Sebastian Kunert *Editor*

Strategies in Failure Management

Scientific Insights, Case Studies and Tools

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Editor

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Editor
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Why the hell does everybody want to succeed?
I'd like to meet somebody who wanted to fail.
That's the only sublime thing.
John Dos Passos: Manhattan Transfer (1925)

Editorial

In November 2012, I met four young scientists in Leipzig (Germany) to form the interdisciplinary project team Failure-driven Innovation.[1] Funded by the Peter Pribilla Foundation, we collected empirical evidence from various disciplines to determine whether innovation could emerge from failure and what role leadership plays in it. We underlined our findings with case studies and published the results as an e-book (Alexander, Berthod, Kunert, Salge, & Washington, 2015). In the following years, I did research specifically on project failure and innovation, organised a science symposium with psychologists from different disciplines on human failure factors, and published a volume on failure management with German-speaking colleagues.

The new volume *Strategies in Failure Management* collects essays by 32 authors from seven different countries. They look on failure from the fields of work and organisational psychology, management, engineering, consulting, design, journalism, sports, and therapy. The book comprises the current state of research, illustrated by several case studies and supplemented by recommendations and tools.

This seems absolutely necessary because the topic is currently receiving much attention from society. At the same time, there is only little research, thus anecdotic literature and some sporadic special issues of management journals dominate the market. We intend to change that.

The book is divided into two major sections. After a short introduction, failure is seen from an organisational perspective: **Henning Staar** and I reflect on "Failure in Organisational Change", **Bettina von Stamm** does the same for "Innovation". After that, **Rüdiger von der Weth** and I provide some insights on "Failure in Projects". Fittingly, **Petra Badke-Schaub** and **Gesiner Hofinger** come next with their article on "Failure in Teams". Then, leaders are especially addressed by **Salvatore Moccia** with his remarks on "Failure of Leadership", followed by **Stephan Bedenk** and **Harald A. Mieg** with their thoughts on "Failure in Innovation Decision Making". Subsequently, **Simone Kauffeld** and **Ann-Christine Massenberg** speak about "Failure in Personnel Development", followed by **Claas Triebel**, **Claudius Schikora**, and colleagues, with their article on "Start-up Companies". **Carsten Tesch** reveals

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[1] pribilla-stiftung.de/

"Failure in Public Relations" before I close that section presenting an interview with **Jonas Schumacher**, an aid worker and founder of a development agency in South Africa, and his experiences on "Failure in Intercultural Cooperation".

The second half of the book widens the focus and addresses failure beyond companies. It starts with some thoughts on counselling when **Karin Lackner** speaks about "Failure in Consulting", followed by **Thomas Bachmann** and his contribution on "Failure in Coaching". After that, **Jules Thoma** and **Christiane Funken** give some insights on "Failure of Networks". Subsequently, **Romualdo Ramos** and **Theo Wehner** provide findings on "Failure in Volunteer Work", followed by **Martin Elbe** who opens the door to military as an example for "Failure in Public Institutions". Next, **Gunther Schmidt** accompanied by **Florian Pommerien-Becht** and **Nora Daniels-Wredenhagen** provide some thoughts on burnout as a "Failure in Health", followed by **Bernhard and Katharina Rothbucher** who write about "Failure in Design". **Hartmut Wandke** and his article on "Failure in Use of Technology" as well as **Uwe Freimuth**, a record decathlon athlete, with some insights on "Failure in Sport" complete the list. This section also closes with an interview. I talk to the actor, lecturer, and theatre director **Harry Fuhrmann** about "Failure on Stage".

Finally, some people in the background shall be mentioned. I would like to emphasise the patience of Gordon Carrera and Syed Mujtaba while proofreading; Vanessa Grebenstein and Luisa Brümmer while transcribing; Ruth Milewski and Prashanth Mahagaonkar while producing; and finally Kathrin, Levi, and Tinko while kindly asking me to close that book project.

I wish you successful reading.

Berlin   Sebastian Kunert
October 2017

Reference

Alexander, A., Berthod, O., Kunert, S., Salge, O., & Washington, A. (2015). *Failure-driven innovation*. Berlin: artop.

Contents

Part II   Failure Beyond Companies

About the Authors

Thomas Bachmann psychologist (Diplom-Psychologe), Dr. rer. nat., born in 1964, is co-founder and partner at artop GmbH, the renowned consulting, training, and research institute at the Humboldt University of Berlin in the field of personnel and organisational development and usability. Since 1993, he has worked as a consultant and coach for organisations, management executives, and teams. He completed his psychology degree in 1994, majoring in work and organisational psychology, clinical psychology, and informatics. Thomas Bachmann is a communications and behavioural trainer, organisational consultant, and coach. Since 2004, he has been a senior coach of the German Federal Association of Executive Coaching (DBVC) and was the head of the specialist committee "Profession" from 2008 to 2010 and a member of the DBVC executive committee. He is also a member of other institutions and associations and a lecturer at the Humboldt University of Berlin. Since 2001, he has worked as an instructor and teaching trainer for coaches and consultants.

Petra Badke-Schaub is professor of design theory and methodology at the Faculty of Industrial Design Engineering at the TU Delft, the Netherlands. Before she came to Delft, Dr. Badke-Schaub was senior researcher at the University of Bamberg and at the Max-Planck Project Group Cognitive Anthropology in Berlin. She received her PhD at the Theoretical Institute for Psychology in Bamberg, Germany, on the topic "Groups and Complex Problems". This research was aimed to understand action regulation of groups when dealing with complex and dynamic projects. During the following years, the research stream was continued in cooperation with engineers and psychologists of the Universities Bamberg, Darmstadt, and Munich. Currently, the main research topics of Dr. Badke-Schaub and her section are aspects of designer-centred methodology with an emphasis on internal and external representation, creativity, and team mental models. Dr. Badke-Schaub published and edited more than 120 papers and five books on human behaviour in design and human factors.

Stephan Bedenk studied psychology and business administration. He graduated from the University of Mannheim and received his doctor's degree from Humboldt University of Berlin, where he was a research assistant. Today, he works as a business consultant at artop—affiliated institute at Humboldt University of Berlin. His focus is on the design, implementation, and analysis of employee surveys, organisational analysis, and organisational development projects. Stephan Bedenk is author of several journal articles and book chapters. He held teaching positions at several universities, i.e. in social psychology, personality psychology, human resource development, organisational theory, as well as market and financial psychology. He does research on innovation management, organisational development, consulting, decision-making, change management, knowledge transfer, and failure in private companies, start-ups, social enterprises, and public administration. A particular focus of his studies is on the perspective of managers on innovation and change processes.

Nora Daniels-Wredenhagen studied experimental and clinical psychology in Heidelberg, Oxford, and Berlin. She is a systemic and hypnosystemic therapist who is especially interested in conducting research on and supporting complex self-organising systems in individual, group, and organisational settings as a way of promoting healthy growth and evolutionary development. This is what brought her to the sysTelios Gesundheitszentrum, where she brings her analytical abilities and love of life to bear in facilitating encounters on an equal footing.

Martin Elbe has been a captain at the German Bundeswehr and left the military after more than nine years of service in 1997. He holds degrees in business administration and organisational psychology (Dipl-Kfm. Univ.) as well as sociology and social psychology (Dipl.-Soz. Univ) and received a PhD in economic and social sciences from Bundeswehr University in Munich in 2001. Having been a professor at universities in Bavaria and Berlin for 10 years, he is now a senior research fellow at the Center for Military History and Social Science of the Bundeswehr (ZMSBw) in Potsdam, Germany. Professor Elbe has published nine books as author, co-author, or editor and over 100 papers in journals, as book chapters or working papers. His key activities span from social and organisational psychology to military sociology and health behaviour.

Uwe Freimuth born on the 10th of September 1961 in Rathenow/East Germany, attended sports school 1974 until 1981 and represented a sports club in Potsdam from 1981 until 1988. From 1981 until 1988, he studied sport and trainings science in Leipzig. He was decathlon athlete from 1974 until the Olympic Games 1988 in Seoul, South Korea; 1989 club coach in Potsdam, responsible for the jumps; 1994 National Coach in Kuala Lumpur, Malaysia, in preparation for the Commonwealth Games in Malaysia; and 1998 Federal jump and decathlon coach in Bavaria and club coach in Erlangen. He received first academic position at the Julius Maximilian University of Wuerzburg in 2000 and a PhD in 2003. From 2007 until 2009, he was development director at the Institut Sukan Negara (ISN) in Kuala Lumpur. In 2009, he was technical director and sport expert of the Vietnam Athletic Federation on behalf of the German Government. Since 2013, he is professor and head of a Master's Programme "International Sport & Event Management" at the campus Berlin.

Harry Fuhrmann After studying at the Academy of Music and Theater in Hamburg in 1995, he was an actor at the Lübeck Theater, before studying at the "Ernst Busch" Academy of Dramatic Arts in Berlin from 1998 to 2002. During this time, he worked as a directing assistant with Peter Zadek at the Vienna Burgtheater. In 2004, Harald Fuhrmann founded the theatre company "fliegende fische". Together with the company, he undertook an eight-month theatre tour through Nepal and India in 2005/2006, followed in 2007/2008 by a journey through Germany. From the travel experiences, the group developed several pieces. Since then, he has implemented several research theatres, i.e. "The Weavers of Augsburg" and "Unrest in Paradise" at the Theater Augsburg and "The Cottbus Project" at the Staatstheater Cottbus. He has directed at numerous theatres in Germany and Switzerland. His work includes "The Robbers", "The Persians", "Don Juan", "Look Back in Wrath", "A Summer Nightmare",

"Waiting for Godot", "Woyzeck", "Cabaret", and "Faust Part one". He has already performed numerous theatre workshops, for example at the "Toi Whakaari New Zealand Drama School", at the VCA in Melbourne, at the NSD in Delhi, at KHIO in Oslo, at the HKU in Utrecht, at KADK in Copenhagen, at the CUT in Mexico City, and in Tehran. Since 2016, he teaches Tibetan artists at TIPA in Dharamsala. From 2010 to 2017, he was a regular teacher for acting at the "Ernst Busch" Academy of Dramatic Arts Berlin.

Christiane Funken (born 1953 in the Rhineland) is a sociologist and head of the Department of Communication and Media Studies and Gender Studies at the Technische Universität Berlin since 2002. She was promoted in 1989 at the RWTH Aachen with a study on criminal sociology and habilitated in 1998 at the Faculty of Philosophy of the RWTH Aachen with an interdisciplinary empirical study about software development practices. Within her research and teaching, she focuses on the areas of media and media effects, business careers, communication and cooperation, as well as innovation and management in SME networks. Prof. Funken is an expert in transformation of labour, communication, career, and innovative network management. Her latest book, *Sheconomy,* has attracted wide public attention in the field of economy and politics.

Together with Jules Thoma, she founded the TRUSTnet NETZWERKMANAGEMENT consulting agency (www.trust-net.org) to transfer research findings into network practice.

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Gesine Hofinger psychologist, is partner of Team HF—Human Factors Research and Training PartG, a group of social scientists in Germany who work on psychological and human factors aspects of safety. She takes part in applied research projects, gives trainings, offers workshops, and publishes on different aspects of human factors psychology. Her areas of research interest include decision-making in critical situations, crisis management in complex domains, inter-organisational and inter-professional communication and cooperation, and human error. Areas of applied research and training are psychological aspects of crisis teams, human factors in evacuation, visitor safety, and patient safety. Further information: www.team-hf.de

Simone Kauffeld completed her studies of psychology at the University of Koblenz-Landau and the University of Marburg. Later, she received her PhD at the University of Kassel. After a visiting scholarship at the City University of New York, she held a professorship at the University of Applied Sciences, Northwestern Switzerland. In 2007, she accepted the offered professorship at the TU Braunschweig.

In her research, Simone Kauffeld focuses on various aspects concerning competences, team interaction, training transfer, consulting, and leadership. To make her research findings accessible to the practice, she founded the 4A-SIDE consultancy in 2008. In 2012, Simone Kauffeld joined the board of presidents at the TU Braunschweig as vice president for teaching and diversity.

Sebastian Kunert is professor of human resources and organisational studies at a German business school. Additionally, he is partner at artop—institute at the Humboldt University of Berlin and works as strategy consultant, trainer, speaker, and business coach. Sebastian Kunert graduated in psychology and received his doctor's degree from the Humboldt University of Berlin. He has held teaching appointments in several universities in Germany and Austria. He is member of the German Association of Psychology (DGPs) and of the European Association of Work and Organizational Psychology. His main research interests focus on innovation management ecosystems, organisational culture, leadership, projects, change, and evaluation.

Karin Lackner University of Klagenfurt, is conducting the master's degree programme "Multidimensional Organization Consulting MDO[b]" at UNIKIMS in Kassel and head of the Institute for Organization Dynamics. Her research fields are organisation and group dynamics, participatory action research, and consulting. Her consulting activities focus on international consulting, training, and organisation development programmes in manufacturing companies, financial service companies, education systems, political organisations, judiciary organisations, and profit and non-profit organisations.

Ann-Christine Massenberg completed her studies of psychology at the Humboldt-Universität zu Berlin. During her last year of studies, she undertook an apprenticeship for communication and behaviour trainer at the artop GmbH. Afterwards, she was a PhD student at the Department of Industrial/Organizational and Social Psychology at the TU Braunschweig and completed her PhD on training transfer. As senior consultant at the 4A-SIDE GmbH, she worked on different consulting projects regarding human resource development. Most recently, she became Director Corporate Management Development at the publisher Bertelsmann.

Harald A. Mieg received his doctor's degree in social psychology from the University of Manheim (chair of Martin Irle) and habilitated in environmental social sciences at ETH Zurich. Currently, he works as a professor of innovation and research at the Potsdam University of Applied Sciences, where he manages a governmental research group. He also serves as honorary/associate professor for metropolitan studies at the Humboldt-Universität zu Berlin as well as lecturer at the Swiss Federal Institute of Technology, Zurich. His research focuses on professional sociology, sustainable urban development, and university development. Harald Mieg's publications repeatedly address the question of strategic planning (city planning, environmental policy, financial markets).

Salvatore Moccia holds a PhD in management for the University of Navarra, Pamplona, and an MBA from the St. John's University, New York. He teaches strategic management at the University UNIR La Rioja, and he holds several visiting professorships in Germany, Switzerland, and Thailand in strategy, leadership, and human resource management. He is the author of management books on topics like good humour and productivity and the art of talents. Before joining the university, he was working as officer for the Italian Army (lieutenant coloonel), including several leadership positions at the Military Academy, the War College, NATO, and United Nations; as entrepreneur and business consultant (sole proprietor of his strategic management consulting firm); and as manager in the higher education sector (Assistant Dean, Assistant Vice President, Director of External and International Relations). He is the founder and CEO of www.fintechnews.org and the organiser of the Fintech Conference.

Florian Pommerien-Becht started his career as a farmer and is now a music psychotherapist and researcher who loves thinking, playing, and living in and with complex systems. He is particularly enthusiastic about and competent in analysing and modelling the complex dynamics of self-organisation processes in therapeutic contexts and at an organisational level. His gentle, powerful, authentic, and clear manner touches people and awakens their sensitivity.

Romualdo Ramos studied psychology at Florida Atlantic University and the University of Zurich. He received his doctor's degree from ETH Zurich. He was participant of the governmental-funded PhD programme "Health@Work" that did research in diversity management, qualitative research and mixed design in occupational health, meta-analysis, ergonomics, and policy and advocacy. He was co-founder of the Austrian Talent Network. Now, he works as a lecturer at the "Fachhochschule des BFI" (University of Applied Sciences) in Vienna. His current research interests focus on occupational health, work–life balance, voluntary work, and well-being, especially psychosocial determinants of health at work.

Richard Graske Born in 1987 and raised in Stralsund close to the Baltic Sea, Richard Graske spent 2 years working for the German navy, after graduating from high school.

He then chose to work in the field of marketing and communication for a couple of years. During his career, Richard was working for both start-up companies and established enterprises where he was able to gather experience in agency work and junior management positions. Over the years and gradually, his focus changed more and more towards the field of business development.

This experience within different kinds of companies, industries, as well as positions led his interest on topics like work environment, organisational development, as well as business-related psychology.

After his graduation in business psychology (BA), Richard is now working for an in-house education entity within a well-known German DAX company. Besides that, freelance activities within project management, training, and business psychology are his second main pillar.

Richard lives in Munich (Germany) together with his fiancée.

Bernhard Rothbucher was born in Salzburg, Austria. He holds a master's degree in industrial design and a PhD in design culture from Chiba University, Tokyo, Japan. He owns a design and innovation consultancy called aka buna/SYNOWAYTION GmbH with clients in Central Europe, Asia, and the USA. The focus is on industrial design, design management, and guiding innovation projects from idea to market success. The approach is an interdisciplinary one in which he integrates people, technology, and Gestalt to achieve customer success. Awards: Good Design Awards, USA; German Design Award; DME Design Management Europe Award; multiple Red Dot Awards; iF design award; Autodesk Clean Tech Partner; Swedish Aluminiumdesign Prize; representing Austrian Design at international exhibitions.

In his academic life, Bernhard Rothbucher developed DE RE SA, the Design Research Salzburg Centre at Salzburg University of Applied Sciences, as a full professor and as the Head of Industrial Design. He was and still is a visiting university professor and lecturer in Austria, Germany, France, Italy, and Switzerland. His professional experience allows him to enhance his teaching concepts with effective real-world applicability.

Katharina Rothbucher is a graduate designer and MBA. Following many years in design services and brand and marketing consulting for international customers such as KTM and Silhouette, she became international marketing manager for Prinoth. Her job then took her from the headquarters in Italy to the USA and Canada to implement a global brand and design strategy. Today, she manages global marketing and product management for Emco-Test. In this position, she has complete responsibility for new product development and portfolio management. She is the winner of the 2003 Austrian State Prize for Design.

Claudius Schikora began his career at Procter & Gamble in Germany, as a customer business development manager. In 1999, he joined the "New Economy" and became the business development manager for the Boo.com Group for central Europe. He operated in London and Munich at the most famous, or most notorious, start-up period of the organisation. Following the group's media insolvency, which also heralded the end of the speculation hypes in the USA and Europe, Prof. Schikora relocated to the Bavaria Film Group. Once there, he emerged as the managing director of the new media subsidiary operates.

In 2001, he transferred to the Siemens Group and went into the business of management consulting. In consulting, he was as principal responsible for the themes "Mobile Business" and "Strategy". At the end of 2002, he was appointed to a new position within the media account management at Siemens business services and was responsible from the marketing and sales perspective for the broadcaster operating in Germany.

In 2006, Claudius Schikora reinvent himself as an entrepreneur and built, with his partner Andreas Hörr, www.medikompass.de, a online auction portal for patients and doctors. The publishing group Georg von Holtzbrinck became a shareholder with

the company. In 2008, the founders sold their shares to the von Holtzbrinck Publishing Group.

Now he is active as business angel and investor for various online companies. Additionally, Prof. Schikora is on the Supervisory Board of Dr. Müller Diamond Metal AG and the Pironet AG.

Since 2005, he has been a professor of media management, marketing, and business planning, at the University of Applied Management in Erding. Since 2013, he is president of the university.

Gunther Schmidt director of Milton-Erickson-Institut Heidelberg and medical director of the sysTelios clinic for health development and competence activation developed the hypnosystemic approach, which is internationally regarded as a major pioneering concept that integrates systemic-constructivist models, the competence-focused concepts of Erickson's hypnotherapy, and neurobiology-based embodiment concepts to yield a holistic solution-focused concept for counselling, psychotherapy, coaching, and organisational development.

For his work, he was honoured with the life achievement award of the German training association (2011), the prize of the Milton Erickson Society (2014), the coaching award 2015 of the German Coaching Convention, and the WinWinno Prize 2017 of the Mediation Association DACH (Germany, Austria, Switzerland). With his appreciative and respectful manner, his empathy, and his sense of humour, Schmidt is particularly successful in lending precise and unobtrusive support to people and organisations in their efforts to effectively reactivate "latent" solution competencies and bring about desired changes.

Jonas Schumacher born in Germany in 1979, lives in Port Elizabeth, South Africa, on a permanent basis. He holds a master's degree in political science, African anthropology, and business management from the Johannes Gutenberg Universität, Mainz, Germany. He has studied MA South African Politics and Political Economy at the University of Port Elizabeth. He did his compulsory community service after finishing high school in a youth project in Walmer Township, Port Elizabeth, from 1998 to 2000. In 2003, he founded the non-profit organisation Masifunde. In Germany, Masifunde Bildungsförderung e.V. coordinates a nationwide network of volunteers; in South Africa, Masifunde Learner Development NPC works with more than 100 employees at three sites reaching daily over 1000 children and youth with holistic education programmes. Jonas Schumacher has worked for several years as a consultant in Germany, before relocating to South Africa in 2009. Since then, he works as Managing Director of Masifunde Learner Development, sent as German Development Aid Worker by the Arbeitsgemeinschaft Entwicklungshilfe (AGEH).

Sarah Sopper has gained several experiences in social services, online marketing, and business development during her studies at the Cooperative State University in Heidenheim and the Fresenius University of Applied Sciences in Munich. Meanwhile, she received degrees in social work and business psychology as well as diverse profound insights into non-profit organisations, online marketing agencies, and start-ups. Currently, Sarah Sopper is employed as research associate in the Faculty for Business Psychology at the University of Applied Management in Ismaning.

Henning Staar is a professor of psychology at the University of Applied Sciences for Public Administration and Management of North Rhine-Westphalia (FhoeV NRW). His research topics are change management with a focus on virtualisation and software implementation processes, health, and leadership in organisations. Besides that, he works as a strategy consultant and business coach.

Bettina von Stamm Visionary at the boundary of academia and industry, Dr Bettina von Stamm has been evolving the field of innovation since 1992. Her constant desire to understand is coupled with a passion to enable others to use innovation for creating a purposeful and sustainable future. The three cornerstones of her thinking are focus on people, a deep understanding of specific context, and a systems-based approach. Tools she has developed include a framework that helps understand where innovative organisations differ from their less innovative counterparts, the Innovation Wave®, a facilitated tool for the assessment of innovation capability which builds on that framework, and a methodology to support collaboration across diverse mindsets. Author of multiple books, she operates globally, in both the academic (Cambridge University, UK; CEDIM, Mexico; Copenhagen Business School, Denmark; DEUSTO Business School, Spain; Kedge Business School, France; London Business School, UK; Technische Universität München, Germany) and the corporate world (AMP, Banco Santander, DSM, Imerys, Katerva, Lloyds Register, Mars Mattel, SAP).

Carsten Tesch For the last decade, Carsten Tesch has been a consultant for German NPOs experiencing PR crises. He has created a storytelling method for organisational development. During these activities, he works as a journalist embedded in NPOs and businesses. He presents his reportage live at events before audiences of up to 250 employees. He has developed both areas of activity based on his journalistic experience and practices. The training he has done with Fritz Simon (Simon, Weber and Friends) in organisational consulting has shown how well the systemic method set and the "craft" of journalism complement each other.

One week each month he hosts *Morgenmagazin*, a radio programme covering cultural issues broadcast by mdr Kultur. He also produces a 1 hour interview with well-known artists and intellectuals from the worlds of film, literature, and research.

Jules Thoma Dipl.-Soz. tech., studied sociology, communication science, and psychology at the Technische Universität Berlin. Since 2010, he is a research fellow at the Department of Sociology at the Technische Universität Berlin in the special field of communication and media studies and gender studies (run by Prof. Dr. Funken). He conducted several empirical studies, especially about the development of innovation networks and network management methods. He currently works on the project "Network-Identity für smart³" which is funded by the programme "Zwanzig20 Partnerschaft für Innovation" (Bundesministerium für Bildung und Forschung). He has published several articles about innovation networks and is co-author of a network management guidebook. Together with Prof. Dr. Christiane Funken, he founded the TRUSTnet NETZWERKMANAGEMENT consulting agency (www.trust-net.org) to transfer research findings into network practice.

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Claas Triebel born in 1974 and raised in Munich, is a founder and a consultant for start-ups and fast-growing companies. He was a professor of business psychology at the University of Applied Management in Erding (near Munich). Claas studied psychology in Munich and did his PhD on psychological working principles in coaching and career guidance. He has developed the Competence Balance, a leading method for career guidance in German-speaking countries (www.kompetenzenbilanz.de). He has built up a nationwide network of Competence Balance Coaches. He founded the companies PerformPartner and PERFORMPLUS and leads many projects, trainings, coaching, and consulting mandates, around the field of start-ups and fast-growing companies and develops digital consulting tools for this field. Claas lives in Munich, together with his family.

Hartmut Wandke is a retired professor at Humboldt-Universität zu Berlin. From 1993 to 2014, he worked as full professor of engineering psychology/cognitive ergonomics at the Department of Psychology. He is one of the co-founders of artop Institute. His research and consulting interests are human–computer interaction, assistance systems, and automation and ambient assisted living.

Theo Wehner studied (after a vocational training) psychology, sociology, and philosophy in Münster. He received his doctor's degree and was promoted to professor in Bremen. Since 1989, he has been teaching as professor for industrial and organisational psychology at TU Hamburg and from 1997 to 2015 ETH Zurich, from where he retired in September 2015. Currently, he is visiting professor at the University of Bremen. His scientific work focuses on questions related to "developing the new" (creativity and innovation), the "truth of the error" (error-friendliness and work safety), and the "experience/knowledge ratio" (cooperation and knowledge exchange). Under the headings of "knowledge-based cooperation" and "work safety through error-friendliness", he has been implementing projects on behalf of a number of companies for many years. At present, the focus of his attention is on research projects on volunteering and corporate volunteering.

Rüdiger von der Weth was born in 1960. He received his master's degree equivalent (diploma) in psychology from the Technical University, Berlin, in 1985. His PhD thesis was on goal conflicts in complex management tasks (1989). He became a full professor at the "Hochschule für Technik Stuttgart" in 2000 (applied psychology) and changed to the HTW Dresden in 2003 (human resource management and ergonomics). There he is one of the heads of the Human Factors and Resources Research Group. His scientific interests focus on the role of motivational and emotional aspects in technical and organisational innovation processes, planning and decision-making in professional contexts (industry, public service, agroforestry), development of software tools and tool methods for complex projects in these fields, training for project managers, and evaluation of the effects. Rüdiger von der Weth has published five scientific books and 87 papers in international and German journals and books.

He works in the editorial board of the *Journal Psychologie des Alltagshandelns* [psychology of everyday activity] and as a scientific reviewer for several international research journals (e.g. *Research in Engineering Design*, *Learning and Education*, and *Behaviour & Information Technology*). He was a member of the management committee of the research network HOPS (Human and Organisational factors in Planning and Scheduling).

Introduction

Sebastian Kunert

The Spectre of Failure

Since man began to move forward, deliberately and creatively, failure existed in the world. If plans are forged, goals set and resources invested, to mess it up is a possibility, the adversary to success. But, the closer you get to the concept of failure, the more it becomes fuzzy, blurred, and difficult to grasp. I offer three examples for that phenomenon.

Increase Versus Decrease

Failure seems to have increased. It is omnipresent and more threatening than ever before. In the Middle Ages, individual failure was not an issue because all human beings were condemned anyway: Hell could be called the 'classic place of failure', only to be prevented by a God-obeying life. In philosophy, the *Vanitas* describes death as the ultimate failure of man to his own fate. The Age of Enlightenment changed the game dramatically. The original sin was virtually abandoned, whereby for the first-time individual plans and projects became subject to possible failure, especially when I try something beyond convention. In today's world, everyone can fail at any time, because we have learned to be able to achieve everything.[1] In a modern, fast-moving world, self-realization is the central premise of life (Inglehart & Welzel, 2005). Thus, to be happy becomes a social duty and a lack of fulfilment equals personal failure (e.g. Green, 2014; Jones, 2015). At the same time, we all become responsible not only for ourselves but for the society and natural

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[1]Think of the film character Forrest Gump (Groom, 1986).

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environment, where we must deal with *risks [. . .] of hazards and insecurities induced and introduced by modernization itself* (Beck, 1992, p. 21), meaning *by us*. In literally every domain of daily life, missing a goal—according to authors of all subsequent publications—*is not an option*, neither in Health (D'Angelo, 2005; Trowbridge, 2017), Education (Blankstein, 2012), Retirement (Rosell, 2013), Business (Johnson, 2016; Kettenacker, 2016; Privett, 2007; Varley, 2011; Walsh, 2012) nor in Religion (Thompson, 2014), Space traveling (Kranz, 2009), and Military (Justice, 2014).

At the same time, our western society has become less and less threatening for our existence. Social security systems, political stability and the absence of war make failure losing the nimbus of the irreversible, the irrevocable, the inevitable, the final, and the hopeless. Self-realization by trying things is linked to the allowance of failing: It's ok to fall down, at least I tried to climb up, in best case, I learned something valuable for my next attempt. Consequently, the connotation changes and failure becomes a "gift" (Lahey, 2016), "a career guide" (Romolini, 2017), a "Back Door to Success" (Lutzer, 2016), is "always an option" (Peterson, 2016), starting point of "A funny memoir" (Lyle, 2017), deeply rooted in American culture (Sandage, 2009), and even a heroic character (Pastis, 2015, 2016). Several TV shows, events, and websites[2] makes failure an anecdote on the way to success. Accordingly, failure has become a famous interjection in journalism (Zimmer, 2009). Especially among founders, it has become popular to publicly exhibit their own miscarriages. Since 2009, they report on FailCons[3] and fuckup-nights[4] in front of a large audience their first trials and errors—always embedded in a narrative of the final success. Meanwhile, a Dutch bank founded the 'Institute of Brilliant Failures' to collect unsuccessful business ideas in order to initiate a national culture change in dealing with business failures.[5] The Canadian Engineers Without Boarders offer the same service for public and non-profit project ideas,[6] the World Bank provide a matching interaction format, the Fail Fair.[7] In Japan, the Association for the Study of Failure runs a government-financed failure database on huge organization failures with public.[8] In Sweden, the Museum of Failure[9] showcases unpopular consumer products, e.g. green Heinz ketchup, fat-free Pringles and Colgate frozen lasagne. On top, Finland proclaimed October 13th as the International day of failure.[10]

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[2]Search for the term *failure* on bigthink.com

[3]thefailcon.com

[4]fuckupnights.com

[5]briljantemislukkingen.nl

[6]admittingfailure.org

[7]failfaire.org

[8]shippai.org/eshippai/html

[9]museumoffailure.se

[10]dayforfailure.com

This aestheticizing makes failure more transparent, people get the chance to have a look behind the curtains of infamous unsuccessful projects. At the same time, failure loses a bit its connotation of something embarrassing, tabooing, and avoiding.

Systemic Versus Personalized

When organizations fail, it is a good practice for people in charge to 'accept their responsibility' and step down. From a psychological point of view that makes absolutely sense. The role of a manager implies to solve problems and to make decisions. If something goes wrong, everyone knows who to blame. By presenting a scapegoat, the rest of an organization redeems itself, regains its control illusion, and regains the ability to act. On the other side, the expellees are mostly alone with their 'guilt'. In worst case, they are forced to publicly commit themselves as failed persons. You find them off the big stages. In Germany, Attila von Unruh founded the 'Anonymous bankrupts' after his own private insolvency.[11] For those, who had the courage to found or run a small business, he wants to give a voice, to recover their confidence and to raise their dignity.

From a systemic point of view, failure is always the result of a chain of events and usually many people are involved (in difference to sabotage). The complexity of a company exceeds human rationality by far.[12] However, social systems neglect their collective contribution to failure. People tend to reduce complexity by simplifying conditions, underestimating causalities and projecting the misfortune to an individual. We are always fine with others failing: we suffer with Macbeth facing his fate as a regicide, wonder about Don Quixotes disability to distinguish between fiction and reality, we observe captain Ahab devoting himself to his hate, we gaze at Paul Auster's protagonists struggling with aging, and we have a great time watching Charlie Chaplin and Rowan Atkinson violating social conventions.

For the Worse Versus for the Better

By definition, failure means not to implement plans, not to achieve goals, or being stopped with consequences of existential importance. But, whether someone finally failed or ultimately succeeded depends on the point of view. The US-American inventor Thomas Edison summed up his experience in the saying: *I did not fail. I have successfully found 10,000 possibilities that do not work*. In history of mankind, a lot of people existed who sought for gold and found porcelain. The Italian sailor

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[11]team-u.de/en/index

[12]See Herbert A. Simons work on bounded rationality he received the Nobel Prize in Economics in 1978 for. See also a compilation of fallacies on youarenotsosmart.com and the chapter of Bedenk & Mieg (2018).

Christopher Columbus made great promises to his Spanish funders before his expedition, but failed due to bad maps and inaccurate calculations on his way to explore a western passage to India ... and was stranded in America in 1492. Sir Alexander Fleming, a Scottish physician, failed in the chaotic organization of his laboratory at London University, which led to the contamination of several bacterial cultures ... and discovered penicillin in 1928. The US-American inventor Wilson Greatbatch had the task in 1956 to build an oscillator for the measurement of heartbeats. However, the resistors in his device were wrongly wired and the analyser caused electric shocks instead ... the pacemaker was invented. Harry Wesley Coover Jr., a chemist at Kodak, failed in 1942 when trying to develop a camera lens. The material was too sticky for the production process ... the superglue was discovered. *Exactly 5126 attempts to make the first bagless vacuum cleaner were failures—some catastrophic disappointments, some minor defects. It took 15 years. Prototype 5127 was the success* James Dyson stated 2012 in an article for The Guardian.

In management, errors, defeats and misses are eliminated as good as possible. They are the opposite to best practice, customer promises, high quality, reliability, and safety, thus, they jeopardise reputation, credit, and survival. Whereas, when it comes to innovation and change, those things become a source of ideas, are a necessity in scientific-based trial-and-error processes, and a valuable learning opportunity. Without testing new products, new services, new processes, the reputation, credit, and survival of a company is also in danger.[13] In economics, the ambiguous role of failure is also well known. On one hand, market failures threaten companies when customers reject entire product portfolios, banks stop providing credits to ensure liquidity, or public regulations inhibit founding and growing of enterprises. On the other hand, failed firms give way for more efficient ones, prove new concepts or products being unmarketable, resources and knowledge are released from where they do not add value. In result, the benefits for economy and society offset the costs (Knott & Posen, 2005).

As you can see, failure—as well as success—is always a retrospective assessment based on objectives. If the evaluation criteria change, a completely different picture may arise: from today's point of view, the invention of penicillin has been a complete success. There are other forms of reinterpretation. At the moment it was a failure, later has turned out to be insignificant. Elsewhere, the failure is postponed as a goal, then again one's own failure is no longer so bad compared to the even greater failure of others. In some cases, the failed result is simply sold as a success, or the failure is concealed until it is barely recognizable—a deliberate denial and twisting coming from fear of the reactions: neither the evaluation scale nor the perspective have changed, someone who has failed, knows that and nevertheless does not admit. Most organisations try to prevent themselves from failure (e.g. disclaimers, insurances), some are prevented from failure because their survival

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[13]See Kunert and Staar (2018), Kunert and von der Weth (2018), and von Stamm (2018).

is a matter of national interest and powerful institutions decide to keep them alive by all means possible (as seen in the financial crisis in 2008).

Conclusion

Irrespective of the examples above, failure is something else than everyday misfortune. It is more than a confusion, a slip of the tongue or a mishearing, something other than a missed book or an abandoned friend, something worse than a simple mistake, more dramatical than feeling unsuccessful or being dogged by bad luck. It is not a simple temporal loss of control and different from *errare humanum est*. At the same time, failure is no natural and unforeseeable disaster like an earthquake or hurricane. It requires individuals, who set goals, make plans, act, and evaluate.

In several European languages, a word like *failure* exists.[14] It always deals with missing certain goals, non-passing standards, or becoming unable to meet one's engagements. Thus, failure becomes something existential, life-shaping: a failed exam can blow up career plans, failed debt repayment may lead to bankruptcy, a failed relationship breaks families apart, a failed technical construction put lives at risk. However, as you will see in this book, it is a matter of interpretation whether and to what extent someone or something failed. The one and only, true, definite failure does not exist.

References

Beck, U. (1992). *Risk society: Towards a new modernity*. Thousand Oaks, CA: Sage.

Bedenk, S., & Mieg, H. A. (2018). Failure in innovation decision making. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Blankstein, A. M. (2012). *Failure is not an option: 6 principles that advance student achievement in highly effective schools*. Thousand Oaks, CA: Corwin.

D'Angelo, L. (2005). *Failure is not an option: Thriving with rheumatoid arthritis*. Charleston, SC: BookSurge Publishing.

Green, A. (2014). *Failure is not an option! – How to build self-esteem and gain self-confidence for life*. Seattle: Amazon Digital Services.

Groom, W. (1986). *Forrest Gump*. New York: Doubleday.

Inglehart, R., & Welzel, C. (2005). *Modernization, cultural change, and democracy. The human development sequence*. Cambridge: Cambridge University Press.

Johnson, H. (2016). *How to get a job when failure is not an option: How to find work in any economy*. Seattle: Amazon Digital Services.

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[14]According to wiktionary.org, modern *fail* comes from Middle English *failen*, from Anglo-Norman *faillir*, from Vulgar Latin *fallire* ("to deceive, disappoint"), from Proto-Indo-European $b^h\bar{a}l$- ("to lie, deceive"). Similar words are the Dutch *feilen*, *falen* ("to miss"), the German *fehlen* ("to miss, lack"), the Danish *fejle* ("err"), the Swedish *fela* ("be wanting, do wrong"), and the Icelandic *feila*.

Jones, M. (2015). *Power to overcome the fear of failure: Failure is not an option or an excuse to give up*. Seattle: Amazon Digital Services.

Justice. (2014). *G.I. JOE: Star Brigade II: Failure is not an option*. Kindle Worlds.

Kettenacker, C. (2016). *Failure is not an option: Step-by-step guide to make money online!* Bloomington, IN: Xlibris.

Knott, A. M., & Posen, H. E. (2005). Is failure good? *Strategic Management Journal, 26*(7), 617–641.

Kranz, G. (2009). *Failure is not an option: Mission control from Mercury to Apollo 13 and beyond*. New York: Simon & Schuster.

Kunert, S., & Staar, H. (2018). Failure in organizational change. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kunert, S., & von der Weth, R. (2018). Failure in projects. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Lahey, J. (2016). *The gift of failure: How the best parents learn to let go so their children can succeed*. New York: Harper.

Lutzer, E. W. (2016). *Failure: The back door to success*. Chicago, IL: Moody Publishers.

Lyle, A. (2017). *The Amy Binegar-Kimmes-Lyle book of failures: A funny memoir of missteps, inadequacies, and faux pas*. San Bernardino, CA: CreateSpace Independent Publishing Platform.

Pastis, S. (2015, 2016). Timmy failure. Somerville, MA: Candlewick.

Peterson, C. (2016). *Failure is always an option: Negativity to color and display*. New York: St. Martin's Griffin.

Privett, T. (2007). *Failure is not an option*. San Antonio, TX: Historical Publishing Network.

Romolini, J. (2017). *Weird in a world that's not: A career guide for misfits, f*ckups, and failures*. USA: HarperBusiness.

Rosell, D. (2013). *Failure is not an option: Creating certainty in the uncertainty of retirement*. Bend, OR: Incubation Press.

Sandage, S. A. (2009). *Born losers: A history of failure in America*. Cambridge: Harvard University Press.

Thompson, J. (2014). *Failure is not an option*. USA: Xulon Press.

Trowbridge, J. P. (2017). *Failure is not an option: Our "stem cells" can repair your painful injuries, arthritis, and more*. Appleday Press.

Varley, P. (2011). *Failure is not an option: The 12-step plan to successful turnarounds*. Denver: Mile High Press.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Walsh, M. T. (2012). *Hair salon ownership: Failure is not an option*. San Bernardino, CA: CreateSpace Independent Publishing Platform.

Zimmer, B. (2009). *How fail went from verb to interjection*. The New York Times Magazine. Retrieved July 16, 2017, from http://www.nytimes.com/2009/08/09/magazine/09FOB-onlanguage-t.html

Part I

Failure Inside Companies

Failure in Organizational Change

Sebastian Kunert and Henning Staar

Change in Organizations

Every change starts with a need for something new, something different. The need for change arises from the fact that the current state of the organization is, to some extent, not appropriate any more. The system must be further developed. Such a process can be described as *"a complex educational strategy intended to change the beliefs, attitudes, values and structure of organizations so that they can better adapt to new technologies, markets and challenges."* (Bennis, 1969, p. 2).

Changes that organizations undergo vary extremely. According to a rather superficial study by Capgemini Consulting with $N = 71$ respondents, most modifications deal with internal restructuring (Bohn, Crummenerl, & Graeber, 2015). It is interesting to note that at the top of the list there has been no variation since the beginning of that survey in 2003 (see Fig. 1).

In the course of adaptation, some companies changed dramatically and became famous for that: *"For every well-known failure (e.g., Polaroid and PanAm), there are firms like GKN, a maker of auto parts and aero-space materials, that began as a coal mining company 245 years ago. The Tandy Corporation, founded in 1898, was originally a maker of leather goods and is today a retailer of electronic products. Bally began making pinball machines and now is a large operator of gambling casinos and fitness centers. IBM, perhaps the most famous example, began as a maker of mechanical office equipment and today is primarily a service and consulting company. A number of today's largest automobile manufacturers began as bicycle and carriage makers."* (O'Reilly & Tushman, 2008, p. 186).

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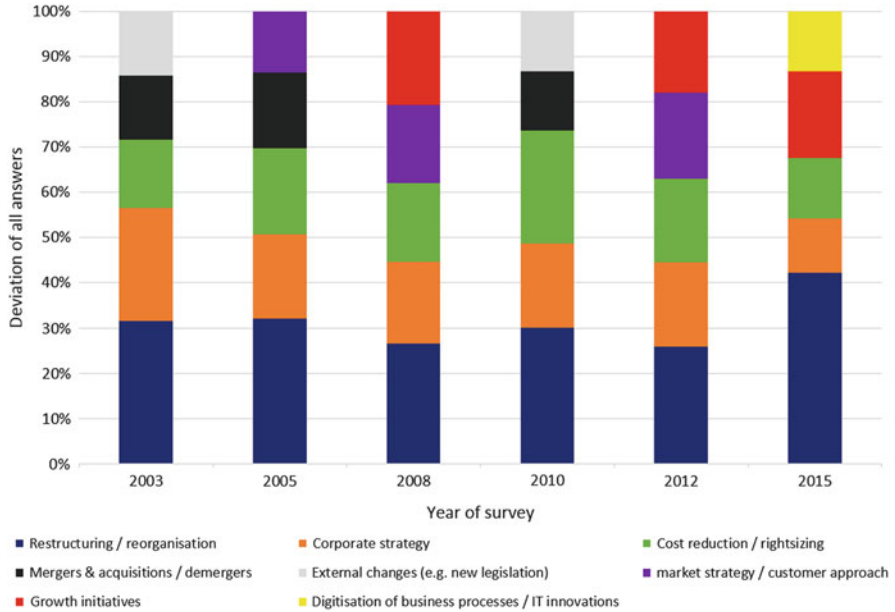
Fig. 1 Drivers for change (data taken from Bohn et al., 2015)

To survive over decades, changes are inevitable. However, the majority of organizations fail ultimately. According to many studies, most companies that once existed have vanished. (Similar to biological species that are now extinct.) The survival rate ranges from 68% within 5 years (Reeves & Pueschel, 2015) to 10% in the long run of 80 years (Louca & Mendonca, 2002). Accordingly, the life expectancy of firms is quite low, has in fact decreased from 90 years in 1935 down to an estimated 12 years in 2020 (Foster, 2012, cf. Foster & Kaplan, 2001).

In the search for pitfalls, a vast variety of reasons exist. In general, change means the creation of something new. The organization becomes the innovation, is reinventing itself. The main reason to fail is non-existing knowledge about the future state, change is a journey into the unknown. Obviously, there exist close connections to other domains that deal with novelty-like innovation (see von Stamm, 2018) and project management (see Kunert & von der Weth, 2018). In this article, we will focus on specific aspects involved in change that might lead to failure. Structural and process-related factors will be distinguished, the former dealing with the ability to change, the latter with the procedure.[1]

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[1]For basic concepts of organizational change see e.g. Cummings and Worley (2009).

Failure at the Structural Level

The sociologist Talcott Parsons describes structural causes that decisively influence the failure of organizational changes. He uses ecosystem conceptions from biology for his structural functionalism system theory. With the parable of a forest lake, this can be made clear. Every plant and animal organism (entity) occupies its specific place (ecological niche). Through the constant interaction of the members of the system, a specific inner order emerges without external action (autopoietic). In addition, the lake is in a process of exchange with the surrounding forest, where water, nutrients and organisms cross the border of the system (input & output). Due to the resultant balanced state (equilibrium), the lake as a whole remains stable over time and in different situations (seasons).

According to Parsons, these observations can be transferred to social systems (Parsons, Shils, Naegele, & Pitts, 1961). Thus, people have a specific role by culturally integrating into the community, adapting to the existing processes, and fulfilling tasks assigned to them. In addition, the organization is in a process of exchange with its environment in the form of material, energy and information. In this way, the organization also gains a state of inner equilibrium, which basically allows it to exist continuously over time and in different situations (Lewin, 1947). At the same time, it is of secondary importance that the system operates smoothly in this way, that the cooperation is organized without contradictions, and the result of the joint action satisfies all requirements. First of all, it has to prove itself as functional (viable).

These factors are an important source of failure in organizational change. Breaking this homoeostatic state is a prerequisite for change taking place at all. Persistent individual tendencies within social systems result from the fact that for its members the organization in its current state is familiar. In addition, they invested much energy into their own adaptation. This creates a set of reliable options for action: they have gained experience, know each other and know how to move within the system. After years, organizational membership becomes an integral part of one's own identity. All this is in danger of being lost if something should change.

The antagonist for inertia is the willingness to try new things. In organizational research, the term readiness for change has prevailed. It describes *"organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes."* (Armenakis, Harris, & Mossholder, 1993, p. 681). Cinite, Duxbury, and Higgins (2009) underpinned this concept with certain behaviour of organizational members. They summarized the statements of more than 700 interviewees on three overarching points, which show the readiness for change: support of top management, support of executives, and the competence of the change manager. According to the authors, a lack of readiness can be attributed to poor communication as well as to disadvantageous effects on daily work.

For Parsons (1951), the balance between persistence and change is reflected in the four basic functions that a system has to fulfil in order to survive. The AGIL scheme contains:

- Adaptation (the ability of a system to respond to changing external conditions)
- Goal attainment (the ability to define and pursue goals)
- Integration (the ability to accept and retain new members)
- Latency (the ability to establish sustainable structures and processes).

The Modular Inventory for Organizational Research (modul_or)

Scholl et al. (2014) invented a questionnaire based on the AGIL model from Parsons (1951) for German speaking countries. The survey tests for four basic facets of organizational culture: Adaptation (operationalization of Goal Attainment), Trust (operationalization of Integration), and Participation (operationalization of Latency). These facets can be arranged in two dimensions: Stability versus Flexibility as well as Internal versus External focus. In the course of further development, Kunert (2016) integrated leadership styles. The survey tests if the leader's behaviour supports facets of organizational culture. Furthermore, he added the group level, testing if team climate promotes Outcome, Innovation, Quality, and Cohesion. Finally, the individual level was included with scales for Sense, Change, Competence and Satisfaction. Figure 2 shows the overall model.

Kunert and Buber (2017) investigated if the four AGIL elements are connected to organizational performance. They analyzed data of more than 1000 employees from over 70 companies using the modul_or questionnaire (see Info box). The results show that all four facets of organizational culture correlate highly with the subjective assessment of company's success ($r = 0.34$ for Adaptation to $r = 0.46$ for Trust). These findings confirm earlier research (Scholl, 2014) as well as studies with objective outcomes (Denison & Mishra, 1995), which are, moreover, inter-culturally stable (Denison, Haaland, & Goelzer, 2003). This shows how important it is for organizations to develop stability-promoting and flexibility-supporting features at the same time.

According to Hooijberg (1996, cf. Rosing, Frese, & Bausch, 2011), leaders play an important role here. They are expected to react adequately to different situations in order to guarantee the company's balance between retention and change. He found a link between the overall repertoire of leadership styles and the leadership success assessed by subordinates ($r = 0.64$), colleagues ($r = 0.46$) and supervisors ($r = 58$).

Kunert & Buber (2017) investigated the relation between organizational culture and leadership repertoire based on the modul_or data set to correlate the two concepts simultaneously. Results of a multiple regression analysis show, that only organisational culture can be associated to organisational performance ($\beta = 0.52$) while leadership repertoire is of no significance ($\beta = 0.05$). Instead of leaders creating culture rather culture determines what leadership style is tolerated. That means, if an organization is able and willing to change on a structural level mostly depends on cultural conditions.

The following case study shows how difficult a balance between stability and flexibility within a company can be.
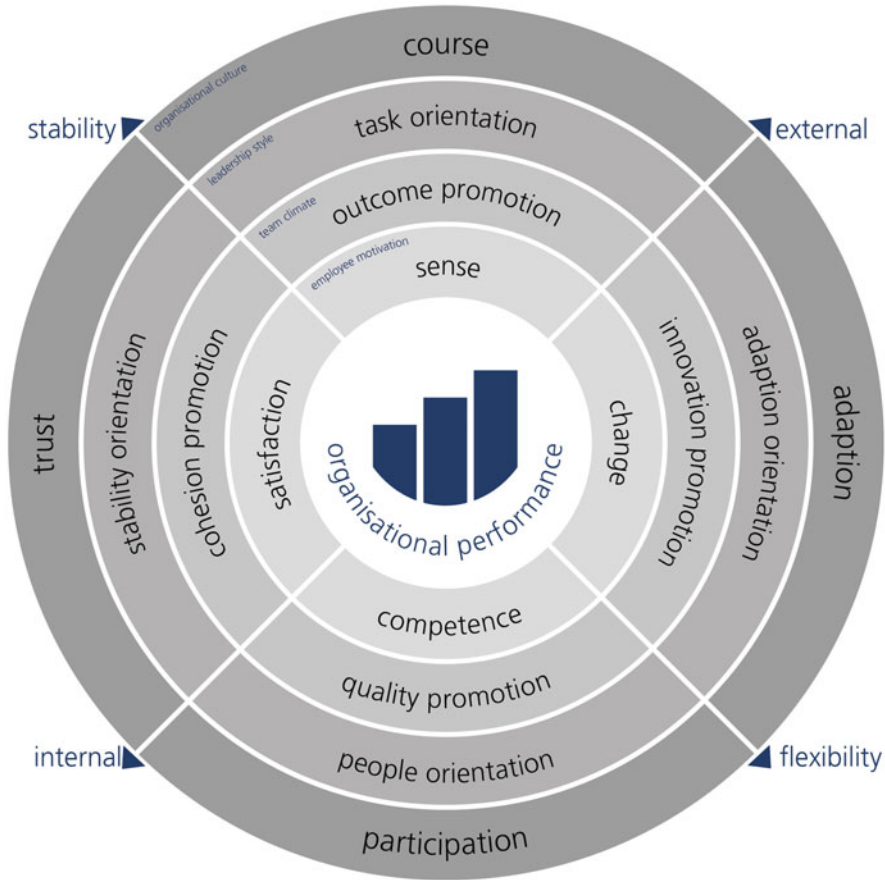
Fig. 2 Theoretical model of the modular organizational research inventory (modul_or) including facets of organizational culture, leadership styles, team climate and employee motivation

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Case Study

The company in this case study[2] is a 100% subsidiary of a global waste management corporation based in Germany. The approximately 65 employees sell and distribute used paper, glass, plastic, metal, and composites. That is to say, they organize the buying, the transport, the sorting, and, finally, the selling to producers. The company is highly profitable, with lean processes and a highly skilled, motivated staff. However, the management is worried that its business might be outsourced due to the highly standardized nature of its services: organizing purchases, transport, sorting, and selling of waste. These activities are hardly unique. As a result, dissociation takes place mainly by costs and gains.

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[2]Extracts taken from Alexander, Berthod, Kunert, Salge, & Washington (2015, pp. 67–70).

To make things worse, the parent corporation started a merger process and new departments for sales & distribution now appear inside the holding. Consequently, being innovative, being the first in new markets, and being the first with new (integrated, sustainable) customer services is the key to long term survival.

The company's business performance is good. However, the ability to change is lacking. An innovation survey (questionnaire throughout the company, interviews with 12 selected employees) revealed that

- the high amount of work led to little motivation to innovate
- innovations were hardly encouraged by management or honoured by colleagues
- a culture of lone wolves hindered cooperation
- the reward system emphasized short term goals in the main business

In summary, this company was not a market leader but instead chased after lost opportunities.

Two members of middle management came up with the suggestion for an idea-management tool. It included a formalized process to gather, select, evaluate, and reward new ideas. Furthermore, they defined a jury, a list of gratifications and a call for proposals based on the company's strategy. The development & implementation was participative (survey feedback, enlarged project group, updates on team meetings and annual Employee Day). For dissemination, they announced a competition to find a mascot and more than twenty suggestions were posted.

New top management cancelled the project shortly before roll out (*"If they've got the time to do that, there are free capacities to do usual business!"*; *"Being innovative is part of the job and shouldn't be rewarded on top of it!"*). The implementation of an idea management process was not only a simple tool realization. It was a big innovation with consequences for the company's processes (how do ideas come to life), structures (to judge ideas gives power) and culture (staff co-decides strategy). Moreover, this tool revealed the main reason why innovation was so rare. Top Management was afraid of resource demanding changes, of time waste in a fast and highly competitive business, and of giving away power in a rather masculine culture (cf. Hofstede, Hofstede, & Minkov, 2010). The participation activities did not consider these circumstances. They mainly addressed staff members, not senior management. As a result, the implementation was created by middle management (team leader level) and seemed to be supported by lower level employees but it suffered from upper level authorization requirements.

This case emphasizes the fact that readiness to change is less a commonly shared characteristic throughout the company but varies in different groups. As a change management study of Capgemini (Claßen, Arnold, Papritz, & Juhasz, 2005) shows, the willingness to change is usually highest at the top management level and decreases dramatically moving down the hierarchy.

In conclusion, organizational culture serves as a shared social mind-set and is the starting point for all observable communication and cooperation processes inside a company and with the environment (cf. Schein, 1985). If values, norms and behaviour restrictions do not support development, the organization is much more likely to underperform and fail in the long run. At the same time, cultural characteristics are reflected in the way in which a change is implemented. In the following, the process level will be examined in more detail.

Failure at the Process Level

This section is devoted to the question of how organizational changes must be addressed. Special attention is paid to those factors that may be associated with failure. In general, the amount of scientifically proven facts is quite low. Surveys and case studies about failure are by nature not very welcome. Nevertheless, there is something to be learned from them.

The psychologist Kurt Lewin introduced the classical model of a change process more than half a century ago. In his field theory, energies act on a group of people, urging them to develop (driving forces) or to retain (restraining forces). Similar to Parson, Lewin believes it is important that a dynamic equilibrium between these two forces be created, so that the group neither freezes from too little change nor struggles for constant change. In order to proceed with a development process, three stages[3] are required: *"unfreezing (if necessary) the present level L1, moving to the new level L2, and freezing group life on the new level."* (Lewin, 1947, p. 35). Each of the three phases has a special function in shaping a change process.

Unfreezing

The first stage of the unfreezing is to create change readiness. Here, the driving forces should be supported so that the existing status quo (equilibrium) is dissolved and the change can be accomplished. The social system is prepared to deal with something new. *"To break open the shell of complacency and self-righteousness it is sometimes necessary to bring about deliberately an emotional stir-up."* (ibid.). Such an irritation is necessary, because change means giving away something known, something accustomed to. That creates a significant loss of orientation and, thus, reduced self-efficacy and security. It is always easier to omit than to adapt. Having to adapt leads to discomfort, reluctance and resistance. In this case, the restraining forces are stronger than the driving ones.

Lewin was able to demonstrate in his own research that communication, participation and the generation of urgency are decisive for the acceptance of the change

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[3]Interestingly, such a 3-step-approach exists also in consulting (see Lackner, 2018) and project management (see Kunert & von der Weth, 2018).

(cf. Armenakis & Harris, 2002). One of the most effective methods has been the Survey Feedback approach (Heller, 1969). Data from questionnaires, interviews or performance figures are collected and prepared in order to show them to employees. In feedback workshops the participants get the chance to recognize a problem, to discuss it with peers or management, and make up their mind. Hardly any other method creates the same degree of change as the reflection on the analysis of results (Bowers, 1973).

The 2005 change management study of Capgemini (Claßen et al., 2005) provides some insights regarding the most serious problems in creating readiness for change. The top four includes:

- Too many activities without prioritization
- Interests/target conflicts of the parties involved or no clear objectives
- Lack of support from the line management, lack of commitment from the management board
- Paralysis of the organization due to persistent reorganization.

Moving

The second phase of moving focuses on learning and on setting new standards. According to Lewin, leadership activities as well as methods of personnel and team development play most important roles. In meta-analyses, trainings and target agreements have proved particularly effective (Guzzo, Jette, & Katzell, 1985). According to another Capgemini change study (Claßen & von Kyaw, 2007), the most used tool is also trainings. Furthermore, individual development programs, workshops, events and special reward systems are on top of that list.

In the implementation phase the size of a change project is probably most important. The bigger it is the more internal complexity and the influence of external factors increase. Empirical studies are very clear on this point. In a survey conducted by Kunert (2014), change success correlated negatively with the duration of the project ($r = -0.28$). Even more crucial is the amount of delays in relation to the total project duration ($r = -0.56$). In the surveys of the Standish Group (2013), the success rate of small projects (up to 1 million $ person costs) turned out to be significantly higher compared to large projects (over 10 million $ person costs). Their success rate was only 10% (see Kunert & von der Weth, 2018).

In addition to time related aspects, communication plays another important role. Especially in times of change, opposing opinions might lead to conflicts. Because there is little to no knowledge regarding the best solution or the way to reach it, different roads lead to Rome (wherever it might be located). That causes differences in setting priorities, choosing preferred courses of action, and establishing aims. Surprisingly, the total conflict load is not per se destructive. As De Dreu (2006) showed, teams were more successful when the level of task conflict was moderate instead of low or high. In contrast, this curvilinear effect does not exist for relationship conflict, which is dependent on collaborative problem solving. The same
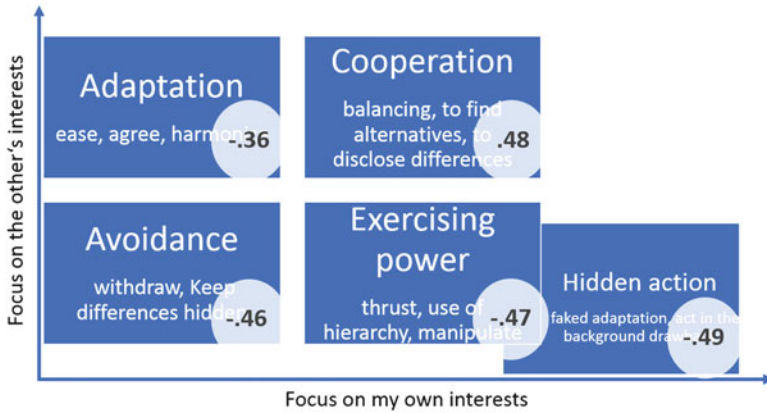
Fig. 3 Conflict solution strategies (data taken from Scholl, 2014, p. 88)

conclusion comes from Scholl (2014). He summarizes in his questionnaire study based on a conflict solution style model by Thomas (1976), that only cooperative ways of handling a disagreement are positively associated with project success ($r = 0.45$). All other styles—Adaptation ($r = -0.45$), Avoidance ($r = -0.60$), Exercise of Power ($r = -0.52$), and Hidden Actions ($r = -0.43$)—are destructive (Fig. 3).

Re-Freezing

In the third phase of the re-freezing it is necessary to get back to the restraining forces, so the group creates a new equilibrium, and does not fall back into old patterns of behaviour. *"Since any level is determined by a force field, permanency implies that the new force field is made relatively secure against change."* (Lewin, 1947, p. 35). Besides that, the aim is to eliminate shortcomings, increase improvements, and test usefulness. This is achieved by giving the group time to transform new behaviours into routines, to process the negative effects of change, to recognize the benefits of the change, and to address signs of rejection at an early stage (Cummings & Worley, 2009).

The study by Kunert (2014) shows that an evaluation after a change is associated with success ($r = 0.36$). In an investigation at the end, the gains and benefits can be presented. At the same time, it is an opportunity to articulate the toil connected with the change, which makes it possible to learn for next time and to improve the organizational skills generally.

The following case study shows how difficult a re-freeze without a proper un-freeze can be.

Case Study

The case study is about an IT house based in Germany. The company employs approximately 2000 people, who generate sales in the mid-three-digit million range. The product portfolio is focused on digital as well as physical personnel management and security architectures. Clients are public as well as private institutions in Germany and abroad. The company's structure follows a traditional line organization with departments for production, sales, research & development, technology, marketing and personnel.

Added to this is a quality assurance team, which has a sort of cross-section function and is directly subordinated to the managing director. This office is of great importance, because accuracy and reliability are of the highest priority for the customers. To meet the 0-defect claim, quality management for a long time continued its work in a traditional sense of the pure checking & controlling at the release state of products. In case of complaints, crisis management was also part of their tasks. As a result, the employees in quality management described themselves as 'detectives', 'police men' and 'gatekeepers'.

About 6 years ago, the idea came up to modernize quality management and expand the tasks. To do this, a development and consulting function was added to the control function of the department. The management board came up with the idea of a 'Competence Centre Quality'. Team members were supposed to act not only as controllers but as technically savvy experts (developers function) as well as multipliers with the best connections in the entire organization (promoters function). Quality management, like internal consultants, would help the other departments by addressing deficiencies in quality before they caused any problems.

A very comprehensive stakeholder analysis examined the interconnectedness of the teams in the organization. Data on contacts, communication patterns, tasks and efficacy were collected. It turned out that the other departments worked together particularly in the framework of controls and crisis intervention with quality management, but hardly perceived the counselling and support services. The team members were still seen as 'detectives' and met with scepticism and fear. The quality managers were never aware of this because they refused to ask for feedback. Thus, they lost the opportunity to inform their future clients, to gather information according to their needs and demands, and failed to prepare the organization for that significant change. The control function was still applicable but the advisory function never happened. After 1 year, this change project was cancelled.

This shows how strong the traditional control function is. It has much greater impact than any other role. The training and advisory offers of the 'Competence Centre Quality' presuppose that the other departments are willing to challenge themselves, to test their internal processes, to show knowledge gaps, to reconsider attitudes, to reflect on themselves and their development needs, to communicate and give up usual routines. Such an act of transparency leads to a sense of one's own imperfectness and creates risks of visible shortcomings. The resulting need

for trust is in contrast to the control function of quality management that is supposed to reveal defects, correct them, and report to the management. A long and intense un-freezing would have been necessary to build trust and confidence. Schein (1979) once argued: *"...the reason so many change efforts run into resistance or outright failure is usually directly traceable to their not providing for an effective unfreezing process before attempting a change induction."* (p. 144).

Dealing with Failure

As stated above, failure in organizational change is quite usual—it is the nature of the beast that in most cases organizational change projects will be confronted with a number of pitfalls and drawbacks. On that note, the question of how to deal with failure in organizational change has become a vital topic among both, practitioners and researchers (Madsen & Desai, 2010).

Is Failure Good?

Directly or indirectly, the discussion addresses the valence of failure in organizational change. Or, to put it in other terms: Is failure good?

Most traditional managerial approaches to organizational change reveal a dominant focus on success-orientation. Following this perspective, failure is seen as something to be avoided, risks should be minimized in order to stay on track. To the contrary, more recent literature in this field emphasizes the positive potential of failure. However, failure is not considered an inherently desired outcome nor should it be pursued for its own sake. Rather, failure may function (a) as one essential prerequisite for organizational change and (b) can be regarded, retrospectively, as a learning source, and, prospectively, as a potential seed for creating new and beneficial strategies and opportunities within the change process (McGrath, 2011).

The rationale behind this view is quite simple: While success and orderliness will arouse little drive to change existing routines, failure is more likely to foster the willingness and urgency to change, and, thus, stimulate action. Besides the function of failure as an impetus to change, modest levels of failure may serve as a safety and survival-enhancing asset in organizations within the process of organizational change. Instead of simply following the formula on how to successfully deal with organizational change, paradoxically, failure is actively integrated in the course of organizational change as a means to success: *"Failure can enhance learning, adaption to changing environmental conditions, and systematic resilience when confronting unknown future changes"* (Sitkin, 1995, p. 232). As such, failure may provide *"small doses of experience to discover uncertainties and the unpredictable in advance"* (Wildavsky, 1988, p. 26). When organizations are lacking failure experiences, this might result in a decreased organizational resilience when

organizational change occurs (Sitkin, 1995). Being an essential process in nature, experimentation is necessary for an organism to become more resilient to future environmental changes and to guarantee survival.

Which Failures Are Good?

After having broadened the perspective on success and failure in general, a more differentiated view on failure is needed, because not all failures are the same. Along these lines, one might ask: Which failures are good? For example, Sim Sitkin (1995, p. 243) has coined the term "intelligent failure". The author illustrates five key characteristics that contribute to the intelligence of failures:

- Intelligent failures result from thoughtfully planned actions that integrate the knowledge and experiences of the employees.
- Intelligent failures have uncertain outcomes—if outcomes were predictable, no new information would be provided.
- Intelligent failures are of modest scale which requires a delicate balancing to achieve large enough outcomes to attract attention, but at the same time they should be small enough to avoid negative responses.
- Intelligent failures are executed and responded to with alacrity, that means, that "trial balloons" are systematically brought out to gather feasible and useful information.
- Intelligent failures take place in organizational domains that are familiar enough to guarantee that novel outcomes are recognizable and understandable and, therefore, permit effective learning.

Organizations that are undergoing change or developmental processes can systematically facilitate intelligent failures. First and foremost, the positive or at least neutral consequences of "good failure" have to be made transparent and visible to the employees. As such, the legitimization of intelligent failure should be reflected in shared norms and values that contribute to a failure-friendly culture. This requires that leaders stress the importance of intelligent failures and provide valid and reliable evidence of their positive effect on the individual and the organizational level. In addition, publicizing intelligent failures can contribute to shared mental models among the agents. Finally, Sitkin (1995) suggests that on an organization-level the natural individual aversion to failure, which can be mitigated through training and personnel development, should be taken into account.

Who Deals with Failure in Organizational Change?

The different understanding of failure and how to deal with it in organizational change is also reflected in the group that is responsible.

For example, to cope with failure risks, many organizations started to profession-alize their change management. Change became an internal business. It became part of the job profile of Human Resource Managers' (HR business partner, cf. Ulrich, 1997) as well as of executives and leaders (cf. Bohn et al., 2015). Furthermore, some companies (and even authorities) started to establish special change managers (called chief restructuring officer, cf. Haghani, Weidemeyer, & Scheunert, 2016) or change teams (called in-house consulting). Both have several characteristics in common:

- They act as a hybrid: part of the company but not part of the daily business.
- They carry out a reactive approach, that is, they come onto the stage when a crisis is already happening.
- They are called to create some kind of turn around.

Alternatively, organizations try to use collective intelligence and to activate their employees. In this way, change becomes democratic and grass-rooted—employees are not seen as passive recipients of organizational change.

Resistance to Organizational Change: Failure Risk or Opportunity?

First and foremost, it is the individual employees who act as a linchpin for success or failure in organizational change processes. The rationale behind this view is that *"change in the individual organizational member's behaviour is at the core of organizational change"* (Porras & Robertson, 1992, p. 724). Accordingly, scholars have repeatedly noted that change efforts fail due to an underestimation of the central role that employees play in the organizational change process. In this line of research, resistance to change is frequently cited as one of the most important reasons for difficulties in implementing change and the failure of change initiatives (Erwin & Garman, 2010). The failures are often attributed to the organization's inability to provide for an effective unfreezing process that was described above. While most researchers agree that resistance in organization change is inevitable because employees are forced to reflect and modify their routines and their behaviour, suggestions on how to deal with resistance vary considerably (ibid.). Therefore, different perspectives regarding resistance to change come into play: On the one hand, resistance to change is perceived solely as *"a reactive process where agents embedded in power relations actively oppose initiatives by other agents"* (Jermier, Knights, & Nord, 1994, p. 9). However, some scholars have started to criticize this passive and one-dimensional perspective on resistance and suggest a more multifaceted perspective on attitudes towards organizational change. This multifaceted perspective integrates the potentially positive intentions that may motivate negative responses to change (Thomas & Hardy, 2011). Analogous to the potential of failure in organizational change processes, that was discussed above, some scholars emphasize not suppressing or eliminating employees' negative reactions to overcome the "barrier" of resistance. Instead, change managers or

organizational representatives should consider the concerns of the change recipients and engage with them in useful feedback that will add value to the organizational change process (Ford & Ford, 2010). Quite similar, the concept of the employees' "readiness for change" (Choi & Ruona, 2011) postulates that the individuals' concerns about organizational change are natural and that there will be reasons for the negative reactions. In this way, attention is given to the employees' attitudes toward organizational change and the situational causes of such concerns—for example, individuals' evaluation of management support, and organizational capability to cope with a specific change initiative (Holt, Armenakis, Feild, & Harris, 2007).

Lessons from Failure

1. Failure is unavoidable!

Despite the knowledge of the success factors coming from research, failures cannot be avoided. Trying to prevent failure is less important than planning for them, freeing them from the stigma of guilt, and taking them as a source of knowledge.

2. Failure is unique!

Unsuccessful changes in organizations have many interlocking causes. To deal with failure means to address both structural conditions as well as implementation strategies. The worst thing that can happen is to over strain the organization with several changes at the same time, or ongoing changes without any re-freezing (as it is explicitly applied in some quality management concepts, such as SixSigma).

3. Failure is usual!

As statistics show, failures in change projects are the standard rather than the exception. The main challenge is not to prevent failure but to accept and learn from it. Too little failure indicates a reluctance to try something new, something outstanding, something brave. Thus, organizations with a high rate of failure is struggling to learn and develop further. Frequent failure should not be interpreted as a sign of organizational imbalance.

4. Failure is useful!

To fail can be useful as long as organizations take it as a source of experience in managing risks. Smaller errors in areas where experience in dealing with the failure already exist, are ideally suited for analysing the mechanisms behind the failure, and in generating risk awareness in the workforce (Sitkin, 1995). Small scale projects, research based approaches, iterative procedures, and evaluation as a sincere search

for insufficiencies are most appropriate in taking failure as it is: a necessity in making change.

References

Alexander, A., Berthod, O., Kunert, S., Salge, O., & Washington, A. (2015). *Failure-driven innovation*. Berlin: artop. Retrieved June 9, 2017, from http://www.artop.de/aktuelles/new-publication-failure-driven-innovation

Armenakis, A. A., & Harris, S. G. (2002). Crafting a change message to create transformational readiness. *Journal of Organizational Change management, 15*(2), 169–183.

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations, 46*(6), 681–703.

Bennis, W. G. (1969). *Organizational development: Nature, origins & prospects*. New York: Addison-Wesley.

Bohn, U., Crummenerl, C., & Graeber, F. (2015). *Change management 2015*. Offenbach/M.: Capgemini Deutschland. Retrieved June 10, 2017, from https://www.de.capgemini.com/resource-file-access/resource/pdf/change-management-studie-2015_new.pdf

Bowers, D. G. (1973). OD techniques and their results in 23 organizations: The Michigan ICL study. *Journal of Applied Behavioral Science, 9*(1), 21–43.

Choi, M., & Ruona, W. E. A. (2011). Individual readiness for organizational change and its implications for human resource and organization development. *Human Resource Development, 10*(1), 46–73.

Cinite, I., Duxbury, L. E., & Higgins, C. (2009). Measurement of perceived organizational readiness for change in the public sector. *British Journal of Management, 20*, 265–277.

Claßen, M., & von Kyaw, F. (2007). *Change management 2008*. Offenbach/M.: Capgemini Deutschland. Retrieved June 10, 2017, from http://www.wirtschaftsplan.ch/images/content/03_forum/pdf_publikationen/Change_Management-Studie_2008.pdf

Claßen, M., Arnold, S., Papritz, N., & Juhasz, Z. (2005). *Change management 2005*. Offenbach/M.: Capgemini Deutschland.

Cummings, T. G., & Worley, C. G. (2009). *Organization development & change* (9th ed.). Mason, OH: South-Western Cengage Learning.

De Dreu, C. K. W. (2006). When too little or too much hurts: Evidence for a curvilinear relationship between task conflict and innovation in teams. *Journal of Management, 32*(1), 83–107.

Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science, 6*(2), 204–223.

Denison, D. R., Haaland, S., & Goelzer, P. (2003). Corporate culture and organizational effectiveness: Is there a similar pattern around the world? *Advances in Global Leadership, 3*, 205–227.

Erwin, D. G., & Garman, A. N. (2010). Resistance to organizational change: Linking research and practice. *Leadership & Organization Development Journal, 31*(1), 39–56.

Ford, J. D., & Ford, L. W. (2010). Stop blaming resistance to change and start using it. *Organizational Dynamics, 39*(1), 24–36.

Foster, R. (2012). *Creative destruction whips through Corporate America*. INNOSIGHT Executive Briefing Winter 2012. Retrieved June 10, 2017, from https://www.innosight.com/wp-content/uploads/2016/08/creative-destruction-whips-through-corporate-america_final2015.pdf

Foster, R., & Kaplan, S. (2001). *Creative destruction: Why companies are built to last and underperform the market—and how to successfully transform them*. New York: Currency.

Guzzo, R. A., Jette, R. D., & Katzell, R. A. (1985). The effects of psychologically based intervention programs on worker productivity: A meta-analysis. *Personnel Psychology, 38*, 275–291.

Haghani, S., Weidemeyer, F., & Scheunert, E. (2016). *Chief restructuring officer – Coach or commander?* Frankfurt/M.: Roland Berger.

Heller, F. A. (1969). Group feedback analysis: A method of field research. *Psychological Bulletin, 72*(2), 108–117.

Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations – Software of the mind: Intercultural cooperation and its importance for survival*. New York: McGraw-Hill.

Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change: The systematic development of a scale. *Journal of Applied Behavioral Science, 43*, 232–255.

Hooijberg, R. (1996). A multidirectional approach toward leadership: An extension of the concept of behavioral complexity. *Human Relations, 49*(7), 917–946.

Jermier, J. M., Knights, D., & Nord, W. R. (1994). *Resistance and power in organizations*. London: Routledge.

Kunert, S. (2014). Time, staff and motivation in innovation projects – New empirical insights. In K. R.E Huizingh, S. Conn, M. Torkkeli & I. Bitran (Eds.), *The proceedings of XXV ISPIM conference – Innovation for Sustainable Economy and Society*.

Kunert, S. (2016). Kultur fördert Innovationen – Organisationsdiagnostik im Zeiten des New Work. *Wirtschaftspsychologie aktuell, 2*, 55–57.

Kunert, S., & Buber, E. (2017). Culture beats leadership – First insights of the modul_or. *Proceedings of XXVIII ISPIM innovation conference in Vienna on 18–21 June*.

Lewin, K. (1947). Frontiers in group dynamics. *Human Relations, 1*, 5–41.

Louca, F., & Mendonca, S. (2002). Steady change: The 200 largest US manufacturing firms throughout the 20th century. *Industrial and Corporate Change, 4*, 817–845.

Madsen, P. M., & Desai, V. (2010). Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. *Academy of Management Journal, 53*(3), 451–476.

McGrath, R. G. (2011). Failing by design. *Harvard Business Review, 89*(4), 76–83.

O'Reilly, C. A., & Tushman, M. L. (2008). Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in Organizational Behavior, 28*, 185–206.

Parsons, T. (1951). *The social system*. London: Routledge.

Parsons, T., Shils, E., Naegele, K. D., & Pitts, J. (1961). *Theories of society*, *Foundations of modern sociological theory* (Vol. I). New York: Free Press.

Porras, J. I., & Robertson, P. J. (1992). Organizational development: Theory, practice, and research. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial & organizational psychology* (Vol. 3, 2nd ed., pp. 719–822). Palo Alto, CA: Consulting Psychologists Press.

Reeves, M. & Pueschel, L. (2015). *Die Another Day: What leaders can do about the shrinking life expectancy of corporations*. New York: BCG. Retrieved June 10, 2017, from https://www.bcgperspectives.com/content/articles/strategic-planning-growth-die-another-day

Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly, 22*, 956–974.

Schein, E. H. (1979). Personal change through interpersonal relationships. In W. Bennis, J. Van Maanen, E. Schein, & F. Steele (Eds.), *Essays in interpersonal dynamics* (pp. 129–162). Homewood, IL: The Dorsey Press.

Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco, CA: Jossey-Bass.

Scholl, W. (2014). Innovationskultur, Innovationsprozesse und Innovations-erfolge. In W. Scholl, F. Schmelzer, S. Kunert, S. Bedenk, J. Hüttner, J. Pullen, & S. Tirre (Eds.), *Mut zu Innovationen – Impulse aus Forschung, Beratung und Ausbildung* (pp. 77–99). Berlin: Springer.

Scholl, W., Schmelzer, F., Kunert, S., Bedenk, S., Hüttner, J., Pullen, J., & Tirre, S. (2014). *Mut zu Innovationen – Impulse aus Forschung, Beratung und Ausbildung*. Berlin: Springer.

Sitkin, S. B. (1995). Learning through failure: The strategy of small losses. In M. D. Cohen & L. S. Sproull (Eds.), *Organizational learning* (pp. 541–577). Thousand Oaks, CA: Sage.

Standish Group. (2013). *The chaos manifesto*. West Yarmouth: Standish Group. Retrieved June 10, 2017, from https://cs.calvin.edu/courses/cs/262/kvlinden/resources/CHAOSManifesto2012.pdf

Thomas, K. W. (1976). Conflict and conflict management. In M. D. Dunette (Ed.), *Handbook of industrial and organizational psychology* (pp. 889–935). Chicago, IL: Rand McNally.

Thomas, R., & Hardy, C. (2011). Reframing resistance to organizational change. *Scandinavian Journal of Management, 27*(3), 322–331.

Ulrich, D. (1997). *Human resource champions: The next agenda for adding value and delivering results*. Harvard: Business School Press.

Wildavsky, A. (1988). *Searching for safety*. New Brunswick, NJ: Transaction Books.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure Management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kunert, S., & von der Weth, R. (2018). Failure in projects. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Lackner, K. (2018). Failure in consulting – Consultation cannot fail! In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Online Resources

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Failure in Innovation: Is There Such a Thing?

Bettina von Stamm

Setting the Scene

Failure. In the context of innovation this is an interesting concept, one that has different connotations and different implications to most other contexts. Indeed, whereas in most contexts failure is something bad, to be avoided at all cost, in the context of innovation failure is considered to be not only a necessary evil but often a precondition for success and a whole host of books has been written on this topic, many of them in recent years (e.g. Danner & Coopersmith, 2015; Heath, 2009; Maxwell, 2007; Tarkenton & Woren, 2015; Weinzimmer & McConoughey, 2012). As Charles Kettering, an American inventor, engineer, businessman, holder of 186 patents, founder of Delco, and head of research at General Motors from 1920 to 1947, suggested in the earlier decades of the last century: "*99 percent of success is built on failure.*" More recently, Elon Musk, CEO of SpaceX and Tesla Motors, echoed the sentiment declaring that: "*If things are not failing you are not innovating enough.*" So, failure in innovation is seen to be essential to achieving success in innovation—or as Thomas Watson, founder of IBM once put it: "*The way to succeed is to double your failure rate.*"

If that is so, all should be well in the world of innovation as there are indications that failures rates lie between 75% to even 90%, depending on which study you look at:

- Ernst and Young (2011) reported that out of every 100 new consumer products that come to market, the failure rate is typically between 80% and 90%. Whereby failure is defined as not realising the anticipated benefits agreed before launch.
- A Nielsen report (Hall & Wengel, 2014) is quoted saying that three in four Fast Moving Consumer Goods launches fail within a year.

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- Of every seven new product/service projects, about four enter development, 1.5 are launched, and only one succeeds (Edgett, 2011).

Yet not all is well. A study by Accenture (Lacy & Hayward, 2016) indicates that innovation remains the top two strategic priority. A PriceWaterhouseCoopers study (Percival, Shelton, & Andrews, 2013) of 246 CEOs couldn't be clearer: innovation today is a key driver of organic growth for all companies regardless of sector or geography. A study conducted by The Conference Board Global in 2015 indicates that innovation is also one of the top three challenges CEOs are facing. Accenture declare in their 2015 report that: *"US executives are unrealistic in believing they have the capabilities they need to achieve their bold innovation goals. The truth is that most struggle to generate the returns they seek from their innovation investments."* (Alon & Elron, 2015, p. 3).

Failure rates in innovation remain high AND satisfaction with innovation performance does not really seem to improve. Maybe innovation does not fail enough? Or perhaps it is the wrong kind of failure? Perhaps it is fear of failure, not failure itself, that needs to be looked at? Fear is widely acknowledged to be the greatest obstacles to innovation (e.g. Accountempts, 2012; BPI Network, 2015).[1]

Of course, one answer to failure could be: let's not innovate. No innovation, no fear, no failure. While this might sound safe and therefore tempting, it is not an option in the twenty-first century. As Klaus Schwab, founder and executive chairman of the World Economic Forum, describes in an interview with The Guardian in 2016: *"The changes are so profound that, from the perspective of human history, there has never been a time of greater promise or potential peril. My concern, however, is that decision-makers are too often caught in traditional, linear (and non-disruptive) thinking or too absorbed by immediate concerns to think strategically about the forces of disruption and innovation shaping our future."* Linear thinking, entirely sufficient in the twentieth century, no longer works in a context that is characterised by volatility, uncertainty, complexity and ambiguity (VUCA). Such a context requires adaptability, experimentation, and a willingness to "embrace the path of change to create value" which is my definition of innovation. To speak with the words of Jim Whitehurst, CEO at Red Hat and previously COO of Delta Air Lines, *"Today, a culture of innovation is a strong indicator of an*

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[1]Interestingly, my PhD (1994–1998) was motivated by the insight that, despite all the insights into factors underlying success and failure in new product development, as it was called at the time, success rates did not really seem to improve! Trigger was the booklet "The new product" by D. Karger published in 1960 in which the drivers for success and failure were almost identical those identified in 'latest research' in the early 1990s. The conclusion I reached based on three case studies from different contexts was, that a key facilitator of failure are our habits, and the assumptions we make when embarking on new projects. We tend to ignore the differences and complexities of projects, using accustomed tools, approaches, processes, and generally the people who have worked on the last five projects to succeed with something that has not done before, and may require an entirely different setup.
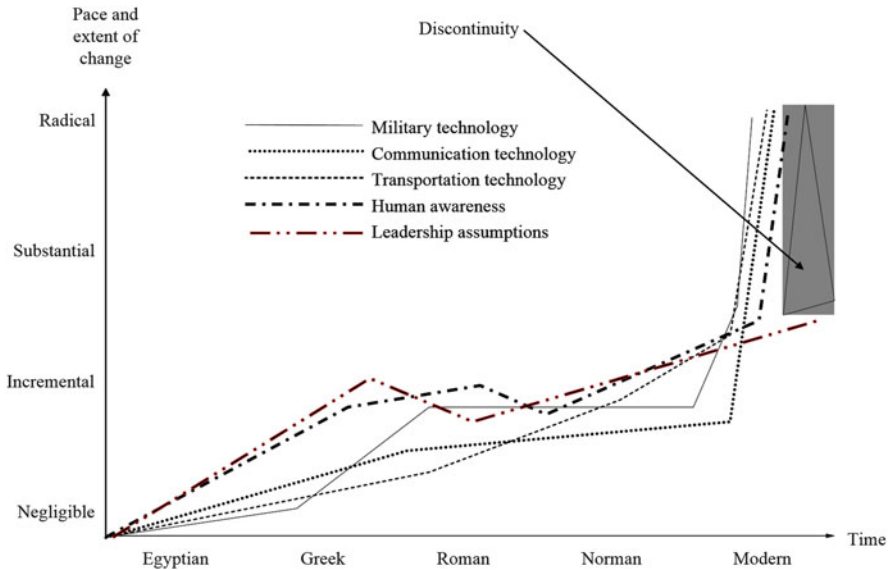
Fig. 1 Accelerating rate of change (Obolensky, 2015)

organisation's ability to weather the kinds of constant disruption nearly every industry seems to be experiencing" (Whitehurst, 2016).

Hence, the particular conditions of the twenty-first century—which I will elaborate upon in the next section—make innovation an absolute necessity for any organisation that wants to survive. Logic declares that innovation does not happen without failure. This means that organisations that want to survive in today's context need to learn to love failure, and find a way to minimise fear.

I the next section I will present arguments that support the claim about the unprecedented nature of the twenty-first century which will lead to the conclusion that innovation is indeed a key necessity. This will be followed by an excursion into the topic of fear, before delving into why I believe that, even if there is no such thing as failure when innovating, there still is failure in the context of innovation. The chapter will conclude with some thought on how to minimise failure of innovation, while acknowledging that it will remain a necessary part of it.

Want to Succeed in the Twenty-First Century? Innovate!

The twenty-first century is like nothing we have experienced before. Business are struggling to find their way in a world that is characterised by volatility, uncertainty, complexity and ambiguity, VUCA for short. Five C's drive this challenging context:

- **C**hange is gathering pace—the rate at which new things are being introduced has increased dramatically since the turn of the millennium (see Fig. 1).

- Connectivity is unlimited—meaning that time and space have lost their relevance. A report by Business Insider from (Camhi, 2015) anticipates that by 2020 34 billion devices will be connected to the internet, up from 10 billion in 2015. It is worth keeping in mind that the world's population by 2020 is anticipated to be 7–8 billion.
- Convergence is happening everywhere—boundaries are not shifting but blurring and disappearing altogether. Think about your smart phone which was introduced a mere 10 years ago, in 2007. How many devices you would have needed 10 years ago to match its functionality. How much or little are your personal and professional lives separated? Do you answer emails in the evening and during holidays? When you buy a new smartphone, are you using a product or a service? When you go to the supermarket, do you buy your food, or also your banking and insurance products? Hierarchies are flattening, the boss in one team might be a supporting member in another.
- Consumers are changing—they are better informed, more demanding, and more fickle than ever before. Accenture described one aspect of such new consumers in their 2013 report as: *"Consumers make choices not only to improve their material welfare. They increasingly do so to improve their physical and mental well-being."* (Nunes, Yardley, & Spelman, 2013, p. 3). Interestingly, Accenture's Global Outlook Study 2016 is titled, "Why green is the new gold", indicating that sustainability is playing an increasing role in purchasing decisions today.
- Challenges to humanity are unprecedented—be it access to fresh water or sustainable sources of energy, feeding and housing a population of soon to be 10 billion, or a loss in biodiversity and natural resources. Overcoming challenges has always been part of human history, yet never on this scale, on so many fronts, affecting so many people, and with a good chance of creating havoc to the planet with irreversible consequences unless we plan to address them.

These five Cs also result in a sixth: complexity, whereby it is important to differentiate between "complicated" and "complex" systems. Looking at Fig. 2 the system on the left is complicated, the system on the right is complex. It is not just semantics. A complicated system we can understand if we study it, analyse it, and take it apart. What is more, based on its past behaviour we can predict and influence how it will behave in future. In contrast, however long we study and analyse a complex system, however much insight we gain into its past behaviour, we will not be able to predict how it will behave in future. Digital connectivity has transformed a complicated system into a complex one, facilitating unlimited and unpredictable connections of people and things, in real-time.

The latter is not without significance. If the slower pace and slower flow of information, ideas and implementation of the past made a sequential approach acceptable, the VUCA context we are facing now has not only reduced the timespan organisations can survive without innovating dramatically, it has also made concurrency a necessity (see Fig. 3).
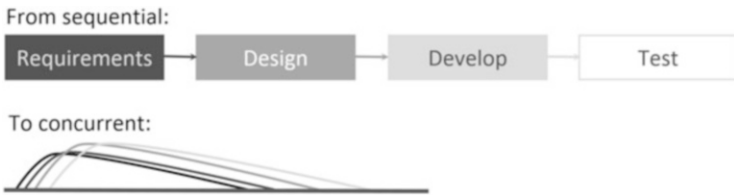
Fig. 2 Complicated versus complex

Fig. 3 From sequentiality to concurrency

The only way for an organisation to survive, let alone thrive, in such a context is to innovate. Not only around their products and services, even more so around their business models, organisational structures, leadership styles and the way they interact with the outside world.

A Word on Fear

In principal, the imperative to innovate is understood in most organisations. In principal, the fact that innovation cannot come without (some) failure is also understood.[2] So, is there a problem? If there were satisfaction with innovation performance, there would not be. If failure in innovation would truly translate into learning, there would not be. If we would see the kind and level of innovation the world needs right now, there would not be. Yet there is dissatisfaction, there is not enough learning, and we do not have (enough) of the kind of innovation that makes our world more successful and sustainable.

Enter: fear. As pointed out at the outset, this emotion[3] is considered to be the greatest obstacle to innovation, and there is a lot of potential for fear in the context of innovation, to name but the most obvious:

- Fear of damaging one's reputation/loss of face when asking 'silly' questions—yet it is often the seemingly silly question that unearths deep-set assumptions and habits that are no longer appropriate; to find meaningful questions/challenges is even more difficult than finding meaningful answers. This is expressed in the Einstein quote that *"The mere formulation of a problem is far more often essential than its solution, which may be merely a matter of mathematical or experimental skill. To raise new questions, new possibilities, to regard old problems from a new angle requires creative imagination and marks real advantages in science."*
- Fear of being ridiculed/loss of prestige when I have a crazy idea—yet Einstein pointed out that: *"If an idea is not crazy at the outset there is no hope for it."*
- Fear of redundancy/loss of position as a consequence of the innovation—to innovate is to change the status quo. The more radical the innovation the greater the change and the likelihood that it might affect me. Yet Buckminster Fuller said: *"You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete."*

Hilary and Vyas (2016) identified six signs of organisation running on fear: (1) An absence of frank and open dialogue, (2) a resistance to participate, for fear of being ridiculed, overlooked or "shot down", (3) only notional alignment ("lip-service") on action plans, (4) a partial or total reluctance to pass any bad news upwards, (5) a culture of "going through the motions" without any real engagement, and (6) a focus on salient but unlikely catastrophic outcomes.

Such fear is generally not expressed and acknowledged; showing such emotions in the workplace is generally not encouraged, not least: we are all rational beings,

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[2]See also Kunert and Staar (2018) and Kunert and von der Weth (2018).

[3]Wikipedia defines fear as "a feeling induced by perceived danger or threat that occurs in certain types of organisms, which causes a change in metabolic and organ functions and ultimately a change in behaviour, such as fleeing, hiding, or freezing from perceived traumatic events."

Old Brain - New Brain

Triggers:

* Safety
* **Unconditional respect** or love
* **Being listened to**
* Clarity
* Permission
* Authentic attention
* Acknowledgement
* Trust
* **Inclusion**
* Generosity
* Vulnerability

Blue Zone - Prefrontal Cortex approximates the newer part of the brain

Red Zone - Amygdala approximates the "old" or limbic part of the brain

Triggers:

* Physical threat
* Fear/Anxiety/Guilt
* **Rejection**/Exclusion
* **Ambiguity** & lack of clarity
* Perceived **unfairness**
* **Not being listened to**
* Sarcasm
* Being told how to think
* **Being judged**

Based on: Group 8 Education – VASSP Conference 18/19 August 2008

Fig. 4 Old brain—new brain

right? Instead those experiencing fear often resort to micro-management and becoming more dictatorial, as this gives them the impression of being in control, which in turn helps to suppress fear.

In order to explain the role of fear in the context of innovation I will make a (simplified, probably even simplistic) excursion into neuroscience. For our purpose, we simply divide our brain into two parts: the "old" or limbic part of the brain, called amygdala, which I will refer to as the "red zone", and the "new" part of our brain, the prefrontal cortex, which I will refer to as the "blue zone" (see Fig. 4). It is important to know that the amount of energy available to our brain is fixed, and that energy is available to either the red zone or the blue; it cannot be in both parts at the same time.

Whether the energy is in the blue or the red part of our brain depends on what we experience at that moment. We are "in the red zone" when we feel physically threatened, experience fear, anxiety or guilt if we perceive a lack of clarity, being judged or treated unfairly, feeling rejection or exclusion, or are not listened to and just told how to think. All of this triggers the "fight or flight" reaction, where the body releases stress hormones, increases our heart rate, and increases blood flow to the skeletal muscles. The red zone is focused on "self", it is the seat of anger, fear, and depression; it is about impulses and desires; it is where "low-order learning" takes place. This means it is about memorising rather than applying knowledge, and importantly for innovation, if we are "in the red" we cannot reflect or consider alternatives: we are resisting change and fall back on what we know to work.

Interestingly, very often the mere suggestion of a change—and what is innovation but change—triggers the red zone. Why is that? We seem to have an education system that conveys a world view where there is but one right answer. Unless we get that one right answer we fail, we feel stupid, we might be laughed at. It might well be that when we are starting our educational journey and learning reading, writing and maths there truly is often only one right answer, for example, not much arguing with the fact that six times six is 36. How to spell a word seems to be the same—though those familiar with American and British English know that how you spell a word can depend on the national context, and the meaning of a word can chance in embarrassing ways. When an American says "I am pissed" he is in a very different emotional state to a Briton saying that he is pissed. Bottom line is, a "right or wrong" mentality is ingrained very early on. The deeply embedded search for the 'one right answer' causes problems in the context of innovation. If we believe there to be 'one right way', and someone suggests a change, does that not mean that we must have been wrong all along? How many of us become defensive when someone suggests to change how we do things or just asks us why we do them the way we do? No wonder we feel threatened by innovation, and our energy moves into the red zone, into the very place from where it is almost impossible to innovate.[4]

If we consider the key characteristics of the twenty-first century (volatile, uncertain, complex, ambiguous) it is not surprising that fear in organisations has emerged as a topic. Moving on to the blue zone, not surprising it is triggered by more or less by conditions to what gets us 'into the red'. We are in the blue zone when we feel safe, respected, trusted, loved, being listened to, getting authentic attention, being acknowledged and included, having clarity and permission, experiencing generosity, and where others show vulnerability. The blue zone is about reflection, managing our impulsive desires, it is the seat of affiliation, generosity and good will, and the home of imagination and creativity. When we are "in the blue", high-order learning takes place, the kind of learning where we apply knowledge in different contexts, and combine things to create something new. Given that much innovation happens by connecting previously unconnected bodies of knowledge, blue is definitely the zone to be in for innovation.

There is another driver of fear in organisations. How many people in your organisation consider themselves to be highly creative and innovative? How many people are truly comfortable with the uncertainty, risk and ambiguity that comes with innovation? In most organisations it is not many. How do you think these people feel when challenged by their boss to be more creative and innovative? Where will the energy in the brains be, in the red or in the blue zone? The bottom line is, as long as we are fearful it will be difficult to innovate, and the fear is about something much more complex than just failure. If we want to innovate, which is a necessity in the twenty-first century, we need to find a way to acknowledge, and address the fear. Looking at failures in creating a context for innovation might be more helpful than looking at innovation failures.

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[4]See also Kunert and Staar (2018).

Failure? But Not As We Know It!

That not all innovation can succeed, hence that innovation will not come without failure, is a fact. However, in the context of innovating and innovation there are failures that, if addressed appropriately, could reduce the rate of innovation failure. If this seems illogical let me explain. Here some failures in the context of innovation that can and should be addressed:

- Failure to provide direction
- Failure to establish a shared definition
- Failure to ensure required resources are available
- Failure to experiment and push beyond the immediately obvious
- Failure to invite everyone
- Failure to ensure diversity
- Failure to mitigate risk

Failure to Provide Direction

Innovation is not the end in itself, it is a means to an end. This means that it is not enough to just call for more innovation or declare innovation to be one of the company values. Where innovation is to take us—the end—needs to be defined and made explicit. Otherwise people spend time developing ideas that are irrelevant and are then frustrated when their ideas are being rejected.[5] There are three aspects to this.

First, providing an engaging and inspirational vision, such as 'putting man on the moon', is a powerful tool to stimulate innovation, without having to mention the i-word. The best vision describes the end result, and leaves the path of how to get there open. This way there is room for experimentation and exploration as well as an opportunity for each individual to judge whether what they do contributes to getting the organisation where it wants to be.

Second, not all innovation is created equal. The focus should not be on how innovative something is but how much value it creates—and not only financial value but value across the triple bottom line. If you believe focusing on the bottom line is enough, consider the results of the 2016 Millennial study by Deloitte (2016) which found that for six in ten millennials, 'a sense of purpose' influences the decision whether or not to take a job. It goes further: almost 50% of survey participants declined work assignments that were contradicting their personal values.

Third, another aspect that needs to be made explicit is what level and what type of innovation is desired. Is it incremental innovation, radical innovation or even

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[5]If you want to get an impression what innovation without direction looks like I recommend watching the 'race of people without a sense of direction' from the Silly Olympics by Monty Python.

transformational innovation? Is it innovation around products, services, processes, business models, how we work and collaborate?

A failure to provide direction will lead to the waste of resources, confusion and frustration as well as the loss of employee enthusiasm and engagement.

Case Study

A multinational medical organisation decided to accelerate the pace on their innovation journey. As a first step they thought about what they really wanted to stand for, as an organisation, which led to the creation of a new mission statement: Helping people regain their lives. A young and assertive project manager was then asked to check all projects in the company's development portfolio against that new mission. Her recommendation: out of 89 kill all but 16. This was reduced even further, first to 11, then four—until at last only two remained. That kind of action requires serious courage and supporting action that prevents the researchers who had been working on the projects to feel rejected. Here a couple of things they did:

- The R&D Director set a positive tone by saying: *"I'd rather they (the R&D people) do not anything at all than destroy value."*
- They send the R&D team out to visit customers (something that had not happened before) and attend training courses.
- The leaders of projects that got killed actually moved on to better projects; they also got a note from senior management basically saying, 'thank you for not wasting company resources'.
- Bonuses we paid based on senior management's understanding that bonuses are not given for a positive decision, e.g. a go-ahead decision, but for the right decisions. Killing projects that do not create value that it is the right decision.

Failure to Establish a Shared Definition

Following on from the first point, in addition to providing direction it is necessary to develop definitions of what different types and levels of innovation look like to ensure everyone in the organisation (and beyond if involved in the innovation process) has a shared understanding of what is expected. This is important as what is considered to be incremental and what radical varies, both from the perspective of the individual (depending on their comfort with risk and uncertainty), and whether it is viewed from the perspective of the organisation, or the customer/user. There is no 'absolute' definition of different levels of innovation, what matters is that the definition of different types and levels of innovation is shared amongst those who innovate together, and relevant and meaningful in the context of the particular organisation in question. To ensure shared understanding it is best to illustrate different types and levels through real life examples, ideally from within the

organisation. A failure to define what is meant by different types and levels of innovation most likely leads to frustration and conflict.

Failure to Ensure Required Resources Are Available

The call for innovation often seems to come with the unspoken request to do it on top of the day job, without any additional resources, ideally without changing anything. This is not likely to happen. This seems confirmed by insights from the 2015 MindMatters study of innovation worker that revealed that four of five people who took the survey (81%) said their firms do not have the resources needed to fully pursue the innovations and new ideas capable of keeping their companies ahead in the competitive global marketplace. If the call for innovation is serious, this needs to be reflected in making resources available, from appropriate skill-sets, to time, to finances. Failure to provide appropriate and adequate resources leads to frustration, delays, and inferior results which increases chances for failure.

Failure to Experiment and Push Beyond the Immediately Obvious

Linked to the issue of resource availability, yet also a question of mindset, is a failure to experiment. That we often focus on finding answers before we have verified that the question we are asking actually matters is one challenge. Another challenge is our tendency to run with the first answer or approach that seems feasible. In a subtle way, our belief that there is one right answer comes into play: if we have an answer that works, surely that is the right one. We have one (the) answer, why keep looking for another one? Yet it is often when we have exhausted the repertoire of immediate and therefore often obvious answers that true innovation can happen. To start again when you would normally give up is what leads to real innovation. Failure to experiment limits chances to create exciting, radically different innovation and is more likely to lead to failure.

Failure to Capture Learning

One important aspect of experimentation, as well as failure, is to ensure that the different experiments and their results are recorded so we and other can benefit from the insights that these experiments (or failure) have generated at a later time. Instead of identifying learning many organisations focus on identifying whom to blame instead. As Edmondson (2011) points out: *"When I ask executives to consider this spectrum and then to estimate how many of the failures in their organisations are truly blameworthy, their answers are usually in single digits—perhaps 2% to 5%. But when I ask how many are treated as blameworthy, they say (after a pause or a laugh) 70% to 90%. The unfortunate consequence is that many failures go unreported and their lessons are lost."* Failure to capture learning from experiments and

failure opens the door for the same mistakes and failures being repeated, and encourages a blame culture.

Failure to Invite Everyone

If we go back a couple of decades, the prevailing option was: the boss knows best, ideas come from a select few, you have to be an expert to contribute. Today we know that nothing could be further from the truth. What has become known as 'open innovation' is the gateway to successful innovation. The fact that most innovation happens by connecting and combining previously unconnected bodies of knowledge has already been mentioned. It is supported by findings of Larry Keeley of the US-based innovation consultancy Doblin, who suggests that 98% of successful innovations, including many we would describe as 'breakthroughs', brought to market over the last 10 years were based on existing knowledge explored and put together in new ways; only the 2% remainder being based on new knowledge (Keeley, Walters, Pikkel, & Quinn, 2013).

> **Case Study**
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> A large US-based conglomerate decided to kick-start they innovation activities by establishing an online idea management system. While there was initially a debate about who should be allowed access, the CEO was please that they decided in the end to give access to everyone, everywhere. The Chief Innovation Officer said in an interview: *"What we learned from the submissions we received is the following: (1) the more people you invite the better the output, and the higher the achievements; (2) when we looked at where the best, most powerful ideas had come from we could not find any link to either a particular geographical area, nor to a particular level within the organisation's hierarchy, nor to one particular function. There were no hot spots for 'good ideas'. The ideas were rather distributed across all dimensions. The 'winners' had only one thing in common: they were all quite exceptional. So we were pleased we asked everyone, otherwise we would have missed out on some fantastic opportunities."*

Most interesting though in this context is that the solutions for difficult challenges hardly ever come from the knowledge domain in which they originate. Experts from within the domain have often preconceived ideas of what is and isn't possible and reject unusual solutions. Yet to quote Einstein again: *"We cannot solve our problems with the same thinking we used when we created them."* Failure to involve everyone leads to suboptimal results, missing out on opportunities, and identifying truly different solutions.

Failure to Ensure Diversity

Connecting to the above is something a colleague of mine once said, *"If you have an innovation team of ten who all think alike you have a cost savings opportunity of nine."* In order to innovate we need someone to challenge our assumptions, question why we do the things the way we do, and ask the silly questions we as 'experts' would be too embarrassed to ask. Yet most of us prefer to surround ourselves with likeminded people to whom we do not need to explain why and how we do things, where we have fewer challenges through misunderstandings that arise from associating different meaning with the same words. Working in diversity is not easy and does not happen on its own accord, but investing in making it work is definitely worth the effort. Failure to ensure diversity leads to perpetuating the status quo and risks failure due to group-think.[6]

Failure to Mitigate Risk

Risk and uncertainty are invariably part of innovation,[7] yet there are ways to mitigate risk and limit the scope of potential failure. Risk can be mitigated by up-front experimentation. Risk can be mitigated by committing to a next step in a project rather than the entire project. Risk can be mitigated by collaborating and sharing the risk. Risk can be mitigated by a staged introduction rather than a blanket roll-out of an innovation. Risk can be mitigated by giving up the search for the 'one right answer'. A failure to mitigate risk enhances risk of failure, and the scope of it.

Looking back over the list of failures laid out above you may notice that many of these failures are likely to push individuals' energy in to the red zone, activating fear, or causing us to resort to proven approaches and solution. Given that the above failures are quite common, it is perhaps not surprising that only 5% of workers feel highly motivated to innovate (MindMatters, 2015). These failures reduce potential and impact of innovation, often facilitating the very failure they aim to avoid.

And if you take another look, it might occur to you that most of the above are, in the end, failures of leadership. It is not for nothing that McKinsey noted in their 2007 survey of global business leaders: *"Leadership is the best predictor of innovation performance."* This is echoed in a note by Soken and Barnes (2014), which also confirms some of the other failures above: *"Leadership and management behaviours that engender fear, a lack of focus and communication about*

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[6]Wikipedia defines group-think as *"a psychological phenomenon that occurs within a group of people in which the desire for harmony or conformity in the group results in an irrational or dysfunctional decision-making outcome."*

[7]See also Kunert and von der Weth (2018).

organisational innovation strategy, a paucity of resources (time, money, encouragement) are among the factors that make innovation less likely or less successful.[8]

Tips and Tools for Minimising Failure

So what can leaders do to embrace and minimise failure of and in innovation? First measures are to avoid the failures listed in the section above, in fact, all of them can be turned into recommendations of what to do to minimise failure. Becoming aware that these failures exist, and what their consequences are, is the most important first step. Only when one is aware of something one can start to take corrective action. There are a few more tools I would like to mention here, each will be explained in a bit more detail:

- Consider context
- Collaborate
- Embrace the concept of sunk cost
- Stage commitment
- Prototype
- Celebrate failure

Consider Context

What works well in one context does not necessarily work equally well or in the same way in another; what works well today might not necessarily work well tomorrow. For example, the context in which incremental innovation thrives is very different from a context that supports radical innovation. Different types and levels of innovation thrive in different conditions, with different skill sets, supported by different processes, with different selection and decision criteria, and are most likely to succeed if all is aligned and supporting each other. As most organisations are set up to support incremental innovation it is not surprising that much radical innovation fails or is killed. The Peter Drucker statement that *"There is not only one right organisation. The right organisation is the organisation that fits the task."* (Drucker, 2007) applies equally to the context of projects and innovation.

Collaborate

Diversity, referred to in the section above, refers to those involved in a particular innovation. Collaboration here refers to working across functions, across business units, with customers and suppliers, and even with competitors. Collaboration is one

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[8]See also Moccia (2018).

of the most powerful tools in the innovation armoury. To collaborate means to share risks and costs, it can bring in additional resources and complementary skills (diversity/fresh perspective), it can also ease access into new markets. If diversity already helps counter-balance group-think, an outsider perspective is even more likely to prevent it. Isabelle Royer found in her research that innovation failure was often caused by the organisation's deeply held belief that the project will succeed: *"Hardly the product of managerial incompetence or entrenched bureaucracy, the failures I've examined resulted, ironically, from a fervent and widespread belief among managers in the inevitability of their projects' ultimate success. This sentiment typically originates, naturally enough, with a project's champion; it then spreads throughout the organisation, often to the highest levels, reinforcing itself each step of the way. The result is what I call collective belief, and it can lead an otherwise rational organisation into some very irrational behaviour."* (Royer, 2003).

An interesting side effect of external collaboration can be that it helps to keep radical innovation alive, the kind of innovation that is often the first to be killed when times get tough. It is more difficult to pull out of a partnership deal than kill an internal project quietly. As Ernst & Young found in their 2014 Agile Innovation Study: *"50% [of participants] say failure to collaborate puts them at a disadvantage."* Collaboration is innovation's secret weapon (cf. von Stamm, 2004).

Case Study

Back in the early 2000s the innovation manager of a UK-based retail organisation decided to explore and develop the emerging RFID (radio frequency identification) technology to improve stock-keeping and supply chain management. At the time there was quite a bit of controversy around the technology, mostly related to privacy concerns.

In addition to having to counter the public's scepticism and aversion the innovation manager had to fight internal battle to keep the project alive which was quite radical for time and context. His biggest trump card was collaboration and part-funding by the UK government which was interested in progressing the technology. Killing a project that had considerable attention outside the organisation would have been much more difficult than killing a project that was run entirely in-house.

Embrace the Concept of 'Sunk Cost'

The essence of the 'sunk cost' concept is not to throw good money after bad—which is always a tough decision and a difficult one as another quote from Royer (2003) illustrates, *". . . as a project unfolds and investments increase, this faith [that the project will eventually succeed] has to be increasingly tested against the data. Indeed, the challenge for managers in the 'can-do' culture of business is to*

distinguish between belief as a key driver of success—and belief as something that can blind managers to a project's ultimate failure."

Staged Commitment

The principal recommendation here is, the more radical the project the more it is advisable to apply staged funding, an approach that is of course widely spread in venture funding. Not only are there different investment stages such as Series A (for proof of principle), Series B (for early stage growth), and Series C, D etc for later rounds of growth funding, those providing funding at these different stages are often not the same (perhaps there is an interesting lesson to be learned for corporations).

Creating break-points for projects was also the driving principle behind what was originally called the 'phased review process' and originated in the chemical industry in the 1940s and picked up by NASA in the 1960s (Di Biase, 2015). Today such approach is better known under the term 'stage-gate' process.

Case Study

A case example that may be of interest in the context also stems from the aforementioned UK-based medical devices company. As part of their innovation journey they, as most other organisations, introduced a stage-gate process. In most companies the gate meetings are about the team defending what they have done, hoping that senior management will sign them off to go to the next stage. Senior management in this company took a different approach. They felt that, having given the project the green light in the first place, it was their responsibility to provide the team will all the support it needed. The responsibility for the decision of whether to proceed, pause or to discontinue was given to the team whereby a key criterium was: does the project support our mission or not.

Prototype

Indeed, if collaboration is innovation's secret weapon, then prototyping is a plain necessity, not least as prototyping is about creating a reality that does not (yet) exist. By making ideas and concepts tangible they become easier to understand, and it is easier to discuss and debate potential, alternatives, challenges. It helps avoid misunderstandings and facilitates shared understanding. Interestingly, the German word for understanding—begreifen—literally translated means to grab hold of, i.e. being able to touch and therefore understand. Tom Peters famously said: *"On a list of, say, five things would-be-innovators should do, working at creating a full-blown culture of rapid prototyping surely merits inclusion."* (Peters, 1999).

Celebrate Failure

To come full circle in this chapter, in the context of innovation this is an interesting concept, one that has different connotations and different implications to most other contexts. So don't try to brush innovation failures under the carpet. Give them the limelight and put them under the microscope instead! You may even want to go as far as celebrating failure—as it is said that companies such as 3M do and Hewlett Packard did just that. One thing it would certainly do: take the stigma of failing away. One thing we have certainly come to realise is that much of what is considered innovation failure becomes and essential stepping stone to success.[9]

Applying these tools, together with avoiding the failures outlines in the previous section should allow organisations to take a more positive outlook on failure, and by doing so minimise the impact of the real culprit: the underlying fear.

Closing Thoughts

I would like to close with the (hopefully) obvious: innovation failure is not about making stupid mistakes, nor about condoling shoddiness or tolerating carelessness. It is about accepting failure that happens despite all precautions having been taken, that has happened with the full acknowledgement and consideration of the risks involved, that is driven by courageous decisions built on deep insight and understanding.[10] As Edward Dowden, Irish poet, critic and educator (1843–1913) once said: *"Sometimes a noble failure serves the world as faithfully as distinguished success."* So, if you want to thrive in the twenty-first century, understand fear, love (nobel) failure, and innovate.

References

Accountempts. (2012). *Workplace frights*. Retrieved June 10, 2017, from http://accountemps.rhi. mediaroom.com/workplace-fears

Alon, A., & Elron, D. (2015). *Innovation: Clear vision, cloudy execution. Accenture 2015 US innovation survey*. Retrieved October 26, 2017, from https://www.accenture.com/us-en/insight-innovation-survey-clear-vision-cloudy-execution

BPI Network. (2015). *Innovation – The new competitive equation*. Retrieved October 26, 2017, from http://www.impactinnovationgroup.com/wp-content/uploads/2015/10/Innovation-The-Competitive-Equation-IIG-Nov-2016.pdf

Camhi, J. (2015). *BI intelligence projects 34 billion devices will be connected by 2020*. Retrieved October 10, 2017, from http://www.businessinsider.com/bi-intelligence-34-billion-connected-devices-2020-2015-11?IR=T

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[9]For "5 Examples of Failure that Resulted in Innovation" you may want to visit. http://blog.innocentive.com/2013/10/17/5-examples-of-failure-that-resulted-in-innovation

[10]Please note that I have not used 'justified by data' as this will be rather difficult, sometimes impossible, certainly if it is radical innovation.

Danner, J., & Coopersmith, M. (2015). *The other "F" word: How smart leaders, teams, and entrepreneurs put failure to work*. Hoboken, NJ: Wiley.

Deloitte. (2016). *Winning over the next generation of leaders*. Deloitte Millennial Survey 2016. Retrieved June 10, 2017, from https://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-millenial-survey-2016-exec-summary.pdf

Di Biase, S. A. (2015). *Advancing your tech career: A handbook*. North Charleston, SC: CreateSpace Independent Publishing Platform.

Edgett, S. J. (2011). *New product development: Process benchmarks and performance metrics*. Retrieved June 10, 2017, from http://www.stage-gate.com/publications_newproddev.php

Edmondson, A. C. (2011). Strategies for learning from failure. *Harvard Business Review, 89*(4), 48–55.

Ernst, & Young. (2011). *Eleven risks for consumer product companies*. Retrieved June 10, 2017, from http://www.ey.com/gl/en/industries/consumer-products/eleven-risks-for-consumer-products-companies---3--speed-and-success-of-innovation

Ernst, & Young. (2014). *Delivering agile innovation*. Retrieved October 27, 2017, from http://www.ey.com/Publication/vwLUAssets/EY-Agile-Innovation-CP/$FILE/EY-Agile-Innovation-CP.pdf

Hall, T., & Wengel, R. (2014). *The U.S. breakthrough innovation report*. Retrieved June 10, 2017, from www.nielsen.com/us/en/insights/reports/2014/breakthrough-innovation-report.html

Heath, R. (2009). *Celebrating failure: The power of taking risks, making mistakes and thinking big*. Wayne, IL: Career Press.

Hilary, G., & Vyas, V. (2016). *Does your organisation run on fear? Managing director of distinctive performance*. Retrieved June 10, 2017, from http://knowledge.insead.edu/blog/insead-blog/does-your-organisation-run-on-fear-4520

Keeley, L., Walters, H., Pikkel, R., & Quinn, B. (2013). *Ten types of innovation: The discipline of building breakthroughs*. Hoboken, NJ: Wiley.

Kunert, S., & Staar, H. (2018). Failure in organizational change. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kunert, S., & von der Weth, R. (2018). Failure in projects. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Lacy, P., & Hayward, R. (2016). *Why green is the new gold*. Accenture Outlook 2016. Retrieved June 10, 2017, from https://www.accenture.com/gb-en/insight-outlook-why-green-is-the-new-gold-sustainability

Maxwell, J. C. (2007). *Failing forward: Turning mistakes into stepping stones for success*. Nashville, TN: Thomas Nelson.

McKinsey. (2007). *How companies approach innovation: A McKinsey global survey*. Ance. Retrieved October 27, 2017, from https://www.elkarbide.com/sites/default/files/MCKINSEY%20INNOVACI%C3%93N.pdf

MindMatters. (2015). *Innovation survey 2015*. Retrieved June 10, 2017, from http://www.mindmatters.net/mindmatters-innovation-survey

Salvatore Moccia (2018). Failure of leadership In: Sebastian Kunert, Strategies in failure management: Scientific insights, case studies and tools, Springer: Heidelberg.

Nunes, P. F., Yardley, S., & Spelman, M. (2013). *A new path to growth: How to stay a step ahead of changing consumer behaviour*. Accenture Outlook, 2. Retrieved October 26, 2017, from https://www.accenture.com/us-en/insight-outlook-new-path-to-growth-stay-ahead-of-changing-consumer-behavior-marketing

Obolensky, N. (2015). *Complex adaptive leadership – Embracing paradox and uncertainty* (2nd ed.). Farnham: Gower.

Percival, D., Shelton, R. D., & Andrews, H. (2013). *Unleashing the power of innovation*. London: PWC. Retrieved October 27, 2017, from https://www.pwc.com/gx/en/innovationsurvey/files/innovation_full_report.pdf

Peters, T. (1999). *The project 50 (reinventing work): Fifty ways to transform every "task" into a project that matters!* New York: Alfred A. Knopf.

Royer, I. (2003). Why bad projects are so hard to kill. *Harvard Business Review, 81*(2), 48–56.

Soken, N. H., & Barnes, K. B. (2014). What kills innovation? Your role as a leader in supporting an innovative culture. *Industrial and Commercial Training, 46*(1), 7–15.

Tarkenton, F., & Woren, D. (2015). *The power of failure: Succeeding in the age of innovation*. Grand Haven, MI: Brilliance Audio.

von Stamm, B. (2004). Collaboration with other firms and customers: Innovation's secret weapon. *Strategy & Leadership, 32*(3), 16–20.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Weinzimmer, L. G., & McConoughey, J. (2012). *The wisdom of failure: How to learn the tough leadership lessons without paying the price*. Hoboken, NJ: Wiley.

Whitehurst, J. (2016). *Innovation requires new approaches to feedback and failure – Fresh approaches to learning can help you change your organizational culture*. Retrieved June 10, 2017, from https://opensource.com/open-organization/16/12/building-culture-innovation-your-organization

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Projects

Sebastian Kunert and Rüdiger von der Weth

Failure Rates and Factors in Projects

Projects are very unlikely to be successful. In fact, empirically most projects fail. A highly popular failure index comes from Standish Group (2013, critics by Eveleens & Verhoef, 2010), an international IT development and consulting company. Unlike other studies, data of the Chaos Manifesto is provided not by customers but by their own staff. The authors distinguish between successful projects (delivered on time, on budget, with required features and functions), challenged (late, over budget, and/or with less than the required features and functions), and failed (cancelled prior to completion or delivered and never used). Based on over 50,000 cases, they view most projects as being not successful (Fig. 1). Looking back in time, percentage may vary, but on the average, there is an approximate trisection in the categories.

   Such failure rates seem to be quite common. In 2008 IBM published the results of a survey among 1500 practitioners, covering strategic, organizational, operational and technology related projects. The proportions were quite the same: only 41% of all ventures met their objectives fully, 44% did not meet either time, budget or quality goals, the remaining 15% missed all goals or were stopped. Similar results are found in a survey of the federation PMI (2017) among 3200 project management practitioners. About 30% of the projects are said to be failures. It is doubtful if this

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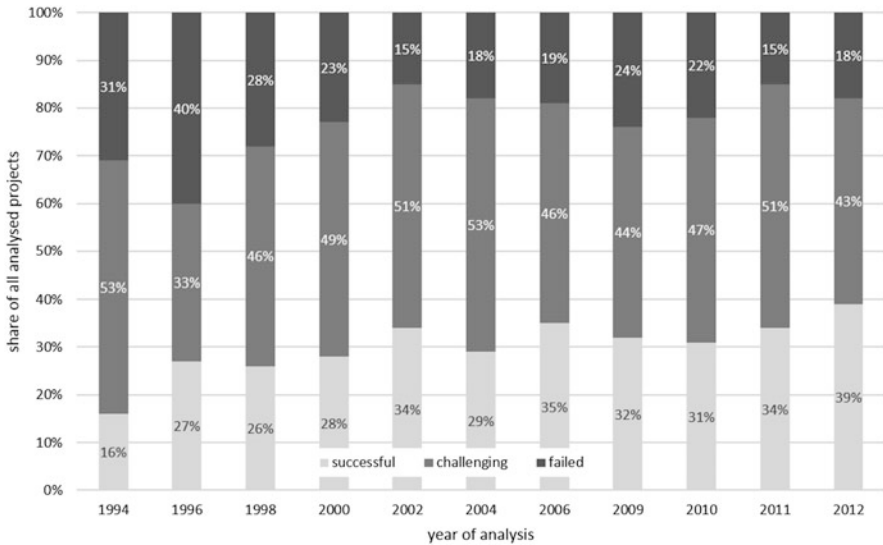
Fig. 1 Shares of successful, challenged and failed IT projects between 1994 and 2012 (data from Standish Group, 2013)

distribution reflects reality as the estimated number of unreported cases might be much higher. However, the failure rates seem to be high in other domains as well.[1]

The PMI study provides some insights regarding the challenging factors. Most projects suffer from scope creep or uncontrolled changes to the project's scope (49%). Another 49% run out of budget and 43% run out of time. In an analysis of more than 5400 large IT projects (more than $15 million) by McKinsey and the University of Oxford (Bloch, Blumberg, & Laartz, 2012), 45% of the projects ran out of budget but only 7% ran out of time, whereas 56% delivered less value than predicted.

Plenty of meta-analytical studies, large-scale surveys and literature reviews revealed crucial factors regarding success and failure of projects (Belassi & Tukel, 1996; Bloch et al., 2012; Ika, Diallo, & Thuillier, 2012; PMI, 2017; Rietiker, Scheurer, & Wald, 2013; Standish Group, 2013; van der Panne, van Beers, & Kleinknecht, 2003). Four major characteristics appear to be recurrent:

Poorly defined/unclear/not shared objectives deal with the reason for projects. These endeavours are undertaken to solve certain problems for an organization. The desired outcome is usually not the product/solution/result of the project but gaining new possibilities, creating cheaper/better ways of value creation, getting rid of a painful problem or meeting expectations of customers. The latter are the key issue. Often stakeholders agree on the project and its results but not on the purpose. A soon

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[1]See also von Stamm (2018), Wandke (2018), Kunert and Staar (2018) and Triebel, Schikora, Graske, and Sopper (2018).

as changes in the project are necessary, those differences become visible. According to Bloch et al. (2012) those disagreements cause most project failures and highest cost-overruns.

Communication addresses the demand for sharing information within the project team and among all stakeholders. Projects are by nature explorations of unknown land. Thus, no one involved has entire knowledge, especially when the outcome of a project is something that is "first of its kind". Mostly, there is scattered expertise inside the organisation. The best way to produce new knowledge within a group is by sharing existing knowledge in order to combine, conclude and reason. Scholl (2014, cf. Wilensky, 1967) distinguishes several ways of undermining this distribution process:

- Deficient transparency regarding repositories of knowledge (e.g. employees, experts, storages, documents) and flow of information (e.g. communication occasions, share points, and rules of trade)
- Deficient sharing culture (e.g. information as a power tool, low openness to new ideas, lone wolf behaviour, organisational blindness)
- Deficient usage of knowledge (e.g. low quality of information, information overload, high stability of existing processes, low acceptance of innovation, the so-called "not-invented-here-syndrome")
- Deficient knowledge management (e.g. non-existing policy/strategy, maladaptive incentive systems, unused storage systems, autocratic leadership style, inhibited communication among employees).

Top Management Support deals with resource allocation and resistance among employees. As stated in more detail later, projects are about something that is new and potentially frightening for the members of a social system who commonly compete for shared, scarce goods. Unlike project leaders, line managers can rely on their own staff, stable resources and approved routines. Projects are usually staffed by temporary workers, receive non-recurring resources and act outside the familiar processes. Projects operate with impunity, extracting energy, people and time from the usual system for something indefinite. Such activities are highly demanding for an organisation and require a strong intention based on a long-term vision, broad overview and power to be assertive. These factors can only be provided by top management. As long as the people who are ultimately in charge are not convinced, projects will suffer from a lack of security, integration and momentum.[2]

Scheduling is about planning a project. That factor also arises from the impunity character. Because projects take place outside the familiar processes, and produce outcomes that are different from what already exists, they appear like an ongoing disturbance for an organisation. Scheduling is an attempt at integration: As long as the organisation knows what resources will be spent for how long in order to produce

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[2]The importance of Momentum is described in greater detail in the video *Reasons Projects Fail* by Keith Ellis.

what outcome that must be implemented at which point, all people will be oriented regarding the duration and amount of interference. That helps to synchronize the routines with the uniqueness.

In our opinion, most of the cited studies lack scope and do not go far enough. They mainly focus on how a project should be conducted but disregard the context, genesis, and transfer of those endeavours. Actually, potential project failures start already before the project is kicked off. There is much more during the project life span than the four major factors mentioned above, and there is a lot to consider in the follow up when an organisation is confronted with the generated outcome. The most general cause of failure, however, lies in the reason for the existence of projects.

Purpose of Projects

Why do projects exist? In short, organisations prevent themselves from failure by trying to innovate.

Companies, public authorities, non-profit associations, clubs, unions—in the first place they all exist to create stability: They consist of a continuous group of members (e.g. the staff of Ford Motor Company), who processes steady routines (e.g. producing the same cars every day) with a given infrastructure (e.g. the factory with its machines), which leads over the years to a unique portfolio of outcomes (e.g. range of cars) and shared attributions among stakeholders (e.g. Ford as a brand). People inside the organization gain a lot of expertise because they perform more or less every day the same procedures (e.g. assembling cars). Together they build up specific rules, norms and values (corporate culture). Over the years, everyone knows his/her place in that system and what to do (e.g. role expectations for a blue-collar worker). Finally, the inner structure of an organization becomes balanced and stable,[3] whereas the membership and work become part of the employee's identity.

By doing the same things over and over again an organisation gets very professional in what it is doing, thereby creating stability, quality, reliability and efficiency. The downside of this process, however, is the lack of ability to make changes. The more stability the less flexibility. When a system is profoundly adjusted and performing at its best, every change jeopardises these achievements. At the same time, an organisation cannot ignore changes in its environment, changes among stakeholders, and competitors. It has to adjust to new legal requirements, technological advancements and customer needs. To innovate is essential to survival. Rubera & Kirca published in 2012 their meta-analysis on how innovation (inputs like R&D expenditure, outputs like number of new products, cultural, radical and incremental innovations) is correlated with performance outcomes (firm value like Tobin's q, market position like market share, and financial position like ROI). The effect is

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[3]Talcot Parsons (1951) calls this functional balanced state in a system equilibrium.

generally quite small (r = 0.14–0.16) but extremely robust (fail safe N = 1220–2560).[4]

The major threat for a routinized system in times of change are implementations that do not work. When Ford changed from combustion engineering to electric mobility, when they changed the entire product line, assembly procedures and services within their daily business, no one knew whether it would work. Failure puts the organization's survival at risk. For that reason, they founded a special institution to implement the innovation, an institution separate from the everyday routines. By definition, those endeavours are temporary and separated from daily business to create something new, innovative, unique (ISO 21500:2012). This is done by a team of experts with their own budget, structure and processes. Projects are made for gaining knowledge in a scientific way by trial & error. They serve as laboratories outside the main building: If something explodes, no one gets hurt.

Projects are not only endeavours that allow failure, but they are even appropriate for producing failure in order to learn from breaching limits. Given that characteristic, project failures are potential opportunities for gaining new knowledge. Therefore, failure rates should be rather high.

In the following paragraphs, we take a closer look at failure in the stages of the project life cycle. We will go through the Initiation stage, when new ideas are born, which potentially become a project. After that, we show the major failure factors in planning and conducting a project followed by transferring the results back to the organisation. The entire project life cycle is shown in Fig. 2.

Failure in Initiating a Project

At the beginning, an organization must decide what idea is worth developing in a project in order to be potentially integrated later on. There are numerous approaches in the literature on how ideas should be generated,[5] gathered and selected. They are presented in relevant manuals (e.g. Tidd & Bessant, 2013) and tool boxes (e.g. Carleton, Cockayne, & Tahvanainen, 2013). Unfortunately, there is no gold standard in the realization of ideas (van de Ven, Angle, & Poole, 2000). Rather, organizations are dependent on creating an innovation-promoting environment that increases the likelihood of an idea being recognized, selected, realized and established. The common instruments for creating such a setting can be distinguished in two dimensions (see Fig. 3):

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[4]The hypothetical number of additional studies with a zero-effect needed to fall below significance.

[5]Fun fact: According to Fueglistaller (2005), about 65% of all ideas come up during non-work activities (e.g. hiking, watching TV, doing sports, on vacation), another 30% in work-related settings (in meetings, at breaks, on travel), and only 5% at the workplace or while using creativity techniques.
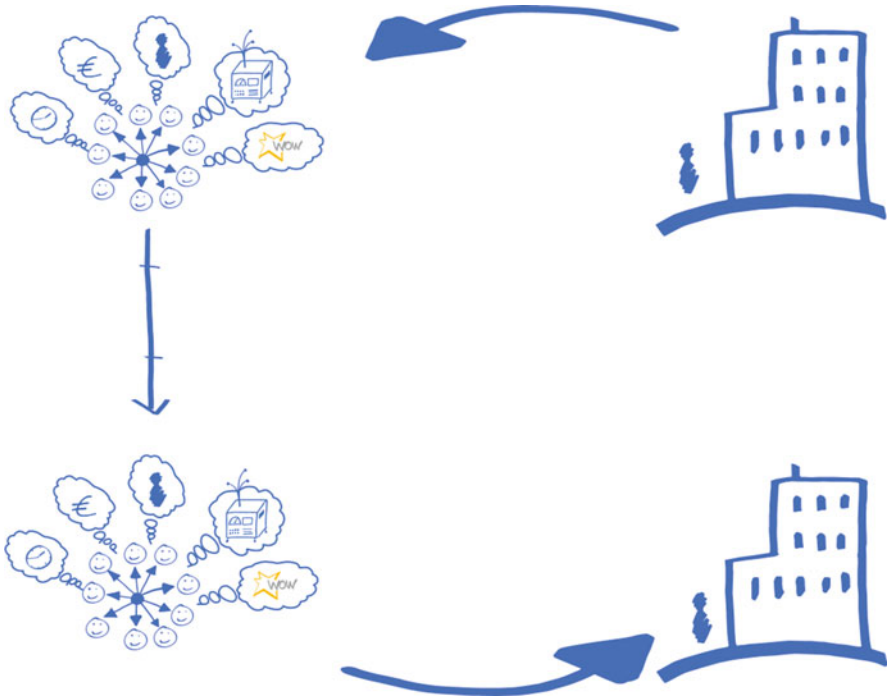
Fig. 2 Project life cycle

1. If they focus on a single outcome or the general environment.
2. If they are occasional or continuous.

Highly innovative organisations do not rely on a single method but link their idea/
project management with other management activities (strategy, organisational
development, controlling, resourcing) and install a comprehensive Innovation Eco
System, applying a multiple method approach (Adner, 2006). The Global Innovation
1000-Study of Booz & Company verifies that with empirical data (Jaruzelski, Loehr,
& Holman, 2011). Based on 600 surveys, authors show that companies with an
integrated innovation system are of higher value (in some cases 30% and more) and
growing faster (by 17% during the last 5 years) in comparison to other competitors
without such a system.

However, most crucial is the transfer of an idea from its creator to the organisation
in order to become a project. Following the assumption that people involved in a
company do not lack suggestions for improvement but cannot be forced to tell them,
all depends on an invitational, project supporting culture. Scholl et al. (2014) support
this hypothesis with questionnaire data from more than 50 companies. Based on the
Denison Organizational Culture Survey (Denison & Mishra, 1995) they uncovered
the link between innovation project success and corporate values, such as
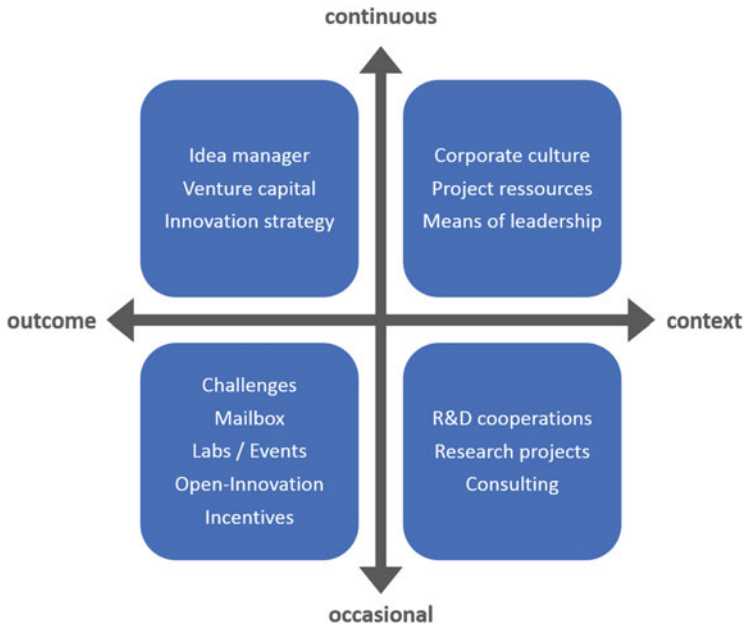
Fig. 3 Two-dimensional model of innovation management

involvement (r = 0.41), consistency (r = 0.29), adaptability (r = 0.30) and mission (r = 0.44).[6]

Even when an idea is successfully transferred to an organisation, a planning process is needed to found a proper project.

Failure in Planning a Project

Projects cannot be planned completely in advance! But planning is necessary (see above)—and another step on the way to potential failure. A plan which is not elaborated in detail is a strategy. The following definition (von der Weth & Frankenberger, 1995, p. 361) is coming from military and business management (Berekoven, 1989; Fricke, 1993; von Moltke, 1912): *"(1) Strategies are oriented towards an ultimate goal of an action process. In attaining subgoals or intermediary goals we cannot use the term strategy, e.g., strategies in chess playing do not aim at taking a chess-piece but at placing the other player into check-mate. Strategies have a methodological character—they contain information about how to proceed in order to reach the final goal under certain conditions. (2) Strategies define subgoals, distinctive features of proceeding (e.g., offensive, defensive) and in that way, limit*

[6]See also Kunert & Staar (2018).

the possible operations. (3) Suitable strategies structure and simplify the action. They help to sub-divide a problem into clear units of subproblems so that it becomes superfluous to reconsider over and over again the whole way of proceeding, unless a modification in strategy becomes necessary."

According to this definition the classical way of planning projects with well-defined milestones as well as the more flexible process of planning in agile project management can both be regarded as more or less detailed strategies.

A great challenge to a project is the adequate level of resolution for strategic planning. This depends on task characteristics, such as the complexity, content and required accuracy of the result. These task characteristics are influenced by the resources of the organization and psychological factors. There exists neither common sense nor a set of fixed rules which allows the identification of an adequate level of resolution. This is a source of failure in many projects. But there are many empirical results on psychological factors which lead to an inadequate level of resolution.

Since the 1980s, research on complex problem-solving has identified some core variables for the explanation of failure. Projects can be regarded as complex problems (Dörner, 1996; Funke, 2003; Starker, 2012). A central problem for coping with complexity is making decisions which cannot be overlooked because of their influence on a dynamic process. Because the outcome of a project is not completely predictable, there always remains residual uncertainty, which reduces control. Low control leads to stress-related behaviour patterns which increase the probability of failure. Research of Dörner et al. (for an overview, Dörner, 1996) identified typical behaviour indicating low control in a complex and risky situation. He calls them "intellectual emergency reactions". In a short term perspective, they decrease control, because they neglect critical information. In the long run, these behaviour patterns lead to an increased risk of failure. Some examples, which are typical for different stages of planning a project:

- *Goal setting.* A lack of concreteness in goal setting conceals weaknesses of plans and leads to subjective control.
- *Information and models.* "Encapsulation" means avoiding problematic aspects and concentrating on activities where easy success is possible. Simple mental models (e.g. only one reason for all problems) ease planning in the beginning of a project, on the long run such plans of-ten are wrong because they are far from reality.
- *Prognosis and scheduling.* The belief that major changes in the future are not possible leads to more subjective control, makes planning and decision making easier as long as these major changes do not occur.

Self-efficacy is one of the central predictors in explaining differences between individual planners. People with lower self-efficacy have a lower level of perceived control in a complex and new situation. Because intellectual emergency reactions allow the improvement of control by neglecting critical information their probability in-creases for people with low self-efficacy. Team work is not a remedy for this for

two reasons. (a) Mechanisms of group think undermine rational strategies for collaborative planning in complex projects (Badke-Schaub, 1993). Different levels of self-efficacy of team members lead to different individual strategies of planning which can lead to conflicts between team members. Moreover, (b) differences in self-efficacy lead to different opinions on the adequate amount of information and extent of planning for making decisions. These conflicts increase the risks of projects (Starker & von der Weth, 2007).

Failure in Conducting a Project

Finding a gold standard to apply to a project is a kind of holy grail in management research. Pavitt (2006) concludes research findings with the generalist statement: *"There is no widely accepted theory of a firm, level process of innovation."* (cf. van de Ven et al., 2000, p. 87). According to literature, stage models are still dominant in practice. This might be justified as long as projects are simple or adapted from an external source. But if they are complex, stages tend to be muddled and overlapping. This is because phases of idea generation, selection, testing, accomplishing, and disseminating do not occur once but iteratively. To understand the pitfalls and conditions that lead to failure in projects, stage models simply do not work (more detailed in Kunert, 2015).

Projects are usually implemented by a team of people, who bring all the knowledge and competencies that are needed according to the plan. They experience numerous shortcomings and pitfalls, which mostly do not arise from poor management but rather from task complexity, time restrictions, group dynamics, and individual factors. Some of these pitfalls are examined in more detail below.

Ill Defined Tasks

It would be much more fruitful to look closely at the tasks to be performed. Project objectives are often poorly described and presented as dynamic, interdependent tasks. In contrast to well-defined problems (like the famous Tower of Hanoi task), organizations often lack knowledge about the target and the way to reach it. Therefore, they cannot define them very well. At the same time, both change during the project, because expectations vary or relevant information become available late. Last but not least, the several tasks are mostly not independent of each other because one goal influences many others.[7] To deal with that problem project managers are advised to apply the Quality Function Deployment Technique, known as House of Quality (Akao, 2004).

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[7]See also Bedenk and Mieg (2018).

Time

The amount of time to complete a project is one of the most crucial factors in the implementation stage. The increasing need for time reflects an increasing complexity that has to be handled. In addition, the longer a project lasts, the more external, unforeseen factors influence the endeavour. Both effects interact with each other and lead to self-energising delays (Bloch et al., 2012; Henard & Szymanski, 2001; Pattikawa, Verwaal, & Commandeur, 2006). Kunert (2013) provides some insights on the dimensions of that problem. Data from an interview study with 45 participants and a subsequent survey with another 355 employees (2013) show a correlation between project success measures with duration of unplanned delays as a proportion of total project time of $r = -0.56$, which means 31% of the overall failure probability can be forecasted by that variable. Cooke-Davies (2002) concluded his research, stating that mean performance against budget is generally better than mean performance against schedule.

Team

Project teams face tremendous expectations and very little chance to meet them. On the one hand, they are supposed to coordinate themselves autonomously, share their knowledge willingly, perform instantly, and deliver first outputs within a short period of time. On the other hand, they have no time for team-building and related stages of team evolution (cf. Tuckman, 1965), for dealing with difficulties because of high heterogeneity, nor for sharpening unclear project orders.

First question to be answered often concern the *size* of the team. A small number of people promises less struggle in coordination, increased team-building, and decreased diffusion of responsibility. In turn, more people also means more knowledge and perspectives, more effective specialization and division of work, and less risk if someone quits. Several studies focused on this topic show that effects are highly heterogeneous (cf. Hülsheger, Anderson, & Salgado, 2009; Stewart, 2006). Statistically, more or less a zero-correlation evolves, showing a curvilinear effect, which means neither too few nor too many people are to be recommended. In conclusion, the optimal absolute team size cannot be stated, at most only a relative one. Depending on the task, demands and restrictions, a slight under-staffing works best because of motivational effects (Hudson & Shen, 2015).

Because the team size question cannot easily be addressed, the *composition* has become the focus of increasing interest. Unfortunately, many approaches on how to assemble a well performing (project) team have also failed. Several meta-analytical studies prove the team composition approach wrong (Bell, 2007; Horwitz & Horwitz, 2007; Stewart, 2006). The authors looked at competencies, personality traits, age, tenure, roles and many more factors. As has often been the case, only the average intelligence/general mental ability is highly correlated with team performance.

Much more promising is the team *development* approach. It follows the assumption that good teams are not built but emerge. The focus is on changes within the group. Most notable are interventions regarding reflection and role clarification (Salas, Rozell, Mullen, & Driskell, 1999), building communication ties (Balkundi & Harrison, 2006), and decision-making strategies (Guzzo, Jette, & Katzell, 1985).[8] But for all that a team needs time, which is the scarcest resource in a project.

Leadership

Usually project team members do not directly report to project leaders. Because projects are just temporary, line managers keep their administrative responsibility. It is a kind of labour leasing. That is why project leaders are usually in a weak supervisory position. At the same time, there is no standardized best way of leading projects. Phases of innovation (creativity, trial & error, gathering information) alternate with phases of implementation (prototyping, small series, data collection). In both cases, team members have different needs, and team leaders need to adapt their leadership behaviour to these needs. (cf. Rosing, Frese, & Bausch, 2011).[9]

However, as Freitag, Kunert, Waack, & Tiede (2015) have shown, leadership style is only of minor importance. In a survey that addresses organizational culture and leadership styles simultaneously, organizational culture correlates strongly with innovation project success ($r = 0.62$) and leadership style becomes insignificant ($r = 0.11$). Such results indicate that team members are much more influenced by shared norms and values than by a person with low-level authority.

Motivation

When it comes to willingness to participate in a project, the frequently used term 'valley of tears' shows up (cf. van de Ven et al., 2000. That means, motivation starts high, drops dramatically and—in best case—rises again at the end. Kunert (2014) questions that picture. In an interview study, only 24% of the participants reported such a U-shape in their motivation over time (values start high, drop and end approximately at the starting point). Another 34% of the interviewees reported rising elation during the process (values start low and end high). In 24% of the cases the motivation declines (values start high and end low). The remaining 18% shows a wave-like deviation (values cross the average line at least two times). However, the progress of motivation is not so important, but the average level should be high (correlation with project success $r = 0.54$) and variance over time should be small ($r = -0.44$).

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[8]See also Kauffeld and Massenberg (2018).

[9]See also Moccia (2018).

Emotion

There are case studies on the role of emotion in conducting long term projects. A typical field for this research is the course of great software implementation projects. It is possible to design models to describe the development of interdependence between emotions in organizations and the technical and organizational process of software implementation projects (von der Weth & Starker, 2010). These case studies show that the general phenomenon of resistance against change should be analysed in a more differentiated way. For this purpose, a general model for the role of emotion in complex projects was developed (Wäfler et al., 2010). At the moment, single decisions in three software implementation projects on communication, participation of the staff and integration of qualification measures into different phases of the project are being analysed. How do they influence emotion and, vice versa, how does emotion influence the quality of these activities (Schubach & von der Weth, 2011) Prerequisites of organizations and actors in such projects, in combination with consequences of decisions, have been collected in a data base (the principles are described in Seipel, von der Weth, & Abreu, 2016). Summarizing the practical outcome of this data base in a book like this one is not easy. The influence of decisions on the emotional state of the staff is different for different people: e.g., major technical changes generate new working processes. Anxious workers with low qualification levels are more relaxed when they get a detailed guideline for the new task in a project. Workers with high self-efficacy, good knowledge and high problem-solving ability feel constricted using the same guideline.

Failure in Transferring a Project

Even if the team was successful, produced deliverables within time & budget, the biggest challenge might be the integration of the outcomes in the organization. The roots of that problem date back to the very beginning of a project: If the definition of the needs to be worked on was poor, the project results will probably not be suitable. Furthermore, even the organization is not something totally stable, it evolves and develops. The longer a project lasts the more changes occur on the principal's side. This can result in altered needs, declined or increased readiness for change, new stakeholder groups or varied project image/relevance. In light of this, the contact points between project and organization are of special interest. They open up possibilities for both parties to learn about and from each other over time (obstacles during the implementation on the organizations side are core subject of change management).[10] Therefore, several authors suggest an integration of project management and change management (e.g. Cooke-Davies, Crawford, & Lechler, 2009; Hornstein, 2015) in order to strengthen the strategic role of projects. However, only one third of PM professionals are actually doing this (PMI, 2017).

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[10]See also Kunert and Staar (2018).

In the worst case, executives assign the project order and some months or years later the project manager presents the results. In the meantime, both are off the air. Instead, feedback should be the solution: the project manager should keep the organization informed, and the organization makes recommendations and decisions. Thus, the project involves the organization in discussions and decisions and, in return, the organization shares the responsibility with the project team. Such a process creates shared ownership, and shared learning. This approach is visualised in Fig. 4.

Project Information

The most wanted feedback for a project team concerns the following: Are they still on the right track? Have the aims changed? Is the organization still supporting them? For this process to be successful, the project team have to make intermediate results, failures and learnings transparent. In addition, they should explain what the next steps are and what the future solutions might look like. By providing prototypes, creating quick results, or conducting a pilot program they show their capabilities. In addition, guest appearances by organization members can be helpful in getting some insights into project specific working styles.
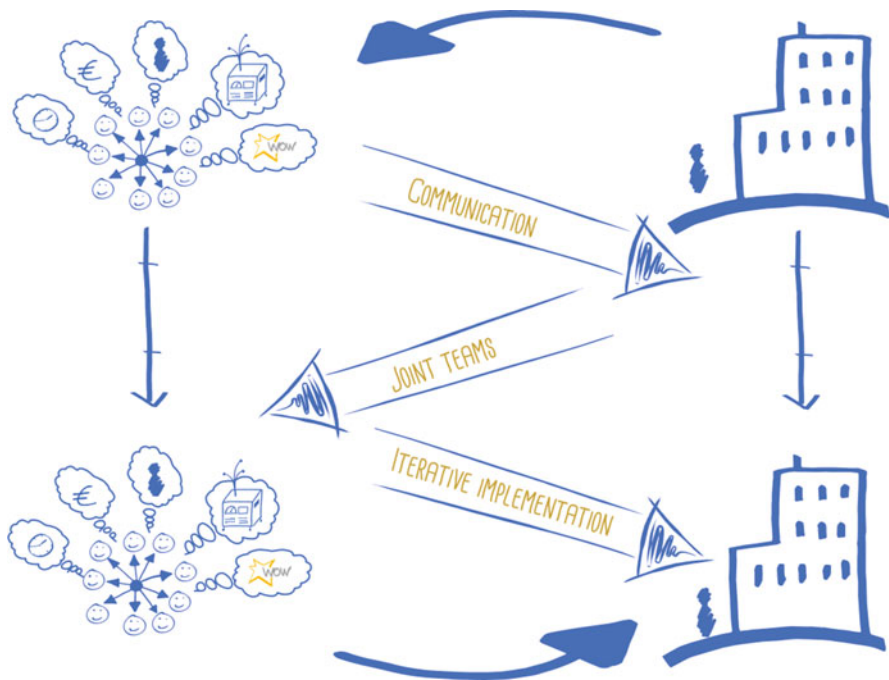

Fig. 4 Project life cycle with contact points between project and organization

Organizational Resonance and Decision

The need for reliable information is not only important for the project leaders. The organization as well should call for facts and updates to be assured that everything is going in the right direction. Furthermore, the several groups affected by a project cannot be addressed by the project team solely. The top managers also have to make sure that all stakeholders are still on board.

What happens as soon as this information is provided is quite similar to what Heller (1969, cf. Levin, 1946) describes as the discussion phase in survey feedback processes. People of the organization have to understand what they see and make up their mind if it fits to their expectations. After this, they should share impressions, assumptions and wishes. By discussing those points the whole group learns about itself, becomes aware of changes among the members, synchronizes itself and becomes able to decide whether the project should go on, must change, or will be closed. All that should not happen once but recurrently. The sessions are at best facilitated and documented. If the project is rather large and long-lasting, an advisory board could be established. This body would provide interim feedback and pave the way for resonance in other stakeholder groups. By applying such feedback processes on a regular basis, the organization will become actively involved in the project, able to have appropriate discussions, and make timely decisions.

Dealing with Failure in Projects

Once again, the first step in dealing with project failure is even before a new one starts. To evaluate finished ventures means to learn from history. Organizations that do so are of 13% higher probability to initiate a successful project (Kunert, 2013). According to the Standish group, more than 90% of their sample perform some type of project postmortems or closeout retrospectives. Nevertheless, learning effects are mostly quite limited because of poor documentation, focus on electronic and data based storage systems instead of contact-centred methods (like project mentors, advisory board, experienced team members), and too much belief of inerrableness among the new project members.

But the Chaos Manifesto of the Standish Group provides yet another highly valuable solution based on their failure data: Small projects are much more likely to succeed than big ones. The probability of ventures less than $1 million staff costs is about 76% but only 10% for more than $10 million (cf. Bloch et al., 2012). Small, short and cheap projects benefit from less complexity, less changes in environment, lower staff turnover, and easier integration in the daily business of the organization.

In the last 20 years, a revolutionary new project management style has emerged which follows that finding. It comes with names like *scrum*, *agile*, *lean*, *rapid*, *RITE*, or *Design Thinking*. The core features are shortened, iterative project life cycles of planning, executing and evaluating. A team develops solutions, not in one shot, but approaches the best outcome in many tiny steps (cf. Sutherland, 2015). These project management styles do not try only to prevent a project from failure, but aim to integrate the project for learning, development, and, therefore, reducing losses in

time, budget and motivation. About 40% of PM professionals apply some kind of agile/ incremental/iterative project management practices, 27% are said to use scrum techniques (PMI, 2017).

Besides the change towards more agile approaches, an ongoing professionalization can be witnessed in this domain. Companies with several projects running at the same time establish a project management office (PMO). According to PMI (2017), PMO's are primarily responsible for overarching tasks, such as establishing/monitoring project success metrics, standardization, developing core project management competencies/organizational project management maturity. Only secondarily do they deal with program management, portfolio management, management of project resource allocation or providing project managers.

Another highly effective way to raise success probability are people around the core team, who support the venture with expertise, power, or network resources. Based on Schumpeter (1912), similar but independent theories of crucial individuals in project environment emerged calling them promoters (Chakrabati, 1974) or champions (Schon, 1963). The positive effects of those people are evident in various studies (e.g. Gemünden, Salomo, & Hölzle, 2007, Hauschildt & Schewe, 2000, Rothwell et al., 1974). They cause less resistance, increased communication, more knowledge sharing, faster progress and better results. While all authors assumed that motivated employees step into that role spontaneously, Rudinger (2012) reports a successful evaluation of a training program for innovation promoters. It focusses on the communication skills, facilitation, conflict solution, and in-depth knowledge regarding innovation projects.

Despite everything mentioned above, a project remains a risky endeavour. To at least keep some overview, project leaders have to provide several status reports, time and budget indicators, as well as progress statements. Nevertheless, even the people inside cannot estimate all risks and failure factors. One playful way to integrate virtually all accessible information and to build an early-warning system are Project Stock Exchanges or Project Betting Systems. All employees of an organization are invited to assess their individual expectation regarding the success of a project. If the 'market price' drops or the odds rise, management knows something is going wrong, then they can gather additional information and react appropriately.

Failure in Learning from Failure

Projects are unique! How to learn from a failed project for the next project? Of course, not everything in a new project is new. The result of a project can be a new product, a new process or new knowledge. Novelty is related to content and outcome of a project. Moreover, a project changes participants. They have new or even a novel experience. But the processes and organizational structures for different projects can be similar or even standardized. So they can be changed in the case of failure. The modification of behaviour is more complicated. It requires reflection of the process and the ability and readiness to learn.

To evaluate finished ventures means to learn from history. Organizations that do so have a 13% higher probability of initiating a successful project (Kunert, 2013).

According to the Standish group, more than 90% of their sample perform some type of project post-mortems or close-out retrospectives. However, learning effects are mostly quite limited because of poor documentation, focus on electronic and data based storage systems instead of contact centred methods (like project mentors, advisory board, experienced team members), and over- confidence among the new project members.

The following two scenarios assure that this process of learning fails:

No debriefing. Shortly after failure most people are depressed. It is not the adequate moment for a complete analysis of the reasons. But there should be a first comment on the actual state and possible reasons. Immediately after failure people begin to restore their self-esteem by constructing a positive story about their role in the process. Some days later there is a high risk that these stories are very different from the real processes leading to failure.

Looking for scapegoats. Most failure results in an error chain, which involves personnel, organizational and technical factors (Reason, 1988). In most cases the search for one or several people who made a mistake is misleading. People who are suspected of being at fault are looking for arguments to defend their positive role and are not ready to speak frankly about problems, misunderstandings and wrong decisions.

Case study

The company in this case study[11] offers services in hardware, software and technical networks for law firms. They implement standardized products as well as customized solutions. The seven employees (two sales, five technical support) and two managing partners, all based in Berlin (Germany) run a stable company with mostly long term business relations. However, the IT market is highly competitive and demands constant innovation. Therefore, in that organization every member takes part in innovation workshops, is involved in several projects simultaneously and invests about 20% of working time in the implementation of ideas.

Most innovations were about new IT services, for example in-house server-based automated data mirrors and automated remote-control devices. Few projects focused on internal processes, for example an automated booking and reporting system. Most of the innovations were initiated by one partner, who also monitors, accepts or revises the outcomes. All projects were driven by a single employee and had to be done parallel to the core business. In a handbook, all process steps and formalities are deeply fixed.

An innovation survey (questionnaire and interviews throughout the company) revealed that:

- far too many projects were initiated by management at the same time (over 20) with very long-time periods (on average 18 months instead of desired 9).

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[11]This case study is taken from Alexander, Berthod, Kunert, Salge, and Washington (2015), pp. 71–74.

- projects were much more complex for employees (in average 17 steps) than expected by management (seven steps).
- management monitored poorly, especially the outcomes. The partners changed success and outcome expectations during the project or, even worse, at the end. That led to long durations and much frustration.
- management offered too little assistance and encouragement, e.g. the bonuses were only paid for customer services and sales, not for innovation projects, hence all colleagues tried to minimize their effort in other's projects.
- projects were communicated as cost factors by management in their annual financial reporting; earnings in the long run were not connected to former initiatives.

In sum, this company had much more ideas than resources to implement them. Project leaders felt mostly left alone. The overall outcome was quite small compared to the investments: increasing unfinished or escalated or failed projects, and decreasing volume of sales with new products and services.

Transformation started with moderated survey feedback workshops, followed by a task force with quarterly meetings over 2 years. The partners committed themselves to start less projects, to fix the desired outcomes in a specification sheet, to report gains from former projects and to share financial gains with the project leader. Furthermore, innovation management was installed which acts as a process promoter. The innovation manager mediates between management and staff, hosts supervision meetings, initiates project mentoring, intervenes in crises, connects to resource holders and gives practical advice. By so doing, management tried to erase the stigma of blood, sweat and tears from innovation projects and to bring back fun and glory for successfully implemented ideas.

Conclusion

Projects cannot be prevented from failure. In fact, both are tightly interconnected. To eliminate all risks would mean removing the best a project has to offer: Discovering the unknown. Nonetheless, in the eyes of an organization this is an investment, therefore there must be some results for all that money, manpower, and fuss. What success means is probably one of the most crucial questions to be discussed. The project team might answer differently from the project leader, and the management board might think differently than all the other stakeholders and employees involved. Nonetheless, all of them have to accept the risky nature of projects: without failure there is no advancement.

References

Adner, R. (2006). Match your innovation strategy to your innovation ecosystem. *Harvard Business Review, 84*(4), 98–107.

Akao, Y. (2004). *QFD: Quality function deployment – Integrating customer requirements into product design*. London: Taylor & Francis.

Alexander, A., Berthod, O., Kunert, S., Salge, O., & Washington, A. (2015). *Failure-driven innovation*. Berlin: artop. Retrieved June 10, 2017, from http://www.artop.de/aktuelles/new-publication-failure-driven-innovation

Badke-Schaub, P. (1993). Denken und Planen als soziale Prozesse. In S. Strohschneider & R. von der Weth (Eds.), *"Ja mach nur einen Plan. . .". Pannen und Fehlschläge. Beispiele, Ursachen, Hintergründe. Mit einem Vorwort von Dietrich Dörner* (pp. 51–67). Bern: Huber.

Balkundi, P., & Harrison, D. A. (2006). Ties, leaders, and time in teams: Strong inference about network structure's effects on team viability and performance. *Academy of Management Journal, 49*(1), 49–68.

Bedenk, S., & Mieg, H. A. (2018). Failure in innovation decision making. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Belassi, W., & Tukel, A. I. (1996). A new framework for determining critical success/failure factors in projects. *International Journal of Project Management, 14*(3), 141–151.

Bell, S. Z. (2007). Deep-level composition variables as predictors of team performance: A meta-analysis. *Journal of Applied Psychology, 92*(3), 595–615.

Berekoven, L. (1989). *Grundlagen der Absatzwirtschaft*. Berlin: Neue Wirtschafts-Briefe.

Bloch, M., Blumberg, S., & Laartz, J. (2012). Delivering large-scale IT projects on time, on budget, and on value. *McKinsey on Finance, 45*, 28–35.

Carleton, T., Cockayne, W., & Tahvanainen, J. (2013). *Playbook for strategic foresight and innovation: A hands-on guide for modeling, designing, and leading your company's next radical innovation*. Innovation Leadership Board.

Chakrabati, A. K. (1974). The role of champion in product innovation. *California Management Review, 17*(2), 58–63.

Cooke-Davies, T. (2002). The "real" success factors on projects. *International Journal of Project Management, 20*, 185–190.

Cooke-Davies, T. J., Crawford, L. H., & Lechler, T. G. (2009). Project management systems: Moving project management from an operational to a strategic discipline. *Project Management Journal, 40*, 110–123.

Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science, 6*(2), 204–223.

Dörner, D. (1996). *The logic of failure*. New York: Metropolitan Books.

Eveleens, J., & Verhoef, C. (2010). The rise and fall of the Chaos report figures. *IEEE Software, 27*(1), 30–36.

Freitag, A., Kunert, S., Waack, K., & Tiede, A. (2015). *Passungsmaße als Prädiktor in Zusammenhangsanalysen, Reihe Empirische Evaluationsmethoden* (Band 19, pp. 5–13). ZeE-Publikationen.

Fricke, G. (1993). *Konstruieren als flexibler Problemlöseprozeß – Empirische Untersuchung über erfolgreiche Strategien und methodische Vorgehensweisen beim Konstruieren*. Düsseldorf: VDI-Verlag.

Fueglistaller, U. (2005). Kreativität und Innovation. Wo Ideen entstehen und wie sie zu Innovationen transformiert. *KMU-Magazin, 7*, 14–16.

Funke, J. (2003). *Problemlösendes Denken*. Stuttgart: Kohlhammer.

Gemünden, H. G., Salomo, S., & Hölzle, K. (2007). Role models for radical innovations in times of open innovation. *Creativity and Innovation Management, 16*, 408–421.

Guzzo, R. A., Jette, R. D., & Katzell, R. A. (1985). The effects of psychologically based intervention programs on worker productivity: A meta-analysis. *Personnel Psychology, 38*, 275–291.

Hauschildt, J., & Schewe, J. (2000). Gatekeeper and process promoter: Key persons in agile and innovative organizations. *International Journal of Agile Management Systems, 2*, 96–103.

Heller, F. A. (1969). Group feedback analysis: A method of field research. *Psychological Bulletin, 72*(2), 108–117.

Henard, D. H., & Szymanski, D. M. (2001). Why some new products are more successful than others. *Journal of Marketing Research, 38*(3), 362–375.

Hornstein, H. A. (2015). The integration of project management and organizational change management is now a necessity. *International Journal of Project Management, 33*(2), 291–298.

Horwitz, S. K., & Horwitz, I. B. (2007). The effects of team diversity on team outcomes: A meta-analytic review of team demography. *Journal of Management, 33*(6), 987–1015.

Hudson, C. K., & Shen, W. (2015). Understaffing: An under-researched phenomenon. *Organizational Psychology Review, 5*(3), 244–263.

Hülsheger, U. R., Anderson, N., & Salgado, J. F. (2009). Team-level predictors of innovation at work: A comprehensive meta-analysis spanning three decades of research. *Journal of Applied Psychology, 94*(5), 1128–1145.

IBM. (2008). *Making change work*. Somers, NY: IBM.

Ika, L. A., Diallo, A., & Thuillier, D. (2012). Critical success factors for World Bank projects: An empirical investigation. *International Journal of Project Management, 30*, 105–116.

Jaruzelski, B., Loehr, J., & Holman, R. (2011). *The global innovation 1000: Why culture is key*. New York: Booz & Company.

Kauffeld, S., & Massenberg, A.-C. (2018). Failure in personnel development. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kunert, S. (2013). Managing innovational processes. In G. Hertel, C. Binnewies, S. Krumm, H. Holling, & M. Kleinmann (Eds.), *Abstract proceedings of the 16th EAWOP Congress* (p. 922). Münster: Münstersche Informations- und Archivsystem multimedialer Inhalte (miami).

Kunert, S. (2014). Time, staff and motivation in innovation projects – New empirical insights. In K. R. E Huizingh, S. Conn, M. Torkkeli, & I. Bitran (Eds.). *The Proceedings of XXV ISPIM conference – Innovation for Sustainable Economy and Society*.

Kunert, S. (2015). Failure-driven innovation at the process level – literature review. In A. Alexander, O. Berthod, S. Kunert, O. Salge, & A. Washington (Eds.), *Failure-driven innovation* (pp. 57–66). Berlin: artop.

Kunert, S., & Staar, H. (2018). Failure in organizational change. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Levin, K. (1946). Action research and minority problems. *Journal of Social Issues, 2*(4), 34–46.

Moccia, S. (2018). Failure of leadership. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Parsons, T. (1951). *The social system*. London: Routledge.

Pattikawa, L. H., Verwaal, E., & Commandeur, H. R. (2006). Understanding new product project performance. *European Journal of Marketing, 40*(11/12), 1178–1193.

Pavitt, K. (2006). Innovation processes. In J. Fagerberg, D. Mowery, & R. Nelson (Eds.), *The Oxford handbook of innovation* (pp. 86–114). Oxford: Oxford University Press.

PMI. (2017). *Pulse of the profession. 9th global project management survey*. Newtown Square, PA: Project Management Institute.

Reason, J. T. (1988). *Human error*. Cambridge: University Press.

Rietiker, S., Scheurer, S., & Wald, A. (2013). Mal andersrum gefragt: Ergebnisse einer Studie zu Misserfolgsfaktoren in der Projektarbeit. *PMaktuell, 4*, 33–39.

Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly, 22*, 956–974.

Rothwell, R., Freemann, C., Horsley, A., Jervis, V. T. P., Robertson, A. B., & Townsend, J. (1974). SAPPHO updated – project SAPPHO phase II. *Research Policy, 3*(3), 258–291.

Rubera, G., & Kirca, A. H. (2012). Firm innovativeness and its performance outcomes: A meta-analytic review and theoretical integration. *Journal of Marketing, 76*(3), 130–147.

Rudinger, G. (2012). *Can one purposefully encourage innovation? – An empirical evaluation of a pilot training as innovation promotor*. Qualification paper. Berlin: Humboldt-Universität zu Berlin.

Salas, E., Rozell, D., Mullen, B., & Driskell, J. E. (1999). The effect of team building on performance – An integration. *Small Group Research, 30*(3), 309–329.

Scholl, W. (2014). Collaboration and knowledge gains in organizations. In A. Berthoin Antal, P. Meusburger, & L. Suarsana (Eds.), *Learning organizations – Extending the field* (pp. 69–84). Dordrecht: Springer.

Scholl, W., Schmelzer, F., Kunert, S., Bedenk, S., Hüttner, J., Pullen, J., & Tirre, S. (2014). *Mut zu Innovationen – Impulse aus Forschung, Beratung und Ausbildung*. Berlin: Springer.

Schon, D. A. (1963). Champions for radical new inventions. *Harvard Business Review, 41*, 77–86.

Schubach, K., & von der Weth, R. (2011). Faktor Mensch? Ein Ansatz zur Untersuchung der emotionalen und motivationalen Zusammenhänge bei ERP-Einführungen. In E. Müller & B. -Spanner-Ulmer (Eds.), *Nachhaltigkeit in Fabrikplanung und Fabrikbetrieb – TBI'11* (pp. 191–200). Chemnitz: Technische Universität.

Schumpeter, J. (1912). *Theorie der wirtschaftlichen Entwicklung*. Berlin: Duncker & Humblot.

Seipel, D., von der Weth, R., Abreu, S., Nogatz, F., & Werner, A. (2016). Declarative rules for annotated expert knowledge in change management. *Proceedings of SLATE 2016*.

Standish Group. (2013). *The chaos manifesto*. West Yarmouth, MA: Standish Group.

Starker, U. (2012). *Emotionale Adaptivität*. Lengerich: Pabst.

Starker, U., & von der Weth, R. (2007). Implicit function allocation in complex work systems. In W. Karwowoski & S. Trzcielinski (Eds.), *Value stream activities management* (pp. 344–352). Madison, WI: IEA Press.

Stewart, G. L. (2006). A meta-analytic review of relationships between team design features and team performance. *Journal of Management, 32*(1), 29–54.

Sutherland, J. (2015). *Scrum: The art of doing twice the work in half the time*. London: Random House Business.

Tidd, J., & Bessant, J. (2013). *Managing innovation: Integrating technological, market and organizational change*. Chichester, UK: Wiley.

Triebel, C., Schikora, C., Graske, R., & Sopper, S. (2018). Failure in startup companies – Why failure is a part of founding. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Tuckman, B. W. (1965). Developmental sequence in small groups. *Psychological Bulletin, 63*, 384–399.

van de Ven, A. H., Angle, H., & Poole, M. S. (2000). *Research on the management of innovation: The Minnesota studies*. New York: Oxford University Press.

van der Panne, G., van Beers, C., & Kleinknecht, A. (2003). Success and failure of innovation: A literature review. *International Journal of Innovation Management, 7*(3), 1–30.

von der Weth, R., & Frankenberger, E. (1995). Problem solving in engineering design. *Learning and Instruction, 5*, 357–383.

von der Weth, R., & Starker, U. (2010). Integrating motivational and emotional factors in implementation strategies for new enterprise planning software. *Production Planning and Control, 4*, 375–385.

von Moltke, H. (1912). *Moltkes Militärische Werke IV. Kriegslehren. 3. Teil: Die Schlacht*. Berlin: Königliche Hofbuchhandlung.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Wäfler, T., von der Weth, R., Karltun, J., Starker, U., Gärtner, K., Gasser, R., & Bruch, J. (2010). Human control capabilities. In J. C. Fransoo, T. Wäfler, & J. Wilson (Eds.), *Behavioral operations in planning and scheduling* (pp. 199–230). Berlin: Springer.

Wandke, H. (*2018*). Failure in use of technology. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Wilensky, H. L. (1967). *Organizational intelligence*. New York: Basic Books.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Teams: Why Successful Teams Do Not Fail (So Often)

Petra Badke-Schaub and Gesine Hofinger

Introduction

In our social reality, there is almost no task or process conceivable which would not require teams working together. People are supposed to cope with increasing complexity in their environment; the competencies needed are claimed to be 'new thinking', 'critical thinking' or 'design thinking'. In times of globalization the relevance of interdisciplinary and intercultural cooperation in teams is often expressed but without an underlying framework which would integrate the different phenomena and allow to derive further support in these situations. Even though these demands are anything but new or surprising, we do not know in how far the uncountable amount of research projects help to their specific impact on team performance on different levels for over a century, teamwork is still endowed with many question marks. In fact, research interest in teamwork is quite high in different fields of science. This also means, a comprehensive literature overview is hardly possible.

At the same time, we have to state that there is quite few scientific literature, which describes processes of failure or success in teams in detail and on different levels. Why do we need these detailed analyses? The main reason is the need to find out more about underlying cognitive, motivational and emotional processes in teams which lead to successful or unsuccessful outcomes. This is hardly surprising, because failure in teamwork is often a slowmoving process and only 'weak signals' indicate (Ansoff, 1980) the small step between success and failure. Such key moments are often simply not noticed by the participants. In retrospect, when the

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failure is obvious, these indicators are hardly comprehensible. Whoever reports on team failures primarily describes the events, especially if the reporting person is involved in the process himself (e.g. Krakauer, 1997).

Especially in the last two decades, research reinforced the view on high reliability teams, high reliability organizations (Baker, Day, & Salas, 2006; Weick & Sutcliffe, 2007) and high performance teams (Pawlowsky & Steigenberger, 2012), so teams that are very successful in very difficult environments. However, it is not necessarily possible to generate "instructions for failure" for teams from the reversal of these findings. High performance teams are successful in regard to both, process and result. There are also teams, however, that have succeeded in the task and nevertheless failed as a group. On the other hand, difficult processes can lead to success, as studies show. For example, groups with a certain kind of conflicts, so-called cognitive conflicts in teams, create more innovative problem solving compared to harmonic conflict-free teams.

In the following, we will present the features of successful and less successful teamwork. Furthermore, we will outline typical weaknesses of teams during the processing of complex situations that can lead to failure (prototypical phases of problem solving processes). We distinguish between the critical situations of goal definition and situation analysis, information management, planning and decision making, as well as reflection and learning in the team. Critical situations of the communication, coordination and cooperation of teams are also to be added, for example the allocation of tasks and responsibilities in the context of teamwork.

Requirements for Successful Teamwork: What Makes a Successful Team Different?

As shown in Fig. 1, teamwork is dependent on a variety of factors such as a specific context and a culture (that can be the culture of a country, an organization, or a professional group), the scope of the problem, and critical situations that can be
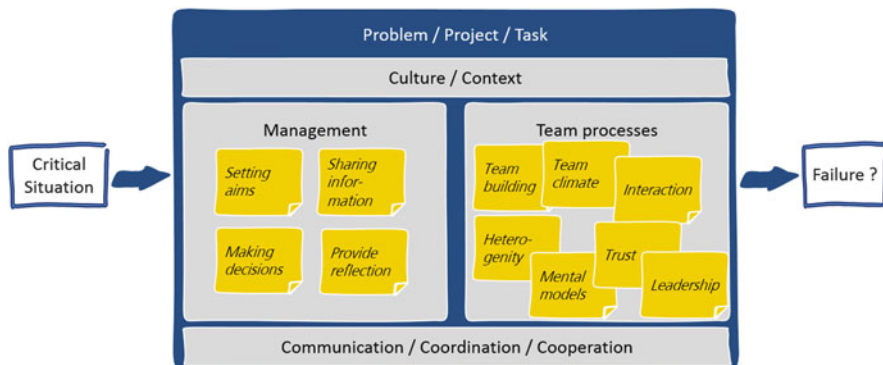
Fig. 1 Teams dealing with complexity: doomed to failure?

described as steps in the problem-solving process. These situations are 'critical' because their processing influences the outcomes in a positive or negative way. That means, it is necessary to successfully process these situations and, above all, to realize and adapt deviating or unexpected developments in time. In addition, those situations are also to be considered as critical, which control and coordinate team processes. This includes role and task assignment including all associated requirements, such as the planning of processes or the definition of responsibilities.

Factors of Successful Teamwork

Based on a wide range of research results (Salas, Burke, & Cannon-Bowers, 2000; Salas, Sims, & Klein, 2004), the following characteristics of successful teams can be stated: successful teams work on and due to common goals, they communicate precisely with each other, they define roles and information paths, they follow the given rules, they create a good team climate by motivational and emotional mutual support, the team leader steers the direction but provides individual freedom, and conflicts are solved constructively. Ultimately, a common mental model is generated during the teamwork. It contains shared knowledge about the situation, the team members, the previous process, the goal orientation, and the expectation of the future situation. There might be many coincidences as well as discrepancies with the mental models of the other team members. Therefore, a good match between the knowledge of the team members is helpful for effective action. These shared mental models are partly static and permanent, but they are also flexible, because relevant changes in the environment are integrated into the individual mental model. Adaptations of mental models usually go both sides, from the sender to the recipient and vice versa and are only adapted if the team members have agreed upon the common goal orientation.

Salas, Sims, and Burke (1997) mention five core elements coming from an analysis of the literature on teamwork, which the authors call the "big five" of successful teamwork: team leadership, team orientation, mutual performance monitoring and adaptability. These components are positively influenced by mutual trust, the formation and reassurance of common mental models, and by closed-loop communication.

Factors of Successful Team Processes

Is a good process a prerequisite for a good result? Is a good result an indicator for a good process?

Case Study

In the race for the conquest of the South Pole the team of the Norwegian Ronald Amundsen reached the South Pole on 14 December 1911, 5 weeks before the

British Sir Robert Falcon Scott arrived. Not only this defeat marks the failure of the British expedition. Unlike Amundsen, who safely led his team back to the starting point of the trip, Scott's men cannot escape the ice, all died from physical exhaustion on their way home.

This tragic outcome is, in a macabre way, a good example of different strategies in the planning of a complex project that is characterized by great uncertainty. Both teams are different relating to many of the above features, however, one central factor can be named as reason for the different outcome of the two expeditions. This is the different mental approach of both teams steered by totally different leaders. Planning, design, adaptation and modification is what Amundsen requires from himself and his team. He makes clear that every single detail is important or can become crucial in an environment that does not forgive any errors. Amundsen always tries to improve—clothing, means of transport (horses, dogs, motor/sleds, skis), selection of food as well as planning of depots on the way home. While Amundsen was the more experienced pole driver and accordingly accepted by his team as expedition leader Scott's decisions, in contrast, often seemed to be mainly determined by his current dominant motivation what then led to quick changes of his decisions while the consequences not being thought of.

One example makes Scott's ad hoc decision making very clear: the selection of the four persons chosen as members of the pole team, meaning the four persons would together with the leader go for the pole. The whole conceptualization of the tour had been targeted at four persons plus leader altogether, the entire planning, including the depot for food and petrol was targeted at four people, Scott decided at the last moment to take off with five people to the South Pole, which resulted in a series of short- and long-term effects that Scott did not consider when making the decision. The consequences happened as everybody would have foreseen: on the way back Scott's team ran out of petrol and food, no ice for water could be prepared for drinking, a fact that caused further dehydration of Scott's men.

In conclusion, the same goal was planned and reached with very different means and different success. Team performance was mainly determined by the personality of the leader. However, many questions remain still open: To what extend were the teams different? How was the communication? Who was the socio-emotional leader in the team? How were decisions made? What kind of person was Amundsen/Scott?

Many authors tried to answer these and further questions with different focus but quite similar results (see, for example, Gurney, 1997; Höfer, 2011; Huntford, 1985; MacPhee, 2010; Scott & Bartsch, 2011; Venzke, 2011). What do we learn from this example? Strictly speaking, it illustrates the definition of team performance as "potential performance minus loss of coordination and motivation" (Stroebe, Diehl, & Abakoumkin, 1992). In addition, it is also apparent that even an extremely high motivation of the team cannot compensate for a lack of coordination.

Routine Processes: The Enemy of Innovation

Many parts of the daily work, even in creative domains, contain a large part of actions, which are recurrently very similar. Only a few partial aspects then change the current problem or task so that they require a different solution. In such situations, people tend to prefer to decide for the solution they already know, because they believe—apart from the time savings—to handle weaknesses easier with and to use strengths better. This also means: "routine tasks generate routine responses". If a standard solution exists which solves the current task, it is chosen first, even though it is not necessarily the best solution. In addition, a solution known to the team or in the organization is easier to implement, according to the motto "we have always done it this way."

However, new developments, innovations or new processes cannot be gained by rules such as "never change a running system"—this approach can only lead to incremental innovations. Aiming for revolutionary developments, routinization must give way.

Apart from the preference of the known, the avoidance of detailed analyzes can be observed in many teams. (Subjective) time pressure, which is generally a permanent restriction for any project, does not allow long-term analyzes. Thus, highly creative solutions are avoided and important new developments are not perceived or ignored. Even in the case of new problems, the absence of analyzes, especially in combination with routine-generated safety, can be fatal, as the following example shows:

Case Study

On 3-8-1999 the Boeing 737-204 crashed at the start in Buenos Aires: 67 people died. The pilots had ignored an alarm signal. After the start, a warning indicated that the landing flaps were not (correctly) extended. The cockpit voice recorder transmits quiet voices of the crew ("it is all right!"): The alarm signals were known to be corrupted in old machines. Pilot and co-pilot had not mentioned the landing flaps during the routine check before the start.

As an explanatory model, the concept of 'situation awareness' can be useful. Endsley (1995) describes three processes in the interaction between the person and the environment that precede each decision: perception, understanding and prediction.

In the case outlined above, the perception is obviously limited by the influence of experience because it prevents a further analysis of the causes of the alarm signal. Thus, the understanding of the concrete problem situation is not given, and the prognosis is correspondingly wrong. This can be seen as a faulty "shared situation awareness", because the pilot and co-pilot interpret the situation in the same way without any further communication and act accordingly.

Action Regulation of Teams in Critical Situations

As described above (see also Fig. 1), the behaviour of human beings can be described as an action regulation process (Hacker, 1973/2005; Oesterreich, 1981; Volpert, 1974) or action organization (Dörner, 1976, 1989). In this case, steps of the organization of actions or problem-solving steps are distinguished, which describe the specific requirements more precisely based on a descriptive model. A representation of teamwork thus requires a transformation of individual action regulation on groups and describing additional requirements for the activities of teams. This is illustrated below in selected case studies.

Case Study

"Heads of government of the euro zone should resolve the debt dispute on Monday at a special summit just a week before the possible bankruptcy of Greece" (Die Zeit, 2015). But on Monday there is no solution in sight, even a week later no solution. While the one side has asserted that everything has contributed to a solution, the other side complains that too few convincing proposals have been put on the table for measures which are reliable and serious enough. This process is going on for weeks without any visible progress—even though all member states of the Euro Group actually pursue this goal. Although the overarching goal is accepted on all sides, the suggestions for solutions look very different, and it is obvious that an agreement always entails winners and losers. Especially when target formulations are too abstract, an agreement about adequate measures is highly difficult.

While the question of whether EU member states can be described as a team can be questioned here, the group of heads as well as the euro finance ministers should act as a team. Thus, they are supposed to balance their own country-specific targets with the goals of the other members of the community. In this case predominantly a motivational alignment would be necessary to scope for further activities.

Information Search, Analysis and Transfer

It does not seem to be important in which context failures occur, the answer of why they happened is almost always the same as: If we had to name a factor as the main cause of failure in teams, it would be communication (Badke-Schaub, 2012; Hofinger, 2012). Despite of overwhelming technical advancements regarding all kinds of communication support, in each situation communication has to ensure a valid, and useable situation picture: Which information is important? Which information must be passed onto whom and when? Which information cannot be passed on at all? Which information is reliable?

Even in highly standardized situations such as in professional communication in aviation research revealed that communication was involved in 47% of all recorded critical events among cockpit crews (Kemmler, 2000).

Case Study

In a crisis squad a large-scale exercise took place, which was conceptualized as training for professional crisis managers, a decision had to be made on the classification of injured persons. This discussion came up because the control center had asked about the rules, what should happen after an explosion with about 30 people category-1 injured. In the staff, nobody knew exactly what this classification meant. The red folders with the relevant information were on the shelf in the room, there was also a working telephone and internet access installed. What did the participants the practicing staff do? It took them about 10 min of discussion until they agreed on category 1 as the slightly injured patients. They ordered a bus to bring the injured persons to the medical center. The control room clarified the error and the staff could finally take care of the (only in the exercise) severely injured. This result caused amusement after the training session, but impressively shows how teams prefer "information generation" rather than information search.

Researcher, who look closely on the course of thought and action processes in teams often work with video protocols from laboratory investigations or exercises based on simulations or case studies, which are then evaluated using predefined categories (protocol analysis). Stempfle and Badke-Schaub (2002), for example, gave student groups of mechanical engineering a complex design problem, which the teams had to solve within 3 h. The video protocols were investigated regarding communication patterns, which were based on the phases of the problem solution process. In addition, interaction sequences were recorded and analysed at a micro-analytical level (Stempfle & Badke-Schaub, 2002). An interesting result of this study is the identification of two fundamentally different ways of dealing with solution proposals in the team: (1). Proposed solutions are first analyzed and then evaluated. (2). Proposed solutions are immediately evaluated without further analysis. Negative evaluation such as: 'this cannot be done', 'the boss will never approve it' etc. This approach is problematic: Immediate assessments disrupt the flow of thought and can also significantly reduce the motivation of the respective team member so that this person will not contribute further in the discussion.

Historically, in 1957 Osborn already mentioned such effects when he proposed 'brainstorming' as a method of generating new, unusual ideas in a group of people. After analyzing and clarifying the problem, the idea finding in phase 1 takes place in 4 steps, whereby the non-evaluation of solution ideas is considered one of the four classical basic rules. Only in Phase 2 analysis and evaluation of the listed ideas is allowed.

Although brainstorming is the most widely used method, the deployment does not deliver the promised performance advantage of teams in contrast to individuals

who individually brainstorm (and share their results as a nominal group). They produce numerical more and more creative ideas than a real team (See, for example, Taylor, Berry, & Block, 1958). Nevertheless, the common activity of a brainstorming session can contribute positively to the team climate, which is sometimes more important than the production of another two ideas.

Planning and Decision Making

In the context of decision-making processes, a conflict between two different cognitive mechanisms are supposed to exist. On the one hand, the intuitive approach mostly reaches quick but sometimes wrong decisions, while the rational approach allows us to make successful decisions that take longer, on the other hand. However, research of neuroscience can show that the brain works with much more colors than black or white.

Case Study

"The new A-Class is more than an important component of the successful Mercedes product offensive. It is a milestone in the history of our company and a trendsetter for the entire development of passenger cars." (1997, Jürgen Hubbert, Member of the Management Board of Daimler-Benz AG, Passenger Car Business Unit). With this goal, the development of a product started, which should play a central role in the portfolio of Mercedes Motor Company. It was decided at the end of the last century. Management decided to enter the compact car class with a car of compact size but crash safety of a limousine. Table 1 shows some stages of this development, which can be described as initially failed.

This case is an example, which shows that a team—successful or unsuccessful—is always involved in a context that also contributes to failure. The target date was set by the managing board, what led to 3 years of development, a reduction of at least 25% compared to previous projects, a fact that even increased the time pressure on the project team. Many things should be changed at once with the aim of developing something 'revolutionary new'. However, excessive time pressure can have undesirable consequences for the overall process of the team. Deficit patterns of action under stress are, for example, the reduction of information collection and solution searches. That means the information search is interrupted too early and essentially confirmatory information is sought.

Reflection and Learning

Reflection can be done in various ways. An important approach is the reflection on one's own thinking, to derive changes from this information (Tisdale, 1998). Can teams reflect and learn by reflection to eliminate failure or at least prevent themselves

Table 1 Chronology of some stages in the development of the Mercedes A-Class

Spring 1993	Start of the development of the new A-Class passenger car
Summer 1996	Start of the advertising campaign for the new A-Class
June 1997	Product presentation: positive reviews from the professionals; 100,000 pre-orders
September 1997	A-Class gets out of control during the elk -test in the competition of the "car of the year in Tännishus/Denmark"
18 October 1997	Launch of the A-Class
21 October 1997	3 days later: A-class overturns with an evasion maneuver carried out by test driver Robert Collin, the famous "elk test"
1 week later	At first, any responsibility was rejected, and the Goodyear tires were blamed for the problems: "We have some weaknesses…"
Early November 1997	Decision that all vehicles of the A-Class are upgraded with the Electronic Stability Program (costs of about DM 100 million a year)
End of November 1997	Start of a basic rework of the chassis
December 1997	New advertising campaign from Mercedes-Benz
February 1998	After technical modifications of the chassis, wheels and driving dynamics programs, resume production.

Source: SPIEGEL (1999)

from repeating the same failures? In a joint research project conducted by psychologists and product developers, the question was how a training concept could be designed for promoting technical and non-technical competences (Bierhals, Weixelbaum, & Badke-Schaub, 2010). In an integrated overall model, the areas of method competency, communication and reflection were taught in a coaching-based training approach. The aim was to achieve a flexible managed style of individual and joint action within the team. The research revealed the remarkable result that the student teams with training were able to work with a more structured approach, gathered more information and spent more time on the situation analysis and did a more effective shared reflection in the team. In addition, the team should also have a certain amount of time to develop common routines and common mental models to minimize coordination losses. Naturally, motivation losses should not be overlooked either.

The analysis of failed situations is intended to understand the development of the dynamics of influencing factors and detect sources where critical situations turn into classify mistakes. As stated by other authors (Bedenk & Mieg, 2018; Kauffeld & Massenberg, 2018; Kunert & von der Weth, 2018), such an approach is highly recommendable. However, only if the organization maintains a trust culture that does not penalize the mistakes but rather sees failure as a starting point for learning and thus increases the motivation of the team members to improve their knowledge.

Can Successful Teams be Formed from Unsuccessful Teams?

The distinction of 'successful' and 'unsuccessful' teams is often based on the arbitrary assumption that there is a clear difference between success and failure. Furthermore, teams that are successful in terms of performance are supposed to work together in a positive way. However, a successful team is not necessarily a good team in every respect—the objective success could be clouded by a failed cooperation. In contrast, teams can fail in spite of good processes due to external influences or professional mistakes (see Triebel, Schikora, Graske, & Sopper, 2018). But have they failed as a team?

According to Tuckman (1965), team development is an important component of success. And although this approach has now been 50 years old, it can be cited as one of the few universally secured findings of small group research. In his model, Tuckman describes four successive stages, which must be processed by a team in order to work successfully together. At the beginning of the co-operation ("Forming") there is still uncertainty among the group members whether they are accepted in the team. A response to this initial insecurity takes place in the second phase ("Storming"), in which everyone is taking over tasks. In addition, roles are individually defined and defended against other team members. Later on, people start to clarify these roles, create a common set of rules and values ("Norming"). This reduces coordination and motivation losses in the team and opens the upcoming working phase ("Performing"). This stage model was supplemented by a fifth part ("Adjourning") by Tuckman and Jensen (1977), which can be regarded as a reflection phase. After a team has completed its task, a joint final discussion should take place, which can help to make experiences more aware and to be applied to the next projects. The most important message of this model is that a team not only has to schedule time for the task to be processed, but also needs time for the managing team processes.

Consequently, it seems compelling to consider and understand the respective team processes for the evaluation of team performance. Supportive and obstructive strategies can be described and analyzed, for example under which conditions teams often reduce the analysis, stop to share different mental models or only communicate them in a restricted manner, or dispute conflicts in a dysfunctional way. From such analyzes, a recipe for success cannot be deduced directly. But together with insights from high-performance teams that are able to combine successful outcomes and good processes, suggestions for successful teamwork can also be derived for "normal" teams.

References

Ansoff, I. (1980). Strategic issue management. *Strategic Management Journal, 1*(2), 131–148.

Badke-Schaub, P. (2012). Kommunikation in kritischen Situationen. In G. Hofinger (Hrsg.), *Kommunikation in kritischen Situationen, 2., aktualisierte und erweiterte Auflage* (pp. 3–28). Frankfurt a.M.: Verlag für Polizeiwissenschaft.

Baker, D. P., Day, R., & Salas, E. (2006). Teamwork as essential component of high-reliability organizations. *Health Services Research, 41*(84), 1576–1598.

Bedenk, S., & Mieg, H. A. (2018). Failure in innovation decision making. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Bierhals, R., Weixelbaum, I., & Badke-Schaub, P. (2010). Kritische Situationen meistern, Prozesskompetenz aufbauen – Entwicklung eines anforderungsbasierten Trainings für erfolgreiche Projektarbeit in Produktentwicklungsteams. *Psychologie des Alltagshandelns, 2*(3), 11–26.

Die Zeit. (2015, June 19). http://www.zeit.de/wirtschaft/2015-06/griechenland-schuldenkrise-eurogruppe-keine-einigung

Dörner, D. (1976). *Problemlösen als Informationsverarbeitung*. Stuttgart: Kohlhammer.

Dörner, D. (1989). *Die Logik des Mißlingens*. Reinbek: Rowohlt.

Endsley, M. (1995). Measurement of situation awareness in dynamic systems. *Human Factors, 37*(1), 65–84.

Gurney, A. (1997). *Der weiße Kontinent. Die Geschichte der Antarktis und ihrer Entdecker*. München: Verlagsgruppe Random House.

Hacker, W. (1973/2005). *Allgemeine Arbeitspsychologie: Psychische Regulation von Wissens-, Denk- und körperlicher Arbeit* (2nd ed.). Bern: Huber.

Höfer, S. (2011). *In den eisigen Tod: Robert F. Scotts Expedition zum Südpol*. München: DVA.

Hofinger, G. (2012). Kommunikation. In P. Badke-Schaub, G. Hofinger, & K. Lauche (Eds.), *Human factors. Psychologie sicheren Handelns in Risikobranchen* (2nd ed., pp. 131–151). Heidelberg U.A.: Springer.

Huntford, R. (1985). *The last place on Earth*. London: Pan Books.

Kauffeld, S., & Massenberg, A.-C. (2018). Failure in personnel development. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kemmler, R. (2000). *Sicherheitsrelevante Flugsituationen*. Vortrag im Rahmen des Psychologischen Kolloquiums am Institut für Theoretische Psychologie der Universität Bamberg.

Krakauer, J. (1997). *In eisige Höhen. Das Drama am Mount Everest*. München: Piper.

Kunert, S., & von der Weth, R. (2018). Failure in projects. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

MacPhee, R. D. E. (2010). *Race to the end: Amundsen, Scott and the attainment of the south pole*. New York: Sterling Innovation.

Oesterreich, R. (1981). *Handlungsregulation und Kontrolle*. München: Urban & Schwarzenberg.

Osborn, A. F. (1957). *Applied imagination*. New York: Charles Scriber's Sons.

Pawlowsky, P., & Steigenberger, N. (Eds.). (2012). *Die HIPE-Formel. Empirische Analysen von Hochleistungsteams*. Frankfurt/Main: Verlag für Polizeiwissenschaft.

Salas, E., Sims, D. E., & Burke, C. S. (1997). Is there a "big five" in teamwork? *Small Group Research, 36*(5), 555–599.

Salas, E., Burke, C., & Cannon-Bowers, J. (2000). Teamwork: Emerging principles. *International Journal of Management Reviews, 2*(4), 339–356.

Salas, E., Sims, D. E., & Klein, C. (2004). Cooperation and teamwork at work. In C. D. Spielberger (Ed.), *Encyclopedia of applied psychology* (Vol. 1, pp. 497–505). San Diego, CA: Academic Press.

Scott, R. F. & Bartsch, E. (2011). *Letzte Fahrt: Kapitän Scotts Tagebuch – Tragödie am Südpol. 1910–1912. Herausgegeben von Ernst Bartsch*. Wiesbaden: Edition Erdmann.

Stempfle, J., & Badke-Schaub, P. (2002). Kommunikation und Problemlösen in Gruppen: eine Prozessanalyse. *Gruppendynamik und Organisationsberatung, 33*, 57–81.

Stroebe, W., Diehl, M., & Abakoumkin, G. (1992). The illusion of group effectivity. *Personality and Social Psychology Bulletin, 18*, 643–650.

Taylor, D. W., Berry, P. C., & Block, C. H. (1958). Does group participation when using brainstorming facilitate or inhibit creative thinking? *Administrative Science Quarterly, 3*, 23–47.

Tisdale, T. (1998). *Selbstreflexion, Bewußtsein und Handlungsregulation*. Beltz PVU: Weinheim.

Triebel, C., Schikora, C., Graske, R., & Sopper, S. (2018). Failure in startup companies – Why failure is a part of founding. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Tuckman, B. W. (1965). Developmental sequences in small groups. *Psychological Bulletin, 63*, 384–399.

Tuckman, B. W., & Jensen, M. A. C. (1977). Stages of small-group development revisited. *Group & Organization Studies, 2*(4), 419–427.

Venzke, A. (2011). *Scott, Amundsen und der Preis des Ruhms – Die Eroberung des Südpols*. Würzburg: Arena.

Volpert, W. (1974). *Handlungsstrukturanalyse als Beitrag zur Qualifikationsforschung*. Köln: Pahl-Rugenstein.

Weick, K., & Sutcliffe, K. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty*. San Francisco, CA: Jossey Bass.

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Failure of Leadership

Salvatore Moccia

> *Leadership is a whole combination of different ingredients—but by far, by far, the single most important ingredient of leadership is your character...99 percent of all the leadership failures in this country (USA) in the last 100 years were not failures in competence; they were failures in character. Greed, lying, prejudice, racism, intolerance, sexism, hate, immorality, amorality—none of these things are competence failures. They are all character failures*
>
> Norman Schwarzkopf (1999)

Introduction

The mystery of what leaders can and ought to do in order to spark the best performance from their people is age-old. In recent years, that mystery has spawned an entire cottage industry: literally thousands of "leadership experts" have made careers of testing and coaching, all in pursuit of creating businesspeople who can turn bold objectives into reality. Still, effective leadership eludes many people and organizations (Goleman, 2000). What is leadership—I mean, what is a possible definition of an effective leadership that has been really tested on the field several times with good results? U.S. Field Manual 6-22, Army Leadership (2015), defines leadership as the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization. So, according to this definition, the objective of leaders is not only to reach the objective, but also to improve the consistency of the organization. In short words, get more money and improve the organizations. Quite easy, no?

It is, therefore, clear why leadership has become one of the most thoroughly explored concepts in business and industry. Good leaders make good money. Bad

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leaders make bad money, meaning that ineffective leadership damages organizations. Ineffective leadership is the perfect formula for bankruptcy, lost sales, lost reputation, and other organizational and human disasters.

Successful business results depend on good leaders, who are able to surpass their individualism and egocentrism and look after the benefits of the people and the entire organizations. Leadership behaviours that lead to corporate failures, such as Enron, Motorola, Nokia, Lehman Brothers, Monte dei Paschi di Siena, etc., confirm that common sense is not something so common, and doing the right thing is not just a matter of applying a formula.

As Moore (2011) noted, ineffective leader is *"someone who engages followers, but fails to produce the desired results. Ineffective leaders do not create the intended outcomes, due to a combination of missing traits, weak skills and poorly conceived strategies, among other attributes. To distinguish, unethical leaders fail to distinguish right from wrong"*, whereas effective leader is defined as *"someone who engages followers, and achieves the desired outcomes. While effective leaders attain goals, one must recognize that effective leaders are not necessarily ethical leaders who strive to create positive results for the common good. While Hitler may be an example of an effective leader, as he achieved desired outcomes, he also exercised unethical behaviour and violence to attain goals."*

Defining Leadership and Management

Let's be clear that the word 'leadership' is not a synonymous of management. The two concepts are different. Many organizations are very well managed, and very poorly led. Being a leader—as Bennis (1990) pointed out—means having an entrepreneurial vision and the time to spend thinking about the forces that will affect the destiny of the organization. Therefore, as we go back to our definition of leadership, being a leader means not only getting the objective, but also to define the route, the course of the organization not only to survive in the future, but also to improve it. The organization can only be improved when organizations are led (not managed) and inspired by truly leaders who can affect positively the destiny of the organization. As a consequence of this, being an ineffective leader means not only not getting the objectives, but also not having the skills and the ability to forecast the future and define to course of action. Leadership always start with a sort of dream, a vision, a place where to stay in the next years, and not the short-time objectives. These are part of managers' job. *"Leaders are people who do the right thing; managers are people who do things right. Both rules are crucial, but they differ profoundly"* (Bennis, 1990). Consequently, ineffective leaders are people who fail to do the right thing.

Let's think just for a while to Motorola, the inventor of the mobile phone communication. What happened to a company that once was the number one of its sector? Christopher Galvin, the grandson of Paul Galvin, the founder of Motorola, served as the Chairman and Chief Executive Officer of Motorola between 1997 and January, 04 2004 when he was forced to resign from Motorola by a Board that did

not share the same view of him of the *"pace, strategy and progress at this stage of the turnaround"* (Maney, 2003). In an unusual frank internal memo sent to his executive staff on Jan. 28, Mr Galvin declared that Motorola had become *"arrogant and dogmatic"* and *"slower than we should have been in adapting to new events"*. The company had *"systematics problems"* in marketing, timely delivery of products, and in the quality of its wireless networks. *"Motorola"*, he concluded, *"traditionally has been unable to collaborate successfully inside or outside the company"* (Cravens, 2000).

This internal memo gives us the opportunity to introduce the concept of "team leadership" or "collective leadership" and analyse the possible existence of "team leadership failure". From the example presented before, it is clear obvious to say that Mr Galvin cannot be held responsible for Motorola's decline. Mr Galvin in that memo also blamed the Motorola's culture of *"warring tribes"*, the teams and sectors that have traditionally fought each other for funding and support from headquarters.

So, blaming one leader to be the only responsible for the failure of an organization it is not right, especially considering the fact that work teams are prevalent in today's organizations. *"The reliance on teams is due partially to increasingly complex tasks, more globalization, and the flattering of organizational structures"* (Northouse, 2016). Effective team leadership has been found to consistently relate to team effectiveness.[1] The contribution of leadership to effective team performance rests on the extent to which team leaders help members achieve a synergistic threshold, where collective effort accomplishes more than the sum of individual abilities or efforts. (Zaccaro, Heinen, & Shuffler, 2009). Strong leaders and strong leadership teams are essential to sustaining today's high complex and globalized business. Going back to what we said at the beginning, it is time to affirm that "good leader, good business" is not anymore sufficient. In today's high competitive world, "good leader and good team leadership, is equal to good business". Therefore, bad leaders and bad team leadership are the main responsible for failure.

It is, hence, imperative to define some of the elements that could help us to recognise the incipient of a leadership failure.

Fail to Develop a Clear Vision and Mission Statement

Vision and Mission define what the organization is and what it does and provides important guidelines for getting the objectives and improving the organization. A well-conceived vision–mission statement defines the fundamental, unique purpose that sets a company apart from other firms of its type and identifies the scope or domain of the company's operations in terms of products/services offered. Research reveals that firms with an explicit business-domain definition, or, in other words, a statement identifying the competitive boundaries of the organization, may contribute to better performances because it improves competitor analysis, allows timely

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[1]See also Badke-Schaub and Hofinger (2018).

detection of threats and opportunities and aids the development of appropriate strategic response. Drucker went so far as to say that managerial neglect of the "what business are we in?" issue is the number one cause of organization frustration and failure (Sidhu, 2004).

Fail to Develop a Results-Driven Organization

The main purpose of leadership is to provide means for the continuation of the business. Most people would say that profit is a dirty word. Nonetheless, no business or organizations can continue without generating a surplus over and above its cost of operation. However, the search for profit should be not widely accepted without a structure that is able to "ride the bull". Effective leaders need to find the best structure for accomplishing their goals. On October 15, 1998, Boston Chicken— whose initial public offerings (IPOs) in 1993 was received as a great entrepreneurial success story, with their stock price soaring 143% on its opening day— filed for "Failure in Intercultural Cooperation" bankruptcy protection. What went wrong? Did Boston Chicken expand too far too fast? From May 1992 to 1998, it grew from 34 stores to 1.143. Sales jumped from about $21 million in December 1991 to nearly $1.2 billion in 1996. Great grow is possible, but no so wild and, especially, without a result-driven organization that is able to manage a wild growth, and with the adequate training on controls over operations, costs, customer service, and locations. (Hartley, 2001).

Fail to Recruit and Develop Competent Workers

Not all the top performers in an industry are hired by the top performer company. Effective leaders are able to build their business on good, reliable, normal workers, flanked by few superstars. Learning and development is increasingly recognised as a function that contributes to the attainment of strategic organisational objectives. (Crawshaw, Budhwar, & Davis, 2014). Learning and development provides the mechanism for knowledge creation and exchange, thereby driving organisational change. The promotion and retention of talent through rigorous developmental interventions lie at the heart of effective learning and development.[2] As Andrew Carnegie said *"The only irreplaceable capital an organization possesses is the knowledge and ability of its people. The productivity of that capital depends on how effectively people share their competence with those who can use it."*

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[2]See also Kauffeld and Massenberg (2018).

Fail to Build a Collaborative Climate

Collaborating reflects a high concern for your own interest and a high concern for the interest of the other party (Phillips & Gully, 2012). Effective leaders should create a culture of collaboration, based on trust, in order to fulfil both parties' needs with a goal of "I win-you win". Organizational commitment reflects the degree to which an employee identifies with the organization and its goals and wants to stay with the organization and to further develop it. Creating an environment that sustains collaboration and assonance, can positively impact a company's bottom line, since emotions affect productivity, creativity, and engagement. The Towers Perrin Global Workforce Study on engagement at work (2008), highlighted that *"only one out of every five workers today is giving full discretionary effort on the job, and this 'engagement gap' poses serious risks for employers because of the strong connection between employee engagement and company financial performance."* The more engaged the workforce, the better a company is likely to perform on a range of key financial metrics. Thus, leaders that fail to engage their employees may be lagging both in today's tough market for talent, as well as in the broader market for customers, revenues, investors and capital. Layard (2009) noted that *"our society has become too individualistic, with too much rivalry and not enough common purpose. Values matter. . .we do not need a society based on Darwinian competition between individuals. Beyond subsistence, the best experience any society can provide is the feeling that other people are on your side. That is the kind of capitalism we want."*

Case Study

Former Tesco Boss Leahy Criticizes 'Failure of Leadership' at the Grocer[3]

Former Tesco chief executive Sir Terry Leahy has said there was a "failure of leadership" under his successor Phil Clarke. He also said the grocer had allowed consumer trust to be "eroded" in recent years. Leahy said Tesco's loss of price leadership had undermined shopper trust. He said: *"Tesco is the biggest, people expect it to have the best prices and know they can trust Tesco to deliver that and not have to shop around and check that they're getting the best deal. I think that some of that trust has been eroded, which has meant that people have shopped around."* Leahy said of Clarke: *"People tried very hard to do the right thing, it clearly has not worked. In the end that's a failure of leadership, not a failure of the business, not a failure of the people who work hard every day in the business. When you're the CEO, if it goes well, you get credit, if it doesn't go well, you must take responsibility and Phil Clarke has taken that responsibility and paid the price with his job."* He added: *"I think the culture did change under Phil Clarke and not for the better. I think if you talked to people who knew Tesco, worked in Tesco when I was there, actually the culture was pretty positive and it has to be*

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[3]Taken from MacDonald (2015).

because it employs half a million people and you can't make them do things, you have to motivate them to do things, they've got to want to do it."

Fail to Define the Operational Concepts

Effective leaders acknowledge that operations demand a clear understanding of certain key operational concepts involved in the business. These are: estimate of the situation, objectives, priorities, end-state, limitations (constraints and restraints), main effort, and sequencing. End-state is the situation which needs to exist when and operation has been terminated on favourable terms. Main effort is the concentration of means, in a particular business/project; it provides a focus for the activity the effective leader considers crucial to success. Sequencing is the arrangement of activities within an operation in terms of time, space and resources. A 2005 study by the U.S. Government identified at least three benefits for having a well-prepared Concept of Operations. They were: (1) Stakeholder Consensus—ensuring that every partner understands and supports the proposed system. (2) Risk Reduction—forcing the sometimes painful but always beneficial process of predetermining every aspect of the system before it is procured or implemented. (3) Quality Improvement—discovering every opportunity to leverage existing and new infrastructure to increase system performance.

Fail to Recognize that Gravity Wins

Hamel (2012) highlights that managers too often see themselves as farmers. They've been given a plot of ground to cultivate, a business or a market segment, and their goal is to grow the biggest possible crop of profits. They fail to recognize that over time, yields fall as the soil becomes more saline, or as vital nutrients are depleted. Hamel (2012) suggest that manager should see themselves as ranchers whose grass-fed herds is always on the move. When a pasture gets grazed out, you move the herd on. Effective leaders recognize that to sustain success, *"they have to be willing to abandon things that are no longer successful."* (Hamel, 2012) Take the Nokia's case. Nokia lost the smartphone battle because divergent shared fears among the company's middle and top managers led to company-wide inertia that left it powerless to respond to Apple's game changing device (Huy & Vuori, 2015).

The real truth was that Nokia ignored threats to its business. They are that it made the wrong OS choices and the wrong platform choices. It lacked experience in the latter and it is still faltering over the former. It did not ignore the dangers. It simply did not understand the new skill sets it needed (Shaughnessy, 2013).[4]

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[4]As an example see Coleman-Lochner (2016).

Fail to Recognize that Strategies Die

Again, Hamel (2012) indicates that no strategy lives forever. Strategies die when they are replicated (e.g. Calis, Levitra, and Spedra copy Viagra), superseded (e.g. Wikipedia created a free alternative to traditional encyclopaedias) or eviscerated (e.g. Ryanair). Effective leaders should always pay attention to the environment and try to avoid getting surprised. While Nescafé and others competed for the supermarket business using coupon promotions, other firms such as Starbucks, succeeded in selling a very different kind of coffee in different ways and for a higher price. Another example: On-line music providers were largely ignored by the major music labels until they gradually became major players (Aaker & McLoughlin, 2010). One key to success in strategic opportunism is an entrepreneurial culture and the willingness to respond quickly to opportunities as they emerge. Hugues, Hugues, and Morgan (2010) define *"strategy failure as considerably substandard business performance relative to major, direct competitor referents. In other words, the realized strategy is not meeting the firm's performance objectives and performance is far worse relative to competitors and is thus a failing strategy."* The authors contend that *"strategic managers must understand their market environment, customer needs, value drivers, and competitors' behaviour and from this, formulate and implement the correct product-market strategy, that is, to realize the strategy. Consequently, strategic managers invest much time and effort in this strategy-making process[5] to bring the product-market strategy to fruition. A key decision facing strategic managers is whether to persist or adhere with the current product-market strategy or change the direction of the organization and follow a new strategy."*

Fail to Recognize that Virtues Matter

As Moccia (2012) highlights, looking at the relationships between virtues and leadership, it is interesting to note that leadership differs from management by the fact that it moves souls and hearts, not only brains. Leadership is about how to be, not how to do (Hesselbein, 2004). Leadership is irrevocably tied to morality (Safty, 2003). Virtue creates the space in which leadership occurs by instilling trust (Havard, 2007). Leaders who encompass virtues build trusts; and the greater the trust, the faster things get done (Duran, 2008). Effective leaders recognize the compounding effects and benefits of leading with virtues. Virtues beget virtues. Empirical investigations by Neubert, Carlson, Kacmar, Roberts, and Chonko (2009) showed that managers can virtuously influence perceptions of ethical climate, which in turn will positively impact organizational members' flourishing as measured by job satisfaction and affective commitment to the organization. Followers who aspire to lofty positions naturally emulate the behaviours of the people who lead them.

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[5]See also Bedenk and Mieg (2018).

Leaders who lead through virtue inspire people to follow suit. This creates several advantages. A culture built with virtue is resilient, capable of withstanding changes inspired from within and changes from the outside. A culture of virtue is also great for retention.

Fail to be Flexible

Today's economy is revolving around innovatively assembled brain power, not muscle power (Peters, 1994). However, most of our management rituals were invented (a very long time ago) to promote discipline, control, alignment, and predictability. To out-innovate the upstarts, a company must reengineer all of these processes constantly so they facilitate bold thinking and radical doing (Hamel, 2012). In today environment, inflexibility is a dangerous illness. Keough (2008), includes the "inflexibility" in his list of the Ten Commandments for business failure. He notes that *"not taking a risk and being inflexible are closely related, but there is an important nuance of difference. The truly inflexible people are not avoiding risks. They are not merely reluctant to take a risk on some change or innovation. They are so set in their ways, so sure that they the formula for success that they simply cannot see any other way of doing things."* Wheatley (1994) notes that *"equilibrium is neither the goal nor the fate of living systems, simply because as open systems they are partners with their environment... Prigogine's work on the evolution of dynamic systems demonstrated that disequilibrium is the necessary condition for a system's growth... organizations and their environments are evolving simultaneously toward better fitness for each other... if an open systems seeks to establish equilibrium and stability through constraints on creativity and local changes, it creates the conditions that threaten its survival."* In fact, in a world of mind-flipping change, what matter is not merely a company's advantage at a point in time, but its evolutionary advantage over time (Hamel, 2012). As McRea and Betts (2008) noted in today's dynamic environment, static firms are not likely to endure. Rather, companies must adapt to their environments' varying conditions, react to their competitors' actions, and respond to their customers' changing requirements. To be successful, organizations must find ways *"to redefine or rejuvenate themselves, their positions within markets and industries, or the competitive arenas in which they compete"* (Covin & Miles, 1999).

Fail to Assume Responsibility

According to Collins (2001), the author of the best seller "Good to Great", *"the good-to-great companies built a consistent system with clear constraints, but they also gave people freedom and responsibility within the framework of that system."* The leader sees leadership as responsibility rather than as rank and privilege. When things go wrong—and they always do-leaders do not blame others. Napoleon said: *"There are no bad soldiers, only bad officers."* A good leader takes a little larger

share of the blame (Garner, 2002). Some scholars (e.g. Du Gay, Salaman, & Rees, 1996) call for a "redefinition of management" that consists on major shift in the contract between employer and manager. This redefinition of management not only emphasizes and articulates the skills/competencies managers will need in order to act effectively in their newly empowered and accountable roles, but also reflects the delegation of responsibility to ensure achievement, possession of these competencies, to the managers themselves. Effective leader accepts personal responsibility for results. Brown (1985) noted that essentially there are two actions in life: performance and excuses. Based on these two distinct actions, entirely different attitudinal approaches exist: internalists and externalist. Internalists are those who are performance-oriented, accept personal responsibility for their actions, successes and failures. On the other side, externalists are those who refuse to accept their responsibility for their position in life and hide behind excuses. An important facet of responsibility is being able to admit you are not all-knowing, and you need others' help. Effective leader is able to create a constellation of executives to assist him not only with the needed service, but also with the needed information (Bennis, 1990).

Fail to Recognize the Human Nature of the Organizations

As Blau (1956) noted, *"to administer a social organization according to purely technical criteria of rationality is irrational, because it ignores the no rational aspects of social conduct."* In fact, business is about human activity that is carried out by individuals within organizations (Melé, 2009). In 1960, Douglas McGregor (1906–1964) published his book The human side of Enterprise, where he presented his theory Y. His theory was revolutionary because it emphasized fostering individual self-direction and full potential, exceeding the mere satisfaction of personal needs. Generally, as Webb and Norton (1999) highlight, human resource administration was influenced by McGregor's theory to:

- Place new emphasis on the importance of the human dimension in organizations and give a new meaning to the utilization of human resources
- Emphasize the positiveness of employees' potential to contribute in intellectual and meaningful ways to organizational effectiveness
- Underline the fallacy of total centralization of administrative actions and emphasize the values of employee participation on a broad scale throughout the organization
- Present a new view of expectancy motivation and human behaviour in that, when management concepts allow for high-level performance expectations, employees tend to respond.

From the corporations' point of view, Herb Kelleher, the co-founder of Southwest airlines, in a superb video available on internet, analyses the formula of the fantastic success of Southwest Airlines: the business of business is people, now and forever. The argument he presents is the following one: if we care our employees, they will

care our customers. Our customers will like this, and they will fly again with us, which gives money to our shareholders. It is a fantastic example of a business which has identified organisational culture as a source of sustainable competitive advantage. Kelleher identified the need for an employee-centered culture at Southwest as the way in which his airline could deliver outstanding customer service.

Fail to Create a Culture of Fun

The World Health Organization analyses estimate that by 2020 depression will be the second leading cause of work incapacity, and they indicate that at present 22% of the workforce in Europe (almost 40 million workers) are victims of stress due to work. The meta-analytic research by Luthans and Youssef (2007) has shown that positive organisational behaviour can contribute between 4% and 15% of the variation in work performance. In addition, the authors calculated the economic impact of the results in the two companies where the research was conducted, concluding that the usefulness of individual positive psychology (optimism = 0.028 and persistence/tenacity = 0.055) multiplied by the average salary of an employee ($50,000) and multiplied by the number of workers (almost 25,000) results in an increase of $50,000,000 in the companies' profits. Finally, the authors note that *"the positive behaviours of workers, together with the positive behaviours of organisations, have a positive and substantial impact on both individual and organisational performance as well as on other business results. These results are probably more important than the results that can be achieved using other material resources, or other economic models."* Other empirical studies support these findings. In particular, the investigations of Wright and Cropanzano (2004), which show that Happiness/Psychological Well-being (PWB), a very similar concept to that of positive organisational behaviour, explained up to 25% of the variation in the results of workers. Specifically, the authors note that the higher the level of happiness and positive emotions of workers, the stronger the link between job satisfaction, performance and results. These authors, making a calculation similar to the one described above, note that in a company of ten engineers with an average salary of $65,000, the annual profit of Happiness/Psychological Well-being (PWB) is $650,000. Judge and Erez (2007) suggest that a correct application to performance of the combination of Emotional stability and Extraversion—which, in turn, is a reflection of a happy personality—involves much more significant results than isolated behaviours. Their results clearly indicate that people who are optimistic, cheerful and enthusiastic in life, achieve better performance than sad people (see the Brady Co.'s case study). According to Zamagni (2007), not only it is possible to combine happiness at work and productivity, but it is necessary to pay attention to this matter if the company wants to remain competitive in the long run. Hackman and Wageman (1995), addressing TQM Philosophy, report Kaoru Ishikawa's contention that *"An organization whose members are not happy and cannot be happy does not deserve to exist"*. According to Avolio, Howell, and Sosik (1999), the use of humour in organizational contexts can be hypothesized to have both direct and indirect effects

on individual and unit performance, and has been associated with improving morale among workers, creating a more positive organizational culture, enhancing group cohesiveness, stimulating individual and group creativity, and increasing motivation. Their empirical investigation—directed at the 115 leaders of a large Canadian financial institution and their 322 respective followers, indicated that humor had a positive, direct relationship with the two performance measures used—consolidated unit performance and individual performance appraisal—suggesting that leaders can be trained to use humor in constructive ways.

Case Study

Brady Co. and the Culture of Fan

Brady Corporation. It was founded in 1914 in Eau Claire, Wisconsin, as W.H. Brady Co., and renamed Brady Corporation in 1998. It makes more than 50,000 industrial identification and specialty coated material products. The company began selling products internationally in 1947, and has 9000 employees around the world; it operates in 26 countries and distributes its products in more than 100 countries. For fiscal year 2007 the company presented the following financial results: Net Sales: $1.36 billion, Net Income: $109 million, return on stock investment: $1000 invested in Brady Stock in July 1984 grew to over $30,000 by July 31, 2007 with dividends reinvested. In 1994 Katherine M. Hudson became the first non-family member to run the company. The newly appointed President and CEO decided to start a program to include fun as an integral part of the culture at Brady Corporation, *"not simply as an end in itself but for serious business reasons. We've found that getting people to loosen up and enjoy themselves has numerous benefits. It can break down jealously guarded turf boundaries. It can foster an esprit de corps throughout the company and greater camaraderie on teams. It can start the conversation that spurs innovation and increase the likelihood that unpleasant tasks will be accomplished. It can help convey important corporate messages to employees in memorable ways. It can relieve stress and, heaven knows, we can all benefit from that"* (Hudson, 2001). Seven years after the beginning of the program, the company had doubled its sales and almost tripled its net income. The President and CEO wouldn't attribute this performance solely to having a fun culture but *"our performance is a sign that a company can be fun and friendly for its employees and fierce with its competitors. In fact, the fun has made us fiercer, by making the organization more flexible and dynamic and our people more creative and enthusiastic."*

Fail to Trust Your People

Yes, trust matters. Cho and Poister (2014) pointed out that many scholars demonstrate its importance for effective management. Trust is expected to decrease

transaction costs and the necessity of monitoring while increasing job satisfaction, information sharing, and performance—and a lack of trust brings negative outcomes such as low commitment, low motivation, and cynicism. Rasch's (2012) investigation on the relationship between trust and leadership, found, among other things, that an individual's propensity to trust seems to affect trust in leadership through perceptions of leader trustworthiness. Indeed, leaders can inspire trust by being capable, kind, and honest. Leader integrity is the most important direct determinant of trust in leadership. Trust may act as a substitute for costly and rigid formal control mechanisms, like legal contracts. Trust in leadership is also important to predicting turnover intentions, even beyond job satisfaction and organizational commitment. Another scholar, Harrison (2009), found a significantly and positive correlation between transformational leadership and trust. A transformational leader demonstrates behavioural integrity, which allows for the development of trust with followers.

Conclusions: The Good, the Bad, and the Ugly

In 2000 psychologist Daniel Goleman published an article on Harvard Business Review titled "Leadership that gets results". In his piece, the author highlights that *"new research suggests that the most effective executives use a collection of distinct leadership styles—each in the right measure, at just the right time."* Goleman then introduce the six different leadership styles, each springs from different components of emotional intelligence. They are the following: Coercive, Authoritative, Affiliative, Democratic, Pacesetting, and Coaching. Leaders with the best results in terms of best climate and business performance mastered and rely on at least four of them: authoritative, democratic, affiliative, and coaching style. In other words, the Good, the Bad, and the Ugly, as depicted in the famous Sergio Leone's movie (see Fig. 1).

Another important indication from Goleman is this kind of leadership can be learned. As a consequence of this, we could affirm that anyone could be a leader, but most fail to be real leaders. According to new research of Deloitte (Bersin, Geller, Wakefield, & Walsh, 2016) despite substantial efforts by learning professionals, a multibillion leadership development industry, and more than 70 years of leadership research, the overall success by organizations to grow leaders remains dismal. Only 60% of leaders in organizations surveyed show commercial acumen and business judgment; 48% are seen as driving change and innovation; and only 44% build talent for competitive advantage. Again, anyone could be a leader, but most fail to be successful. On the contrary, most represent a sort of leadership that is usually called as "toxic". Toxic leaders are those who put their own need or image above their workers, who are worried about short-term results and micromanagement, and who are insecure, but arrogant and stubborn, in their own positions. Beum (2015) reports that U.S. Army War College states that toxic leaders *"are focused on visible short-term mission accomplishment. . .provide superiors with impressive, articulate presentations and enthusiastic responses to missions. . .(but) are unconcerned*
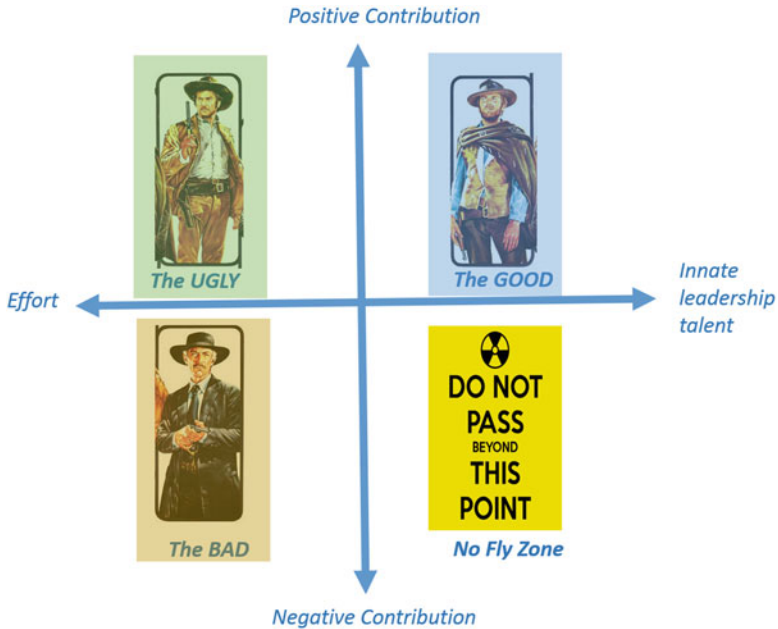
Fig. 1 Two-dimensional leadership model 'the Good, the Bad, and the Ugly'

about, or oblivious to, staff or troop moral and/or climate...(and) are seen by the majority of subordinates as arrogant, self-serving, inflexible and petty."

In conclusion, Goleman (2000) uses to explain the six leadership styles the metaphor of the "array of clubs in a golf pro's bag". Over the course of the game, the pro picks and chooses clubs based on the demands of the shot. Sometimes he has to ponder his selection, but usually it is automatic. The pro senses the challenge ahead, pulls out the right tool, and puts it to work. That's how high-impact leaders operate, too. In other words, effective leaders should have a sort of three dimensions—the Good, the Bad and the Ugly—and use each of them when it is needed. On the other side, ineffective leaders are neither Good, neither Bad, neither Ugly. They are just INEFFECTIVE. And their company inevitably will die under their guidance.

Last words: during the press conference to announce NOKIA being acquired by Microsoft, Nokia CEO ended his speech saying this *"we didn't do anything wrong, but somehow, we lost."* Upon saying that, all his management team, himself included, teared sadly.

References

Aaker, D. A., & McLoughlin, D. (2010). *Strategic market management* (1st ed.). Hoboken, NJ: Wiley.

Avolio, B. J., Howell, J. M., & Sosik, J. J. (1999). A funny thing happened on the way to the bottom line: Humor as a moderator of leadership style effects. *Academy of Management Journal, 42*(2), 219–227.

Badke-Schaub, P., & Hofinger, G. (2018). Failure in teams – Why successful teams do not fail (so often). In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Bedenk, S., & Mieg, H. A. (2018). Failure in innovation decision making. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Bennis, W. (1990). *On becoming a leader*. Boston, MA: Addison-Wesley.

Bersin, J., Geller, J. G., Wakefield, N., & Walsh, B. (2016). *Global human capital trends report*. Deloitte. Retrieved October 27, 2017, from https://www2.deloitte.com/us/en/pages/human-capital/articles/introduction-human-capital-trends-2016.html

Beum, L. (2015). Toxic Leadership affects soldiers at all levels. *Infantry, 104*(3), 44–49.

Blau, P. (1956). *Bureaucracy in modern society*. New York: Random House.

Brown, S. (1985). *13 fatal errors managers make and how you can avoid them*. Ada, OK: Fleming H. Revell Company.

Cho, Y. J., & Poister, T. H. (2014). Managerial practices, trust in leadership and performance: Case of the Georgia Department of Transportation. *Public Personnel Management, 43*(2), 179–196.

Coleman-Lochner, L. (2016). *Sears may sell its best-known brands*. Bloomberg Businessweek. Retrieved June 10, 2017, from https://www.bloomberg.com/news/articles/2016-06-03/sears-may-sell-its-best-known-brands

Collins, J. (2001). *Good to great*. New York: Harper Collins Publishers.

Covin, J. G., & Miles, M. P. (1999). Corporate entrepreneurship and the pursuit of competitive advantage. *Entrepreneurship Theory and Practice, 23*(3), 47–63.

Cravens, D. W. (2000). *Strategic marketing* (6th ed.). New York: McGraw-Hill.

Crawshaw, J. R., Budhwar, P., & Davis, A. (2014). *Human resource management*. Thousand Oaks, CA: Sage.

Department of the Army. (2015). *U.S. Field Manual No. 6-22: Leader development*. Washington, DC: Department of the Army.

Du Gay, S., Salaman, G., & Rees, B. (1996). The conduct of management and the management of conduct: Contemporary managerial discourse and the constitution of the 'competent' manager. *Journal of Management Studies, 33*(3), 263–282.

Duran, D. (2008). Leadership virtues. *Leadership Excellence, 25*(7), 14.

Garner, D. D. (2002). Effective leadership: The pharmacist's role and responsibility. *Drug Topics, 146*(18), 76–82.

Goleman, D. (2000). Leadership that gets results. *Harvard Business Review, 78*(2), 78–90.

Hackman, J. R., & Wageman, R. (1995). Total quality management: Empirical, conceptual, and practical issues. *Administrative Science Quarterly, 40*, 309–342.

Hamel, G. (2012). *What matters now*. Hoboken, NJ: Jossey-Bass.

Harrison, C. W. (2009). *Transformational leadership and its relationship to trust and behavioural integrity*. Dissertation thesis, Saybrook University, Oakland, CA, USA.

Hartley, R. F. (2001). *Marketing mistakes and successes* (8th ed.). Hoboken, NJ: Wiley.

Havard, A. (2007). *Virtuous leadership*. New Rochelle, NY: Scepter.

Hesselbein, F. (2004). The leaders we need. *Leader to Leader, 35*, 2–4.

Hudson, K. M. (2001). One laugh at a time. *Harvard Business Review, 79*(7), 45–53.

Hugues, P., Hugues, M., & Morgan, R. E. (2010). Why do product-market strategies fail? A sociostructural examination under condition of adherence. *Group and Organization Management, 35*(5), 606–635.

Huy, G., & Vuori, T. (2015). W*ho killed Nokia? Nokia did*. Insead Knowledge. Retrieved June 10, 2017, from https://knowledge.insead.edu/strategy/who-killed-nokia-nokia-did-4268

Judge, T. A., & Erez, A. (2007). Interaction and Intersection: The constellation of emotional stability and extraversion in predicting performance. *Personnel Psychology, 60*(3), 573–596.

Kauffeld, S., & Massenberg, A.-C. (2018). Failure in personnel development. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Keough, D. (2008). *The ten commandments for business failure*. London: Penguin Books.

Layard, R. (2009). It is time for a capitalism based on values. *Financial Times, 12*, 15.

Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of Management, 33*(3), 321–349.

MacDonald, G. (2015). *Former Tesco boss Leahy criticises 'failure of leadership' at the grocer*. Retrieved June 10, 2017, from https://www.retail-week.com/companies/tesco/former-tesco-boss-leahy-criticises-failure-of-leadership-at-the-grocer/5068201.article

Maney, K. (2003). *Motorola expected to seek outsider; Harsh words follow CEO's resignation*. Retrieved June 10, 2017, from https://en.wikipedia.org/wiki/Christopher_Galvin

McGregor, D. (1960). *The human side of enterprise*. New York: McGraw-Hill Publishers.

McRea, E., & Betts, S. C. (2008). Failing to learn from failure: An explanatory study of corporate entrepreneurship outcomes. *Academy of Strategic Management Journal, 7*, 111–132.

Melé, D. (2009). *Business ethics in action*. Basingstoke: Palgrave Macmillan.

Moccia, S. (2012). Leadership that gets results: Lessons from Don Quixote. *Review of Business, 33*(1), 5–18.

Moore, T. (2011). *The impact of ineffective leadership on organizational performance: Recommendations for best practice*. Dissertation thesis, The College of St. Scholastica, Duluth.

Neubert, M. J., Carlson, D. S., Kacmar, K. M., Roberts, J. A., & Chonko, L. B. (2009). The virtuous influence of ethical leadership behavior: Evidence from the field. *Journal of Business Ethics, 90*(2), 157–170.

Northouse, P. G. (2016). *Leadership* (7th ed.). Los Angeles, CA: Sage.

Peters, T. (1994). *Seminar. Crazy times call for crazy organizations*. New York: Vintage Book.

Phillips, J., & Gully, S. (2012). *Organizational behavior*. Boston, MA: South-Western Cengage Learning.

Rasch, R. L. (2012). *Exploring the nomological net of trust in leadership: An empirical examination of antecedents, moderators, and outcomes*. Dissertation thesis, University of Minnesota, Minneapolis, MN, USA.

Safty, A. (2003). Moral leadership: Beyond management and governance. *Harvard International Review, 25*(3), 84–85.

Shaughnessy, H. (2013). *Apple's Rise and Nokia's Fall*. Highlight Platform Strategy Essentials. Retrieved June 10, 2017, from https://www.forbes.com/sites/haydnshaughnessy/2013/03/08/apples-rise-and-nokias-fall-highlight-platform-strategy-essentials/#1ccf95376e9a

Sidhu, J. S. (2004). Business-domain definition and performance: An empirical study. *SAM Advanced Management Journal, 69*(4), 40–45.

Towers Perrin. (2008). *Closing the engagement gap: a road map for driving superior business performance*. Towers Perrin Global Workforce Study 2007–2008. Retrieved June 10, 2017, from https://c.ymcdn.com/sites/simnet.site-ym.com/resource/group/066D79D1-E2A8-4AB5-B621-60E58640FF7B/leadership_workshop_2010/towers_perrin_global_workfor.pdf

U.S. Department of Transportation, Federal Highways Administration. (2005). *Developing and using a concept of operations in transportation management systems (FHWA-HOP-07-001)*, p. 43. Retrieved June 10, 2017, from https://tmcpfs.ops.fhwa.dot.gov/cfprojects/uploaded_files/conops_tms_handbook.pdf

Webb, L. D., & Norton, M. S. (1999). *Human resource administration* (3rd ed.). Upper Saddle River, NJ: Merril Prentice Hall.

Wheatley, M. J. (1994). *Leadership and the new science: Learning about organization from an orderly universe*. Oakland: Berrett-Koehler Publishers.

Wright, T. A., & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an age-old quest. *Organizational Dynamics, 33*(4), 338–351.

Zaccaro, S. J., Heinen, B., & Shuffler, M. (2009). Team leadership and team effectiveness. In E. Salas, G. F. Goodwin, & C. S. Burke (Eds.), *Team effectiveness in complex organizations:*

Cross-disciplinary perspectives and approaches (pp. 83–111). London: Taylor and Francis Group.

Zamagni, S. (2007). *L'economia del bene commune*. Roma: Città Nuova editrice.

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Failure in Innovation Decision Making

Stephan Bedenk and Harald A. Mieg

Introduction

"Why do people make stupid decisions?" Ordinary psychological explanations are easily found, such as "Some people are just not smart enough" or "Some people do not think enough". In fact, both responses represent typical ordinary assumptions on why humans make bad decisions. The first response suggests constancy and consistency in human decision making: smart people always make good decisions, whereas less intelligent people always make bad decisions. The second answer implies causality: good decisions are the inevitable result of good thinking skills and decision making processes: Just get enough information, think enough, process it intensely—and you will make good decisions!

Both responses may seem plausible from an ordinary psychological point of view. However, both responses do not adequately address the complex mechanisms of human decision making. In some cases, the interrelations between decision making process and decision making outcome may even be the opposite of what ordinary psychological assumptions might suggest: too much involvement in a decision problem can sometimes lead to poorer decisions (see, for example, "sunk cost fallacy", later in this chapter). And sometimes decisions can be bad—not because of too little information, but because of too much information (see "too much choice effect", Grant & Schwartz, 2011). In conclusion, no human being is immune to making bad decisions.

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Failure in Managerial Decision Making

The notion that all human beings are vulnerable to erroneous decision making processes has been neglected for a long time. Normative models of decision making portrayed humans as "homi oeconomici" and were popular. However, the inadequacy of these models was demonstrated in many empirical studies in the second half of the twentieth century. These studies demonstrated systematic biases in human thinking and decision making (see Tversky & Kahneman, 1974).

Biases can be understood as systematic cognitive deviations from optimal decision making (see Thompson, Neale, & Sinaceur, 2004). They are increasingly discussed in the context of strategic decision making. Strategic decision making is a core task of management boards in companies (Hambrick & Mason, 1984) and marked by a high level of complexity and uncertainty (Eisenhardt & Zbaracki, 1992; Harrison, 1992). Hence, biases that lead to bad decision making outcomes can have serious negative impact—not only on the individual decision makers but also on the company as a whole.

Innovations as (Cognitive) Psychological Processes

In this chapter, the effect of biases on managerial decision making processes is illustrated with regard to innovation projects.[1] In fact, innovation processes are highly psychological processes (see Klein & Sorra, 1996). Social and organizational psychological research has widely demonstrated that aspects such as leadership, conflict management styles, and communication skills in teams are essential to the success of innovation projects (e.g., Shipton, Fay, West, Patterson, & Birdi, 2005). Interestingly, findings from cognitive psychological research, which mainly deals with thinking, perception and decision making of individual actors, are hardly noticed in the field of innovation research. Although cognitive psychology is often considered a basic psychologic research field, it offers important impulses for practical innovation work as well. The central role of cognitive processes in the course of innovation projects can easily be demonstrated by looking at "key words" that are used to describe innovation: In many companies, innovation management is intended to lead to creativity and ideas. Methods such as brainstorming are combined with slogans such as think big or think outside the box. Finally, when it comes to finding the one good idea out of many ideas, judgments and decisions have to be made.

Cognitive psychology provides theories and studies on these aspects and they are all relevant for innovation processes. However, even after almost 30 years, Van de Ven's (1986) statement seems to hold true: *"Much of the folklore and applied literature on the management of innovation has ignored the research by cognitive psychologists and social psychologists."* (p. 594).

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[1]See also von Stamm (2018) and Kunert and von der Weth (2018).

Innovation Processes as Cognitively Challenging Fields of Action

Innovation decision making can be considered as far more challenging than decision making in organizational routine tasks. The following five prototypical features of innovations demonstrate the challenges of innovation contexts (see Krause, 2004) and, in turn, the likelihood of biases and failure in innovation decision making:

Novelty

As the Latin term (innovare = to start something new) etymologically suggests, innovations represent new situations for all actors involved. Therefore, they also demand new ways of thinking: *"It matters little, so far as human behavior is concerned, whether or not an idea is 'objectively' new. (...). The perceived units of the idea for the individual determines his or her reaction to it. If the idea seems new to the individual, it is an innovation."* (Rogers, 1983, p. 11). Thus, innovations always represent "individual novelties" (Hauschildt & Salomo, 2007, p. 24): established patterns of thinking and deciding have to be brought into question as they may be insufficient ways to deal with new situations that occur in the course of innovations.

Uncertainty

Many strategic innovation decisions have to be made right at the beginning of a project—at the very same time when the level of uncertainty is the highest with regard to essential project aspects (see Souder & Moenaert, 1992). Precise forecasts are nearby impossible (see Jalonen, 2011), and many questions can not be answered accurately: Will there be enough time, money or technological resources in the future to implement an innovation? Will the employees support the innovation plans? Will customers accept or reject the new product or the new service?

Complexity

Funke (1991, p. 186) identifies typical features of complex problem-solving situations (see Fig. 1 for a graphic illustration): (a) a large number of influencing variables or determinants which (b) can influence each other due to their high degree of connectivity and (c) often remain invisible for a long time. Furthermore, new influencing variables often arise in the course of the problem solving process: complex problem-solving situations are dynamic and they tend to change rapidly (d). A final feature of complex problems is "polytely" (e): the complexity of problems very often leads to contrary and even contradictory goals and perspectives of the relevant actors. Hence, innovation projects can be considered typical complex problems. Success and failure of innovation projects depend on a multitude of interconnected influencing factors, such as societal and market factors. For example, the demand for sustainable products in an industry can start innovation activities of all competitors in a market and, in turn, change the entire relevant market. At the same time, decision makers within an organization often do not possess enough information on all influencing factors that might determine innovation success. As innovations are often long-term projects that can take several years to be
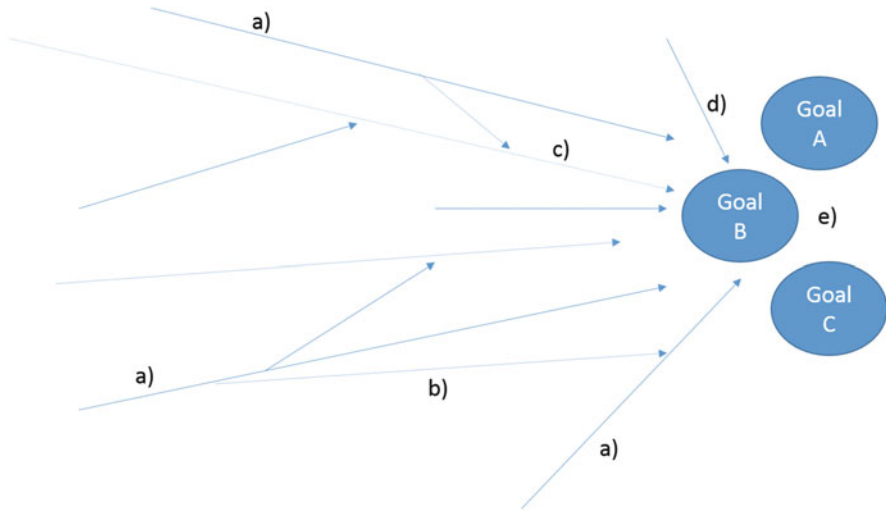
Fig. 1 Features of complexity (see Funke, 1991, S. 186): **(a)** large number of variables, **(b)** connectivity, **(c)** intransparency, **(d)** dynamic developments, **(e)** polytely

implemented, new influencing factors are permanently emerging (e.g., new competitors enter the market). Polytely emerges due to the fact that different actors outside of an organization (owners, political interest groups) or in an organization (executives, middle management) have contradictory goals within an innovation project—which can lead to huge conflicts.

Conflicts

Innovation processes are always change processes. They lead to a variety of conflicts, as old and new ways of thinking and "how we do things around here" compete with each other. Power and relations have to be re-negotiated (Scholl, 2004). Conflicts are a consequence and a syndrome of the human struggle with novelty, complexity and uncertainty, as the different opinions reflect different ways of perceiving ambiguous situations.

Volatility

Very often, organizational changes turn out to be much bigger than we dare to predict. In financial markets, "volatility" stands for the extent of fluctuations in prices. These are usually underestimated: After a time of apparently uniform development there is often the conviction that this trend will continue in small steps of change—which is rarely the case (Mieg, 2001). In the business context, strategic decisions often fail because they are based on estimated developments in the future as decision makers omit considering the aspect of volatility (Mintzberg, 1994). High volatility can be expected wherever and whenever the expectations of many stakeholders come together. This applies, for example to large companies, to politics, and generally: to innovations. The financial economist Robert Shiller (2000)

called this phenomenon "irrational exuberance", irrational enthusiasm. Probably two phenomena are critical for volatility: first, we tend to underestimate the extent of possible changes. Second, we make changes even more different than we once expected, as we tend to show a collective overreaction due to our "irrational exuberance", all striving in the same direction.

Bounded Rationality in Innovation Decision Making

The characteristics of innovation (novelty, uncertainty, complexity, conflicts, volatility) demonstrate that failure in innovation decision making is not necessarily due to insufficient or a lack of "rational" thinking. It is difficult to deal with these challenging characteristics, as human decision makers do not correspond to the ideal of the "homo oeconomicus" (Hilary & Menzly, 2006; Smith & Winkler, 2006). Instead, decision makers can only deal with these characteristics within the limits of their bounded human rationality. The concept of "bounded rationality" is closely linked to the name of Herbert Simon, who defined "bounded rationality" as the *"limits upon the ability of human beings to adapt optimally, or even satisfactory, to complex environments."* (Simon, 1991, p. 133). These limits are particularly applicable to strategic decision making in innovation contexts: the limited cognitive information processing capacities of human beings only allow limited perspectives on problems and solutions (Hammond, Keeney, & Raiffa, 1998; March & Simon, 1958; Scholl, 2004; Simon, 1976), which may lead to biases in decision making processes. In what follows, we will provide some examples of biases that often occur in innovation decision making processes and that might add to the likelihood of failure in relevant innovation projects.

Failure Due to Wishful Thinking

Case Study

In an industrial company, each idea for an innovation project had to be submitted along with descriptions of three possible outcome scenarios: In a "best case scenario" an extraordinary successful outcome scenario of an innovation project had to be described. In a "realistic case scenario", an outcome scenario had to be described that was most likely to be achieved. In a "worst case scenario" an extraordinary negative outcome had to be described and, if necessary, the company's losses and expenditures in that case.

After a series of failed innovation projects, the management decided to take a closer look at those failed innovation projects. The re-analysis showed that one third of the failed innovation projects actually had even worse outcomes than the ones that were expected in the "worst case scenario": The company losses were even higher.

A deeper analysis showed that the drastically failed innovation projects had some aspects in common. In particular, critical and sceptical thoughts on the innovation idea were not appreciated at the beginning of the projects. Instead, critical perspectives on the idea were perceived as hindering the project flow—hence, neither project team members nor members of the management team brought up critical aspects at all.

A one-sided positive view of innovation actors is particularly strong at the beginning of innovation projects. "Wishful thinking" (Scholl, 2004, p. 35) guides information processing. Critical aspects, difficulties and challenges are trivialized. In consequence, overoptimistic forecasts are pretty common and anticipated costs or expenditures for resources are underestimated (see Schwenk, 1988).

Failure Due to Overconfidence

Another often observed phenomenon in innovation projects is "overconfidence". On an individual level, overconfidence describes the tendency to assess one's own abilities and competencies as more pronounced than they actually are (Nguyen & Schüßler, 2012). In the innovation context, overconfidence may lead managers to overestimate their own knowledge about and their own insight into detail aspects. As a consequence, opinions of others and particularly those, who are lower in hierarchy, will neither be heard nor taken into account (see Scholl, 2004).

Failure Due to the "Not-Invented-Here" Phenomenon

The conviction to be better (informed) than others can be accompanied by the tendency to not adequately compare one's own judgments and assumptions with comparable project experiences from other organizations: comparable projects in other companies or businesses are not properly studied. Hence, valuable opportunities to learn from others are not taken. This is where the "not-invented-here phenomenon" (Katz & Allen, 1982; Scholl, 2004) comes into play. Experiences, ideas and problem solving strategies of others are not considered, only for one reason: because they didn't occur within one's own organization. For instance, the "not-invented-here"-phenomenon can occur in ERP (enterprise resource planning) projects. ERP projects often share a lot of comparable challenges across different organizations: New software solutions need to be suited to structures and processes, which very often turn IT projects into organizational-wide change management projects. Although these change dynamics have been documented in many companies, the relevant lessons-learned are very often not used for better assessments of the situation in one's own company.

Failure Due to Inappropriate Project Models

The opposite of the "not-invented-here" phenomenon can also lead to failure in innovation decision making. Failure might occur when particularly successful projects from other organizations are uncritically used as models for one's own project or organization. In this case, information collection is often insufficient as the unique specifics of the reference projects are not considered. Organizations always differ in terms of external factors such as industry, market position or economic situation as well as internal factors such as company size, organizational structure and employee motivation to implement innovations.

While "failure due to the not-invented-here phenomenon" happens because decision makers neglect valuable experiences and developments in other companies, "failure due to inappropriate project models" happens because decision makers try to copy an extraordinary success story without adapting the story to their own situation.

Failure Due to the Confirmation Bias

The "confirmation bias" describes the human tendency to put much more weight on information that confirms one's own point of view than on information that might contradict one's own perspective (Bogan & Just, 2009). For example, innovation actors tend to prefer talking to experts and colleagues that will likely confirm their own point of view on an innovation. In addition, ambiguous information, that could be interpreted either pro or contra an idea, is often taken as a proof for one's own opinion. The "confirmation bias" reveals a paradoxical relationship between the amount of information and decision making quality: Decision makers may have searched and received a great amount of information prior to their decision. But as long as all information points towards a similar direction and, in turn, does not add new or concurring perspectives on the decision making subject, the occurrence of a "confirmation bias" is even more likely (see also Schulz-Hardt, Jochims, & Frey, 2002).

Failure Due to the "Sunk Cost Fallacy"

Case Study

The head of the R&D department within a company announced the development of a new household product. All members of the R&D department agreed on the fact that this product would combine many innovative features that would revolutionize the market.

Due to the strong conviction of their technical stuff, the management board decided to finance the expensive development of a first prototype. After a couple of months, the development of the prototype turned out to be much more complicated than expected. Still the R&D staff decided to continue their efforts

as they had already invested a huge amount of time in the new product development. Hence, they requested additional financial resources from the management board. The management board conceded the new budget requests as they had already invested a huge amount of money in the idea.

The whole process of requesting and conceding further resources recurred a couple of times. Finally, the first prototype was developed and presented to potential customers. The customers came to a conclusion quickly: *"Maybe the features of this product are innovative. But...we don't need any of these new features."* The idea of the R&D staff to develop a technically sophisticated product did not correspond with the needs of the customers. Those demanded a simple, but easy to use product.

Contrary to the theoretical conception of the "homo oeconomicus", decision makers are often not willing to revise their own judgments and decisions. Surprisingly this is also the case when new information emerges and clearly challenges the original ideas and judgments. During the course of an innovation project new information may suggest to reconsider and revise the original decisions. In some cases, the new information may even indicate that terminating an unfinished innovation project might be the best option. However, this new information is ignored very often. Instead, decision makers tend to cling to their original hopes, judgments and decisions. Even when new problems arise and become visible, decision makers try to defend and justify their judgments and decisions as long as possible (Kirsch, 1983).

This phenomenon is related to the "sunk cost fallacy" (Arkes & Ayton, 1999, p. 591f.), which has been studied widely from psychologists and economists. The "sunk cost fallacy" describes the human tendency to act according to the principle: "I have already put so much effort into my idea, so I am going to invest even more". Even if innovation projects are (or are on the way to) failing they are still funded with new money, more time or more resources. In similar ways, the "sunk cost fallacy" can lead decision makers to invest new resources in new product developments—even if it becomes more and more evident that there is little or no demand for the end product. Hence, additional resources are burned, instead of terminating the project at a certain point and accepting the fact that the invested resources are gone (and taking the loss as "learning from the past"). As for "wishful thinking", the "sunk cost fallacy" is likely to occur when critical perspectives on an innovation project are not taken into consideration or are not allowed (Scholl, 2004).

Ways to Deal with Biases

Biases can influence innovation decision making in a negative way and, in turn, contribute to failure in innovation projects. Hence it seems crucial to find ways of dealing with the effects of "bounded rationality" in managerial decision making.

An important first step to address biases is to embrace and accept the fact that human thinking and decision making is limited (see Scholl, 2004). The famous words of the Greek philosopher Sokrates "I know that I know nothing" seem to be

appropriate guiding principles in managerial decision making. The fact that people can learn from embracing their own cognitive limits has been demonstrated in a study performed by Larwood and Whittaker (1977), see also Schwenk (1988). The researchers compared the performance of management students with the performance of actual managers in a management scenario task. In fact, both groups overestimated their own performance in that task. However, the tendency to overestimate their own performance was less pronounced among managers, who admitted that they had overestimated their own abilities in prior management tasks. Hence, being aware of one's own likelihood to "fail" and being able to connect one's own failures in decision making with one's own "bounded rationality" seem to be a promising path to better decision making in the future.

In addition, people can foster the quality of their decision making process by deliberately considering aspects that might contradict their own judgments and opinions (e.g., Herzog & Hertwig, 2009). This "mental antagonist" can help individual decision makers to look at their own opinions from different ankles and, if necessary, to adapt accordingly. Team decision making processes can also profit from a similar strategy by implementing an "advocatus diaboli"—a selected team member that supports the group by critically commenting on ideas, topics and group processes and, in turn, fosters the likelihood that other team members take critical perspectives as well. By way of that, the "advocatus diaboli" can prevent "wishful thinking" and "group think" within working teams (see Janis, 1983).

In fact, the idea to install an "advocatus diaboli" also found its way in the innovation decision making practice of the company illustrated in the first example. After having identified the flaws and biases in past innovation projects, the management decided to provide an "advocatus diaboli" for each project team meeting. Prior to the team meeting, one member of the project team was determined to watch out for potential biases in the decision making process—and to address them immediately.

Conclusion

The present chapter started with the fundamental question of how to explain bad decision outcomes. It was argued that bad decision outcomes do not occur necessarily due to the lack of intelligence or lack of proper reasoning. In fact the nature of complex decision problems and human "bounded rationality" often lead to cognitive biases, which, in turn, lead to unfavourable decision making. We demonstrated the impact of such cognitive biases using examples from innovation projects, which represent typical managerial decision problems. In the last part of this chapter, we outlined one way to address biases in managerial decision making. Reflecting on one's own cognitive limits seems to be a proper way to handle biases. Paradoxically, it is the realization and acceptance of our own cognitive limits that seem to reduce the likelihood of falling into the traps of biased decision making. This insight is thought-provoking, as there is still a strong pressure on managers to self-present

themselves as analytical and rational (Costanzo & MacKay, 2009; Matthiesen & van Well, 2012).

In sharp contrast to the usually reported innovation success stories in business publications, a social-cognitive psychological perspective on failure in innovation decision making may add an important lesson: The presented ideas in this chapter can encourage innovation actors to learn and talk about the capabilities and limits of human decision making and to take them into account prior to important innovation decisions. In addition, a thorough post-hoc analysis of decision making processes in failed innovation projects can be a valuable learning experience for organizations: Instead of "back-and-forth accusations" in the aftermath, a social-cognitive psychological perspective facilitates constructive reflections on how judgments and decisions were made in the course of the innovation process.

Cognitive biases are a part of human decision making. Hence, the goal of this chapter on failure in innovation decision making is not to present ways to "avoid" or "eliminate" biases, as neither avoiding nor eliminating biases is possible. Biases have been observed and studied in almost all fields of human thinking and acting and are more or less pronounced in all of us. Biased decision making, bad decision outcomes and failures are a part of human reality. Hence, a crucial life task seems to not only discuss and identify biases in judgment and decision making, but at the end of the day, to accept the "flawed human condition" in ourselves and others.

References

Arkes, H. R., & Ayton, P. (1999). The Sunk cost and Concorde effects: Are humans less rational than lower animals? *Psychological Bulletin, 125*(5), 591–600.

Bogan, V., & Just, D. (2009). What drives merger decision making behavior? Don't seek, don't find, and don't change your mind. *Journal of Economic Behavior & Organization, 72*(3), 930–943.

Costanzo, L. A., & MacKay, B. (2009). *Handbook of research on strategy and foresight*. Cheltenham: Edgar Elgar.

Eisenhardt, K. M., & Zbaracki, M. J. (1992). Strategic decision making. *Strategic Management Journal, 13*, 17–37.

Funke, J. (1991). Solving complex problems: Exploration and control of complex problems. In R. J. Sternberg & P. A. Frensch (Eds.), *Complex problem solving: Principles and mechanisms* (pp. 185–222). Hillsdale, NJ: Lawrence Erlbaum.

Grant, A. M., & Schwartz, B. (2011). Too much of a good thing the challenge and opportunity of the inverted U. *Perspectives on Psychological Science, 6*(1), 61–76.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193–206.

Hammond, J. S., Keeney, R. L., & Raiffa, H. (1998). The hidden traps in decision making. *Harvard Business Review, 76*(5), 47–58.

Harrison, E. F. (1992). Some factors involved in determining strategic decision success. *Journal of General Management, 17*(3), 72–87.

Hauschildt, J., & Salomo. (2007). *Innovations management*. München: Verlag Franz Vahlen.

Herzog, S. M., & Hertwig, R. (2009). The wisdom of many in one mind improving individual judgments with dialectical bootstrapping. *Psychological Science, 20*(2), 231–237.

Hilary, G., & Menzly, L. (2006). Does past success lead analysts to become overconfident? *Management Science, 52*(4), 489–500.

Jalonen, H. (2011). The uncertainty of innovation: A systematic review of the literature. *Journal of Management Research, 4*(1), 1–47.

Janis, I. L. (1983). *Groupthink*. Boston, MA: Houghton Mifflin.

Katz, R., & Allen, T. J. (1982). Investigating the Not Invented Here (NIH) syndrome: A look at the performance, tenure, and communication patterns of 50 R & D Project Groups. *R&D Management, 12*(1), 7–20.

Kirsch, W. (1983). Theorie der Individualentscheidung: Von der Rationalitätsanalyse zur Psycho-Logik der Problemhandhabung. In M. J. Holler (Ed.), *Homo Oeconomicus I* (pp. 21–35). München: Verlag N. Leudemann.

Klein, K. J., & Sorra, J. S. (1996). The challenge of innovation implementation. *Academy of Management Review, 21*(4), 1055–1080.

Krause, D. E. (2004). Influence-based leadership as a determinant of the inclination to innovate and of innovation-related behaviors: An empirical investigation. *The Leadership Quarterly, 15*(1), 79–102.

Kunert, S., & von der Weth, R. (2018). Failure in projects. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Larwood, L., & Whittaker, W. (1977). Managerial myopia: Self-serving biases in organizational planning. *Journal of Applied Psychology, 62*(2), 194–198.

March, J. G., & Simon, H. A. (1958). *Organization*. New York: Wiley.

Matthiesen, K., & van Well, B. (2012). Diskursiv führen – oder: Management nach der Vertreibung aus dem Paradies. In B. Knoblach, T. Oltmanns, I. Hajnal, & D. Fink (Eds.), *Macht in Unternehmen – der vergessene Faktor* (pp. 117–128). Gabler: Wiesbaden.

Mieg, H. A. (2001). *The social psychology of expertise: Case studies in research, professional domains, and expert roles*. Mahwah, NJ: Lawrence Erlbaum Associates.

Mintzberg, H. (1994). *The rise and fall of strategic planning*. New York: Free Press.

Nguyen, T., & Schüßler, A. (2012). How to make better decisions? Lessons learned from behavioral corporate finance. *International Business Research, 6*(1), 187–198.

Rogers, E. M. (1983). *Diffusion of innovations*. New York: The Free Press.

Scholl, W. (2004). *Innovation und information*. Göttingen: Hogrefe.

Schulz-Hardt, S., Jochims, M., & Frey, D. (2002). Productive conflict in group decision making: Genuine and contrived dissent as strategies to counteract biased information seeking. *Organizational Behavior and Human Decision Processes, 88*(2), 563–586.

Schwenk, C. R. (1988). The cognitive perspective on strategic decision making. *Journal of Management Studies, 25*(1), 41–55.

Shiller, R. J. (2000). *Irrational exuberance*. Princeton, NJ: Princeton University Press.

Shipton, H., Fay, D., West, M., Patterson, M., & Birdi, K. (2005). Managing people to promote innovation. *Creativity and Innovation Management, 14*(2), 118–128.

Simon, H. A. (1976). *Administrative behavior*. New York: Free Press.

Simon, H. A. (1991). Bounded rationality and organizational learning. *Organization Science, 2*(1), 125–134.

Smith, J., & Winkler, R. (2006). The optimizer's curse: Skepticism and postdecision surprise in decision analysis. *Management Science, 52*(3), 311–322.

Souder, W. E., & Moenaert, R. K. (1992). Integration marketing and R&D project personnel within innovation projects: An information uncertainty model. *Journal of Management Studies, 29*(4), 485–512.

Thompson, L., Neale, M. A., & Sinaceur, M. (2004). The evolution of cognition and biases in negotiation research: An examination of cognition, social perception, motivation, and emotion. In M. J. Gelfand & J. M. Brett (Eds.), *The handbook of negotiation and culture* (pp. 7–44). Stanford, CA: Stanford Business Books.

Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science, 185*(4157), 1124–1131.

Van de Ven, A. H. (1986). Central problems in the management of innovation. *Management Science, 32*(5), 590–607.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

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Failure in Personnel Development

Simone Kauffeld and Ann-Christine Massenberg

Introduction

Personnel development is associated with lots of benefits for employees, teams, organizations, and society (Aguinis & Kraiger, 2009). Despite the personnel growth of skills and knowledge, training and development is supposed to increase job performance of individuals and teams, and thereby enlarge the outcome of organizations (Aguinis & Kraiger, 2009). Employees' personnel development is thus regarded as a key success factor for organizations to persist in today's challenging business world. Therefore, organizations spend a lot of time and money to develop their employees (e.g., Kauffeld, 2016). In the year 2014 organizations in the United States payed on average 1229.00 U.S. dollars per employee for training and development (Association for Talent Development, 2015). However, even if organizations spend that much money to develop their employees, it is questioned if indeed these training programs lead to the supposed benefits (e.g., Blume, Ford, Baldwin, & Huang, 2010). Employees are no longer send to training programs only as incentive—rather HR managers are asked to prove the added value of training and development to the organization (Kauffeld, 2016).

What could failure in personnel development mean? Organizations only benefit from the development of their employees if the employees apply what they have learned in the training program to the workplace (Laker & Powell, 2011), i.e. if a transfer of training content happens. Very early in the training transfer research, the so-called "transfer-problem" was identified (Michalak, 1981). Some researchers assume that only 62% of training participants apply something they have learned

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in a training to the workplace (Saks & Belcourt, 2006). Other researchers suppose that only 10% of the newly acquired skills are transferred to the workplace (e.g., Baldwin & Ford, 1988; Georgenson, 1982; Khasawneh, Bates, & Holton, 2006). This lack of training transfer can be regarded as failure in personnel development: When employees do not change their behavior after attending a training program the investment of time and money is not worth it (Laker & Powell, 2011).

The Transfer-Problem: Literature Review

The identification of the transfer-problem led to a large body of research that identified factors that hinder and that foster the transfer of training (for an overview see Blume et al., 2010; Grossman & Salas, 2011; Huang, Blume, Ford, & Baldwin, 2015). Based on the early distinction of Baldwin and Ford (1988) these factors are related to the participant, to the training program itself, and to the work environment.

Important factors that were identified within the participant are motivational factors, self-efficacy, cognitive ability and the perceived utility of training (see Grossman & Salas, 2011; Huang et al., 2015). Motivation to learn determines the direction, duration, and intensity of learning (Kanfer, 1990), while motivation to transfer is defined as a *"trainee's desire to use the knowledge and skills mastered in the training program on the job"* (Noe, 1986, p. 503). Both kinds of motivational constructs were found to be crucial for a high level of training transfer (e.g., Gegenfurtner, Veermans, Festner, & Gruber, 2009; Weissbein, Huang, Ford, & Schmidt, 2011). Without motivation employees may simply choose not to change their behavior after a training program (e.g., Bauer, Orvis, Ely, & Surface, 2015; Latham, 2007).

A recent meta-analysis by Huang et al. (2015) on motivation to transfer showed that only typical transfer is affected by motivation to transfer but not maximum transfer. Typical transfer is defined as the application of newly gained skills *"without prompts, typically over an extended period of time and without focusing on the fact that the skill transfer is being evaluated"* (Huang et al., 2015, p. 710). By contrast, maximum transfer occurs when *"trainees are given explicit or implicit prompts to maximize effort while demonstrating the skill transfer, typically for a short period of time"* (Huang et al., 2015, p. 710). Usually, organizations are interested in typical transfer that is shown by the employees without being asked to transfer the training content and without being explicitly evaluated by somebody else. Motivation to transfer was found to play a special role in the training transfer process by mediating the influence of different factors and training transfer (e.g., Gegenfurtner et al., 2009; Massenberg & Kauffeld, 2015; Massenberg, Spurk, & Kauffeld, 2015) and should thereby be of special importance for organizations.

Training characteristics that were found to be important are besides others a realistic training environment, and transfer design (e.g., Grohmann, Beller, & Kauffeld, 2014; Grossman & Salas, 2011). Transfer design is defined as the extent 'to which training has been designed and delivered to give trainees the ability to transfer learning to the job, and training instructions match job requirements'

(Holton, Bates, & Ruona, 2000, p. 345). Realizing a high transfer design, trainers uses methods and practices during training that are helpful for the trainees to transfer the gained skills to the workplace. Scenarios and simulations should be as similar to the work environment as possible to ensure a realistic training environment that was also found to be useful for training transfer (Grossman & Salas, 2011).

Besides characteristics of the trainees and the training, factors in the work environment were found to influence the application of training content to practice (for an overview see for example Blume et al., 2010). The consideration of the work environment is crucial because the situation and circumstances that surround a trainee at the workplace impact the training transfer even though they are not connected to the training in a direct way (e.g., Burke & Hutchins, 2007; Mathieu & Tesluk, 2010). Factors in the work environment that play an important role for training transfer are for example the social support a trainee receives, the opportunity to apply the training content to the workplace, and the consequences that trainees experience when they transfer the training content at work (see Grossman & Salas, 2011).

Social support can be provided by the supervisor and by colleagues and was found to be relevant for a high motivation to transfer and consequently for training transfer (e.g., Massenberg & Kauffeld, 2015; Massenberg et al., 2015; Nijman & Gelissen, 2011). Recent research (Schindler & Burkholder, 2014) found supervisor support to consist of four different dimensions: *"mentoring (supporting, guiding, and facilitating an employee's career development), coaching (teaching an employee about the rules, goals, and politics of the organization), social support (assisting an employee with personal and professional challenges), and task support (assisting an employee with work assignments)"* (p. 3).

The consequences that trainees experience after a training program are also important for successful training transfer. They might be positive when trainees are for example praised for transferring the training content to the workplace (Holton, Bates, Seyler, & Carvalho, 1997). At the same time negative consequences should occur when the trainee does not change anything at work (Kauffeld, 2016). These negative consequences are important to signal to the trainee the relevance of the training and to demonstrate that the management cares about the transfer of the training content.

Even though a lot of influencing factors on training transfer have been identified in the past, especially the work environment is still overlooked in practice. The next part enters into question how organisations are able to notice the failure of training transfer.

Diagnostics

As described before failure in personnel development means that employees do not transfer the training content to the workplace. How are organizations able to judge if a training program led to the desired outcome or in turn if it failed? First of all, organizations need to evaluate the training program appropriately. Most

Fig. 1 Four levels of training evaluation (Kirkpatrick, 1967, 1994)

organizations simply ask the participants directly after a training program about their satisfaction with the program, the trainer, and the circumstances (Kauffeld, 2016). Of course, these might be important questions to ask for the organization and administrations of training programs. However, a lot of questions remain open and the question whether the training program was successful could not be answered.

Kirkpatrick (1967) developed a four-level evaluation model that is widely used for evaluation in research and practice (Grohmann & Kauffeld, 2013; Kirkpatrick & Kirkpatrick, 2006; Salas & Cannon-Bowers, 2001). The four levels (Kirkpatrick, 1967; Kirkpatrick & Kirkpatrick, 2006) (see Fig. 1) are

1. reaction,
2. learning,
3. behaviour,
4. and results.

The level reaction measures whether the participant is satisfied with the training program and its result, as well as whether the participant regards the training as useful. The level learning refers to the question whether the participant gained new skills or was able to develop existing skills. Questions on both levels remain in the training environment and can be asked with low effort directly after a training program (Alliger, Tannenbaum, Bennett, Traver, & Shotland, 1997). However, to find out if the training program led to behaviour changes in the work environment and to changes in the results for the employees (e.g., performance) and for the organization (e.g., productivity) the other levels of the evaluation model need to be considered. Especially, because the originally assumed causality between the four levels (Kirkpatrick, 1967) could not be confirmed in following research (e.g., Arthur, Bennett, Edens, & Bell, 2003), i.e. no conclusions like "the more satisfied a trainee is with a training, the more he learned" or "the more the trainee learned in the training, the better he is able to apply the learning to the workplace" can be drawn.

An instrument that can be used to measure the success of a training program and that is based on the four-level evaluation model of Kirkpatrick (1967) is the "Questionnaire for Professional Training Evaluation" (Q4TE, Grohmann & Kauffeld, 2013). The Q4TE comprises the scales satisfaction, utility, knowledge,

application to practice, individual organizational results, and global organizational results. Using two items for each scale that are answered from 0% (completely disagree) to 100% (completely agree), the Q4TE is a very economic, time-efficient instrument. Additionally, to measure the training transfer in a more detailed way, participants can be asked about the numbers of actions they planned to implement after the training program and about the degree of conversion for each action (Kauffeld, 2016; Kauffeld, Brennecke, & Strack, 2009).

However, even if an organization measures all four levels by Kirkpatrick, what happens if the assessment of behavioural change and results are not satisfying, i.e. if the evaluation shows that personnel development failed? How could an organization identify reasons for this failure and get to know which aspects they need to optimize to enhance training transfer and training outcomes?

Interventions

To answer questions about factors that foster and that hinder the training transfer after personnel development, organizations need to be aware of the importance of the learning transfer system. The learning transfer system comprises *"all factors in a person, training, and organization that influence transfer of learning and job performance"* (Holton, 2005, p. 44). Or in other words: Failure in personnel development can have a lot of different causes. To identify these causes and to decide how to optimize the learning transfer system organizations need to evaluate on two levels: They need to implement an evaluation of the four-level model (Kirkpatrick, 1967) described in the last section and additionally, they need to evaluate the learning transfer system to find out barriers in the training transfer process (see Fig. 2). Moreover, since e-learning and blended learning (i.e., a combination of e-learning and face-to-face-learning) are getting more and more important (e.g., Noe, Clarke, & Klein, 2014), despite the traditional influencing factor groups identified by Baldwin and Ford (1988) the technical conditions might also influence the training transfer.

To measure the learning transfer system, Holton et al. (2000) developed the Learning Transfer System Inventory (LTSI) that is validated in many different languages (e.g., Bates, Kauffeld, & Holton III, 2007; Kauffeld, Bates, Holton, & Müller, 2008; Velada, Caetano, Bates, & Holton, 2009). The learning transfer system comprises 16 factors that are shown in Table 1. The factors are separated in specific factors that are related to the training program (e.g., motivation to transfer, transfer design, social support), and more general factors (e.g., self-efficacy, feedback; Holton et al., 2000). The general factors are not related to a specific training program but influence the training transfer. For example, the feedback culture that exist within a team might have no connection to a training program that one team member attends. However, when the team member gets back to the workplace, tries out what he or she has learned in the training program, and receives no feedback from his or her colleagues this might hinder the application of the trained skills.
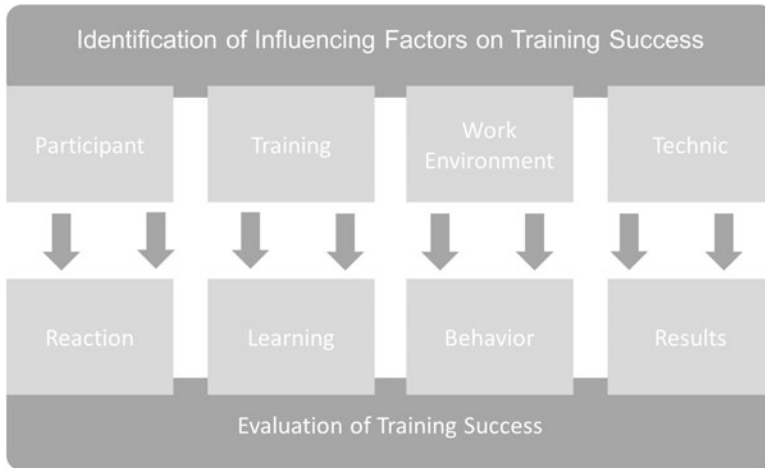
Fig. 2 Integration of evaluation of training success and influencing factors (see also Kauffeld, 2016)

For the identification of transfer barriers organizations should apply the LTSI at different points in the development and implementation process of training programs (Kauffeld, 2016):

As part of a pilot training program the assessment of the learning transfer system leads to hints about how to improve the training program and the transfer climate before the program is rolled-out (Holton & Baldwin, 2003). As a consequence of the analysis, the training program can be improved and the costs and benefits might be evaluated. Additionally, conversations with the trainees should show how realisable, and accepted the training program is (Kauffeld, 2016). Assessing the learning transfer system in this early stage of development, the organization could save money by improving the training as well as circumstances at work before a large and costly roll-out takes place.

Before a training program starts the LTSI could be used to identify possible transfer problems regarding the participants and the work environment (e.g., Holton & Baldwin, 2003; Kauffeld, 2016). Massenberg, Schulte, and Kauffeld (2016) found out that the motivation to transfer before a training program is influenced by the learning transfer system before a training program. Moreover, they found the level of motivation to transfer before the training to be important for the motivation to transfer after the training (Massenberg et al., 2016). Therefore, it is important for organizations to deal with the learning transfer system before a program even started. Doing so, organizations are able to identify possible transfer problems early and to ensure a high level of motivation to transfer after the training by solving these transfer problems.

Regularly after training programs an evaluation using the LTSI could be used to monitor the learning transfer system of the participants and to develop actions to improve the training transfer (e.g., Kauffeld, 2016). Moreover, the LTSI can be used

Table 1 Ideas for optimization of influencing factors on training transfer (Referring to Kauffeld, 2016)

Training-specific ideas for improvement of training transfer	
Participant	
Learner readiness	– Specification of training goals, training content, and training structure as well as written information for participants prior to the training – Participants need to apply to attend the training program. They need to argue why they are the best to attend the training – Meeting between trainer and participants prior to the training program
Motivation to transfer	– Planning specific steps during the training for application of gained skills at the workplace – Letters with ideas and commitment for implementation of training content that are send to the participants few weeks after training – Transfer day after a few weeks – Transfer coaching at the workplace after the training – Telephone coaching by trainers – Contact to a 'sparring partner' of the training group to reflect the training transfer – Communication of evaluation results regarding the training transfer to future participants – Communication of success stories regarding the training – Learning diaries: Defining SMART actions (specific, measurable, attractive, realistic, terminated) which should be implemented after the training. Prioritization of the actions regarding their contribution to transfer success – Transfer project – Fixing appointments for training transfer directly into participants' calendar – Giving positive examples of application of training content to other participants
Training	
Transfer design	– Realistic exercises: participants' case studies – Anticipating resistance and developing possible solutions during training – Interval training: phases of learning and of application in turns – Follow-up-Modules to exchange experiences about training transfer, to make transfer success visible, to name transfer barriers, and to find solutions in the peer group to enhance the application of gained skills – Telephone coaching by trainer or sparring partner after training – Allocation of sparring partners for the implementation phase
Content validity	– Training with 'real' subjects – Training in 'real' teams – Analysis of the organization and of the tasks the employees' tasks – Questionnaire to ask about desired content for training – Demonstrating the relevance of the training content by the trainer or even better by former participants
Working environment	
Personal outcomes positive	– Developing a system to receive a return (What was the training good for?) – Demonstrating achievement

Table 1 (continued)

	– Rewards (e.g., praise or financial benefits) – Bonus system
Personal outcomes negative	– Comparison between a training group and a control group – Evaluation by superiors after a successful application of what has been learned in training
Peer support	– Fostering a common interest in learning – Meeting with participants and colleagues (information sharing, agreements on implementation) – Order by the team to the participant – Participants' report about the training
Supervisor support	– Individual identification of training needs for each employee by the supervisor – Definition of personal learning goals prior to a training together with the trainee – Definition of requirements for the application of gained skills – Making an agreement about the application of training content – Assigning an active role to the supervisor for the employees' training transfer – Transfer meetings
Supervisor sanctions	– Defining training and development of the employees to be a management task – Involving supervisors in training needs assessment – Knowledge about the training content – Allowing supervisors the possibility to participate in the training
Personal capacity to transfer	– To free up space for training transfer by supervisors – Creating time for reflection
Opportunity to use	– To allocate the necessary resources (e.g. materials for moderation after a training in moderation methods)
General ideas for improvement of training transfer	
Participant	
Self-efficacy	– Demonstrating employees' success – Adapting the training content to the competence level of the participants
Performance expectations	– Team members with successful training experiences as example – Comparison to other groups that already attended the training program – Control of results
Outcome expectations	– Giving signals by the management that learning is honored – Choosing the right employees for the training – Commitment of the employees to define learning goals
Working environment	
Openness to change	– Training the entire team – Workshops regarding norms in the team
Feedback	– Regular appraisal interviews – 360° feedback – Customer contact

to identify reasons for known transfer problems. Assessing the entire learning transfer system is crucial because relationships between influencing factors cannot be found when only assessing single factors or factor groups (Massenberg et al., 2016). Furthermore, assessing the entire LTSI persons responsible for the training program might demonstrate that the training itself is not the reason for unsatisfying training outputs. Low results in training transfer might be easily accredited to the training concept or the trainer. However, often the barriers lie in the work environment and are not related to the training itself. Therefore, the results of the LTSI can be used to justify the own work of trainers and employees who are responsible for training concepts (Kauffeld, 2016).

No matter at what point in the development and conduction of training programs, organizations assess the LTSI, it is crucial to analyse the entire learning transfer system (e.g., Massenberg et al., 2016). Simple conclusions like "the higher a factor the better the training transfer" seem not to be realistic (Kauffeld, 2016). Instead, organisations need to analyse combination of factors. Moreover, as each organisation is different, has different cultures, different training programs, and different participants, reasons for low training transfer in one organisation cannot be transferred automatically to another organisation. Some ideas for improvements of each LTSI factor can be found in Table 1. In the following a case of low training transfer after a leadership training is described.

Case Study

A medium-sized company conducts an employee survey within the scope of a large organizational development. For one team the results about leadership are remarkable low. The supervisor is not accepted by his team neither does the team believe in his leadership skills. Especially some employees are very unsatisfied with the supervisor and his way to lead the team.[1]

As the management takes the results of the employee survey seriously they prompt the supervisor to participate in a leadership training. Moreover, they finance a continuous coaching session for the supervisor. In the training he first learns about different leadership styles, roles within a team, and how to make the most of the resources he has in his team. During the following coaching sessions, he reflects about his own role as a leader and about ways in communication with his employees. Together with his coach he works on possible ways to apply the gained skills to the workplace.

He starts to change his way to lead his employees in every day work by trying to apply the methods that he has learned during the training and for that he has discussed their application in the coaching sessions. He, for example, starts to define goals with his employees regarding their different projects and to praise his employees for good results. However, the team's satisfaction with the supervisor does not increase by these actions. In contrast, the employees react in a resistant way and do not experience the changes as authentic. When their supervisor praise

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[1]See also Moccia (2018).

them for good results they say things like 'This is not him. He only acts this way because he was told to do so. He wants to please the management that is why he changes his behaviour. Not because now he cares about our team.'.

Even though the employees were not satisfied with the former behaviour of their supervisor they do not accept the changed behaviour neither. The supervisor therefore experiences no positive consequences when applying the training content to the workplace and resigns after a while. He has the impression that no matter what he is doing, his team does not accept him as supervisor.

What went wrong in this case? Why did the transfer of the leadership training failed even if the team was not satisfied with its supervisor before and the supervisor was open to develop personally? Support is a very important factor in the learning transfer system and in the present case support by the employees was missing. In many other cases support by peers or by supervisors was found to be one of the most important reasons for failed training transfer. However, for leadership trainings and the transfer of training support by subordinates might be important, too.

What should have been done differently for successful training transfer in this case? The management took the results of the employee survey seriously and prompted the supervisor to develop his leadership skills. However, they missed the importance of the work environment for successful training transfer. Especially a supportive surrounding is very important for the application of trained skills at the workplace. The management should have felt responsible for the support which the supervisor receives from his employees.

First of all, the awareness of the importance of support needs to be raised in the team. Therefore the employees should be informed about the training and coaching their supervisor is participating in. Together they should discuss about ways to support the supervisor on his improvement on leadership skills as the employees criticized his actual skills. The team could communicate desires for improvement to the supervisor, which he could use for his goal setting. Moreover, they should learn to be patient with their supervisor when he tries to apply the gained skills to the workplace. When they experience improvements, they should also praise their supervisor and reinforce him.

All these actions would have been important in the described case for a successful development of leadership skills and especially for the application of these skills in practice. It is not enough for organization and management to prompt employees to participate in training and development—they also need to take care about the circumstances at the workplace and to ensure a "transfer-friendly" environment.

Conclusion

Failure in personnel development might have many different reasons and does not necessarily need to be caused by the trainee. Even though factors in the participant and training factors are important for successful training transfer, factors of the work environment are crucial, too. Only when the trainees' surrounding is a transfer-friendly one, success of training transfer is possible. Organizations need to be aware of this learning transfer system to identify possible barriers for training transfer and to find solutions to solve these problems. To analyse the training transfer system is not only important after a training program. It could also be measured before a training program or prior to a pilot of a training program. To be successful, personnel development needs to be related to organizational development and to be thereby more strategically oriented.

As shown in the case described at the end of this chapter, it is not enough if the management prompts employees to attend a training program—they also need to ensure a supportive environment and to create the circumstances that trainees need to best apply the training content to the workplace.

References

Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual Review of Psychology, 60*, 451–474. https://doi.org/10.1146/annurev.psych.60.110707.163505.

Alliger, G. M., Tannenbaum, S. I., Bennett, J. R. W., Traver, H., & Shotland, A. (1997). A meta-analysis of the relations among training criteria. *Personnel Psychology, 50*(2), 341–358. https://doi.org/10.1111/j.1744-6570.1997.tb00911.x.

Arthur, W., Bennett, W., Edens, P. S., & Bell, S. T. (2003). Effectiveness of training in organizations: A meta-analysis of design and evaluation features. *Journal of Applied Psychology, 88*, 234–245.

Association for Talent Development. (2015). *State of the industry report*. Retrieved from https://www.td.org/Professional-Resources/State-Of-The-Industry-Report.

Baldwin, T., & Ford, J. K. (1988). Transfer of training: A review and directions for future research. *Personnel Psychology, 41*(1), 63–105. https://doi.org/10.1111/j.1744-6570.1988.tb00632.x.

Bates, R., Kauffeld, S., & Holton, E. F., III. (2007). Examining the factor structure and predictive ability of the German-version of the Learning Transfer Systems Inventory. *Journal of European Industrial Training, 31*(3), 195–211. https://doi.org/10.1108/03090590710739278.

Bauer, K. N., Orvis, K. A., Ely, K., & Surface, E. A. (2015). Re-examination of motivation in learning contexts: Metaanalytically investigating the role type of motivation plays in the prediction of key training outcomes. *Journal of Business and Psychology, 31*(1), 1–18.

Blume, B. D., Ford, J. K., Baldwin, T. T., & Huang, J. L. (2010). Transfer of training: A meta-analytic review. *Journal of Management, 36*(4), 1065–1105. https://doi.org/10.1177/0149206309352880.

Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human Resource Development Review, 6*(3), 263–296. https://doi.org/10.1177/1534484307303035.

Gegenfurtner, A., Veermans, K., Festner, D., & Gruber, H. (2009). Motivation to transfer training: An integrative literature review. *Human Resource Development Review, 8*(3), 403–423. https://doi.org/10.1177/1534484309335970.

Georgenson, D. L. (1982). The problem of transfer calls for partnership. *Training and Development Journal, 36*(10), 75–78.

Grohmann, A., & Kauffeld, S. (2013). Evaluating training programs: Development and correlates of the questionnaire for professional training evaluation. *International Journal of Training and Development, 17*(2), 135–155.

Grohmann, A., Beller, J., & Kauffeld, S. (2014). Exploring the critical role of motivation to transfer in the training transfer process. *International Journal of Training and Development, 18*(2), 84–103.

Grossman, R., & Salas, E. (2011). The transfer of training: What really matters. *International Journal of Training and Development, 15*(2), 103–120. https://doi.org/10.1111/j.1468-2419.2011.00373.x.

Holton, E. F. (2005). Holton's evaluation model: New evidence and construct elaborations. *Advances in Developing Human Resources, 7*(1), 37–54.

Holton, E. F., & Baldwin, T. T. (2003). *Improving learning transfer in organizations*. San Francisco, CA: Jossey-Bass.

Holton, E. F., Bates, R. A., Seyler, D. L., & Carvalho, M. B. (1997). Toward construct validation of a transfer climate instrument. *Human Resource Development Quarterly, 8*(2), 95–113.

Holton, E. F., Bates, R. A., & Ruona, W. E. A. (2000). Development of a generalized learning transfer system inventory. *Human Resource Development Quarterly, 11*(4), 333–360.

Huang, J. L., Blume, B. D., Ford, J. K., & Baldwin, T. T. (2015). A tale of two transfers: Disentangling maximum and typical transfer and their respective predictors. *Journal of Business and Psychology, 30*(4), 1–24. https://doi.org/10.1007/s10869-014-9394-1.

Kanfer, R. (1990). Motivation theory and industrial and organizational psychology. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology. Volume 1. Theory in industrial and organizational psychology* (pp. 75–170). Palo Alto, CA: Consulting Psychologists Press.

Kauffeld, S. (2016). *Nachhaltige Personalentwicklung und Weiterbildung: Betriebliche Seminare und Trainings entwickeln, Erfolge messen, Transfer sichern [Sustainable human resource development and training: Developing, evaluating, and transferring professional training courses]*. Berlin/Heidelberg: Springer.

Kauffeld, S., Bates, R., Holton, E. F., & Müller, A. C. (2008). Das deutsche Lerntransfer-System-Inventar (GLTSI): psychometrische Überprüfung der deutschsprachigen Version [the German version of the Learning Transfer System Inventory (GLTSI): Psychometric validation]. *Zeitschrift für Personalpsychologie, 7*(2), 50–69. https://doi.org/10.1026/1617-6391.7.2.50.

Kauffeld, S., Brennecke, J., & Strack, M. (2009). Erfolge sichtbar machen: Das Maßnahmen-Erfolgs-Inventar (MEI) [Visualizing training outcomes: The MEI for training evaluations]. In S. Kauffeld, S. Grote, & E. Frieling (Eds.), *Handbuch Kompetenzentwicklung* (pp. 55–79). Stuttgart: Schäffer-Poeschel.

Khasawneh, S., Bates, R., & Holton, E. F. (2006). Construct validation of an Arabic version of the Learning Transfer System Inventory for use in Joran. *International Journal of Training and Development, 10*(3), 180–250.

Kirkpatrick, D. L. (1967). Evaluation of training. In R. L. Craig & L. R. Bittel (Eds.), *Training and development handbook* (pp. 87–112). New York: McGraw Hill.

Kirkpatrick, D. L. (1994). *Evaluating training programs: The four levels*. San Francisco, CA: Berrett-Koehler.

Kirkpatrick, D. L., & Kirkpatrick, J. D. (2006). *Evaluating training programs: The four levels* (3rd ed.). San Francisco, CA: Berrett-Koehler.

Laker, D. R., & Powell, J. L. (2011). The differences between hard and soft skills and their relative impact on training transfer. *Human Resource Development Quarterly, 22*(1), 111–122. https://doi.org/10.1002/hrdq.20063.

Latham, G. P. (2007). *Work motivation: History, theory, research, and practice*. Thousand Oaks, CA: Sage.

Massenberg, A.-C., & Kauffeld, S. (2015). Hilf mir (nicht immer) – Eine moderierte Mediationsanalyse zum Einfluss der Unterstützung durch die Führungskraft auf Transfermotivation und Lerntransfer [Help me (but not always): A moderated mediation analysis of the effect of support by senior staff on transfer motivation and the transfer of learning]. *Zeitschrift für Erziehungswissenschaft, 18*(1), 145–167. https://doi.org/10.1007/s11618-014-0603-5.

Massenberg, A.-C., Spurk, D., & Kauffeld, S. (2015). Social support at the workplace, motivation to transfer and training transfer: A multilevel indirect effects model. *International Journal of Training and Development, 19*(3), 161–178. https://doi.org/10.1111/ijtd.12054.

Massenberg, A.-C., Schulte, E.-M., & Kauffeld, S. (2016). Never too early: Learning transfer system factors affecting motivation to transfer before and after training programs. *Human Resource Development Quarterly, 28*(1), 55–85. Advance online publication. https://doi.org/10.1002/hrdq.21256.

Mathieu, J. E., & Tesluk, P. E. (2010). A multilevel perspective on training and effectiveness. In S. W. J. Kozlowski & E. Salas (Eds.), *Learning, training, and development in organizations* (pp. 405–440). Routledge/Taylor & Francis Group: New York, NY.

Michalak, D. F. (1981). The neglected half of training. *Training and Development Journal, 35*(5), 22–28.

Moccia, S. (2018). Failure of leadership. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Nijman, D.-J., & Gelissen, J. (2011). Direct and indirect effects of supervisor support on transfer of training. In R. F. Poell & M. Woerkom (Eds.), *Supporting workplace learning* (pp. 89–106). Dordrecht: Springer Netherlands.

Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. *Academy of Management Review, 11*(4), 736–749. https://doi.org/10.5465/AMR.1986.4283922.

Noe, R. A., Clarke, A., & Klein, H. J. (2014). Learning in the twenty-first-century workplace. *Annual Review of Organizational Psychology & Organizational Behavior, 1*(1), 245–275. https://doi.org/10.1146/annurev-orgpsych-031413-091321.

Saks, A. M., & Belcourt, M. (2006). An investigation of training activities and transfer of training in organizations. *Human Resource Management, 45*(4), 629–648. https://doi.org/10.1002/hrm.20135.

Salas, E., & Cannon-Bowers, J. A. (2001). The science of training: A decade of progress. *Annual Review of Psychology, 52*(1), 471–499.

Schindler, L. A., & Burkholder, G. J. (2014). A mixed methods examination of the influence of dimensions of support on training transfer. *Journal of Mixed Methods Research, 7*, 1–19. https://doi.org/10.1177/1558689814557132.

Velada, R., Caetano, A., Bates, R., & Holton, E. (2009). Learning transfer – Validation of the learning transfer system inventory in Portugal. *Journal of European Industrial Training, 33*(7), 635–656. https://doi.org/10.1108/03090590910985390.

Weissbein, D. A., Huang, J. L., Ford, J. K., & Schmidt, A. M. (2011). Influencing learning states to enhance trainee motivation and improve training transfer. *Journal of Business and Psychology, 26*(4), 423–435.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Startup Companies: Why Failure Is a Part of Founding

Claas Triebel, Claudius Schikora, Richard Graske, and Sarah Sopper

Introduction

Foundations are often doomed to failure, as current studies show that 50% of all companies must close during the first 5 years. In Germany, for example, the KfW-Gründungsmonitor from 2014 recorded a total of 350,000 foundations in 2013. However, this number stood in contrast to 376,000 company closures (Metzger, 2014).

These figures also coincide with the data of the US Census Bureau. These data show that 400,000 new companies are established in the USA each year. In contrast, 470,000 companies are closed every year in the USA (Meszaros, 2016). This increased number of company closures as opposed to company startups was first shown in the USA in 2008 (Gallup, 2014), which can also be seen in Fig. 1 below.

But why is the worldwide number of startup companies each year accompanied by an even higher number of company closures (Gallup, 2014; Metzger, 2014), although the global economy seems to be going well? There are numerous reasons for answering this question, and some of them are formulated very programmatically (Metzger, 2014):

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BUSINESS CLOSINGS HOLD STEADY WHILE BUSINESS STARTUPS DECLINE

Business startups have been declining steadily in the U.S. over the past 30 years. But the startup rate crossed a critical threshold in 2008, when the birth rate of new businesses dropped below the death rate for the first time since these metrics were first recorded.
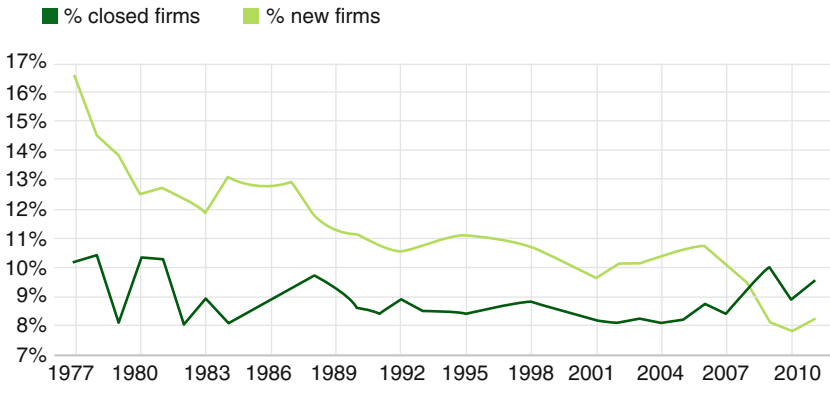
Fig. 1 Development of business startups and business closures in the USA (Gallup, 2014). Source: U.S. Census Bureau, Business Dynamics Statistics

- In 2013, new founders created 419,000 jobs
- Company Foundations can replace or supplement dependent employment relationships. This protects the labor market
- New foundations bring know-how into the market
- Startups can stimulate the market and thus foster competition
- Company foundations foster structural change and innovation
- Foundations symbolize the value of freedom and additionally promote freedom
- Foundations are an expression of a functioning competition and promote competition

This failure of their company is experienced by a large number of founders, although the figures differ greatly in research. A study by the DIHK from 2014 shows that 60% of all company foundations fail (DIHK, 2014). In addition, the Startup-Genome-Project from 2012 shows that only 8% of startups are successful (Marmer, Hermann, Dogrultan, & Berman, 2012).

These different results are probably due to the different focus of the two studies, as the Startup- Genome-Project investigates the development of innovative startups, while the DIHK investigates the basic totality of all startups. Accordingly, the statistics from the study of the DIHK from 2014 include foundations of retail stores, of crafts businesses, of tax consultancies and of startups. At the same time, startup companies are particularly characterized by the development of innovative products,

which can show strong scaling effects within a short time (DIHK, 2014; Marmer et al., 2012).

For this reason, we would like to present some current studies dealing with the reasons for the failure of business startups. On this basis, we want to develop a brief typology of failure and present some examples of failed companies. Please note that the studies presented are essentially surveys that reflect subjective reasons for the failure of the company foundations. We have deliberately preferred these studies over scientific investigations as, in the context of this book, these studies seem to be more vivid and recent than strict scientific analyses. In any case, scientific investigations are rarely found in the field of start-up research and are usually restricted to special fields which offer little explanatory value for this volume.

Why Do Foundations Fail?

Anyone who makes the decision to start a company in the present time enjoys a high reputation in society (AXA, 2015). However, the number of startups has declined in recent years. In addition, company founders usually give up a safe workplace for the benefit of their own company, and at the same time they run the risk of returning to a dependent employment relationship after a failed company foundation.

This should not distract from the fact that individual German metropolises like Berlin or Munich have their own startup scenes. In addition to London and Stockholm, the federal capital of Berlin is one of the leading startup cities in Europe (Álvarez, Beikler, & Rövekamp, 2016). At the same time, numerous American cities, such as New York and Los Angeles, are important when it comes to company foundations (Hackmann, 2013). In the context of US startups, it is especially the Silicon Valley that has to be mentioned, as large companies like Pinterest or Airbnb were founded here (Kosoff, 2015). In all these metropolises, however, there are not only successful startups that are founded, but also failing ones (Nobel, 2011). The causes for the failure of a company start-up are very different, as evidenced by the following studies.

EXIST Study

Numerous studies have been devoted to the question of why startups fail. The results of these studies show that the failure of company foundations is often due to internal factors such as omissions within a startup. By contrast, external factors, such as the wrong choice of location or the lack of investors, play a subordinate role (Jaeger, 2003; Ziegler, 2013).

In 2013, Kulicke and Kripp examined the development of business startups within the framework of the EXIST startup grant. In the context of this startup grant, academic startups from the university sector receive funding for 1 year. The funding is granted to founding teams with up to three team members. The program is run by the Federal Ministry of Economics and Innovation. The evaluation of the
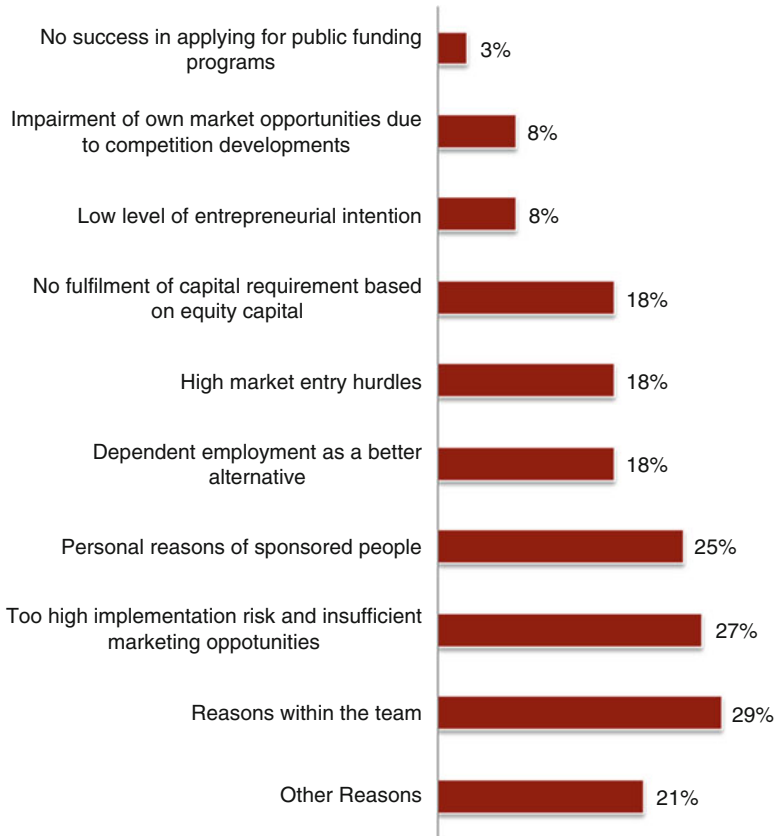
Fig. 2 Reasons for the failure of company foundations (Kulicke & Kripp, 2013)

collected data from the EXIST startup grant (n = 119) shows numerous reasons for failed startup projects. These reasons are listed in the following figure (see Fig. 2) (Kulicke & Kripp, 2013).

Based on data from the EXIST study from 2013, the most common reasons for the failure of business startups can be aggregated into five fields (see Fig. 3). Accordingly, the main reasons for the failure are capital procurement, the technological concept/the implementation risks, market opportunities/market hurdles, personal or team-specific reasons and other reasons, such as a low level of founding intention (Kulicke & Kripp, 2013).

In most cases, a single factor is not responsible for the failure of a foundation, but a variety of causes play a role. It is striking that the most important reasons can be identified as team-internal reasons. In addition to the "personal reasons" and "reasons in the team", the points "market chances/obstacles" and "technological concept/implementation risks" can also be described as team-internal reasons. Market hurdles particularly arise, when a start-up company deals too long with a product
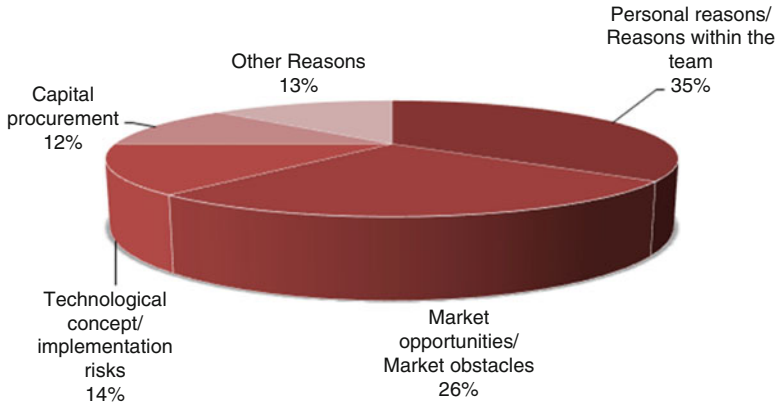
Fig. 3 Main reasons for failed startups (Kulicke & Kripp, 2013)

idea that does not meet the needs of the market. In addition, a lack of a technological concept suggests that startup teams (as a rule, the EXIST program only supports teams) are not in a position to estimate future technological problems of their enterprise (Kulicke & Kripp, 2013). Another study by CB Insights also deals with the causes that can lead to the failure of a company. This study will be described in more detail in the next chapter.

Study of CB Insights

The US company CB Insights surveyed 101 failed startups in their assessment of the reasons for their failure. These reasons, ranked according to the estimated placement made by the startups and according to the CB Insights placement (CB Insights, 2014), are graphically represented in the following Fig. 4.

The survey of CB Insights does not differ substantially from the EXIST study. Apparently, there are internal and external reasons for failure. High on the list are topics such as team-specific reasons, financial needs that are not covered, problems in product development and product development that takes too little account of the market situation (CB Insights, 2014).

Study of the Startup Genome Project

The Startup Genome Project from 2012 surveyed data from 3200 companies (Marmer et al., 2012). As the main reason for the failure of company foundations, the study identified problems that arise when the company grows rapidly, although it is not yet ready for rapid growth. The problems are: The startup has not yet enough customers, the product is not yet mature enough, the team decays in this situation, the business model does not work or the necessary capital is missing at the decisive

Top 20 Reasons Startup Fail

Reason	Percentage
Rain out of Cash	29%
Not the Right Team	23%
No Market Need	20%
Get Outcompeted	19%
Pricing/Cost Issues	18%
Need/Lack Business Model	17%
Poor Product	17%
Ignore Customers	14%
Poor Marketing	14%
Disharmony an Team/Investors	13%
Lose Focus	13%
Product Mis-Timed	13%
Pivot gone bad	10%
Bad Location	9%
Lack Passion	9%
Burn Out	8%
Don't Use Network/Advisors	8%
Legal Challenges	8%
No Financing/Investor Interest	8%
Failure to Pivot	7%

Fig. 4 Reasons for the failure of company foundations (CB Insights, 2014)

moment. From the perspective of the authors of the study, a balance of these factors is essential for the success of startups (Marmer et al., 2012).

Study of the DIHK

The German Chamber of Industry and Commerce investigated the failure of business founders in an expert study analyzing the business concepts of young entrepreneurs. According to the DIHK study, new entrepreneurs predominantly fail because of the following reasons (DIHK, 2014):

1. Do not have sufficient access to equity investors
2. Underestimate the lead-in period until the commencement of business

3. Express ambiguous notions about the market implementation of the product idea/business idea
4. Do not find adequate external financing options
5. Have commercial deficits (price calculation/cost calculation, business planning, etc.)
6. Have to overcome high bureaucratic or legal hurdles
7. Have insufficient access to public funding instruments
8. Have difficulties to find skilled workers
9. Have difficulties in filing their own patent applications or in licensing other patents
10. Have inadequate professional knowledge/industry knowledge

The results of the DIHK study differ from the other studies in one major aspect: Since this is an expert study, in which business concepts were investigated without interviewing the company founders, all "soft" factors (like personal reasons or team-specific reasons) are not applicable.

Internal and External Reasons for the Failure of Company Foundations

Since all studies assume that multiple reasons are essential for a failure, we cannot identify the one reason for the failure of most companies. If we look at the studies, we can form clusters for the reasons of failure.

For a typology of failure, we can use the following overview (see Table 1) in order to bundle the findings of the studies listed. These are explained in the following chapters.

Internal Reasons

Reasons for the failure of a company can be manifold. In the following chapters, the authors will look more closely at the most frequent internal reasons that lead to a failure of the company. In this context, individual and team-specific reasons, the problems of market developments as well as the bad marketing of startups will be described in detail.

Table 1 Internal and external reasons for the failure of company foundations

Internal reasons	External reasons
Individual reasons/Reasons within the team	Lack of capital
Development doesn't meet market demand	Wrong time for the product
Poor marketing	Overtaken in competition

Individual Reasons and Reasons Within the Team

While the other cells of our small typology are underpinned by prominent examples, this cell is illustrated by anonymised examples based on the authors' long-standing consulting experience. In addition, individual and team-related reasons can have very diverse characteristics, which is why these categories are further subdivided at this point:

- Different expectations from the company
- Problem "Genius"
- Different life situations
- Dispute in a strategic decision

In this case, the list of possible conflicts could be much more differentiated. In our experience, however, these four points cover most of the potential fields of conflict. Therefore, further differentiation on the part of the authors is dispensed with. In the following chapters, we shall explain each of these reasons individually by giving a brief, general example.

Different expectations from the company

In this chapter, the authors want to present a shortened process, beginning from the company foundation, and disputes in the team, up to the implementation of the product idea by another company. This presentation will serve as a warning example of how quickly a startup can be a failing business.

We have all heard about this situation: A group of friends has a good idea and decides to set up a business. Often, at this stage of the foundation, the company has the possibility to finance itself with the help of a prize or a fund for the first months or the first year. During this time, the prototype for the first product emerges. First buyers and donors show interest in the product and in the company. As a result of this increased interest, also consultants and cooperation partners are increasingly interested in a cooperation with the newly founded startup.

Then it turns out that one of the founders would prefer a rather conservative growth and would like to build up a company in the long term. This company should have few employees and enable an undisturbed life. The second founder, on the other hand, sees the opportunity to develop a company with the fastest possible growth potential. This is also suggested to him by all sorts of people. He wants to manage a company with several hundred employees and would also consider selling the company at a favourable and lucrative time. The third founder principally agrees with both proposals for solution, which is why neither of the two solutions has a clear majority.

At the time of product development and the founding of the company, this did not matter. But when an investor wants to participate in the company and get in on the business with a high sum, the founders get into disputes. They did not discuss the different expectations of the company at an early stage. In the meantime, they have set up a limited company contract, which contains a restrictive clause: if an investor is to be taken on board, all founders must agree. However, the situation is that one

founder is against the investor, one founder is for the investor, whereas the third founder says he agrees, if the two others reach an agreement.

In the end, the three do not reach an agreement, whereupon the investor withdraws his offer. As a result, the team members make mutual recriminations concerning the withdrawal of the investor, which ultimately leads to the separation of the founding team and a dispute over product rights. These negotiations require a long period of time, whereby the original product is unfortunately marginalized by a competitor. Thus, disputes in the team can have a great influence on the development of the company. Another problem with startups can also be the "genius" aspect, which is explained in the next chapter.

Problem "Genius"

A company foundation does not live by a single invention, but by a viable business model. In some startups, it is possible that one of the founders estimates his own share of the future success much higher than the potential share of the co-founders. We would like to explain this by an example.

Imagine the following scenario: One of the founders wrote a doctoral thesis about the business idea, which is now to be monetarized in the context of a company foundation. This can lead to a significant imbalance in the shares of the business idea, since this founder could insist on the "creator status" of the company. Consequently, he perceives himself, so to speak, as a "genius" who had the idea for the enterprise. This imbalance can only be compensated if the co-founders acknowledge this special position without complaint. This possibility is, however, very unlikely in reality, because company founders have little interest in submitting to a hierarchy in the startup phase.

The consequence is that the genius will not recognize the performance of the co-founders and these will in turn question the genius status of the founder. At the very latest in the subject of company shares, the genius of the company will claim his share. This finally results in the dissolution of the hopeful company foundation. The genius will now feel misunderstood despite the fact that it requires not only a brilliant invention and the construction of a product, but also a viable team.

Different life situations

For the consideration of this problem, we can once again think of a group of friends who have the idea to found a company. Initially, the project has a good start and gathers momentum. The first customers are won, but until the company is profitable, it will take a while. During this time the founders must live by their reserves.

Suddenly, however, unpredictable changes occur in the team as a co-founder gets married and becomes a father. At the same time, he is the founder with the lowest financial background. The other team members have a financial cushion, which means that they can finance their lifestyle for the next 9 months, even without the startup. This phase of the company's development is therefore only a problem for the expectant father who wants to generate sales as quickly as possible. The other team members, on the other hand, tend to pursue the strategy of a further innovation loop before bringing the product onto the market. This discrepancy in the further development of the company leads to a high potential for dispute among the founders.

In addition, the expectant father receives a lucrative offer from a large and well-paying employer. After much thought, he would like to accept this offer but also to keep the shares in the jointly founded company. The discussion leads to even more disputes, which further disturb the relationship between the founders. In the end, all that is left of the hopeful company foundation is a website for sale. Furthermore, also alienation of the partners can lead to the failure of a company foundation. This will be discussed in more detail in the next chapter.

Alienation

The last point is the most general, but the most widespread: as in every close relationship, there is more to talk about than the daily business. A marriage is not different from the relationships in a company. Whereas in a marriage constant discussions or high instalments for the house can lead to divorce, there are also problems in companies. Often too much is talked, but nothing is done. The problem here is, however, that the basis of a company is a well-functioning team. Not for nothing, Steve Jobs didn't regard the Mac, the iPod, the iPhone or the iPad as his main products, but the teams that he has formed. While the first examples were anonymous cases, we will now describe prominent cases in which we illustrate typical processes. In accordance with our "typology of failure", we proceed first with the "internal reasons".

Development "Past the Market", Presented by the Example of Why-Own-It

The purpose of the smartphone app "Why Own It" was to enable its users a problem-free procedure of borrowing and lending on the internet. The idea behind this business concept was that products such as cordless screwdrivers, drills or bicycle tools are only used a few times a year. Most of the time, they are unused in our cupboards. "Why Own It" wanted to be a platform on which these mostly unused products can be borrowed and lent free of charge. When the Smartphone app went online in the summer of 2012, it was considered a typical project of the Sharing Economy and was praised prematurely by many observers. Three years later, on the 12th of March 2015, the project failed (Krüger, 2015; Lommer, 2015; Wölbert, 2012).

The chances of success were good, because sharing is a major trend, as a study of the Leuphana University Lüneburg has found out. According to the study, alternative forms of ownership and consumption are of great importance. The study itself was funded by Airbnb, which is one of the commercial shooting stars of the Sharing Economy. The principle of "Own less, share more" has gained more followers in the last few years, says Philipp Gloeckler from Hamburg. He developed the "Why Own It" app and is the founder of the limited company of the same name (Krüger, 2015).

"However, we quickly realized that there are big differences between the statements 'people like the idea' and 'people take part in it'," says Gloeckler. *"Of course, everyone would like to borrow a drill from their neighbours,"* he adds. *"But the number of people who are ready to lend a drill to the neighbour is much smaller than expected. In the three years, the platform never grew organically, that is through word-of-mouth advertising. It rarely happened that people recommended*

the app." Gloeckler goes on by saying: *"I have completely underestimated the conception of the entire app. I remember that a friend from Berlin has warned me that the concept of mobile apps is something quite different from that of websites. In my former arrogance, I thought that I could manage everything quite easily. However, this was not the case, and I think it is much more complex than we thought it would be. To create supply and demand in a marketplace model at the same time is incredibly difficult."* (Krüger, 2015).

"Bad Marketing", Presented by the Example of Segway

If we look at the field of business startups with regard to their marketing measures, it is very soon apparent that there are big differences in the success of actions. But what means success in the context of a marketing campaign of startups? This question will be explained in more detail in this chapter. There are numerous marketing measures that can make a startup more popular. In most cases, startups try to strengthen their reputation through targeted online marketing. The inventor Dean Kamen, however, focused on targeted marketing measures. Specifically, his invention was the initially strongly hyped Segway (Gloeckler, 2015; Loeffler, 2015).

Prior to the product launch in 2001, however, the public only knew the new product under the code name "Ginger", which was traded as a new alternative to the car. When the investors and the public understood that this new invention was merely a technically advanced scooter, they were initially irritated. Basically, Kamen planned to use the Segway to change the world, like in case of the personal computer and the Internet. In doing so he relied on a highly exaggerated PR. Due to the great irritation of the public and the lack of innovation of the product, however, it was not possible to promote sales by means of numerous commercials and extensive PR campaigns, which praised the Segway as the future means of transport. Kamen planned to sell half a million scooters a year. In fact, he could only sell 24,000 Segways in 5 years (Gloeckler, 2015; Loeffler, 2015).

Meanwhile, this product is bought by the police for far less money, and it is also used by tour guides in cities and companies with large warehouses. The headline-grabbing PR and marketing campaign at the product launch cost huge sums. Today, however, the Segway is rather a curiosity than a real top seller. This example of the expensive marketing campaigns of the inventor Dean Kamen clearly shows that a large marketing budget alone does not yet produce a successful company (Gloeckler, 2015; Loeffler, 2015). Rather, it is a good idea, coupled with a functioning team and sufficient capital, that has to be lead to the goal of a successful company, by using the right entrepreneurial measures. In addition, there are also numerous external reasons that can be responsible for the failure of a company. These are discussed in the following chapters.

External Reasons

There are numerous reasons that can lead to the failure of a company. These must not always be directly related to the company, but can also come from the outside. These

external reasons, such as missing capital, the wrong timing or the fact of being overtaken by competitors, are to be considered in the following chapters.

"Lacking Capital", Presented by the Example of Webvan

The history of the American company Webvan ended in 2001. For a long time, the startup and its idea of an online grocery trade was considered as a model example of a successful company foundation. For a short time, it had more than 1.2 billion dollars in investment capital. With this capital, Webvan wanted to establish its own truck fleet, instead of relying on existing supplier services, like other food retailers did. The development of this company-owned supply chain ultimately led to the closure of the entire company, as the existing capital could not cover the costs of this project. The reason for this was the slow growing number of customers, which meant that too little money was available (Streif, 2001).

The company simply wanted too much in too short a time, which in the end led to the failure of the project. Due to lack of money, Webvan had to close down, and dismiss all employees. This makes the American company Webvan a prime example of how startups can fail due to lack of liquidity (Streif, 2001). Another aspect of why startups frequently fail is the right idea at an incorrect time. What we mean by this is explained in the next chapter.

"Incorrect Time for the Product", Presented by the Example of boo.com

Boo.com was founded by the Swedes Ernst Malmsten, Kajsa Leander and Patrik Hedelin in London in 1998. The business goal of the company was the online distribution of street- and sportsware, that is, the three entrepreneurs had the same idea as Zalando. In the beginning, this new concept was very well received by customers and the company founders gathered 120 million dollars of investor capital within a very short time (Wikipedia, 2016; Wray, 2005).

These investors included well-known commercial and business companies, such as Benetton, JP Morgan and Goldman Sachs, but in May 2000 Boo.com's triumph ended abruptly, which was one of the most spectacular Internet failures of all time. In the review, it turned out that many serious homemade mistakes were responsible for the collapse of the company. The problems began as early as 1999. On the one hand, the start of the online portal had to be postponed several times due to technical difficulties. On the other hand, the operating functions of the platform were very unstable and hindered the design of an "extravagant" website (Wikipedia, 2016; Wray, 2005).

The result was a large, cumbersome and overloaded portal that was barely accessible to most customers, as huge amounts of data volumes were overwhelming the slow modems at that time. In addition, the site was based on JavaScript and Flash in order to reproduce the product assortment, the mascots and the sales assistant-avatar "Miss Boo" in a pseudo 3D animation. Whenever the main page of boo.com was accessed, it contained the warning *"This site is designed for 56 K modems and above."* Furthermore, there were typical errors of the New Economy, which concerned personnel management. The uncontrolled hiring of employees, the omission of the establishment of clear management structures, above-average salaries and

huge expense reports while exploring the international market accompanied the decline of the company (Wikipedia, 2016; Wray, 2005).

Consequently, investors refused to provide additional money. In summary, the company boo.com developed a product that was technically 9 years ahead of its time in 1999. However, boo.com started at a time when internet access was largely equipped with modems and a speed of 56 K or less in Germany and Europe. Today, Zalando and other successful, very similar companies offer an almost identical product like boo.com used to. As a result, it was the right idea at the wrong time for this company (Wikipedia, 2016; Wray, 2005). In addition to the right time to set up a company, the rapid competition and the speed of development of the company and the market also play an important role in the failure of foundations. This aspect is addressed in the next chapter.

"Overtaken by the Competition" Using the Example of studiVZ

StudiVZ was founded on November 11, 2005, on the basis of an idea by Ehssan Dariani (CEO) and Dennis Bemmann (CTO). The site was similar to the exclusively English language counterpart Facebook, both optically and in terms of content. The only distinctive feature was the chosen red colour. The project developed rapidly as a social network and was originally designed for 2.3 million students in Germany, Austria and Switzerland. In the autumn of 2006, offshoots from studiVZ started in France (studiQG), Italy (studiLN), Spain (estudiLN) and Poland (studentIX) (Kaczmarek, 2001; Weiß, 2008; Wikipedia, 2017).

In February 2007, the site schülerVZ was founded for pupils. Here students from Germany, Austria, Switzerland, Liechtenstein and South Tyrol were able to network. In 2007 the publishing group Holtzbrinck took over the company for an estimated 85 million euros. In the first quarter of 2008, studiVZ already had around 5.5 million unique users, making it one of the most successful online media in Germany. It was not until March 2008 that studiVZ experienced competition in German-speaking countries, namely by the competing company Facebook. However, the initial development of the American company progressed very slowly. While the numbers of members were booming in the UK, France or the United States, the great hype in Germany initially failed (Kaczmarek, 2001; Weiß, 2008; Wikipedia, 2017).

Initially, many users didn't see any reason to change. StudiVZ had enough to offer: Own profile pages, friend lists, an integrated chat, different groups and of course the "Gruschel" function, which is a mixture of the German verbs "grüßen" ("to greet") and "kuscheln" ("to cuddle"). At peak times studiVZ counted 16 million users. However, in order to gain a foothold in the German market, Facebook wanted to take over studiVZ. But the Holtzbrinck publishing group refused, which in retrospect turned out to be a big mistake (Kaczmarek, 2001; Weiß, 2008; Wikipedia, 2017).

The company that once had a staff of 200 has now become a team of 12, and the number of users is just over one million. The reasons for the rapid downturn are manifold: Lack of innovation, lack of external openness, too much advertising, bad crises management and frequent security gaps led to the creeping death of the platform. In January 2009, the publishing company finally decided to discontinue

the platforms for Spain, Italy, France and Poland. Since then, the VZ networks have been concentrating exclusively on the German-speaking region (Kaczmarek, 2001; Weiß, 2008; Wikipedia, 2017).

In the spring of 2011, Facebook succeeded in overtaking the VZ networks for the first time, which meant that its triumphant move could not be stopped in Germany either. For those who have not deleted their profile at StudiVZ yet, a repeated visit on the platform will be like a trip into the past. And maybe such a visit on the platform is soon no longer possible. StudiVZ is a perfect example of how a market leader and successful company/startup failed in the shortest possible time because a "bigger and better" competitor came onto the market (Kaczmarek, 2001, Weiß, 2008, Wikipedia, 2017).

The Different Culture of Failure

According to the long-term study Global Entrepreneurship Monitor (GEM), the fear of failure in so-called "innovation driven countries" is particularly high (Global Entrepreneurship Monitor, 2016). Such countries are, for example, the USA and many countries in Europe, including Germany. On the other hand, there is the least fear of failure in so-called "efficiency-driven countries" (ibid.) (Global Entrepreneurship Monitor, 2016).

This is relatively easy to explain by the fact that the job opportunities as well as the social security are different depending on the local economy. Simply put, in South Africa you have less to lose if you try to start a business than in Germany. For in Germany you have big corporations, the middle class and almost full employment. In South Africa, on the other hand, the unemployment rate is above 26% (Statista). The study of the GEM also shows impressively that even in the same economic systems, the fear of failure can be different. The following Table 2 shows the percentage development over the past 10 years between the US and Germany (Global Entrepreneurship Monitor, 2016):

The "fear of failure" was measured:

Accordingly, there is a much higher fear of failure in Germany. However, it has also become apparent that fear has increased in the US, whereas it basically stagnates in Germany. In some national economies, it is an important indicator for venture capitalists of whether the founder has already gained "experience" with failure, as this entails experience and improvement (see Report GEM, 2016, p. 36). This raises the question of whether countries with a positive attitude to failure are calling for a higher investment volume. In a direct comparison of Germany and the USA, the

Table 2 Fear of failure in the USA and Germany (Global Entrepreneurship Monitor, 2016)

Year	Germany (%)	United States (%)
2006	34.33	25.67
2011	41.99	31.19
2016	41.04	33.33

Expert Ratings of the Entrepreneurial Eco-system (ranked out of 66)

——— **EUROPE**   ——— **GERMANY**   1 = highly insufficient, 9 = highly sufficient
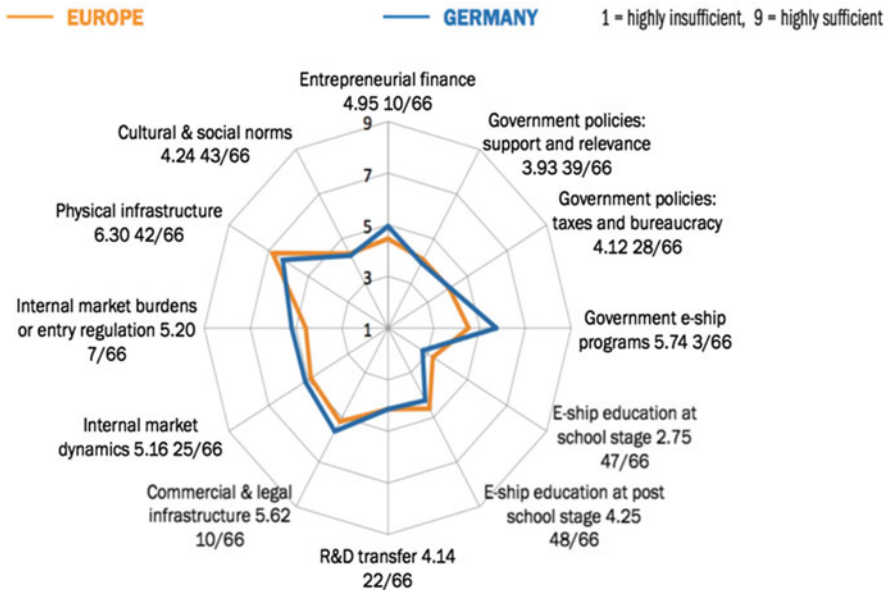
Fig. 5 Ratings ECO-systems, Germany (Global Entrepreneurship Monitor, 2016)

studies of the GEM from 2016 show the following picture (Global Entrepreneurship Monitor, 2016) (Figs. 5 and 6).

The graphs do not refer to the phenomenon of failure per se, but describe the characteristics of the economy of the respective country in relation to entrepreneurship and founding (Global Entrepreneurship Monitor, 2016). The "Entrepreneurial Finance" area, on the other hand, describes the degree of funding in startups in the respective country. There are no significant differences here. Thus, is there any impact of a different culture of failure with regard to company foundations?

In Germany, 51.8% of the interviewees see entrepreneurship as a good career opportunity. In the USA this number is as high as 63.7% (ibid.). There is no described correlation between the degree of fear of failure and reputation. Thus, a direct connection can only be assumed. The ranking only shows that the number of investments in foundations is similar in Germany and in the USA. What is certain, however, is that the average sum of risk capital invested in startups in the US is much higher than in Germany (Bruegel, 2013).

One of the main reasons why companies fail is lack of financial resources (see point 3.2, External Reasons). The startups do not receive follow-up financing, do not have sufficient budget for marketing and development or simply cannot pay their bills and personnel costs (page 7). This raises the question of whether failure can even be avoided if a positive culture of failure leads to more risk capital? The answer

Expert Ratings of the Entrepreneurial Eco-system (ranked out of 66)

——— **NORTH AMERICA**   ——— **UNITED STATES OF AMERICA**   1 = highly insufficient, 9 = highly sufficient
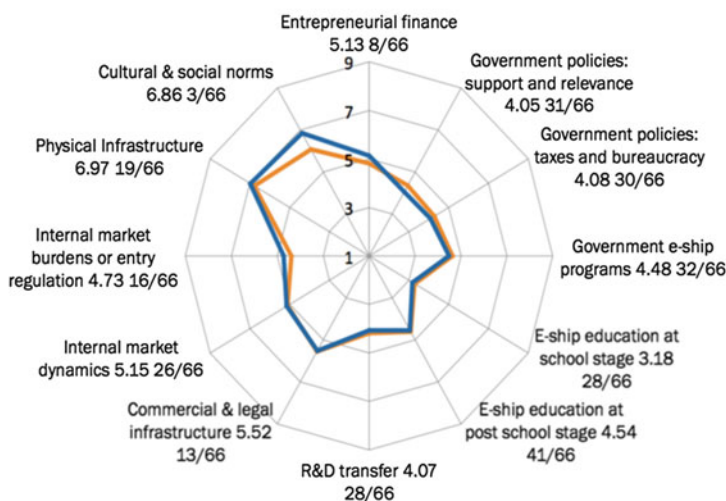
Fig. 6 Ratings ECO-systems, USA (Global Entrepreneurship Monitor, 2016)

is no, since the problem of failure due to financial means often has specific reasons (Bruegel, 2013).

Companies lack funds to grow. However, also in the USA the risk capital is not invested indiscriminately. In fact, it is carefully examined for whom and for what it is used. Moreover, the percentage of failed companies in the United States and in Germany is approximately the same. Measured by the number of inhabitants, approximately the same number of companies are founded. The assumption that a different culture of failure has influence on the number of foundations and ultimately also on the failure in itself cannot be confirmed according to the present state (Bruegel, 2013).

The decisive difference is that the sum of the risk capital used is significantly higher than in Europe or especially Germany. In this way, for example, so-called unicorns, i.e. companies that have a valuation of one billion dollars in the first year of their founding, are created. In the long term, that is how the way can be paved to make a startup a "global player". In Germany, this is much more difficult as the existing equity capital and outside capital must be planned much more conservatively. This aspect may also be traced back to a culture of failure. It can therefore be assumed that the different handling of failure in the US in comparison to Europe or Germany can have an influence on the success of the company in the sense of a global orientation (Bruegel, 2013).

"A study conducted by the German Federal Ministry of Education and Research shows that there is too little startup capital available to young entrepreneurs. Due to a lack of security, bank loans are difficult to obtain. In addition, both venture capital funds and wealthy individual investors (angel investors) are rare in Germany, in contrast to the USA." (Konrad Adenauer Stiftung, 2016).

But the culture of failure has not only influence on the amount of risk capital employed. Another important pillar is the innovative power. The Konrad Adenauer Foundation describes the phenomenon as "fail often", i.e. frequent failure due to trials, and sees in this a great opportunity for innovations. *"The more they fail, the higher the chance of future success"* (ibid.). In Germany this phenomenon is not common. Here we can find a widespread culture of perfectionism (see ibid.). In the USA the culture of "fail often" is lived and implemented. This has an impact on the previously described level of risk capital. In this ways, also innovations are being developed. Experiments, i.e. not precisely foreseeable attempts to develop something new, can lead to innovations. But without the willingness to try something out and accept the initially high probability of failure, ideas cannot turn into innovations (Konrad Adenauer Stiftung, 2016).

Companies like Google, Apple, Facebook etc. invest a lot of money in projects and experiments with high risk. Therefore, Google has launched a specific company, the X Company (https://xcompany). The exact capital sum is not known, but it is supposed to run into the billions annually. Such projects are the real benefit of a culture of positive dealing with failure.

Studies show that Europe has a problem when it comes to building large, global companies. Veron (2008) chart below shows the development in comparison to the USA (Veron, 2008) (Fig. 7).

The graphic speaks for itself and impressively shows the difference between the US and Europe concerning the largest global companies. Whether risk capital or innovative ideas, the reasons for these different developments in the USA and Europe, or especially Germany, are certainly not to be found exclusively in a culture of failure.

According to the present state of knowledge, the question of whether the culture of failure brings with it an indication of favourable founding conditions cannot be answered clearly. However, a healthy culture of failure, as well as a positive error culture are doubtlessly positive amplifiers.

Fig. 7 Number of largest companies in Germany and the USA, based on FT Global 500 ranking of the world's largest listed companies (Veron, 2008)
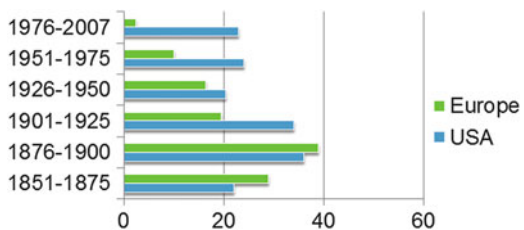
What Do We Learn from It?

Failure cannot be avoided. As long as there are people who choose to start a business, there will be a share of failure. According to this, every company founder should be aware of the fact that an important factor for establishing a company is the fault tolerance. But what does this word "fault tolerance" mean in the context of a company foundation? The term "fault tolerance" generally describes a process of recognizing, accepting, and learning from errors. This can be used to avoid errors which can lead to a negative situation output. This means that people with a high degree of fault tolerance tend to follow the motto *"Try again, fail again, fail better"* (Beckett, 2006).

It is by no means the case that every successful founder was already successful with his first company. The list of those who needed some attempts until they became successful entrepreneurs is almost endless. And most of them made one or more of the above listed mistakes and learned from these mistakes to finally build a successful business. Last but not least, the failure of a company foundation in the US, especially in the Silicon Valley, is considered an award (Nobel, 2011).

To demand in return that one should not deal with failure, but only with the successful enterprises and imitate what they did right, would not be enough. The experience of learning from one's own mistakes cannot be taken over by someone else. Furthermore, it is dangerous for an entrepreneur to go a prefabricated, tailor-made way. Every successful company founder can tell his own story of failure, and every success story of large companies differs. The reason why successful entrepreneurs and companies stand out is precisely because they have not imitated, but that they have gone their own way.

There is no way around it: If a company is to be founded—and a healthy national economy needs innovative startups in the long run—then failure must be accepted as a secondary effect. And this acceptance has to go beyond encouraging words for the failed. Company founders need more capital, they must also be promoted when they have failed. Failure mustn't be a flaw in one's CV, but must be integrated as a step on the road to success.

References

Álvarez, S., Beikler, S., & Rövekamp, M. (2016). *Berlin verliert Titel als führende Start-up-Metropole*. Retrieved March 29, 2017, from http://www.tagesspiegel.de/wirtschaft/investitionen-brechen-ein-berlin-verliert-titel-als-fuehrende-start-up-metropole/14020956.html

AXA. (2015). *AXA Studie "Innovationen und Unternehmensgründungen in Deutschland und in den USA"*. Retrieved March 30, 2017, from https://www.axa.de/site/axade/get/documents/axade/AXA.de_Dokumente_und_Bilder/Unternehmen/Presse/Pressemitteilungen/Dokumente/2015/AXA-Studie-Innovationen-und-Unternehmensgruendungen-in-D-und-USA.pdf

Beckett, S. (2006). *Try again. Fail again. Fail better*. Retrieved March 30, 2017, from http://www.economist.com/node/5624852

Bruegel. (2013). *The changing landscape of financial markets in Europe, the United States and Japan*. Bruegel Working Paper 2013/02. Retrieved March 2, 2017, from http://bruegel.org/wp-content/uploads/imported/publications/WP_2013_02_01.pdf

CB Insights. (2014). *204 Startup failure post-mortems*. Retrieved March 28, 2017, from https://www.cbinsights.com/blog/startup-failure-post-mortem

DIHK. (2014). *Pioniergründer bringen frische Brise. Zahlen und Einschätzungen der IHK-Organisation zum Gründungsgeschehen in Deutschland*. Retrieved March 28, 2017, from https://www.dihk.de/ressourcen/downloads/dihk-grunderreport-2014

Gallup. (2014). *Starved of financing, new businesses are in decline*. Retrieved June 10, 2017, from http://www.gallup.com/businessjournal/175499/starved-financing-new-businesses-decline.aspx

Global Entrepreneurship Monitor. (2016). *Global report 2016/17*. Retrieved June 10, 2017, from http://gemconsortium.org/report

Gloeckler, P. (2015). *We failed – Warum die Verleih App WHY own it nicht funktioniert hat*. Retrieved April 20, 2015, from http://whyownit.com/blog/we-failed-warum-die-verleih-app-why-own-it-nicht-funktioniert-hat

Hackmann, J. (2013). *Die zwanzig besten Regionen: Wo Startups am besten gedeihen*. Retrieved March 30, 2017, from http://www.computerwoche.de/a/wo-startups-am-besten-gedeihen,2529511

Jaeger, T. (2003). *Gründe für das Scheitern von Start-ups*. Hamburg: Diplomica.

Kaczmarek, J. (2001). *StudiVZ – Holtzbrinck verschleudert Millionen*. Retrieved March 30, 2017, from http://www.gruenderszene.de/exits/studivz-holtzbrinck-85-millionen

Konrad Adenauer Stiftung. (2016). *Deutsche StartUps greifen daher immer häufiger auf VC-Finanzierungen aus den USA zurück*. Retrieved April 2, 2017, from http://www.kas.de/wf/doc/kas_29348-544-1-30.pdf?160114114853

Kosoff, M. (2015). *The 38 coolest startups in Silicon Valley*. Retrieved March 30 2017, from http://www.businessinsider.com/the-38-coolest-startups-in-silicon-valley-2015-7

Krüger, A. (2015). *App gescheitert: Leihen ja, verleihen nein*. Retrieved April 20, 2015, http://www.heute.de/sharing-economy-warum-verleih-app-why-own-it-gescheitert-ist-37461978.html

Kulicke, M., & Kripp, K. (2013). *Ergebnisse und Wirkungen des Förderprogramms EXIST-Gründerstipendium*. Retrieved March 30, 2017, from http://www.exist.de/SharedDocs/Downloads/DE/Studien/Ergebnisse-Wirkungen-Foerderprogramm-Gruenderstipendium.pdf?__blob=publicationFile

Loeffler, H. (2015). *Es haben einfach zu wenig Leute Interesse gehabt, richtig mitzumachen*. Retrieved May 22, 2015, from http://www.gruenderszene.de/allgemein/why-own-it-aus

Lommer, I. (2015). *Verleih-App Whyownit ist gescheitert*. Retrieved March 30, 2017, from http://www.internetworld.de/e-commerce/share-economy/verleih-app-whyownit-gescheitert-893304.html

Marmer, M., Hermann, B. J., Dogrultan, E., & Berman, R. (2012). *Startup genome report*. Retrieved March 28, 2017, from https://s3.amazonaws.com/startupcompass-public/StartupGenomeReport1_Why_Startups_Succeed_v2.pdf

Meszaros, G. (2016). *What percentage of businesses fail – The real number*. Retrieved March 29, 2017, from http://www.successharbor.com/percentage-businesses-fail-09092015

Metzger, G. (2014). *Gründungstätigkeit wiederbelebt – Impuls aus dem Nebenerwerb*. Retrieved March 28, 2017, from https://www.kfw.de/PDF/Download-Center/Konzernthemen/Research/PDF-Dokumente-Gr%C3%BCndungsmonitor/KfW-Gr%C3%BCndungsmonitor-2014.pdf

Nobel, C. (2011). *Why companies fail and how their founders can bounce back*. Retrieved March 28, 2017, from http://hbswk.hbs.edu/item/why-companies-failand-how-their-founders-can-bounce-back

Streif, T. (2001). *Webvan-Pleite stellt alle Dot.com-Pleiten in den Schatten*. Retrieved March 30, 2017, from http://www.heise.de/newsticker/meldung/Webvan-Pleite-stellt-alle-Dot-com-Pleiten-in-den-Schatten-38465.html

Veron, N. (2008, July 15). *The demographics of global corporate champions*. Bruegel Working Paper No. 2008/03. Retrieved from https://ssrn.com/abstract=2000710

Weiß, M. (2008). *Facebook wollte StudiVZ kaufen*. Retrieved March 28, 2017, http://www. foerderland.de/digitale-wirtschaft/netzwertig/news/artikel/facebook-wollte-studivz-kaufen

Wikipedia. (2016). *Boo.com*. Retrieved March 28, 2017, from https://de.wikipedia.org/w/index. php?title=Boo.com&oldid=159939515

Wikipedia. (2017). *studiVZ*. Retrieved March 28, 2017, from https://de.wikipedia.org/w/index.php? title=StudiVZ&oldid=161351824

Wölbert, C. (2012). *iPhone-App Whyown.it: mehr leihen, weniger kaufen*. Retrieved March 30, 2017, from http://www.heise.de/mac-and-i/meldung/iPhone-App-Whyown-it-mehr-leihen-weniger-kaufen-1667027.html

Wray, R. (2005). *Boo.com spent fast and died young but its legacy shaped internet retailing*. The Guardian. Retrieved March 29, 2017, from https://www.theguardian.com/technology/2005/may/16/media.business

Ziegler, C. (2013). *Erfolgsfaktoren deutscher E-Ventures in der Early-Stage-Phase*. Retrieved March 29, 2017, from https://publikationen.bibliothek.kit.edu/1000036996

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Failure in Public Relations: Non-profit Organizations Facing Growing Challenges

Carsten Tesch

Case Study

When Harald Ehlert suggested at a press conference in 2010 that his car, a Maserati, could be used to tour neighborhoods where social welfare recipients reside in order to gain insights into how they live, the days of Treberhilfe Berlin, his non-profit, were numbered. At that time, the organization was actually in good shape financially, being the most significant provider of assistance to the homeless in Germany's capital. As Ehlert's case shows, non-profit organizations (NPOs) can go bankrupt both fiscally and morally. More to the point, insolvency can also be declared by the court of public opinion.

In the spring of 2010, Ehlert became known in the German media as "Maserati Harry." Berlin's minister of social affairs pressed charges against him on the grounds of fraud, since he was allegedly receiving an annual salary of €422,000 for running Treberhilfe Berlin, which provided shelter to 4000 homeless people. In addition, his non-profit had placed the black Italian sports car that resulted in his nickname at his disposal, along with a chauffeur to drive it. Moreover, he was living in an apartment in a villa owned by the non-profit, located on a lake outside of Berlin.

It would take 4 or 5 years to settle the case. In 2014, he was sentenced to a year's probation for tax evasion, since he had used the Maserati and a BMW belonging to the non-profit for private purposes, without informing the tax authorities. In a second case, he was fined in 2015 for failing to file for insolvency in a timely manner. The court did not find him guilty of fraud.

The public, however, moves much faster than the wheels of justice. Its judgment is issued within days. Overweight and often described as resembling a pimp, Maserati Harry perfectly embodied the prejudices people in Germany and

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elsewhere often have against social welfare organizations. Here, apparently, was a case of someone taking public funds meant to help the poorest of the poor and using them to live in the lap of luxury. And now he had to pay. The municipal agencies who funded Berlin's homeless shelters promptly terminated their contracts with his non-profit. Other high-profile NPOs cancelled their memberships. Key staff members took jobs elsewhere. Ehlert officially resigned as CEO, but remained at the non-profit as a director without title. During the insolvency case it was later revealed that the media scandal had left Treberhilfe Berlin—which had generated €15 million in revenue the year before it folded—practically unable to pay its bills. Moral bankruptcy took place within days; its financial counterpart followed a short time later.

Legitimacy

Evandro Oliviera and Markus Wiesenberg, researchers based in Leipzig who specialize in communication activities at NPOs, speak of the "legitimacy" that organizations can acquire, defend and lose. They do not use the term in the sense of trust, capital or taking a leap of faith, but in a more pointed sense of being granted permission. Legitimacy is therefore a license to become active in a certain market or area of social work. *"Legitimacy accorded by an organization's external stakeholders can be seen as a 'license to operate'"* (Oliveira & Wiesenberg, 2016, p. 105). The case of Treberhilfe Berlin clearly illustrates which stakeholders grant these licenses to independent non-profits in Germany. The judgment that it was no longer appropriate to do business with this particular provider was issued at the political level. The relevant administrative authorities then implemented that political decision in practical terms. While that was happening, an opinion was forming in the media, where the information about Ehlert and his organization took on the contours of a scandal. As the cautionary tale of Treberhilfe Berlin shows, a scandal is when the boundary between reportage and opinion disappears. This boundary, one of journalism's fundamental principles, becomes blurred in light of "facts" that can only lead to one interpretation or judgment. When in scandal mode, the media morph into their own public in that they share its outrage. After a brief "trial" during which the public, press, politicians and government agencies all affirmed and reinforced each other's opinion, the external stakeholders issued their verdict on Treberhilfe Berlin. The organization's legitimacy had been completely depleted within days.

The Special PR Risks NPOs Face

The above example shows that, when threatened with failure, NPOs and commercial organizations are confronted with different risks. For instance, many external stakeholders might now find their faith shaken in the willingness of Deutsche Bank and Volkswagen to adhere to the letter of the law, but that does not pose an existential risk for the two companies. Similarly, the Diocese of Limburg continues

to administer to parishioners even after its bishop, Franz-Peter Tebartz-van Elst, was moved to another post once information about his questionable decision-making ballooned into a scandal. After the public and media—in scandal mode and alarmed at the failure taking place in the non-profit to which the bishop belonged—came to the conclusion that he was personally responsible, the pope stepped in and relieved him of his duties. End of story. There was no question the diocese would continue to exist, despite the bishop's failure—perhaps because the Church enjoys a "legitimacy of last resort" that protects it from lethal threats emanating from the public sphere. A scandal of this magnitude could well have spelled the end for an NPO lacking such higher connections. The magnitude, however, is not necessarily measured in terms of financial damage, but by the attention and outrage the scandal *excites*.

In the case of a secular NPO, systemic questions would have been raised. To return to Harald Ehlert, there was no separation of the individual from the organization, as naturally happened with the bishop. The agencies providing the funding simply terminated their contracts with Treberhilfe Berlin. The whole affair then escalated into a political debate about the oversight of charitable organizations in general. Other NPOs and umbrella associations of the city—the German Red Cross, Diakonie, AWO, etc.—were brought together at a round table organized by the Berlin's minister of social affairs to discuss new rules for monitoring the social economy. The participants obediently showed up, keeping their opinion to themselves that the whole meeting was unnecessary and merely a political dog and pony show. There is much to suggest that the management problem which the round table intended to solve does not even exist. The so-called third sector is one of the most highly regulated in German society, since it is subject to all the bureaucratic requirements imposed on both the business community and the public sector.[1]

The story of Treberhilfe Berlin suggests yet another risk that NPOs must be aware of when they experience failure. Terms such as "non-profit" and "charitable" attract their share of suspicion. This can be ascribed to old-fashioned resentment, or the Enlightenment tradition by which "critical thinkers" inevitably take a closer look at society's "good guys." Yet no one is unfailingly good; the possibility of failure lurks as a matter of course. "Non-profit," "charitable" and even "social" are paradoxical terms, since those interested in doing good can never be totally selfless, as they too always benefit in some manner. The risk is thus inherent in the name. The labels that the "third sector" uses to differentiate itself from the business and government sectors are equivocal. They have an ethical connotation that draws the public's attention, particularly when it becomes known that an NPO has failed. And they have a bureaucratic connotation that is of great significance for social organizations in their daily activities. Being recognized legally and fiscally as non-commercial and non-governmental is the basis upon which this "third business model" rests, the prerequisite for its existence per se. Examples include the tax advantages accorded charitable organizations in Germany and what are known as 501(c) organizations in the United States.

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[1]See also Elbe (2018).

Crucial Conflicts

These two levels of meaning are at odds with each other, leading to conflicts between the NPO's values and its practices. Its members and staff, for example, can be left feeling that the organization is not meeting its own ethical standards. This criticism is often heard among social welfare organizations. Or the need can arise among managers to compare themselves with private-sector businesses. They feel that policy makers are not paying them the same amount of attention or appreciating them as much as major corporations and medium-sized enterprises. At the same time, social welfare organizations are major employers in many regions, generating millions in revenues. Not infrequently, senior managers at NPOs come to the conclusion that they are deserving of salaries at least roughly commensurate with those earned by their counterparts in the business community—an idea that is viewed much differently by the public. It's a situation that Germany's major umbrella associations for NPOs increasingly feel they must justify. The public's attitude towards compensation packages at charitable organizations is currently one of the most sensitive issues the associations face.

Harald Ehlert of Treberhilfe Berlin failed because of exactly this conflict. He tried to justify his salary and his lifestyle. He questioned the standards being used to judge him. He wanted to discuss the moral outrage, the feeling of injustice he had aroused. *"Does morality need to envelop itself in such ugliness?" Die Zeit* newspaper quotes him as asking in 2010. Why must the world judge him so small-mindedly when he was, in his own words, merely a combination of *"Scrooge, McDuck, Mother Teresa and a street-savvy cop"* (Sußebach, 2010)? From the viewpoint of the scandal, by advancing these arguments he merely seemed unscrupulous—then increasingly deranged, like someone who had lost touch with reality, since he no longer wanted to acknowledge the information that the press and public had deemed "the facts."

How NPOs Can Respond to PR Crises

The question remains of whether Treberhilfe Berlin could have been saved in 2010 had it managed its communication activities differently. If third-sector organizations are confronted with unique risks, which are proliferating, then how can NPOs respond to those risks?

The approach taken in this chapter derives from the communication management used for numerous crises that have unfolded primarily among non-governmental social welfare organizations in Germany. It also incorporates ideas from academic research. However, few studies exist that examine the crisis communications employed by leading social welfare organizations and umbrella associations (unlike for NPOs in general) and how they are perceived by the public. Baseline data would thus be very beneficial, especially in light of the growing risks faced by non-profits.

Developed in the context of social welfare organizations in Germany, the method presented here is based on a diverse range of experience dealing with crises related to social work. Fraud is a common topic when non-profits fail. Others include

insolvency (of both NPOs and businesses); sexual abuse by staff responsible for minors and people with special needs; violence perpetrated by professional caregivers; poor quality of care; wage disputes; conflicts resulting from planned legislation; conflicts relating to refugee-aid efforts; disputes with parents at preschools and special-needs schools; whistle-blowing and leaked information about inappropriate activity and substandard services; conflicts resulting from a change of provider or from acquisitions, for example by a hospital; environmental incidents; and problems with food quality and contagion. As diverse as these instances were and regardless of whether they took place in major cities with numerous media outlets or in rural areas with only one local paper, recurring patterns can be seen in the risks that resulted for the organizations involved.

Risks: Discrepancies and Trust

Crises (failure) at NPOs inherently entail two risks, which can also be seen as potential stages of escalation:

- Discrepancy risks
- Trust risks

Discrepancy risks tarnish an organization's image and damage its reputation among the public. Trust risks can call its entire existence into question. The difference between the two stems from how crises are handled in the public sphere. Are they "only" discussed in the media, or do they have consequences for how those stakeholders react whose trust is crucial for the organization's existence? The key issue is whether groups relevant for the NPO act according to what they hear and see in the news—for example, when funders cancel existing agreements, when government agencies freeze grants and other assistance, or when members and other supporters protest, resign from the organization or stop donating.

Discrepancy Risks

Many providers of social services in Germany are also engaged in sociopolitical causes. They shape public opinion by issuing calls for action, contributing expertise and launching initiatives and information campaigns. In this role as advocates, they represent the interests of children, women, the elderly, people with special needs, and migrants, among others. They criticize social conditions and motivate people to achieve certain policy goals and social change; not infrequently they exhort, warn and condemn. In doing so, they often use "scandal-inducing" language, for example to decry child poverty, domestic violence or xenophobia. Their message is often aimed at "society" or "policy makers" as monolithic entities. Like policy makers and the public, they also often frame the message in a way that implies responsibility or guilt (see below).

At the same time, a dilemma often results when Germany's social welfare organizations become politically active. In their role as advocates, they find themselves "biting the hand that feeds them." That is because, according to the principle of subsidiarity, they have multiple functions in a state that can still be seen as a *welfare* state. They are largely responsible for realizing social legislation that is funded by government ministries, public-sector agencies, EU institutions, etc. In other words, within the context of the German social welfare system, *non-governmental* organizations are actually *near-governmental* organizations. This results in a wide range of conflicts and contradictions. For example, employees and volunteers often want to focus more on the organization's values and less on compromises required by current political realities.[2] Sociopolitical initiatives—such as those calling for a change in how elder-care services are defined or those trying to prevent current funding programs from being revised—are often seen as self-serving, since the organizations in question provide services on one level or another and thus seem to be fighting over money and turf (Tesch, 2012). Similarly, the organizations' social innovations cannot be implemented because the legal framework is lacking or because services and projects do not reflect the bureaucratic requirements imposed by funders (Nock, Krlev, & Mildenberger, 2013).

Policy decisions based on ethical arguments can exacerbate discrepancy risks. If it becomes known that an NPO's actions are at odds with the relevant norms, it will quickly find itself sitting in the proverbial glass house having thrown stones. This is true for umbrella associations and individual NPOs—as the fundraising scandal that rocked UNICEF's German organization in 2007 shows. At the time, the organization's chairwoman resigned, the German Central Institute for Social Issues revoked its endorsement, and donations dwindled. Germany's donation-funded organizations entered into a collective discussion about how their financial resources are deployed, the salaries they pay and wasteful practices in general (see Wirtschaftswoche, 2008; Wohlgemuth & Bentele, 2012). Yet the accusations against UNICEF did not hold up in court.

Trust Risks

In the case of Germany's near-governmental NPOs, discrepancy risks turn into trust risks when political decision makers become "infected." This happens in particular when policy makers at the local or regional level are labeled as being part of the problem and held responsible for it to some degree, for example when a government agency is believed to have been negligent in its oversight duties or when unseemly connections between a service provider and politicians promote a scandal. As with Treberhilfe Berlin, policy makers can join in the outrage, claim the issue as their own and demonstrate their ability to take action by deciding what will be done or mandating that the relevant public authority decide. To give a current example, the

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[2]See also Ramos and Wehner (2018).

AfD political party had a parliamentary commission convened in 2017 in the state of Mecklenburg–Western Pomerania in response to charges of fraud brought against two functionaries at a district-level social welfare organization in the town of Waren an der Müritz. The commission's mandate is to investigate "self-enrichment and nepotism" at social welfare organizations throughout the state.

During crises such as these, policy makers often react in predictable fashion, demanding more oversight and control. Yet their calls for action are less "contagious" than might be expected; usually they are designed to anticipate the outrage that occurs in such moments and cash in on it politically. Such demands largely remain without consequence in the short term. Depending on who issues them, however, they can damage an NPO's reputation and must therefore be classified as a discrepancy risk.

Public Trust: License to Operate

In recent years, the Department of Communication Management and Public Relations at the University of Leipzig has developed a method for evaluating and visualizing the discrepancy and trust risks that NPOs face. The theory of public trust advanced by Bentele (1994) defines the interpersonal trust-based relationships an organization has with its stakeholders as a *"communicative mechanism for reducing complexity,"* with which the organization *"acts as the 'trust object.' Public trust is a media-mediated process [. . .] in which the 'trust subjects' have forward-looking expectations which are very much influenced by past experience"* (Bentele, 1994, p. 141, see Fig 1).

According to this theory, Viertmann and Woelfer (2015) state five interrelated dimensions:
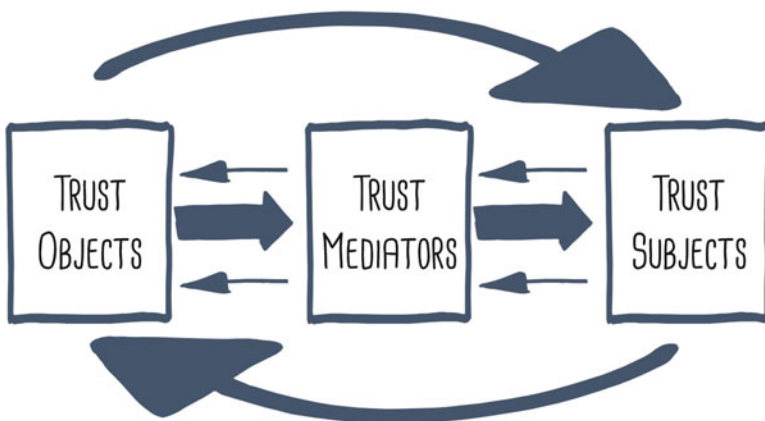

Fig. 1 Model of public trust (adapted from Bentele, 1994)

1. Basic Trust: ethical behavior of an NPO and its members, and the amount of perceived discrepancies concerning norms and ethical behaviour
2. Communicative Action: an NPO's engagement in transparency efforts and internal communication and in media relations and public affairs (external communication)
3. Expertise: an NPO's project work in the field, problem-solving skills and expert status
4. Personalities: trust-related perceptions or evaluations of members
5. Discrepancies: contradictions in communicative action (self-generated and externally generated).

Basic trust (above all, ethical-normative trust factors) is of existential importance for NPOs, as are discrepancies between norms and actions. *"By acting improperly, an NGO endangers its 'license to operate'"* (Wohlgemuth et al., 2013). Thus, the concept of "public trust" resembles the legitimacy theory of Oliviera and Wiesenberg. Both use the term "license," which seems all the more fitting for Germany's near-governmental NPOs, since oversight agencies and funders do in fact have the power to make decisions that could threaten their existence, for example by withholding certification or approval.

Scandals and Frames: Forms of Failure

The scandals with the greatest risk for NPOs are media scandals. This does not refer to the father-in-law who "creates a scandal" at a wedding reception held at a religious organization's community center because he disapproves of the man his daughter has just married. Media scandals have a journalistic context. According to Burkhardt (2006), they are triggered by a *"specific journalistic narrative interacting with information media and entertainment media."* Even if the father-in-law were to make it into the local paper, it would not be a scandal, but an anecdote. What is meant here is a violation of social norms that resonates within society at large, outraging the public and media.

Yet scandals per se are neither good nor bad. For example, both Burkhardt and Pörksen note that they help update social norms: *"Here the general public is testing that great moral conversation, declaring which values are valid or should be. In the scandal's din, individuals and even entire nations reveal their understanding of what is acceptable, and reaffirm their values: the more uniform the outrage, the more stable and accepted the value system that has been violated"* (Pörksen, 2010).

Other authors are less optimistic and criticize the fictional aspects of scandals: *"During the scandal, however, the truth is submerged by a wave of representations that are either crassly exaggerated or wholly false"* (Kepplinger, 2005).

The challenge for NPOs confronted with failure is that scandals generate powerful realities by creating certainty where ambiguity is equally possible. In addition, they create mono-causal contexts and, above all, convincing correlations between facts and responsibility (frames). Thus, there are no scandals without guilt and no

guilt without the guilty (protagonists). Scandals become powerful through the emotions they evoke. Emotions become inflamed by information about actions and individuals that violate ethical principles. Yet because ethical principles in a pluralistic society are wide-ranging and complex, what is violated is more an ethical sensibility. The media and the public each create this sensibility in its updated form the moment the scandal takes place. That means scandals always occur in a given moment; they are not timeless.

Framing

In order to influence and manage communication as a scandal unfolds, it makes sense to understand how these "journalistic narrative templates" work in practice. In the academic discussion of scandals and crisis PR, framing is often cited in this context as a "theory of media effects" (Scheufele, 1999). Framing theory has been applied in communication and media research since the 1990s (see Entman, 1993). It plays a particularly dominant role in research focusing on journalism and public relations. According to Dahinden, frames have "two key functions": the *"selection of perceived aspects of reality and [. . .] the structuring of communication texts about this reality"* (Dahinden, 2006). Entman more pointedly describes this form of processing information: *"To frame is to select some aspects of a perceived reality and make them more salient"* (Entman, 1993). Together these sources give frames four linguistic functions: They formulate a problem in conveniently abbreviated form ("problem definition"); they explain it ("causal attribution"); they assign guilt ("judgment [. . .] that can rest on moral and other values"); and they contain a "recommended strategy" (Dahinden, 2006; Matthes, 2009). Thus, they create a semantic pact in which observation, explanation and judgment reinforce each other and make each other plausible. This plausibility in turn ensures that the frames themselves seem to be self-evident—so much so, they are perceived as facts. The traditional boundary in journalism which attempts to separate reporting and opinion becomes blurred.

What this definition lacks, however, is the aspect of reception. In order to have an effect, frames must be accepted, otherwise they cannot realize their potential impact; they remain an offer untaken and die away unheard. *"Communication is much more than just someone launching something into the world which is dependent on someone reacting to it"* (Nassehi, 2015). This is a crucial principle in crisis communications. It would be naïve to view the competition for attention and for inclusion on the public agenda as merely a competition of facts.

According to Wehling, agenda-setting is essentially frame-setting: Simply presenting facts and trusting that the truth will thereby become transparent creates an "ideological vacuum"; moreover, without frames, one's position can hardly win the day and is threatened with quickly being forgotten. Another point Wehling makes is even more incisive in this context, namely the templates used by the opposing side. When journalists ask for a statement during a crisis, their inquiries implicitly contain an invitation to share a particular frame with them. Those affected

by the crisis usually react by contradicting what is being implied. From the perspective of frame theory, the problem that ensues can be portrayed thus: *"Whoever [. . .] uses the frames of a political opponent merely propagates the opponent's view of the world [. . .]. After all, verbally repeating frames—regardless of whether they are negated or affirmed—reinforces them in our minds and increasingly transforms them into society's [. . .] common sense"* (Wehling, 2016). To put it concisely based on experience gained during past scandals: Deny the charges and you've lost your case.

Short Skill Set for Public Relations in Times of Trouble

For private-sector businesses and especially for major brands, Möhrle provides a proven method containing detailed instructions for crisis management (Möhrle, 2004). As described above, NPOs face unique risks during crises since a loss of public trust or legitimacy are very real existential threats—even if there is much to suggest that the difference between the private and non-profit sectors is diminishing in this regard. For example, businesses are now formulating strategies for corporate citizenship and corporate responsibility that set ethical standards which increasingly resemble those of NPOs (see PwC's 19th Annual Global CEO Survey 2016). More and more, consumers are judging major brands based on ethical considerations. Outrage can create tempests fueled by digital media that are capable of inflicting short-term damage on a brand or even destroying it completely. Until now, however, there has been a difference between people's attitudes and their decisions to purchase a product or not. As stakeholders, consumers behave differently than politicians do. For example, they decide to continue purchasing from Amazon, even if they have a low opinion of Amazon's business ethics. We have our discrepancies, which remain private. Politicians, in contrast, are closely watched as they decide how to act and, as noted, they can quickly be drawn into crises affecting NPOs. Thus, political decision makers are the greatest risk that non-profits in Germany face.

For Möhrle and Stolzenberg, the public's loss of trust in the business community is a variation of crises which they describe as being "political-ideological" and which are *"caused by critical interest groups, conflicts with reference groups or political trends"* (Stolzenberg, 2004). For NPOs, however, only these types of crises exist, even if at first it is only about *"incidents, mishaps, accidents"* or *"product defects"* or *"economic crises"* or *"strikes"* (ibid.). The issue of ethical discrepancies remains the crucial question, since it is precisely the area the media likes to target. Within the medial system, the scandal is the product that sells best. At the same time, the upheaval the media is currently experiencing as it tries to find feasible business models is increasing demand for titillating products (see Schmidt-Deguelle, 2004). And scandals occur in precisely those moments when ethical norms are violated, when words and deeds do not match. In other words, the "good guys" must always meet the standard of being "good." Good, however, is forever a question of language, of attribution, interpretation and judgment. And even if it might seem counter-intuitive, good can never be formalized as fact. To that end, there is much

to suggest that NPOs should understand crises as phenomena that are created—namely, by language—and should thus respond to public crises with a pointedly constructivist approach.

Five steps of NPO communication in moments of failure

1. Worst frame scenario
2. De-framing/re-framing
3. Story
4. Protagonists
5. Timing

Worst Frame Scenario

This step is about recognizing the potential significance of critical information. Which frames might the information activate? How pointed is the language? How could the information be phrased within the context of the scandal? Which risks (discrepancy/trust) would arise if the "worst frame" were to prevail in the media? If this worst frame were to be widely shared by the public and media? If it were—"contagiously"—to become part of the political agenda? If worst indeed came to worst, which consequences might the scandal have for the organization?

The frames having to do with failure and discrepancies typically used in reporting on NPOs, and German social welfare organizations in particular, are: opaque fraud-like activities, entrenched bureaucracy, corruption among social welfare organizations, wasted resources, a lack of oversight, and inadequate care provision. In addition, the question is regularly posed as to whether NPOs actually practice what they preach, i.e. the walk-the-talk frame.

De-framing/Re-framing

What does the worst frame look like? How do selection and structuring take place? Which aspects of the relevant information are ignored in creating the frame? Can the ignored aspects be brought into play and can they call the worst frame into question (de-framing)? What would an alternative selection and structuring of the critical information look like (re-framing)? Ultimately, the issue is ambivalence: How can multi-causality be (re-)introduced when mono-causality looms and, with it, an unambiguous assignment of guilt?

Story

As a narrative template, frames are an open form that lends itself to continuity and sequels. Scandals work well as a series. Conversely, crisis communication must focus on bringing things to an end—the point at which no additional (journalistic)

questions remain unanswered. The story shapes the information, de-framing/re-framing it into a closed form that offers completion and closure.

Protagonists

Who personifies the story in order to de-frame or re-frame it? Personification is a key factor determining whether a story is continued. The social aspects of communication are often underestimated, especially during crises, which is why a story needs a "cast." It is not always obvious who its players (protagonists) are. The content—not the organization's hierarchy—determines who communicates the content.

Timing

Scandals bring time to a standstill. Outrage arises from conditions in society and from characteristics exhibited by people. A scandal requires ignoring the fact that both society and people change constantly. Its tense is the present. Communicating in a crisis, on the other hand, means reintroducing the element of time, which structures the information in terms of past and future. Once again, the issue is ambivalence. The present loses its timeliness when considered between the past and future. Conditions and characteristics are structured over time and, according to the media's rules of perception, that robs an issue of its appeal now. Events overtake other events. People and conditions change within the temporal dimension. For scandals, time is lethal.

Case Study

No one needed to imagine what the worst frame scenario was in 2010 when Harald Ehlert was being investigated for fraud—it had already occurred. His organization's license to operate had been immediately called into question when the minister of social affairs decided to press charges. Given the wave of mono-causality that was rolling in his direction, his attempts to establish multi-causality were clearly futile. No one was willing to listen to him any longer. Everything he said, as creative as he was in expressing it, was bound to come across as justification. With him as protagonist, his organization became stuck in the worst frame scenario. There was no pope to pluck him from the mire and hide him in a monastery, no deus ex machina to separate the organization from the protagonist. In keeping with the method presented here, what was needed was someone else to take on the role of protagonist. The recasting should have happened in-house. A revolt by the organization against its founder would probably have sufficed to convincingly re-frame the situation. The only thing more effective would have been a street-level rebellion: If the homeless had shown solidarity with their most prominent benefactor, Maserati Harry would

perhaps not have failed, but would today be traveling the globe in business class as head of Treberhilfe International.

References

Bentele, G. (1994). Öffentliches Vertrauen – normative und soziale Grundlagen für public relations. In W. Armbrecht & U. Zabel (Eds.), *Normative Aspekte der public relations* (pp. 131–158). Opladen: Westdeutscher Verlag.

Burkhardt, S. (2006). *Medienskandale. Zur moralischen Sprengkraft öffentlicher Diskurse*. Köln: Halem.

Dahinden, U. (2006). *Framing. Eine integrative Theorie der Massenkommunikation*. Konstanz: UVK.

Elbe, M. (2018). Failure in public institutions – Characteristics of organizational culture in the military. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication, 43*(4), 415–432.

Kepplinger, H. M. (2005). *Die Mechanismen der Skandalisierung. Die Macht der Medien und die Möglichkeiten der Betroffenen*. München: Olzog.

Matthes, J. (2009). Identität und Vielfalt des Framingansatzes. In P. Schulz, U. Härtung, & S. Keller (Eds.), *Identität und Vielfalt der Kommunikationswissenschaft* (pp. 117–131). UVK: Konstanz.

Möhrle, H. (2004). Krisenintervention: Wenn Gefahr droht. In H. Möhrle (Ed.), *Krisen-PR. Krisen erkennen, meistern und vorbeugen. Ein Handbuch von Profis für Profis* (pp. 141–166). Frankfurt a.M.: Frankfurter Allgemeine Buch.

Nassehi, A. (2015). *Die letzte Stunde der Wahrheit*. Hamburg: Muemann.

Nock, L., Krlev, G., & Mildenberger, G. (2013). *Soziale Innovationen in den Spitzenverbänden der Freien Wohlfahrtspflege – Strukturen, Prozesse und Zukunftsperspektiven*. Berlin: Bundesarbeitsgemeinschaft der Freien Wohlfahrtspflege. Retrieved June 10, 2017, from http://www.bagfw.de/uploads/media/2013_12_17_Soziale_Innovationen_Spitzenverbaenden_FWp.pdf

Oliveira, E., & Wiesenberg, M. (2016). Von innen heraus: Vier Dynamiken der Legitimation von NGOs und Kirchen. In S. Huck-Sandhu (Ed.), *Interne Kommunikation im Wandel. Theoretische Konzepte und empirische Befunde* (pp. 105–122). Wiesbaden: Springer VS.

Pörksen, B. (2010). *Skandal!* Retrieved June 10, 2017, from https://chrismon.evangelisch.de/artikel/2010/bernhard-poerksen-skandal-4318

PwC. (2016). *PwC's 19th Annual Global CEO Survey, 'Redefining business success in a changing world'*. Retrieved June 10, 2017, from www.pwc.com/ceosurvey

Ramos, R., & Wehner, T. (2018). Failure in volunteer work – A call for strategic volunteer management. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Scheufele, D. (1999). Framing as a theory of media effects. *Journal of Communication*. Retrieved June 10, 2017, from http://www.phil-fak.uni-duesseldorf.de/fileadmin/Redaktion/Institute/Sozialwissenschaften/Kommunikations_und_Medienwissenschaft/Vowe/Forschergruppe/Scheufele_Framing_theory_media_effects.pdf

Schmidt-Deguelle, K.-P. (2004). Medienkrise und Krisenmedien. In H. Möhrle (Ed.), *Krisen-PR. Krisen erkennen, meistern und vorbeugen. Ein Handbuch von Profis für Profis* (pp. 41–45). Frankfurt a.M.: Frankfurter Allgemeine Buch.

Schumacher, H., & Salz, J. (2008). *Spenden eintreiben ist längst ein Geschäft für Profis*. Wirtschaftswoche. Retrieved June 10, 2017, from http://www.wiwo.de/unternehmen/unicef-affaere-spenden-eintreiben-ist-laengst-ein-geschaeft-fuer-profis/5351936.html

Stolzenberg, K. (2004). *Krisenkommunikation im Internet*. Magister Arbeit, Westfälische Wilhelms Universität, Münster.

Sußebach, H. (2010). *Der König der unteren Zehntausend*. DIE ZEIT. Retrieved June 10, 2017, from http://www.zeit.de/2010/27/DOS-Berliner-Treberhilfe/komplettansicht

Tesch, C. (2012). Verändern statt verhindern. *Sozialwirtschaft – Zeitschrift für Führungskräfte in sozialen Unternehmungen, 22*(1), 23–24.

Viertmann, C., & Woelfer, J. (2015). *NPO trust map – Measuring trust in the third sector*. Paper presented at BledCom Symposium 2015, Bled, Slovenia.

Wehling, E. (2016). *Politisches Framing. Wie eine Nation sich ihr Denken einredet – und daraus Politik macht*. Köln: Halem.

Wohlgemuth, C., & Bentele, G. (2012). Die Vertrauenskrise des deutschen Komitees für UNICEF – Eine Fallstudie zum Verlust öffentlichen Vertrauens im NGO-Bereich. In G. Bentele, M. Piwinger, & G. Schönborn (Eds.), *Kommunikationsmanagement. Strategien, Wissen, Lösungen, Nr. 6.33* (pp. 1–29). Neuwied: Luchterhand.

Wohlgemuth, C., Reimann, C., Bolder, E. C., Gebel, E., Grill, C., & Wölfer, J. (2013). NGO-Trust Index. Entwicklung eines Analysetools für das öffentliche Vertrauen von NGOs. In F. Bravo Roger, P. Henn, & D. Tuppack (Eds.), *Medien müssen draußen bleiben! Wo liegen die Grenzen politischer Transparenz? Beiträge zur 8. Fachtagung des DFPK* (pp. 117–137). Berlin: Frank & Timme.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Intercultural Cooperation

Sebastian Kunert and Jonas Schumacher

I meet Jonas Schumacher during his stay in Europe in 2017. While we talk, one of his German Board Members in Germany and one volunteer join us. They all are part of Masifunde,[1] a non-profit organisation offering educational programs to township children in South Africa. Since 2003, they are active in Port Elizabeth. For this commitment, Jonas Schumacher and his team were honoured several times including the prestigious Marion-Dönhoff-Award for International Understanding and Reconciliation.

Sebastian Kunert: *When you were in South Africa for the first time, did you as a German in South Africa experience a typical Clash of Culture?*

Jonas Schumacher: *Yes, several times. I was in South Africa for the first time in 1998 after I had finished high school. For almost 18 months I worked and lived in Walmer township in Port Elizabeth, a purely black, Xhosa speaking community. Never before had I dealt with an African culture, or the Xhosa culture in particular. I had not received any intercultural training or preparation of any kind. Looking back now, I am convinced I acted like an "intercultural sledgehammer" (*laughing*). Almost every day I must have found myself in situations where I behaved culturally insensitive—and all of that simply by behaving the way I was used to behave as an eighteen year old teenager in Germany: in the way I communicated, how I behaved in public, how I dressed, how I treated the elderly, how I interacted with younger people, the way I tried to build relationships with the people in the township—all of that I did exactly how I would have done it in Germany.*

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[1]masifunde.org and masifunde.de

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Sebastian Kunert: *And in return, how did you experience the people and their culture?*

Jonas Schumacher: *Well, I was constantly surrounded by people who seemed to behave rather weird. Without any intercultural training I had no other choice but judging people's behaviour and way of communicating through my German cultural lenses. According to my norms and values, I experienced many people as somehow dishonest, rather unreliable and often simply chaotic. It took me months to firstly realise and then to start to slowly understand the differences between our cultures. And the differences between the German and the Xhosa culture could hardly been much bigger. Firstly, I learned about the traditions and customs, I began to adopt some behavioural patterns of my friends and surroundings. I simply copied and modelled them. And even though it did not feel natural to me I noticed how I blended in better, relationships became more positive and my levels of acceptance increased.*

Sebastian Kunert: *Today, do you see something like this again, for example with your German volunteers who are in South Africa for a year or two?*

Jonas Schumacher: *The main difference is that today's volunteers receive intensive preparation. They undergo intercultural training in Germany, orientation days after arrival in South Africa and they have a mentor who assists them for example with intercultural translation. They arrive fully aware of potential cultural clashes. This obviously does not prevent such clashes but one is more aware of the cultural differences.*

When things are going smooth at work, cultural difference seem to vanish or the team—both local and international—are able to tolerate the differences and work together. It is usually when the workload is high, when things do not work as planned and when the team is under pressure when cultural clashes happen. Then my South African team experiences the Germans as stiff, uneasy, and often rude in the way they communicate. Many Germans in a situation like that tend to "explode" and vent. They must express their frustration and tend to generalise. One hears comments like "Nothing works here!", "It is total chaos!". The venting and direct expression of frustration can cause long lasting damage within a team, especially, when deadlines need to be met.

Several scientists addressed those experiences with studies, that aim to describe differences in human patterns of thought and behaviour using cultural standards (e.g. Hofstede, 1980; Inglehart, Basanez, Diez-Medrano, Halman, & Luijkx, 2004). One of the most mentioned aspects is time. Hall (1990), for example, defines monochron and polychron orientation: *In monochronic cultures, times is experienced and used in a linear fashion, prescribing a consecutive order in which specific action occur. This orientation demands a high degree of self-management in terms of planning and reliability on a personal level, as well as in managing public systems and structures, as in the public transportation system for example. Accordingly, monochronic cultures tend to have a lower tolerance threshold when it comes to changes in timing, scheduling and other interruptions. In contrast, polychronic cultures span many different levels in pursuing their intended communicative action, any number of which can occur simultaneously. This orientation requires a high degree of flexibility and consequently, individuals from these cultures tend to have a*

high tolerance with respect to time/schedule overlaps and interruptions. (Layes, 2010, p. 56).

Furthermore, Germans in particular are known for their direct communication and forthright conflict resolution style. In contrast to most other societies, they tend to be little diplomatic and at the same time not very vulnerable (Schroll-Machl, 2016).

Sebastian Kunert: *Does this often lead to the cancellation of volunteer stays or projects?*

Jonas Schumacher: *I cannot remember intercultural clashes causing such failures. More often, volunteers seclude themselves in their little "German community" and work amongst each other or carry out projects on their own to avoid the emotional stress and frustration often caused by cultural clashes. For many, to achieve on an operational level and to have the general feeling of success at work is more important than to succeed in intercultural cooperation.*

Sebastian Kunert: *Why is the cultural clash so emotional and potentially frustrating?*

Jonas Schumacher: *I think the most emotional part about it is that one arrives in South Africa with the perception of being absolutely liberal and tolerant. But in the moment of a cultural clash one tends to generalise, one starts to think that "all blacks or Xhosas are like this or that!". To notice or even express such thoughts is to some degree shocking and disturbing since these thoughts are ultimately racist and discriminating. It needs a lot of energy to unfold the cultural differences without judgment and without a Eurocentric worldview which might see the own culture as superior.*

That's why many simply back off, do their own thing and avoid the cultural confrontation to ultimately avoid such feelings. The interesting thing though is that often younger people seem to be abler to intuitively navigate and adopt in intercultural clashes. The older a person gets the more set in his or her ways one seems to be and the less flexible one gets interculturally.

Sebastian Kunert: *Let us move to the level of organizations. Do you see Masifunde as an intercultural melting pot? The many German expatriates, the South African staff and cooperation partners on site. How do you deal with the danger of failure?*

Jonas Schumacher: *We have no specific strategy to avoid failure based on cultural differences. We all simply get more experienced and learn to translate cultural clashes. The local Masifunde team knows "how Germans tick" and can be more accommodating and tolerant to integrate Germans in to the team.*

I would not describe us as a melting pot, since we do not become "one". I would rather describe us as a bowl of salad with many different colourful ingredients which do not melt and do not become one, but which all are needed to make the salad or the organisation respectively work.

The glue within our salad bowl of an organisation is our strong organizational culture which builds on our shared vision. We are working on something bigger and more important than ourselves. That connects us. If someone does not buy in to the vision and commits to it, then the person does not fit in, no matter if they are South African or German. Be who you are, behave culturally according to your

own believes, but go the extra mile for our ultimate goal—which is to initiate change within the impoverished communities of South Africa. This approach works very well for us.

Sebastian Kunert: *If we go up another level and look at your business landscape, do you observe other development aid organizations struggling? Do they fail?*

Jonas Schumacher: *In the development industry which still likes to send consultants and development aid workers to the global south, I see one regular pattern of failure. Frequently, NGOs or in general funders from the north which finance projects in the south send Europeans to assist within the project. The implementing partner in the south accepts the support, often not brave enough to say "no" since they depend on the funds, or they say "no" in an indirect manner which is not understood by the partner in the north. The development worker is then often considered to be almost like a spy and extended arm of the funder, an informer who could communicate internal information to the outside. They then ensure that this person stays "happy" and does not get a full insight of the real challenges. This leads to regular failure in our industry: frustrated development aid workers in failing NGOs.*

Sebastian Kunert: *How would you finally define intercultural failure?*

Jonas Schumacher: *I think you have failed if you are no longer able to see the beauty and potential within intercultural teams. If you are stuck in what you call the cultural shock, that you only see the negative and frustrating part of the other cultures. One can learn so much from one another and create amazing results if one makes use of the strengths within each culture.*

References

Hall, E. T. (1990). *Understanding cultural differences*. Yarmouth, ME: Intercultural Press.

Hofstede, G. (1980). *Culture's consequences. International differences in work-related values*. Beverly Hills, CA: Sage.

Inglehart, R. F., Basanez, M., Diez-Medrano, J., Halman, L., & Luijkx, R. (2004). *Human beliefs and values: A cross-cultural sourcebook based on the 1999–2002 value surveys*. Mexico City: Siglo XXI.

Layes, G. (2010). Cultural dimensions. In A. Thomas, E.-U. Kinast, & S. Schroll-Machl (Eds.), *Handbook of intercultural communication and cooperation – Basics and areas of application*. Göttingen: Vandenhoeck & Ruprecht.

Schroll-Machl, S. (2016). *Doing business with Germans – Their perception, our perception* (6th ed.). Göttingen: Vandenhoeck & Ruprecht.

Part II

Failure Beyond Companies

Failure in Consulting: Consultation Cannot Fail!

Karin Lackner

In Lieu of an Introduction: Anticipation of the Bottom Line

Consultation is a business of contradictions and flux. Consultation is relationship work. There is no right or wrong here. We are not dealing with logical causality, we are dealing with ambivalence, dilemma, paradox, or aporia. Contradictions need to be kept in balance. They are 'trapped' in a continuous process and cannot be 'resolved' by opting for one side of the contradiction and thus rejecting the other. We meet with scenarios of failure whenever we try to dissolve this ambivalence through one-sided decisions.

In all stages of consulting, the consultant faces necessary contradictions that logic cannot resolve. Diverse interests may be contained in the person of the consultant, the relationship with the client, the organizational context and last but not least in an ambivalent client/consultant relationship. The consultation process is shaped by conflicting needs, interests and issues, all of which are equally valid and can only be handled in conjunction, not in isolation.

Dependency and independence (freedom of choice), distance and closeness, guidance and uncertain, diffuse situations, confusion and security, setting, structure and open-endedness, approach, curiosity and appropriate depth, consultations that neutralize and obstruct one another.

In view of the contradictions consultants and clients have to face in a consulting process, we might very well pose the question whether it is at all possible for consultation to fail? If aporetically speaking there is no 'right' or 'wrong', but only differing yet justified interests which are 'accommodated' in a consulting process and are supposed to eventually lead to a solution, consultation cannot fail.

There will be both good and bad ends to a consultation, better and less good results. But the consultation was successful even when consultants think they have

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failed because a client broke off the consultation. A decision was made in the client system, there was some reflection about whether the consultation was promising and satisfactory, or whether it was a disappointment. A process of communication was set off, and in the course of this process a decision was arrived at by reflecting one's situation. Surely that is one of the goals of successful process consulting! So the consultation was successful despite having failed.

After a successful consultation, the consultants have made themselves superfluous. They are no longer needed. It is the task of consultants to recognize, support and develop their clients' strengths and potential. Or, to adapt an old saying: *"Behind every great manager there is a great consultant."* Once I have made my clients 'potent', I am superfluous, I must let the clients go (who are no clients anymore). This 'ability to let go' does not come easy to consultants. Consultants need a healthy measure of confidence, a good perception of their own person and a certain talent in self-presentation if they want to be recognized and respected by potential clients. They must make their clients feel that they, the clients, are in good hands with me, the consultant, and that I will not fall over at the first sign of headwind. It is not at all easy for such characters to accept their expendability in spite of a successful consultation. Consultants need to be able to bow out gracefully! And just so that this quality will not carry over into their private lives, every now and then consultants need a bit of consultation, too.

A certain measure of self-referentiality is thus part of the basic professional make-up. Consultants should have a good knowledge of their own needs and standards and be able to control them—which can only be done by way of continuous self-reflection. In order to keep oneself at a proper distance in a consultation and wholly concentrate on the clients and their needs, it is helpful to know one's weak points: What makes me seducible, what are my personal objectives (or even missions), when do I build up resistance?

Case Study

A colleague whom I highly respect and I collaborated on a consulting workshop which we brought to a successful conclusion—successful, that is, from our perspective. The client system might be graded a 'difficult' one.

There was a lot of resistance which mostly resulted from the clients' fears of one another. The clients' mode of resistance was 'taking refuge in humour'. There was a lot of wisecracking and laughter, every contribution turned into a joke, they made fun of each other. We as consultants joined in the laughter, it was impossible not to. However, there came a point when the laughter lost its hilarity and the jokes began missing their mark. In the end, we succeeded in working on the client system's challenging problems with a certain earnestness. We, the consultants, considered that a great success and thought we did really well. In the final session at the end of the last day of the workshop, we were served rather bland and neutral comments. We tried not to show our disappointment, because we had expected at least a little praise after all that hard work. Even after a summing-up talk over lunch we weren't able to let go of the consultation process and could not say our
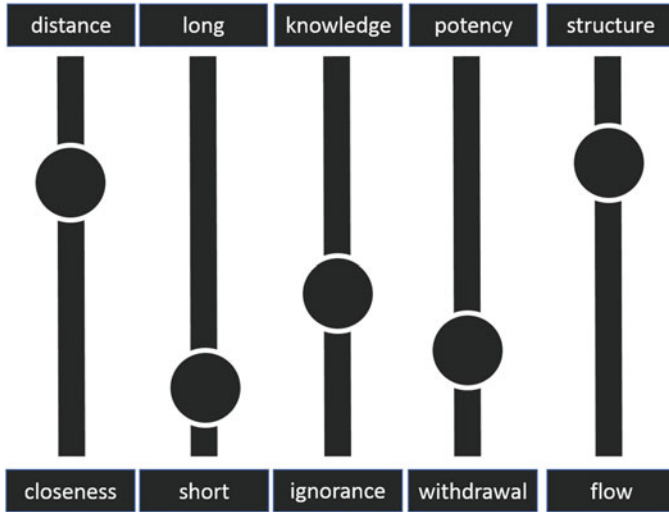
Fig. 1 Contradictions in consulting, which must be balanced

good-byes after the meal, as we usually do. It took a further three hours before we could leave. Not only did we consider the comments inappropriate—we were piqued, our expectations and our need for appreciation had been disappointed.

If whoever uses the term 'consulting' in an everyday conversation one can be sure that the other person knows exactly what you are talking about. Consulting is common knowledge. Almost everyone has experienced consulting as a friend, as an employee or as a client. Academically speaking, however, the term consulting cannot be explicitly defined. Especially, if one tries to find the one and only method how to conduct a consulting process no unambiguous assignment will be found. Rather, the theoretical as well as methodical 'lining' of consulting refers to different mindsets and theories. The consequences are that in this domain we are dealing with contradictions rather that logical reasoning in an 'either—or' mode. These contradictions have to be balanced according to the subject. Hence, in consulting the client—consultant relationship is in permanent flow smoothly sliding between two poles in an 'as well as' mode (see Fig. 1).

In the following article, I would like to go into some of the aporia, dilemmas, paradoxes and antitheses that govern consultation, naming and discussing these contradictions.

Customers and/or Clients: The Inversion of Dependency

Consultation starts with a leap of faith in a relationship that is going be formed during the consultation process—or perhaps not. Consultation relationships are indeed shifting asymmetrical relationships whose balance must be created in the course of the consultation process. In accepting the consultation situation, clients surrender their autonomy. They are no longer solely responsible for their problem but rather delegate responsibility to the consultation. Many a client would indeed much prefer the consultants to appropriate and solve their problem and release them from the consultation problem-free. But that kind of consultation success does not come without side effects.

The relationship between consultants and clients is characterized by a dependency inversion. At first, while soliciting, consultants are dependent on the client system. Before a consultation agreement with the client system has been signed, that is to say without an official assignment, the client is a customer to me.

In such acquisition phases, consultants are tenderers. As tenderers, the consultants are dependent on their potential clients. Once the contract has been signed, customers become clients. The dependency relation is now inversed: The new client puts himself and his problem at the mercy of their consultant, hoping that he or she has made the right choice. At the same time, clients and consultants are supposed to meet at eye level. How is that supposed to work?[1]

A participatory working bond between clients and consultants thus moves in a dialectic opposition of liberty/independence and loss of liberty/dependency.

And, to make matters even more complicated, the balance changes in the move from customer to client. Autonomy, if defined as self-government or self-regulation, is then a state only created through managing these reciprocal dependencies by way of the consultation process.

So, my services have been requested and I have agreed, I have accepted the offer. There are certain 'dangers' lurking even in this decision. I know that I have been given the assignment, but I do not know how it is going to be formed. Maybe I have misjudged the assignment, maybe I have let myself be seduced by the clients or by an exciting, challenging subject. Maybe my vanity was tickled by the clients' prominence and I envisioned further attractive and profitable assignments following in the wake of this one. In the actual consultation, the assignment then turned out to have much wider dimensions and to reach much further into the organization than I had assumed at first. (Without my back-up network of colleagues, I would have been well and truly stranded.)

One might also suspect a certain sloppiness in the contracting meetings, because a more intense investment in the process might have saved me from surprises.

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[1]The dependency inversion addressed here is discussed at greater detail in Lackner (2013).

Success and/or Failure: Who Decides the Outcome?

In consultation, there is no clear distinction between success and failure. Much is decided by the viewer's perspective. A consultation that has failed in the clients' view may very well be seen as successful from the consultants' perspective. By the same token, a consultation that has failed in the consultants' view may very well have supplied the clients with fruitful impulses.

This is because any kind of contact with the consultants already constitutes an intervention in the system—even contacts that have not yet taken place but have merely been announced. Such an announcement will inevitably lead to conversation among affected employees and thus at least to thinking processes and a more or less animated discussion of these thoughts. One might say that the mere words 'consultation', 'supervision' or 'coaching' constitute an intervention whose effect remains unknown for now.

Any beginning from a set of beginnings involves the risk of an indefinite number of possible mistakes. But as a consultant, I can never be sure that a supposed mistake (in my view) is not perceived as helpful intervention by the client, or vice versa. Thus, a brilliant (in my view) intervention might meet with incomprehension, rejection, or resistance in the client system. Or, a third possibility: A remark not intended as an intervention resonates with the client system in an unpredictable way that benefits the consultation process.

Methodology and Flow: Structuring Laissez-Faire

Methodological Handles

Consultants usually bring a plan and a repertoire of methodologies and standard interventions to their work. Such things are learnt in various relevant courses of training and further education. My bookshelf is filled with methodological instruction, diagnostic tools and bullet-pointed how-to lists. I need all these props of consultancy that I have learnt and collected, they provide me with handles in unfamiliar situations with unfamiliar people in unfamiliar settings. And yet it is this exact unfamiliar situation that demands more of me than merely applying methodologies I have learnt. Each consultation is unique, each client is unique, each consultant is unique. An individual, creative, situation-adapted intervention will not necessarily correspond to the clean, professional and methodological procedures laid out in textbooks. So we have techniques, methods, tools and skills for consultation on the one hand. We use these as handles for professional action in consulting. At the same time, these handles obstruct professional action if they serve to obscure our view of the history of the client/consultant relationship. If I let go too much, I lose my grip. If I hold on too hard, I lose contact with my counterpart. The more routine and experience I acquire, i.e. the more professional I become, the less need will I have of my handles: In the textbook sense, I am turning non-professional.

The Order of Space and Time

In consultation, space and time are determined by the setting. A transparent and structured process conveys a feeling of security in an uncertain subject on unknown terrain. Keeping up this kind of frame allows for appropriate depth in the intervention, for just the right degree of irritation to jolt the system out of its own logic without making it fall apart. For all participants, consultations are situations beyond 'normal' routine or procedure.

And since nobody knows what the exact outcome is going to be, the situation is diffuse. Diffuse situations are frightening, but also offer the pleasurable sensation of embarking on an adventure. Between these poles of fear and pleasure (Balint, 1972) lies the possibility of change and development. Too much fear will block things, too much pleasure will make things stray too far from reality.

Free-Floating

My greatest successes in consulting came about when we managed to integrate both sides of the contradiction: To experience a 'consultation flow' within the boundaries of a set framework. Flow describes a side of consulting that is hardly ever written about, which cannot be measured and is not compatible with conventional academic paradigms. This is the down side of a systematically structured profession: The 'incidental music', the uniqueness of a consultation process is irreproducible. The 'vibrations' in a consulting process, the fascination, cannot really be put in words and set down in statistics. There are no key phrases, maxims or mnemonics for this phenomenon. These are transitory moments in which we may be "senselessly happy" (Bischofberger, 2010). Many of these inexpressible phenomena that cannot be described in academic language are reflected outside of standardized and recognized consulting practice, such as in a philosophical talk, a philosophical practice.

A former Olympic champion in dressage riding whom I was allowed to interview about her victories and her recipes for success, described this flow as follows[2]:

"In the top segment among the last ten percent of the best, there is hardly any difference in technical and methodological achievement. To put it another way, the top ten all have the technique down pat. In dressage, besides other relevant factors, the relationship of rider and horse is crucial. How well you are synchronized and attuned to each other. The crucial element for victory is a moment—my interviewee called it a sensation—when 'everything clicks'. One cannot describe the why and wherefore, because it is just a sensation. It is not possible to train for a repeat of this sensation. Any such attempt will block the sensation. Much better to employ practices of surrender, of trusting in the sensation happening again. Relax instead of trying, let go instead of cleaving to technique."

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[2]See also Freimuth (2018).

For this, you need the security of being fully proficient in what you do. Anyone who cannot ride will seek in vain for the feeling of perfection and rather strive to at least stay in the saddle. I can only let go of the handles once I do not need them anymore, once I have mastered them.

In 1992, Csikszentmihalyi (in Allmer & Schulz, 1998) gave a name to this phenomenon: He calls it "flow". These are moments when effort becomes effortless, when everything runs smoothly, when time, space and movement become one. You cannot possibly tell how it was achieved—it just happened. For many people, this is reason enough to strive for this moment of happiness over and over again. In the flow, time is suspended. It allows us to linger in the moment of happiness that we feel when we are wholly focused on something, floating in a state that blanks out all other perceptions and sensations.[3]

In a consultation that goes beyond staying rooted in methodological procedure, clients and consultants sometimes experience that flow. The client-consultant relationship is so finely attuned, so perfectly calibrated, that there is a sense of common experience. Space, setting and structure fade into an insignificant backdrop, time seems to take its own course. At the end of the consulting session, one emerges from a far-off entity back into everyday life—sometimes regretful that time has put a stop to the sensation. These are the happy moments in a consultant's life. Success that cannot be measured. This cognitive process is assisted by what we call analogue intervention which is aimed at the creativity and emotions of the persons involved.

Distance and Closeness: The Affection Trap

One of the elements of professionalism in a consulting process is to create a balance of closeness and distance between consultants and clients and then 'cultivate' that balance. By 'cultivating', I mean that I need to take care to bolster whichever side is the weaker one in that balance. Any one-sided tilted position will have a counterproductive effect on the consultation process. Broken down to the relationship level, I believe that the art of consultation consists of letting oneself get involved on the one hand and keeping up a sufficient distance on the other hand not to lose sight of the relationship. I am being quasi authentic, so to speak, and then again I am not. In this sense, consultation tools serve to keep a distance between the people involved so as to avoid their becoming so close in their relationship as to be confluent. The passion of the joint thinking you let happen without actually merging with each other bestows a certain quality on a consultation that no tool could.

Consultants are instruments of their own actions. A consultant's effect on clients, the reactions they trigger, are a factor of influence in the consultation. Consultants must be conscious of their impact. They are professional figures within in the consultation, but they are also characters in their own right. So, one of the major tasks for consultants is the integration of authenticity and professionalism.

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[3]The flow experience addressed here was already discussed in Lackner (2013).

Too Much Distance

With too much distance, I will not be able to connect with the client system. I will not be able to empathize with the clients' emotional aspects. As a consultant, I am a seismograph for various kinds of vibes. Be it the mood, the concern, the tenseness of an individual, the atmosphere of the social structure I am working with as a whole, or the culture of the organization context—as a consultant, I must be able to identify these dispositions. I must also be able to discern whether these dispositions stem from the client system or whether they are in fact mine, with a base in my personal biography. I must know whether I am serving as a soundbox for the clients, or whether my personal past has just taken up with me and is being projected on the clients.

In reverse, clients might also be using me to get rid of their own uncomfortable feelings and awkwardness. They might then project their feelings of inadequacy on myself and attack me. Psychohistory (deMause, 1989) speaks of a 'poison container'; psychodynamic theory speakes of projection. The consultant's maxim should be: Never take things personally. When during my schooling I complained that the clients treated me like a prostitute, one of my 'masters' said *"You may be anything to a client."* And he added *"Consider what it says about the clients when they treat you like that; maybe they are feeling just like you are now."* I then used to picture myself as a mirror in which the clients saw their own reflection.

Too Much Closeness

If one is too close to the client system, the affiliation can obstruct the consulting process. I, the consultant, lose my perspective as an observer—both of myself and of the client system. I run the risk of becoming part of the client system. The temptation is great. Especially when sympathies emerge, when both parties feel they are tuned to the same wavelength, none of the persons involved wants to leave that wave. But this seemingly harmonious accord would be upset immediately should I bring other perspectives into play in my role of consultant, or worse, ask critical questions. With all this confliction I could not be clear anymore and would cause more confusion in my clients than I should. If clients could choose, however, they would much rather work with a consultant who agrees with them, even while knowing it to be the very thing that will not help them. All of a sudden, consultants start feeling responsible for the decisions made in the organization and begin to take an active part in these decision-making processes. That way, a lot of required distance is lost.

Primary Frustration and Secondary Satisfaction

During and immediately after a consultation process, the consultants' need for closeness remains unsatisfied. There is no primary satisfaction of needs. Consultants have to make do with a 'secondary contentment', knowing or sensing that they have

done a good job, that they have supported the clients. I refer back to the incident in the aftermath of a difficult workshop with difficult clients I mentioned at the start of this article. We had to put off our departure from the seminar location by almost half a day to 'lick our wounds' because we were unsatisfied with the feedback.

Consultants may be motivated by a primary need to help, narcissistic gratification, gain of knowledge or a desire for applause. If let loose, these needs may harm the consultation process. Clients are then simply a means for gratification purposes, and consultants who are thus unbalanced will hardly have the clients' problems at the centre of their attention. On the other hand, one must admit that it is unthinkable to be a consultant without a certain measure of just these traits. Consultants are people out on a limb who like being at the centre of attention (otherwise, no one would listen to them); their desire to help should only just be great enough to be able to let go after the consultation is over, confident that the clients will now be able to handle the situation on their own. Consultants do not simply make sure their clients are able to work, they make their clients potent. The potency of consultants thus lies in making others, their clients, potent. For this withdrawal from the spotlight (in which they leave the clients to stand and sparkle), consultants need to be conscious of their roles, their functions, and their ego strength.

How Much Longer? How Much Consulting Can One Take?

In his MA thesis, André Schröter (2014) explores how long supervisors stay in organizations. Organizations work with the same supervisors over long periods of time. The average length of supervision relationships lies between 2 and 6 years. Supervisors were found to stay with an organization for periods of up to 14 years. I was surprised myself at the frequency of such long working partnerships.

I, too, have experienced long client relationships in my own consulting practice. In some companies, I worked for several years. There were advantages: The organization and its culture, idiosyncrasies, processes, decision makers—all of this was familiar, I didn't have to ask any questions.

Change was more frequent in the executive personnel than in the consultants—and knowing more about the organization than a newly hired executive indeed supplied the consultants with an advantage. I often asked myself at which point I'd stop being a mere consultant and become part of the company. My vision had become blurred. The carefully adjusted balance of distance and closeness was in danger of being upset. In perfect adherence to Max Pagès' (1974) theory of the development of the joint feelings that are developed and shared in groups, a sense of affiliation with the clients emerged. There was a mutual feeling of sympathy. Thus, I ran the risk of letting myself be drawn too far into the client system and neglect the distance which is necessary in consultation. Also, it became increasingly difficult not to take part in decision processes.

At the same time, the increasing affiliation made the client system depend on my consultation. This gradual process of increasing mutual dependency was further

supported by the consultant's economic interest in not giving up a secure source of income voluntarily.

Again, reflexion helped to recognize this process and to find a way out of the consultation in cooperation with the client.

Knowledge and Ignorance: Searching for Information

No consultant will go into a first meeting with clients without some preparation. Information about the clients' field, organization structure, product or services can be found on the web, and will be called up and studied. Sometimes industry experience helps, the consultant already knows his or her stuff. But industry experience can also be obstructive. Knowing an organization's or company's products and structures might suggest that you know everything, and get in the way of the curious gaze for what is special about the clients you are to consult. Again, a balance must be achieved. I cannot keep asking for information in the consultation process—sooner or later the clients will get impatient and question my competence. But if consultants do not ask any questions at all, the other side might read that as a lack of interest. Curiosity is thus a necessary element and a constant companion in the process. Consultants who have lost their curiosity due to experience and routine deprive their clients of important processes of experience and cognition.

Searching for Information: The Curiosity Drive

Seen from a behavioural perspective, curiosity is instinctive behaviour that helped our ancestors to survive (anthropologically speaking, we are set back by 3.5 million years).

Nomadic tribes had to keep exploring their surroundings in order to identify potential dangers in time. Once the relevant information had been ascertained, the curiosity drive was satisfied, and the information-seeking behaviour stopped.

Presumably our ancestors, just like us, would not willingly expose themselves to a dangerous situation. So behavioural science speaks of pre-programmed behaviour, or behavioural disposition. Man is a product of evolution, governed by a distinct system of drives and instincts. At the same time, however, man is also a product of the views, thoughts and conclusions about himself in which he can engage. Human beings may reflect on their dispositions and decide whether to follow them or not.

A well-balanced interplay of drives to be satisfied (drive strength), stimuli (trigger mechanism) and appetence behaviour was intended to maximize the chances of survival (cf. Lorenz, 1978; von Cube, 1997). The law of dual quantification says that a compulsive act—in our consultation scenario, the curiosity drive—is triggered when there is a high drive strength. The organization's need for change is urgent and inevitable. The organization is forced to accept the risk of a change process with an uncertain ending. In this case, a mild stimulus will suffice to trigger the respective behaviour. The organisation will e.g. opt for consultation.

If, on the other hand, there is a strong stimulus (e.g. a change in market conditions, competing suppliers who can market their product more quickly, slumping sales, political decisions resulting in need for action), a low drive strength will suffice (we do not really want any changes in our organization right now, but outer pressures force us to make some).

If there is an imbalance of stimulus strength and drive strength, there can be unintentional learning effects in the organization. If there is neither a strong stimulus nor a strong drive, but the organization keeps staging change after change just because it seems opportune, their sensitivity for organizational acting and operations may become blunted. In my long years as a consultant in financial services companies, I have experienced several waves of IT-supported programmes for risk evaluation and minimization in financial transactions. Decisions about loans were taken out of the employees' hands. Reactions were ambivalent. On the one hand, the IT system offered security. The employees did not have to make any effort or take on personal responsibility in deciding about a loan. On the other hand, they felt degraded in their expertise. They were robbed of the pleasure of getting their teeth into a case and employ their knowledge and experience to contribute to the solution. An exciting challenge turned into boring routine. This constellation entails the danger of a certain blunting, of becoming used to risk.

Another finding of behavioural science which is directly linked to the law of dual quantification is about what we call appetence behaviour. This behaviour is marked by actively looking for trigger stimuli once the drive strength rises (i.e. not waiting around until the horse has bolted). The important thing is that appetence behaviour is associated with effort. Consequently, searching for information and a need for risk minimization and orientation will be right at the top of the agenda in a consultation process.

Applying this regularity to consultation processes leads to certain consultant attitudes. Clients need to be aware of their problems to a certain extent and must accept their need for consultation. The problem or topic addressed in the consultation should be relevant for the organization. (I mention this because clients sometimes do not approach us with the actual problem, but rather choose surrogate issues. It is only in the course of the consultation process that we find out the real matter at hand is a completely different one.)

Staying in the thought pattern of behavioural biology, 'cultivating' sufficient appetence behaviour is part of my tasks as a consultant. I must not anticipate solutions, or rather, I must take care not to make it too easy for the clients to work out solutions. They must be able to feel their success, their triumph in having come to grips with their problem. I will not spare them the necessary effort.

"Achievement as effort with an explorative component, as coping with tasks, solving of problems, mastering of risks, as turning uncertainty into security, as flow, is rewarded with pleasure: the pleasure of the security drive. Evolution has programmed us for effort, not for the land of milk and honey. But evolution also rewards us for that effort: Through the pleasure of drive satisfaction" (von Cube, 2001, p. 5).

In my role as consultant, I have to keep remembering this insight. After so many years of consulting organizations and coaching, I sometimes tend to make hasty assumptions. I feel that I can see the specific core of a situation, be it a problem, some other issue, or a certain interplay of various factors, more quickly than my clients. To give feed-back too quickly, speak out too early, would cut short appetence behaviour and save time, but would leave my clients' curiosity drive unsatisfied. Of course, I could fall back on the methodology of solution-oriented consultation and tell myself that I should not be interested in the problem as such. But then it would need strong curiosity drives and stimuli on the clients' side in order to keep up their appetence behaviour, their active search for a solution.

Again, I settle for a balance between irritation, exploration and support.

Variety of Consultation and/or Exclusive Consultation: Consultation Failing Because of Consultation

I will provide two examples.[4]

Case Study

In a large organization in the social sector, employees who are faced with stressful situations in their job practice are supported by receiving regular individual supervision. Newly employed executives receive additional individual coaching. There were two consultation requests from this organization: The first was in relation to one of the teams. There was some 'disquiet', as the clients put it to my colleague who was to take over that consultation. The second request was related to the executive team. They were supposed to solve and decide lots of questions relating to the organization, but nothing was happening. They never discussed pertinent issues. Instead, they had established a highly appreciative way of dealing with each other, and an inoffensive, hypocritical conversation culture. An analysis of the situation revealed the following picture: All important topics relating to either the team or the organization were discussed in the individual supervision or coaching sessions. Whatever came up in the meetings of the executive team were thoroughly thought out views on the results of the individual coaching. This romanticized presentation lacked any kind of energy or emotion. Critical situations that the organization or team were facing suddenly appeared quite harmless, so that I began asking myself what exactly I as consultant was supposed to do here. Instead of the five executives, there were in fact ten people sitting around the table. Their respective coaches were invisibly hovering in the background. Productive work did not start until we agreed on the individual supervision and coaching being suspended for the period of the consultation. Only then were the actual conflicts and misunderstandings, conflicting interests and contradictions brought forward and could be dealt with.

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[4]The episodes of the first example were already discussed in Lackner (2008) and Krainz (2008).

Another example demonstrates the reluctance of an organization to implement the results and measures arrived at in a successful consultation process.

Case Study

In reply to the consultant's summing-up question what their next steps were going to be, who of the people present would take on responsibility for which issues, and by which date this was going to happen, the clients stated in perfect agreement: *"Well, first we'll be going into supervision and reflect the results."* A novel way of putting off necessary organizational decisions. In that case, I advised the client system to suspend supervision and consultation, to 'go to work', and only sum up and reflect the results after successful implementation. Breaking off this consultation was not only a clear ending, but also a final intervention.

Too much consultation is just as unproductive in my view as no consultation at all. Again, a balance must be achieved.

Can Consultation Fail?

If a consultation process means successful joint mastering of conflicting situations, then consultation cannot fail. It might, however, lose its balance in a contradictory milieu. But if we do speak of failure, then that failure is the result of interpretations by the parties and/or systems involved. Clients might be dissatisfied with the result because what they had imagined could not be achieved. When consultation is 'decreed', taking place against the will of the individuals and/or groups involved, failure is inevitable. I would not speak of consultation in this case but rather of a compulsory measure decided upon by the organization. Consultation can also founder because of the organization if necessary consultation steps are not commissioned. Cancellations are not always due to resistance in the system, sometimes they simply do not have the money.

The minimum requirement for consultation is an opportunity for reflection and analysis, and the possibility to discuss one's own situation and oneself. It is impossible to foresee how such a process will turn out. The effect of the consultants' interventions may only be measured by the clients' reaction. Which is to say: Failure in consultation can usually not be observed objectively, it rather lies in how the process is evaluated from the observer's perspective. The success of consultation interventions does not always show immediately. Some interventions have a delayed effect and only show their potency at a much later point in time.

References

Allmer, H., & Schulz, N. (Eds.). (1998). *Erlebnissport – Erlebnis Sport. Brennpunkte der Sportwissenschaft*. St. Augustin: Academia Verlag.

Balint, M. (1972). *Angstlust und Regression*. Reinbek: Rowohlt.

Bischofberger, N. (2010). *Sternstunde Philosophie: Denken fürs Leben – Philosophische Praxis*. Broadcast on 3sat TV on 27. June 2010, 11:00 a.m. Retrieved June 10, 2017, from https://www.srf.ch/play/tv/sternstunde-philosophie/video/sternstunde-philosophie-vom-27-06-2010?id=d4216519-b7aa-48d8-b5eb-f09ad2c12f43

Freimuth, U. (2018). Failure in sports. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Krainz, E. E. (2008). Supervision – Beratung mit beschränkter Wirkung. *Supervision, 2*, 22–30.

Lorenz, K. (1978). *Vergleichende Verhaltensforschung. Grundlagen der Ethnologie*. Wien: Springer.

deMause, L. (1989). *Grundlagen der Psychohistorie*. Frankfurt am Main: Suhrkamp.

Lackner, K. (2008). *Beratungsillusionen*. Supervision, 2, pp. S. 6-15.

Lackner, K. (2013). Die zweifelhafte Verlässlichkeit methodischer Haltegriffe in der Beratung. *Soz Passagen, 4*(1), 131–146.

Pagès, M. (1974). *Das affektive Leben der Gruppen*. Stuttgart: Ernst Klett Verlag.

Schröter, A. (2014). *Wann ist es Zeit für einen Supervisionswechsel?* Unpubl. MA thesis, Universität Kassel, Kassel.

von Cube, F. (1997). *Fordern statt verwöhnen* (9th ed.). München: Piper.

von Cube, F. (2001). Fordern statt verwöhnen – Lust an Leistung. Beruf Schulleitung. *Zeitschrift des Allgemeinen Schulleitungsverbandes Deutschlands*. Retrieved May 5, 2015, www.zfi-gruenberg.beepworld.de/files/fordernstattverwoehnen.pdf

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Failure in Coaching: Between Professional Craft and the Art of Creating a Relationship

Thomas Bachmann

Introduction

The following chapter examines the failure in, and the failure of, coaching processes. To do so, coaching will first be defined as a form of consulting in a professional context, and categorized according to its specific nature which lies between that of a technical skill and the art of relationships (Buer, 2012). The relationship between the coach and the client will be paid special attention since it is: the prerequisite for, and the result, of good coaching; as well as the foundation and source of learning and change. Of course, in a way, failure also plays a special role here as an opportunity for learning and reflection. Finally, this chapter will examine the different expectations of what coaching could accomplish; the different constellations of coaching processes; and the different perspectives of stakeholders in the context of organizations. After all, what one may consider a failure could be seen as a resounding success by another.

Professional Coaching in Organizations

Since the first few publications on coaching for managers and executives appeared in Germany in the 1990s (Böning, 1989; Hauser, 1987; Looss, 1991), coaching has quickly become widespread, and has come to play an integral role in the professional and business world. There is almost no company or organization that does not collaborate with external coaches or has not established internal coaches. Despite

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175

its enormous proliferation and the many providers and consumers of coaching, it is only today—around 20 years later—that a certain homogenization characterizes the professional coaching market. The leading coaching associations in Germany recently agreeing on unified standards (ManagerSeminare, 2015) could be seen as a first step in this direction. Despite this, the degree of diversity is still great. It remains difficult to define the boundaries of coaching since market participants are rapidly creating new offers or shiny new "fusion" coaching methods (e.g. health coaching, parent coaching, life coaching etc.). For the field of professional coaching, especially in the context of professions and organizations, coaching can be described relatively clearly as process consultation for persons with primarily leadership and management roles for the clarification and shaping of their professional roles and positioning relative to and in the organization by a professional coach based on a trusted relationship and with the help of specific and elaborate methods (for other definitions, see e.g. Rauen, 1999 or the German Federal Association of Executive Coaching, DBVC, 2012). In this case, unlike expert consultation, process consultation does not refer to the "selling" of a concept for action or expertise to clients based on a diagnosis. Instead, it initiates a relationship-based process of support, clarification, and advice. The final goal is to help the client help themselves (Schein, 2000). Hence, the process responsibility, i.e. the manner in which advice is provided and its methodological design lies with the coach. The structural responsibility, e.g. basic spatial-temporal and financial parameters also lie with the coach, but above all with the party who commissioned the coaching (when this is done in the context of an organization). The responsibility for content and/or results, however, lie exclusively in the hands of the client (Bachmann, 2012a; Schein, 2000). Therefore, the objective of coaching is to strengthen and to expand the self-directional capabilities of the client so that he can develop new possible courses of action; based on a robust and trusted relationship through suitable interventions of cathartic, catalytic, supportive, prescriptive, informative, or confrontational nature (cf. Looss, 1991). The main function of coaching is therefore to provide the client with second order observations about how he is observing the problem.

What distinguishes it from other forms of consultation is that coaching is explicitly not to be understood as individual training, management from the background, conflict mediation, expert consulting, organizational consulting, couples counselling, life coaching, therapy etc. (DBVC, 2012), but may contain elements of all these formats and/or individual sequences in a coaching process and may be very similar to these forms of consulting.[1] Thus, whether something can be classified as coaching depends on which format is primarily used, and what the actual focus is. Furthermore, it is important to mention that coaching does not necessarily have to take place in a one-to-one setting. Multi-person settings with e.g. two CEOs, a group of management executives, or a team, are also part of coaching. The line between coaching and organizational consultation is fluid, and all but impossible to discern. Therefore, it is possible that during coaching with a CEO, his role as a manager is the

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[1]See also Lackner (2018).

focus of one session, while the next session touches on strategic issues relating to the company (for more on this, see Bachmann, 2012b).

From an economics perspective, coaching is part of the service sector. Greif (2014) describes coaching as a service that is difficult to quantify and examines the problematic issue of using the term "service" to refer to coaching. As opposed to "conventional services", such as window-cleaning or the cutting of hair at the barber, coaching and its related formats, such as therapy, consultation etc. are co-created intangible services, which can only arise under the active participation of the client. Thus, what is required in this case is not just simply letting the window cleaner into the house and clearing the window sill for him to work, or sitting down on the barber's chair and keeping one's head still, but active participation on the part of the recipient of the service. The results and/or service are only generated through interaction. This is a very important aspect that applies to failure in coaching; it makes it clear that the responsibility for the prerequisites, and the achievement of a result or a coaching objective—however it may be defined—is ultimately distributed across all coaching participants. This applies to coaching in the context of organizations, in other words, to the client; the coach; the party who commissioned it (i.e. the client's superior); any other personnel representatives who are involved; as well as the organization as a social system with its own specific decision-making premises (Luhmann, 2012) and its culture (Schein, 2010).

The term "service" also implies that a service provider performs a service for a client. This results in an unfavourable definition of the coaching relationship, which calls up associations of "activity and passivity", "delivery and receipt", and "commissioning and acceptance" for the parties involved who categorize coaching according to this context. In the worst case, the client simply lets things happen, and behaves as a "visitor" (De Shazer, 1998), and the coach is pushed into assuming the role of an "instigator" who needs to "crack", "convince", or otherwise use sophisticated methods on the client (Bachmann, 2011). This reversal of relationships due to the definition of "service" has a negative impact on the coaching context and shifts the main activity—the interest in effecting change (at least that which pertains to the interaction between coach and client)—to the wrong party, because the motivation for change has to come from the client. This situation is often exacerbated when the coaching process is recommended or mandated by superior executives or as the result of an assessment process such as management audits and/or 360-degree feedback. In such a case, the client is viewed as an object through the rational, purpose-oriented logic of the organization, an object which needs to be improved in some manner, and is therefore robbed of his autonomy as a subject who acts on his own, at least at the level of observable behavior. Not trusting, refusing to join in, examining, testing, and questioning are then what typically characterize contact (Lellinger & Bachmann, 2016) in such situations.

Interestingly, it is exactly the opposite that is necessary for the "success" of coaching. One could even say that it is in fact the client who needs to "perform"; namely, to open himself up to another person, to reflect on, examine, and re-invent himself. The goal is to leave the infamous comfort zone, sometimes even permitting uncomfortable realizations and emotions; to face things one has repressed; and often to also consider unknown or even risky possibilities, in doing so, reinventing one's

own role, one's own career, as well as the related social relationships. This often highly intensive process of learning and feeling can certainly be viewed as a coaching achievement. Hence, the economics definition of "service" is inadequate for what happens in coaching, no matter how sophisticated it is (also see Looss, 2014).

Relationships, Multiple Perspectives, and Context in Coaching

Two main trends can currently be observed in the development of coaching (Bachmann, 2015a). On the one hand, coaching is seen as a method or a tool, which means that almost anyone can coach another person when the right tools are used. This understanding of coaching is found in the English-speaking world, but also in the more technically oriented spheres of trainers and consultants in Germany. The NLP scene is an example of this. Here is where the hobby craftsman analogy comes in. All the required tools and the corresponding instruction manuals can be purchased at the hardware store. This, however, does not always bring the desired level of success, and most of the time, the important tasks are ultimately left to the professionals. This situation is comparable to management executives, teachers, colleagues, or other persons applying coaching methods. Some things work very well, but not others. Personality, interpersonal interactions, and contextual influences are too complex; the tools alone do not equal coaching. After all, having purchased brushes and paint does not make one a master painter (for a more detailed discussion, see Eidenschink & Horn-Heine, 2007). Professional coaching is not simply using the tool "coaching", but instead, acting with professional skills based on elaborated know-how; evaluated experiences; tried-and-tested methods and techniques; professional ethics; and the corresponding professional and quality standards (cf. Schmidt-Lellek, 2012). As described in detail above, coaching is more complicated than "simple" services, and this once again underlines the importance of a professional coach who's most important task (and at the same time his greatest challenge) is to establish and create a sustainable relationship with another person that allows for learning and development. Like other relationships of "impossible" professions (Freud, 1937), the coaching relationship exhibits several special characteristics:

1. Coaching is based on a purpose-oriented relationship. The clarification of an issue; advice regarding an endeavour; or the achievement of an objective are at the forefront—not the intersubjectivity between the coach and the client, which is however necessary for good coaching.
2. The coaching relationship is of a limited duration, designed from the outset to function within a certain period of time and for a certain number of time windows for interaction (i.e. coaching sessions). This means that intimacy arises (or must arise) relatively quickly, and only a certain number of topics can and should be focused on.
3. Remuneration is received for the coaching relationship but not in the sense of payment in exchange for performance, because coaching may result in absolutely

no change or a world of change for the very same fee. The fee is a "payment of honour" and is paid for the professionalism, qualification, and experience of the coach, regardless of the results.

4. A coaching relationship is a solitary relationship; i.e. the coach and client do not have a relationship with each other in any other context. This point is of particular importance because contextual overlaps, above all in organizations, can have a massive influence on coaching; e.g. when information from other contexts flows into the coaching relationship or the party who commissioned the coaching expects evaluations to be carried out as part of the coaching process. This is the case when management executives attempt to coach their employees, or internal coaches have to consider the specific interests of the organization. Similarly, relationship confusions may also influence coaching, because some clients or coaches may mix up coaching with friendship, a teacher-student relationship, or a relationship with a supplier etc.

5. Coaching requires intimacy and trust. This means that the coaching relationship is shielded from the outside, and trust can grow throughout the interactions between coach and client. This trust is the most important quality of the relationship, and from the client's point of view it can occur when he experiences the coach as a professional counsellor who can be characterized by competence, benevolence, and integrity (Mayer, Davis, & Schoorman, 1995).

6. A multiple reciprocal distribution of roles arises between the coach and the client in the coaching process. In this regard, the different areas of responsibility and interaction levels are distributed differently between the coach and client in coaching: i.e. the client speaks, the coach listens; the coach asks, the client answers; the client determines the content, the coach shapes the process and selects the methods; the coach is emphatic and sympathetic; the client can show and/or express his emotions; the client is in the spotlight, but continues to receive support; the coach is paid but remains independent and the client is appraised and confronted. Therefore, the coaching relationship consists of a number of relationship paradoxes (cf. also Schmidt-Lellek, 2006), and/or complementary interactions (Bateson, 1985), which result in a distribution of roles specific to coaching.

7. Because of this multiple reciprocal distribution of roles, what is called "co-creation" can now happen. Both interaction partners collaborate to create something new: a third entity which Luhmann (2012) calls a "communications system" or what Buber (1995) calls the "between" or what gestalt theorists (Lellinger & Bachmann, 2016; Staemmler, 2009) would call "contact"; i.e. a joint construct of reality created by both parties, in which new descriptions, explanations, and assessments (Simon, 2006) arise and lead to new possible courses of action.

There are certainly numerous other aspects of the coaching relationship that could be listed here. The preceding information serves to make clear that coaching can be categorized as being somewhere between a good and meticulous technical skill on the one hand, and on the other, the art of creating a certain type of relationship (Buer, 2012). The significance of the relationship has already been proven and/or

expounded on for coaching and other related "assistive relationship" (Schmidt-Lellek, 2006) concepts in numerous studies. For psychotherapy by Grawe (2000); for coaching by Jansen, Mäthner, and Bachmann (2004) and Alvery and Barcley (2007); and for learning by Hattie (2012) and Bauer (2008).

Thus, if we want to view coaching in the context of failure, what we have then is primarily a failure of a relationship. From a system theory point of view: "co-evolution or abort" certainly best describes failure in coaching. Either you develop together or the relationship is discontinued. There is one interesting finding regarding this: in the study by Jansen et al. (2004) clients and their respective coaches were surveyed regarding efficacy factors, satisfaction, and the achievement of goals with regard to the coaching processes that took place. All clients indicated a high level of satisfaction and achievement of goals through coaching. No client was unsatisfied. If we excluded the possibility that what we have here is a skewed sample consisting of inordinately satisfied people, the only explanation is that coaching processes where there was dissatisfaction or which did not go in the "right" direction, i.e. where there was a dysfunctional relationship, had already been terminated prior to this. Hence, one can say that when coaching takes place, i.e. when a process of interaction develops, it is then also successful.

Naturally, there are a multitude of factors which affect coaching, and furthermore, the relationship between coach and client. The relationship is of course not everything that coaching is based on. The technical skill component, i.e. the knowledge; the experience, and the expertise of the coach; the meticulous clarification of the task at hand and the issues; as well as the professional management of the coaching process play as much a role as the expectations, prior experience, and personal characteristics of the client. Furthermore, how coaching is implemented in a particular organization is critical. Clutterbuck and Megginson (2005) have developed a stage model for this purpose which describes the maturity of the implementation of coaching; i.e. the extent to which coaching is anchored in the organization and/or organizational culture. At the first stage, coaching is only used sporadically in problematic cases, and at the topmost, fourth stage, it is firmly embedded in personnel development processes and established at various levels in the organization with a positive connotation. One can easily imagine how the various degrees of implementation of coaching have an effect on its reputation, the selection of the coaches, the voluntariness, the target groups, but also the understanding of the functions and limitations of coaching.

Another aspect worth considering is the relationship between coaching's non-linear causal mode of action and the various perspectives of all the stakeholders that are directly and indirectly involved in a coaching process with regard to the "problem". Schein (2000) describes this using the concept of a client in process consultation. In this manner, contact clients, intermediate clients, primary clients, unwitting clients, indirect clients, and ultimate clients are distinguished depending on the extent to which the involved parties are included in the consultation process, know of it, and/or wish to have an effect on it. Furthermore, a different definition of success and/or failure applies to all the involved parties in each coaching process. Hence, the next career step which was worked out in the coaching sessions may be

exactly the right one from the perspective of the party who commissioned the coaching, while the family of the client might see it in a negative light because they are affected e.g. due to the need to move again. Another case could involve a client who, over the course of coaching sessions, begins to strain his relationship with his superior because he decided to focus more on his own needs and interests as a result of the coaching. Or it could be a client who, over the course of coaching decides to leave his organization, resulting in the party who commissioned the coaching seeing it as being unsuccessful. Many other cases are also conceivable. Hence, who benefits from coaching and what success and failure are, depends entirely on perspective (Bachmann, 2015b; Hauser, 2003). Problems and success-fully handling them, or suffering failure due to them, can be understood as social constructs which can "continue to exist" or "disappear" depending on perspective, or continue to exist at a different location after their "resolution" and cannot be managed in a linear, causal fashion, but instead only be influenced by stimuli in a best-case scenario (Schlippe & Schweitzer, 2012). The goal is therefore, to upend the client's existing patterns of experience and behaviour, which have conveniently arisen due to "creative" adaptation (Staemmler, 2009) with stimuli and thus effect change such that the client, for his part, shows new behaviour in his home system, which in turn also serves to upend existing patterns. Furthermore, the change takes place primarily for the client, who then, through his behaviour, stimulates the social systems, for which he is the relevant environment, and encourages changes in their patterns.

Furthermore, it is an interesting aspect how the client reacts to the intervention of the coach during the coaching process (or is able to). This aspect was touched on above in the distinction between a passive object and an autonomous subject. Despite being "thrown into" the world, we humans have always been given the freedom of choice; i.e. the decisions we make in a situation, the internal mindset we develop, what we take, adopt, or learn from others (Staemmler, 2009). This means that even the best, and even "evidence-based" coaching method is only an offer for communication whose effects can only develop in the mind and sometimes also the body of the client (in the form of emotions), but do not necessarily have to. Strictly speaking, therefore, it is not possible to speak of the effects of coaching. Instead, the changes develop bit by bit over the course of the coaching process, perhaps initially as emotions and nagging feelings in the client, out of which new descriptions, explanations, and assessments develop, which in turn serve as the basis for other new behavioural patterns. Hence, it is not the coaching itself which has an impact, but instead the coaching context and the coaching relationship, which, like catalysts, enable the development of effects and provide the client, who is a psychological system, with new observations of a second order. This can be achieved through feedback, new descriptions, alternative explanations, and new perspectives. At all times, the goal is to enrich and thus change the client's self-observation so that new stimuli can arise for self-direction.

The description of relationships between people is hardly possible without the social context in which they arise and/or by which they are framed. Bateson (1985) introduced the term of context markers, which describe space-time configurations

and key stimuli that mark various contexts, thereby making certain behavioural patterns more likely. This also applies to relationships, which are transmitted by culture in social communities through context and/or framed by symbols (Hall, 1976; Mead, 1934). If we look at the context of a relationship, we will see that it determines which relationship conventions apply and/or which "expectation expectations" (Schlippe & Schweitzer, 2012) determine the experiences and behaviour of the persons involved. In the situation "a visit to the barber", a person is allowed to scrutinize another's scalp, which is not recommended in the situation "a tram ride". In a management context, a person is allowed to give someone instructions, but not the other way around. In a therapeutic context, a person tells a lot about himself, but this is not expected of the other person, and when he does, it is even seen as disruptive. Related concepts are schemas or frame theories (Rumelhart & Ortony, 1977; Schank & Abelson, 1975), which assume that our experiences and behaviour are determined to a fundamental extent by prototypical event concepts in the form of acquired cognitive structures (Klix, 1992; Klix & Bachmann, 1998). The culturally transmitted context for coaching as a very modern form of consultation is—as can easily be recognized—not clearly defined, and above all differs greatly between providers and consumers in the heterogeneous coaching market. However, a successful relationship requires a context in which the expectation-expectations of the involved parties are adapted to each other. This leads to questions like: What happens in coaching? Which issues can be handled in coaching? Who is responsible for what so that coaching succeeds? What are the limits and taboos? What are my expectations of the coach? How do I need to behave as a client? Etc. To ensure that coaching does not fail due to disappointed expectations, it is of great importance to consciously and meticulously manage the context. This includes, as previously described in the above, avoiding mixing contexts, managing the setting and the basic parameters, as well as the concrete structure of the coaching relationship.

Clarify, Clarify, Clarify

Professional coaching begins with the meticulous clarification of the mandate, in which all major influencing factors that affect the relationship between the coach and the client need to be discussed and examined. Above all, the purpose of clarifying the mandate serves to shape the context and relationship, and also clears up the content-related and methodological aspects in coaching. Over the course of this process, the coach and the client must decide if and how a partnership can be possible and promising. When it comes to coaching processes that turn out to be unsuccessful and/or difficult, often missing or unclear contracting is later identified as factors that negatively influenced the coaching process. There is a lot of literature on the topic of clarifying the task at hand. A publication I would like to refer to is Billmeier et al. (1992).

Professional relationship management also continues to be the coach's main task during the course of every coaching process; without a robust relationship, all methods and tools will remain feeble and empty during coaching. If this is the

case, i.e. the coaching methods are not working, the process is sluggish, the client is unable to get involved or open up, the issue is difficult to grasp, no concrete coaching goals can be identified, the coach feels insecure, the client pressures the coach into fulfilling the role of a supplier etc. and the coaching process is on the edge of failure, then it's necessary to clarify the coaching relationship and its context as well as the issue in order to restore or even build up the basis for coaching in the first place through "re-contracting"—the active shaping of relationships. If so, it will be necessary to (re-)examine and clarify the context in which coaching arose and/or in which it takes place with regard to all stakeholders and possible consequences regarding the coaching results, the relationship between coach and client with regard to mutual expectations, as well as the coaching issue with regard to its applicability to the context of coaching and the expertise, experience, and ethics of the coach.

Often, in such cases, it is not that easy to uncover what is wrong with the working relationship. A feeling that something is "amiss", dissatisfaction, or insecurity in one's own actions may indicate that it is necessary to examine the relationship more closely. For navigating and reflecting upon the coaching relationship over the course of the coaching processes, it may be useful for coaches and consultants to consider the following points (see Fig. 1).

Do I Feel Safe?

Do I have a clear feeling of who they are? What they think? What they need? All of this to say: do we meet at the contact boundary? This means the other person is involved in the joint process and recognizable in his entirety. A robust relationship can be characterized via the construct of contact from Gestalt Therapy. Missing or weak contact is characterized by egotism and/or retroflection, but also projection or confluence (Perls, Hefferline, & Goodman, 1951).

Do I Feel Secure When Communicating with the Other Person?

Insecurity in the relationship means that no co-created communication patterns have formed over the course of the interactions (Luhmann, 2012). How the other person will react, what is possible and what is not, what the other expects of me etc. has not yet emerged with a sufficient degree of stability. This leads to either interaction partner feeling insecure and acting tentatively, which therefore means that he is unable to involve himself naturally in the coaching process with confidence and certainty.

Does our Relationship Have a Quality of Its Own?

A relationship in which contact has been established or is possible is characterized via a special quality of its very own. "The between" (Buber, 1995), "communication

Fig. 1 Points to consider in a coaching process

CRUCIAL POINTS FOR NAVIGATING AND REFLECTING UPON THE RELATIONSHIP OVER THE COURSE OF A COACHING PROCESS

1   *Do I feel safe? Do I have a clear feeling of who they are? What they think? What they need?*

Do I feel secure when communicating with the other person?   2

3   *Does our relationship have a quality of its own?*

Are we compatible with regard to emotional, content-related, and temporal factors?   4

5   *Do we work together in a focused, attentive manner?*

Can my needs be addressed and the other's too?   6

7   *Has a distribution of roles arisen that corresponds to the context?*

Do we show each other how we are amazed, thoughtful, or empathetic?   8

9   *Is our relationship developing?*

Do we both benefit from the encounter?   10

11   *Can we talk about our communication?*

system" (Luhmann, 2012) or "contact" (Lellinger & Bachmann, 2016; Perls et al., 1951; Staemmler, 2009) have previously been presented as descriptive concepts for this purpose. This third, new entity, which develops as part of the dialog between the

coach and client is the "space" in which learning and change is made possible. If this space, i.e. the type of interactive relationships, shows similarities with other relationship patterns already known to the client, such as e.g. boss-employee, client-supplier, teacher-student, father-son etc., this can be seen as a difficult for the coaching relationship.

Are We Compatible with Regard to Emotional, Content-Related, and Temporal Factors?

Luhmann (2012) describes three basic dimensions of communication: the issue or topic; the social dimension, i.e. the individual needs and emotions of the involved parties; and the temporal dimension, i.e. the localization of the topic in the past, present, or future. For a successful discussion and hence for a functioning relationship, the three dimensions between the interaction partners should be fitting, complementary, and/or synchronized.

Do We Work Together in a Focused, Attentive Manner?

An intensive encounter with plenty of contact is characterized by presence and focus by all parties, resulting in "field quality" (Staemmler, 2009). Far from disruptions, external and internal distractions, a "dense" atmosphere of discussion arises through the involved parties that allows the "outside world" to be blocked out.

Can My Needs be Addressed and the Other's Too?

The basic nature of co-creation means that all involved parties include themselves in the communication process, thereby contributing to the shaping of the relationship. The involved parties enter into the coaching relationship to fulfil certain needs. If we use the needs system described by Max-Neef (1989) as orientation, these needs during coaching could be e.g. presence, protection, emotionality, understanding, participation, creativity, recovery, identity, freedom, but also transcendence. The fulfilment of needs is a fundamental component of what motivates people to involve themselves in the relationship, to shape and develop it, and should thus exist to an equal extent for both client and coach.

Has a Distribution of Roles Arisen that Corresponds to the Context?

The distribution of roles arises at the beginning of the coaching on the part of the client based on prior information or experiences from similar contexts, is actively shaped on the part of the coach, and discussed together with the client. However, a distribution of roles that facilitates and is effective for coaching in the context of a

multiple mutual complementary relationship or reciprocal relationship can only form through interactions in that time. This process needs to be observed and managed.

Do We Show Each Other How We Are Amazed, Thoughtful, or Empathetic?

Particularly along the social dimension (Luhmann, 2012), a positive relationship develops in an interaction system when the involved partners feel seen and recognized by each other (ego, alter, and alter ego). Independent of language, the "rapid" channel of emotions is communicated through non-verbal expression, allowing qualities of inner participation and empathy to occur.

Is Our Relationship Developing?

Relationships exist in time. The dimension of time has a particular meaning in coaching, since there is the challenge of creating an intensive relationship within a relatively small number of sessions, which often touches on highly personal life topics. This can only take place when the relationship develops accordingly in each session, and from session to session. If this development does not take place or stagnates, i.e. the relationship is still the same after a number of sessions as it was at the beginning, the coach should interpret this as a sign that "re-contracting" is necessary.

Do We Both Benefit from the Encounter?

Intensive encounters with plenty of contact are characterized by the fact that what happens also changes the parties involved. Realization, being emotionally "touched", learning as part of a dialog, i.e. in the broadest sense, and the assimilation of something new while in contact (Perls et al., 1951) all lead to changes happening in the psychological systems. *"At 'you', the person becomes 'I'."* (Buber, 1995, p. 28). Both the coach and the client experience the interaction and learn. Hence, it cannot be a one-sided, but instead needs to be a two-sided process of drifting together, i.e. co-evolution.

Can We Talk About Our Communication?

Meta-communication (Bateson, 1985), i.e. communication about communication itself is an important means of shaping relationships. This "re-entry" (Luhmann, 2012) refers to the language-based re-insertion of the system into itself, i.e. communication about the patterns of the communication system. This is not always possible and can be risky, e.g. lead to confusion or the termination of

relationships, particularly in cases where the interaction patterns preclude exactly this communication. A robust coaching relationship is therefore characterized by the option for coach and client to constructively broach the relationship and any disruptions.

Outlook

Over the course of this chapter, failure in coaching was identified as failure in the relationship. Although this is certainly a rather blunt way of putting it, the author believes that it reflects the core of what coaching is. Of course, there might be many other possible reasons for failure of coaching processes, which are not mentioned here. The people-oriented nature of coaching makes it necessary to focus on the relationship between coach and client, especially when it is implemented in organizations. If coaching continues to establish itself and be used to support and advise people in the context of organizations, then it is particularly important to keep this relationship as the focal point. Coaching is all too often seen as a "cure-all" or a "wonder drug" and used for all possible issues in an organization—unfortunately, often without any further thought. In such cases, the failure of coaching processes is pre-programmed. Coaching as a form of consulting will also fail long-term when it is used as a last resort to bring disagreeable management executives or employees in line or get rid of them ("not even coaching helped"). It is bound to fail if: it is used as a replacement for the absence of/or bad leadership; there is a lack of conflict management; it is offered as an "incentive"; it is only used for "problem cases"; or when management executives attempt to coach their employees. Fortunately, this interpretation of coaching is not the case in most organizations where coaching has been established (Bachmann, 2016). Organizations which have implemented coaching often have competent human resource managers who themselves have completed coaching training programs and who act as coaching consultants and advise potential clients, select coaches for the organization, and initiate coaching processes.

References

Alvery, C. P., & Barcley, K. (2007). The characteristics of dyadic trust in executive coaching. *Journal of Leadership Studies, 1*(1), 18–27.

Bachmann, T. (2011). Warum coaches lieber nicht werben sollten. *Wirtschaft und Weiterbildung, 3*, 42–45.

Bachmann, T. (2012a). Coachingprozesse. In Deutscher Bundesverband Coaching e.V (Ed.), *Leitlinien und Empfehlungen für die Entwicklung von Coaching als Profession. Kompendium mit den Professionsstandards des DBVC* (4th rev. ed., pp. 65–78). Osnabrück: DBVC Geschäftsstelle.

Bachmann, T. (2012b). Coaching? Training? Organisationsentwicklung? *Wirtschaft und Weiterbildung, 3*, 38–40.

Bachmann, T. (2015a). Coaching: Schnelle Reparatur oder gründliche Reflexion? *Wirtschaft und Weiterbildung, 4*, 44–47.

Bachmann, T. (2015b). Der Coach, der Forscher, die Pille und ihre Nebenwirkungen. Anregungen aus der Praxis für die Coachingforschung? *Organisationsberatung, Supervision, Coaching, 22*, 87–100.

Bachmann, T. (2016). Implizite Theorien über Lernen und Veränderungen durch Coaching in Organisationen – Eine empirische Untersuchung. *Organisationsberatung, Supervision, Coaching, 23*, 231–253.

Bateson, G. (Ed.). (1985). *Die Ökologie des Geistes*. Frankfurt: Suhrkamp Verlag.

Bauer, J. (2008). *Lob der Schule – Sieben Perspektiven für Schüler, Lehrer und Eltern*. Munich: Wilhelm Heyne Verlag.

Billmeier, R., Kaul, C., Kramer, M., Krapoth, S., Lauterbach, M., & Rappe-Giesecke, K. (1992). *Der Beginn von Coachingprozessen*. Köln: EHP.

Böning, U. (1989). Coaching: Zur Rezeption eines Führungsinstrumentes. *Personalführung, 12*, 1149–1151.

Buber, M. (1995). *Ich und Du*. Stuttgart: Reclam.

Buer, F. (2012). Die Supervision und das Glück. In W. Weigand (Ed.), *Philosophie und Handwerk der Supervision* (pp. 237–245). Giessen: Psychosozial-Verlag.

Clutterbuck, D., & Megginson, D. (2005). *Making coaching work. Creating a coaching culture*. London: CIPD.

De Shazer, S. (1998). *Worte waren ursprünglich Zauber – Lösungsorientierte Therapie in Theorie und Praxis*. Dortmund: Verlag Modernes Lernen.

Deutscher Bundesverband Coaching e.V. (DBVC). (2012). *Leitlinien und Empfehlungen für die Entwicklung von Coaching als Profession. Kompendium mit den Professionsstandards des DBVC* (4th rev. ed.). Osnabrück: DBVC Geschäftsstelle.

Eidenschink, K., & Horn-Heine, K. (2007). Der professionelle Einsatz von Coaching-Tools. In C. Rauen (Ed.), *Coachingtools 2* (pp. 11–22). ManagerSeminare Verlag: Bonn.

Freud, S. (1937, 1969). *Die endliche und unendliche Analyse*. (Studienausgabe Ergänzungsband, pp. 351–392). Frankfurt a. M.

Grawe, K. (2000). *Psychologische Therapie*. Göttingen: Hogrefe.

Greif, S. (2014). Evaluation von Coaching: Eine schwer zu bewertende Dienstleistung. In A. Schreyögg & C. Schmidt-Lellek (Eds.), *Die Professionalisierung von Coaching. Ein Lesebuch für den Coach*. Wiesbaden: Springer VS.

Hall, E. T. (1976). *Beyond culture*. New York: Anchor Books.

Hattie, J. (2012). *Visible learning for teachers*. London/New York: Routledge.

Hauser, E. (1987). *Grundlagen des Coaching*. München (Munich): DECollege.

Hauser, E. (2003). Die stillschweigende Allianz – Coaching als Vermeidungsstrategie? In S. - Schmitz-Buhl et al. (Eds.), *Coaching: Zukunft der Branche – Branche der Zukunft* (pp. 61–66). Heidelberg: v. Decker.

Jansen, A., Mäthner, E., & Bachmann, T. (2004). *Erfolgreiches Coaching. Wirkfaktoren im Einzel-Coaching*. Kröning: Asanger.

Klix, F. (1992). *Die Natur des Verstandes*. Göttingen: Hogrefe.

Klix, F., & Bachmann, T. (1998). Analogy detection – analogy construction: An approach to similarity in higher order reasoning. *Zeitschrift für Psychologie, 206*(2), 125–143.

Lackner, K. (2018). Failure in consulting – Consultation cannot fail! In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Lellinger, S., & Bachmann, T. (2016). Die Kontaktgestaltung im Coaching. *Organisationsberatung, Supervision, Coaching, 23*, 297–310.

Looss, W. (1991). *Coaching für Manager: Problembewältigung unter vier Augen*. Landsberg/Lech: Verlag Moderne Industrie.

Looss, W. (2014). Die Irrwege der Coaching-Könige: Warum Coaches keine Dienstleister sind. *Keynote at Congress ‚Coaching heute: Zwischen Königsweg und Irrweg*. Erding (Feb 20–21, 2014): Hochschule für angewandtes Management.

Luhmann, N. (2012). *Soziale Systeme*. Suhrkamp Verlag: Frankfurt am Main.

ManagerSeminare. (2015). Für mehr Durchblick im Anbieterdschungel. *Professionalisierung der Coachingbranche*. Bonn: ManagerSeminare (207).

Max-Neef, M. A. (1989). *Human scale development*. London: Zed Books.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*, 709–734.

Mead, G. H. (1934, 2015). Mind, self, and society. Chicago, IL: The University of Chicago Press.

Perls, F., Hefferline, R. & Goodman, P. (1951, 1994). Gestalt therapy – Excitement and growth in human personality. Gouldsboro, PA: The Gestalt Journal Press.

Rauen, C. (1999). *Coaching. Innovative Konzepte im Vergleich*. Göttingen: Verlag für Angewandte Psychologie.

Rumelhart, D. E., & Ortony, A. (1977). The representation of knowledge in memory. In R. C. Anderson, J. J. Spiro, & W. E. Montague (Eds.), *Similarity and analogical reasoning* (pp. 298–312). Cambridge, MA: Cambridge University Press.

Schank, R. C., & Abelson, R. P. (1975, September). *Scripts, plans, and knowledge*. In Proceedings of IJCAI, pp. 151–157.

Schein, E. (2000). *Prozessberatung für die Organisation der Zukunft*. Bergisch Gladbach: EHP.

Schein, E. H. (2010). *Organisationskultur*. Köln: EHP.

Schlippe, A. V., & Schweitzer, J. (2012). *Lehrbuch der systemischen Therapie und Beratung*. Göttingen: Vandenhoeck & Ruprecht.

Schmidt-Lellek, C. (2006). *Ressourcen der helfenden Beziehung. Modelle dialogischer Praxis und ihre Deformationen*. Bergisch Gladbach: EHP.

Schmidt-Lellek, C. (2012). Die Entwicklung von Coaching als Profession. In Deutscher Bundesverband Coaching e.V (Ed.), *Leitlinien und Empfehlungen für die Entwicklung von Coaching als Profession. Kompendium mit den Professionsstandards des DBVC* (4th rev. ed., pp. 11–17). Osnabrück: DBVC Geschäftsstelle.

Simon, F. (2006). *Einführung in Systemtheorie und Konstruktivismus*. Heidelberg: Carl-Auer Verlag.

Staemmler, F.-M. (2009). *Was ist eigentlich Gestalttherapie? – Eine Einführung für Neugierige*. Bergisch Glattbach: EHP.

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Failure of Networks and Network Management

Jules Thoma and Christiane Funken

Introduction

The idea of a failure causes unpleasant associations. The word implies not only a lost battle but final defeat in war, not only a faulty wheel in the system but the end of the entire construction. The word carries something absolute and is loaded with negative emotions. There are only a few positive aspects that can be derived from it.

One is that failure can be anticipated. As a threat it motivates conscious action and foresighted planning to avert adverse endings. A second aspect is that something must have worked before it could actually fail. For network management, such considerations are not merely philosophical dry runs. Rather, the provocative question about the reasons for failure provides an excellent occasion for a critical examination of the conditions and possibilities of effective network management.

Especially, because we do not really know a great deal about this relatively recent field of work. We lack comparable empirical studies, the "how-to" literature is modest and can be rather confusing. Also, there is no institution that would bring forward generalizable quality standards for network management and its certification. Therefore, it is safe to say that this special form of management stands right at the beginning of a stony path to professionalization with uncertain outcome – despite all prospects for success.

The increasing interest in networks comes along with the broadly supported idea that we are witnessing an organizational revolution (Snow, Miles, & Coleman, 1992). For the challenges posed by an economic and social order affected by digitalization, globalization and innovation, networks seem to be the adequate answer (Castells, 2010; Chesbrough, 2003). Accordingly, it is considered effective to establish networks or to organize work in network manner. This leads to an empirical omnipresence and diversity of networks which makes it hard to find a

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common ground in the "network jungle" (Windeler, 2003). Instead, we are confronted with competing and incompatible network theories (Thompson, 2003), and we are still far away from a mutual network understanding (Jappe-Heinze, Baier, & Krol, 2008; Provan, Fish, & Sydow, 2007, p. 480).

This in mind, we decided not to examine the very few existing works which explicitly deal with failure of networks consecutively (especially Alter & Hage, 1993; Grabher, 1993, 2005; Miles & Snow, 1992). This would have only reproduced the confusion of the network discourse and presumably would have discouraged even the most interested readers. Instead, the question of failure can only be answered after radically reducing the multitude of meanings and connotations of networks. *"As for anything else there need to be limits to the embrace of networks."* (Thompson, 2004, p. 422).

Therefore, as a first step we propose to search through the thicket of theories for the unique characteristics of networks. One promising approach is to delimitate networks and network management from modern organization which is characterized by formality and hierarchy and which is fundamentally connected with the classical management understanding (Schreyögg, 2003). Instead, we will show that networks are characterized by negotiation, trust and flexibility. These three criteria implicate the need to rethink the role of management in networks radically. We will use examples from research and our own work with network managers to demonstrate how and why neglecting the unique logic of networks leads to failure. Moving on from these insights we will put forward recommendations for good network management.

A Network Concept Far Too Broad

Unsurprisingly, all those terms which roll off our tongue easily in everyday life turn out to be highly indeterminate. Think, for example, of the words "structure", "culture", and "system" all of which are most unspecific and therefore usable as descriptions for almost every imaginable constellation. The expression "network" often joins this list of empty shell catchwords.

In its most general definition networks form a set of nodes which are somehow interconnected by links (Brass, Galaskiewicz, & Greve, 2004, p. 795). This definition reduces networks to a simple methodological axiom. It postulates that things are related to one another. Using this heuristic any form of connection or relationship between randomly defined units can be analysed. The focus of interest is therefore not on a specific subject but on the analytical possibilities provided by this method. Network analysis can deal with huge amounts of data by the possibilities of digital processing. Its strength is to visualize complex structures very vividly and to draw a clear picture from a confusing set of data. Relationships can thus be brought to light and unrecognized structures may be discovered (Wellman, 1983, p. 171). Network analysis represents a strong tool for the visualization of cooperative structures and for the evaluation of success or failure of a defined unit.

Take, for example, regional subsidies policy which is often guided by the concept of the networks resp. clusters (Lundequist & Power, 2002; Porter, 1998). Local governments depend on the ability to base their decisions on valid data about the state and nature of regional economy. Through structural network analysis the cooperative relationships of an industry can be well represented and its need for support can be derived. The same applies to companies. They also increasingly perceive themselves as part of a network, evaluate their position in the industry and strategically align their business relationship in front of this background (Burt, 1992; Sydow, Schüssler, & Müller-Seitz, 2016). The development or decline of networks defined in this manner can easily be visualized by comparing two analyses made at different times. Based on the increase or decrease of nodes or links seemingly the success or failure of networks can be visualized objectively (e.g. Powell, Packalen, & Whittington, 2012, p. 448).

However, this portrayal of so called networks can give very limited insight into deriving network management guidelines to avoid network failure. Firstly, it must be noted that the preparation of such analysis requires a specific methodological knowledge and is therefore usually purchased in the form of scientific studies or consulting services (Glückler & Hammer, 2013). In addition, visualized networks of that kind do not allow to draw any conclusions about the causes which lead to an increase or decrease of networks.

The most fundamental objection against the structural network perspective for management concerns derives from its unrestricted scope. As any cooperation can be also defined as a network of nodes and links every failure or success of cooperation becomes a failure or success of a network. A project that fails could be interpreted as a network failure; an organization that fails could be defined as network failure; an association that dissolves could be called a network failure, etc.

Due to their universalistic claim theories about general mechanisms for accomplishment or dissolution of cooperation (Axelrod, 2006; Deutsch, 1973) appeal to the explicit or implicit basic assumptions of management concepts – and to networks as well (Faltin, 2012; Helmcke, 2008). Certainly, such general approaches could likewise inform thinking about networks. However, in order to develop a more specific strategy against the failure of networks it becomes necessary to elaborate the unique features of networks.

The Specific Network Concept

From failure of all kinds of cooperation we now turn to failure of a very specific, delimited cooperation – a "genuine" network. The constituents of networks that make it an independent form of cooperation and coordination are investigated by governance discourse (see Benz, Lütz, Schimank, & Simonis, 2007). Commonly network steps beside the traditionally duo of market or hierarchy (firms and state) as a third alternative: In political discourse networks are located beyond state and market (Jessop, 2003). In the economic debate the network is positioned between or beyond markets and hierarchy (Powell, 1990; Williamson, 2005).

This new theoretical interest both in political and organizational studies has mainly empirical reasons. The debate arose due to the plain fact that numerous empirical findings do not fit adequately into the market or hierarchical logic (e.g. Powell, 1996). Such examples of new and apparently stable cooperation and transaction structures call into question the accuracy of a dualistic model. However, one has to keep in mind that markets and hierarchy are merely idealized theoretical models which naturally never achieve empirical reality. To say that networks are "intermediate" or "beyond" the distinction of ideal-type market and hierarchy will make it very easy to discover networks in everyday life. Accordingly, it becomes undisputable to speak of networks or to claim to be part of one. Such a network understanding (just as in the structural network approaches shown above) disintegrates into infinity. Hence, the axiom that should guide governance theory and management practice can be following: a network is an empirical but also analytical unique and delimited form of cooperation and coordination.

Network failure in terms of governance means the end or change of such a specific form. In this view, it depends on the perspective to consider failure as "bad" instants. For example, a broad life-cycle consideration might lead to the conclusion that a network represents only an intermediate stage of a more global development (see the example in the box). From that superior external position network failures can be assessed as good or natural. Conversely, insights to the management of networks have to take an inner perspective. Taking the functioning of networks as management reference point failure definitely should be avoided.

Case study

Transformation of Governance

A few young students meet on the university campus. They find each other interesting and sympathetic. They start meeting regularly, discussing their studies and how to do something good in the world. Each student is connected to the others in his own way and all act on the same level. No one is thinking about organizing meetings. Sometimes other acquaintances join the group. Suddenly discussion develops into an innovative idea. Nobody can say who actually came up with it or how the idea was further developed. They simply did it together. It is this form of cooperation that can be ideally characterized as a network.

After materializing the idea into a prototype, the students jointly apply for a business idea event. They win the competition. Afterwards venture capitalists offer financially support to promote the idea. Due to financing requirements, the developers found a startup company. At this point the network comes to an end. The network fails or changes into an organization while the innovation spreads into the world. From the perspective of the innovation process one could speak of a "successful network failure". The quality of the relationship between the involved actors will be supplemented by the formal structures of a bureaucratic organization and classical management procedures. As this process gains prerogative practices the old network eventually becomes a myth.

The following scenario is also conceivable. The students submit the prototype but their idea is dismissed. Everyone goes home deeply disappointed. One begins to question the idea. Exams need to be passed. The exigencies of life triumph over the vision. The meetings become less frequent. After graduation party the students apply at different companies. As life passes on they lose contact with each other. The network fades. A few years later two of the former students meet during negotiation talks as representatives of their companies. The market-related interests of each firm require that personal relationships are left out of negotiations. Finally, the former network failed by turning into a market relationship. And perhaps the end of the network has a positive side, too – as the idea may have never been viable.

But which constituents essentially characterize a network? The traits of a network in the example formulated in the box remain comparatively vague: A relatively loose collective of people who have personal relationships with one another and pursue a common idea. A further restriction is that such a collective is neither separated by the principle of the market nor held together by the formal guidelines of a hierarchic organization.

We would like to put some theoretical flesh on that narrow and intuitive definition. Therefore, we will only select the most significant arguments that determine the perspective on networks today.

Network Pillar 1: Negotiation Through Mediation and Moderation

The most prominent network theorist is the Nobel Prize winner Oliver E. Williamson. His reflections on transaction economics gave important impulses for the economic theory of networks (Williamson, 1991, 2005). As the name implies the theory is dedicated to transactions between two business partners. It tries to clarify the type of contracts which govern this exchange. Williamson differentiates contract types and assigns them to the governance models market and hierarchy as well as hybrids between market and hierarchy. Hybrids – which also include networks – are based on neo-classical contract law.

Neo-classical arrangements do not define all possible terms of the contract beforehand and instead explicitly propose to renegotiate or mediate in the event of a conflict between the contracting parties in order to avoid forbearance. As a result, long-term relationships arise which preclude the contractual fixing of all parameters. Joint ventures are one example of such relatively long-range business relationships.

Obviously, we cannot enter further into the vast realm of transaction cost theory and Williamsons role for network thinking here. Instead, we will selectively highlight some assumptions that come along with this view. The foremost important benefit that managers can take from transaction cost theory is to select different types of contract arrangement according to the "asset specificity" of a given transaction object. Against the background of the parameters of an exchange transaction it can be deduced whether a network-like relationship is to be preferred to others. Again, if

the specificity of the exchange object changes with time the resolution or conversion of the exchange relationship is strategically favourable. Thus, a network only fails if the management is unable to establish a (contractual relationship) that defines a network and to maintain it in the event of contractual disputes. As a result, transaction cost considerations reduce the competency of network management to its capability to reach agreements through negotiations between the exchange partners (see Mayntz, 1997).

If the relationship or the exchange modifications are to be negotiated in networks, the task of network management is to manage these processes by methods of moderation or mediation. This plain deduction is in line with the results of research on regional networks. They conclude that success and failure of regional networks depend on good or bad moderation practices (Aderhold & Wetzel, 2005; Baitsch & Müller, 2001).

Previous considerations suggest that network management is not a task for an individual organization or, more precisely, for the managers who are players in the transaction process. However, this perspective of the individual firm or manager dominates the economic debates on networks. *"Theories and perspectives that focus on the individual or organizational actor have a long tradition in social research and have guided most knowledge over networks. These views (. . .) are concerned with trying to explain how involvement of an individual or organization in a network affects its actions and outcomes"* (Provan et al., 2007, p. 483).

According to this common point of view, network management is the task and the manner of a company to position itself well in its environment. In contrast, if one considers the network as a whole, network management emancipates itself as a self-standing entity within the network. Its task is to establish negotiations between the individual managers (i.e. network members) as well as their ability and willingness to cooperate. Only by means of this fundamentally changed understanding network and network management both arise as autonomous instances beyond the dominant realm of organizational thinking and as two variables which constitute an internal coherent relationship between one another.

Network Pillar 2: Trust Based on Common Culture

A second organizational researcher who must be mentioned in connection with network governance is Walter W. Powell. His considerations have strongly influenced network concepts in theory and practice. Powell offers a perspective distinct to that of Williamson (Powell, 1990). He pays particular attention to the aspect of trust in networks. More precisely it is the anthropological understanding of reciprocity which lies at the heart of network organization. Although Powell only addresses networks in the economic field he formulates a principle for the formation and stability of networks that follows anything but the maxims of the homo oeconomicus. Both, trust or reciprocity, refer to a social norm that opposes the economic idea of deliberate decision making (Göbel, Ortmann, & Weber, 2007). This perspective replaces the individual and short-term benefit maximization (which

is for example the basic model of Williamsons approach) by obligations that originate from being a member of a social community. As part of a network community one can expect or trust to be protected against opportunistic behaviour. But this reference to the anthropological norm of reciprocity does not suffice for grasping the unique core of networks. That is because the norm of reciprocity insofar as it comes along with human existence is likewise to be found in organizations or in the market.

Nevertheless, Powell's approach provides important and somehow provocative new impulses. That is mainly because his reference to the community and its values and norms leads consequently to the aspect of culture. The most important maxim that underlies the concept of culture is to respond to the complexity of life by means of holistic thinking. Unfortunately, most of such holistic approaches tend to level differences. Put bluntly, the concept of culture itself remains empty unless it can be distinguished from at least one other concept. Although Powell does not further investigate the concept of culture and thus is not concerned with its methodological issues he proposes such a differentiation: Networks are *"more dependent on relationships, mutual interest and reputation – as well as less guided by a formal structure of authority"* (Powell, 1990, p. 300).

It is this quite unrecognized thesis which leads to a completely new understanding of networks and their management. Unrecognized because one possible – yet quite radical – interpretation that could be derived from this quotation is the differentiation between culture (as an umbrella term for relationship, mutual interest and reputation) as constitutive element of networks on the one hand and formal structure of authority as constitutive for (hierarchical) organization on the other.

Through this differentiation the concept of culture does not embrace the formal structure of organization as many examples of organizational culture would suggest (Schein, 2010). Instead, it is possible to develop the network concept by delimiting it from the principal of formal structure of organizations (Thoma, 2016). Consequently, network management primary involves developing of a common network culture and identity.

Network Pillar 3: Flexibility Through Change and Innovation

Powell, like nearly all other researchers, characterizes networks according to their function. Networks appear to be preponderant when it comes to the issue of sharing tacit knowledge, that is, know-how bound to individuals (Castells, 2010; Powell, 1990; Rammert, 2003).

This characteristic explains the triumph of the network concept within innovation theory. Instead of the one-sided causality of demand-pull or technology-push innovation networks are characterized by the interaction between technology developers and customers (Kowohl & Krohn, 2000; cf. Rammert, 1997). Such networks of people enable recursive learning processes and the use of implicit knowledge, thus creating the basis for innovation.

Table 1 Causes of failure in network organization (Miles & Snow, 1992, p. 64)

Type of network	Stable	Internal	Dynamic
Operating logic	A large core firm creates market-based linkages to a limited set of upstream and/or downstream partners	Commonly owned business elements allocate resources along the value chain using market mechanisms	Independent business elements along the value chain form temporary alliances from among a large pool of potential partners
Primary application	Mature industries requiring large capital investments. Varied ownership limits risk and encourages full loading of all assets	Mature industries requiring large capital investments. Market-priced exchanges allows performance appraisal of internal units.	Low tech industries with short product design circles and evolving high tech industries (e.g. electronics, biotech, etc.
Extension failure	Overutilization of a given supplier or distributor leading to unhealthy dependence on core firm	Extending asset ownership beyond the capacity of the internal market and performance appraisal mechanisms	Expertise may become too narrow and role in value chain is assumed by another firm
Modification failure	High expectation for cooperation can limit the creativity of partners	Corporate executives use "commands" instead of incentives to intervene in local operations	Excessive mechanisms to prevent partners' opportunism or exclusive relationships with a limited number of upstream or downstream partners

Due to the ability to exchange tacit knowledge fast and to gather or reinterpret new information (Castells, 2010) networks become flexible by their very nature. Unsurprisingly, in today's innovation-oriented economy the implicit or explicit challenge to management of companies, particularly large ones, is to turn their business into a network structure. Miles and Snow (1992) provide a typology of networks and show what failure in management can occur by leading such network organizations (see Table 1).

One peculiar characteristic of this typology is that networks are always threatened with failure if the degrees of freedom between cooperation partners are restricted, that is, if the logic of the hierarchy again takes over the market.

However, it is questionable whether the hierarchical organization is actually able to adopt the functionality of networks only by allowing sufficient competitiveness and rivalry (see Grabher, 2005, p. 65). In spite of the omnipresence of the management mantra "responding to change" (e.g. Miles & Snow, 1992, p. 69) or "open innovation" (Chesbrough, 2003) in the present economic world, or even "innovation society" (critical Krücken & Meier, 2003), one should not forget the elaborated success model of modern organization. It lies in the ability of organizations to act reliably and predictably despite the fact that they operate in a permanently changing environment. This is, however, a characteristic which leads back to its structural

inertia (Hannan & Freeman, 1984). Flexibility, that is, the ability to adapt easily to new situations is anything but the strength of hierarchical organizations. And innovations, that is, new products available on the market, more adequately represent the opposite to the monotonic and therefore reliable output of the modern organization.[1]

These considerations highlight that the function of networks is, above all, the openness to innovation and change and that this function distinguishes it from formal organization.

From Network to Network Management and Its Failure

At the end of this admittedly highly selective course of argumentation we can summarize three central pillars which determine networks and their management. These are:

- Negotiation through mediation and moderation
- Trust based on common culture
- Flexibility through change and innovation

This definition delineates both the network and the tasks of network management. They form two sides of the same coin: A system characterized by negotiation requires a management that it able to moderate and mediate in the case of conflict. A system that is based on trust needs someone who is actively involved in developing, communicating and promoting a common culture. A system based on flexibility requires a management to ensure that new partner constellations and cooperation ideas evolve.

It becomes clear that in the initial case study all components of a network were fulfilled without the presence of any management. The emergence and dissolution of the network occurred as an almost natural process. Management only comes into play if networks are initialized strategically and if they should be established as a lasting form of cooperation. Based on that decisive aim typical management errors can be detected. In the following we will show how and why networks fail and provide alternative views and practices in order to overcome common management failure in networks.

Failure 1: The Mindset of Classical Management

Unfortunately, the term management suggests that networks could be managed just like organizations. This association leads possibly to the biggest misinterpretations of network practice. One has to keep in mind that the concept of management is

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[1]See also von Stamm (2018).

deeply connected with the modern organization and consequently with the principle of hierarchical command as confirmed by the work of Max Weber and his bureaucratic legitimation of the legal power to direct (Weber, 2005). The legitimacy of instructions in modern organizations is based on the formal rationality of the bureaucracy which in turn is based on objective and logical criteria of effectiveness and efficiency. From this maxim, however, great difficulties arise as long as networks are taken as hybrids according to Williamson (see pillar 1).

A hybrid is composed of two differing parts. In the sense of Williamson's approach an obvious conclusion is that networks are hybrids of the opposites of the market and the hierarchy principals. Jörg Sydow, the leading German network theorist and undisputed pioneer of network management, derives due to this hybrid character of networks a series of further tensions that need to be balanced by the management. These include autonomy and dependency, trust and control, cooperation and competition, flexibility and specificity, diversity and unity, stability and fragility, formality and informality, economy and polity (s.a. Sydow, 2005, 2010, p. 404). While it is not difficult to identify and name these contradictions within all networks one could point out polemically that the whole social world, and thus also the network, is composed of contradictions while all logic is concerned with avoiding them (Luhmann, 1987, 488ff.). A management concept which gives the indication of dealing with contradictions in networks therefore rather outlines a problem than offers a solution.

However, as one takes a closer look at the issues at hand the formulated problem itself leads into a dead end. The requirement that management has to deal with contradictions in networks ends up in a paradox. As stated above, the legitimacy of classic management lies precisely in giving consistent, that is, non-contradictory instructions. Good instructions would have to pursue the goal of shutting out the complexity of the network world into a rational, thus not contradictory, structure. Good management would therefore paradoxically permanently dissolve the properties of its management subject and the flexibility that characterizes the network in a functional manner.

Our experience gained in interviews and workshops with cluster and network managers as well as the literature corresponding to that field show that there have been numerous attempts to transfer old management practices and assumptions that have been tested in organizations into networks. The usefulness of established methods and tools for network practice cannot entirely be denied. But it is important that the managerial mindset adapts to the new targets and problem settings indicated by the unique network specifics. In this sense Jörg Sydow and Frank Lerch advice that network management needs to be approached "reflexively" proofs most promising (Sydow & Lerch, 2013).

Failure 2: External Network Management

Another misjudgement results from relying too much on the ability of networks to self-organize. References to self-organization generally imply two aspects. On the

one hand an observer (e.g. politicians, financier or manager) defines a system running according to certain regularities. On the other hand, the observer comes to the notion that the functioning of the system would not improve by external intervention. These assumptions exemplary describe the market. Here, the famous, invisible hand (of God) replaces human management.

Every establishment of a network management restricts the momentum of pure self-control of a market. In other words, the development of a network should not be left to faith but should be actively guided. This management task for example comes into play when the natural market of firms and research institutions in one region should be transfer into a cluster. This endeavour usually is taken over by networking or technology transfer agencies. Their goal is to offer professional "network services" to existing and potential network and cluster members (Buhl & Meier zu Köcker, 2009). These so called cluster initiatives represent an indispensable element for the development of regional networks or clusters.

Nonetheless, this approach tends to attribute network management the role of an external service provider, that is to say, one of other players in the market. As a consequence, management and members diverge and are not integrated into a whole. To support a network and by this creating opportunities for its development is not quite equivalent with being a part of a whole network and creating its structures from within. Such approaches are backed by theories which blur the identity of a network to an intangible potential (Wetzel, Aderhold, Baitsch, & Keiser, 2001). But if network management is reduced to an external entity the concrete cooperation between the network members also remain unaffected by management and are left to self-organization. Success stories of networks however show not only the importance of effective network services but also the crucial role of the network manager to bring up interpretations and self-descriptions of the network. If this pursuit of identity is not put on the management agenda, networks impend to fail.

Failure 3: Network as a Formal Structure

Another cardinal failure in network management which can be observed repeatedly is the reduction of networks to their formal structure, for example, when the legal form of a network association leads to the belief that the chairman of the board is in fact the leader of a network because he or she occupies the central decision-making power instance due to formal structure. Or when networks break down into individual projects in which the behavioural rules are also formalized by project plans and contracts. Network management in this view solely is dedicated to the completion of funding requirements which are mostly organized in form of project plans and action tables.

However, this form of pure administration can only seemingly be considered equivalent to a network management, seemingly because not the network logic but only the formal structures, i.e. the formal organization, form the basis for decision processes. Certainly, formal structures provide support and orientation. They represent a principle which every network member knows from his home organization

and which he or she continues to be committed to after he or she steps out of the network realm. The problem lies in the fact that the concept of the formal organization just does not count inside the logic of networks.

Without an instance that strategically pushes network formation forward the partners are only integrated until the end of projects or the expiry of funding measures. The overall effect of this formal logic is that networks are professionally set up, managed and terminated. A cynical conclusion could be: Most of the strategically initialized networks fail professionally.

The importance of a sound administration for networks should not be neglected. We would just like to point out that due to the dedication to the formal structure the actual aspects of shaping a network may fall behind in network management practice.

Failure 4: Retreat to the Back Office

The tendency to reduce networks to their formal structure leads to a further misinterpretation of the task of network management. Instead of actively pushing the design of networks many network managers retreat to the back office. This type of withdrawal is, of course, favoured by the tight financial resources available to network management. The reduction to management and organization often happens as a simple response to the overwhelming expectations of the network members and serves as self-protection.

Without doubt it requires resources, courage and commitment to leave behind the formal roles and to test new ones. Many network managers and members are afraid of this. However, the assumption of an active shaping role is essentially hampered by the seemingly paradoxical circumstance that the management in networks lacks the formal authority – an unavoidable consequence that arises when networks are not understood as formal hierarchies.

A network manager who deliberately decided against the administration in the "back office" described his situation in an impressive way: *"I am a king without a kingdom!"* This sentence emphasizes most accurately the new task description of the network management. Despite the absence of hierarchy, it is up to the network managers to take over the shaping of networks. The role of this new form of rule is outlined by a network member in the following statement: *"Sometime a network manager must also go into the line of fire. He has to clinch and build confidence and say to the members: 'I have understood your objections and I take that into my hands'*" (NW member) In order to outline the new role profile for network management it is promising to take a closer look at the typical problems that derive from network logic.

Failure 5: Latent Conflicts, No Negotiation

We have shown that negotiation represents a constitutive pillar of networks. Surprisingly, the moment of the negotiation hardly takes place in many self-pronounced networks. Why is that so?

The necessity for genuine negotiation comes only into play once legitimate interests meet and compete. Although theory and practice are full of evidence of contradictions and competition in networks they seldom occur in the form of open clashes within the network. This is because networks are built on cooperation and based on the expectation to trust. This norm keeps potential controversy latent. Not only in network but also in organizations disharmonies are deemed as disruptive for effective processes. Particularly, where disputes arise emotions are generally assumed to be superior to reasoning. The classical avoidance strategy in organizations is to escalate conflicts to the next level of hierarchy. This procedure is based on the hope that on the staircase of hierarchy rationality will increase with each step to a higher level.

Today there are voices that demand a revision of this assumed rationality of organizations (Becker, Küpper, & Ortmann, 1988). Namely the importance of informality (Böhle & Bolte, 2002; Kühl, 2007) or of micropolitics (Neuberger, 2006) urges such new reflections. For network management these considerations are highly interesting. The empirical insight that an objective rationality from which means (and objectives) of organizations are to be derived is questioned leads to the conclusion that conflict and rationality no longer stand against each other. From group research, it is already known that flexible systems are characterized by their open handling of conflicts. In such groups the absolute number of contents increases while the relevance of each single conflict for the system is reduced (Coser, 1956). This in mind and according to the picture of contradictions, in networks it is anything but rational for management to avoid controversy. Conversely, one may admit that networks lose their flexibility if they fail to allow controversy. Instead, contests are the driving force behind change – also in networks.

Failure 6: No De-personalization

One of the most important functions of network management is to enable network partners to negotiate. As described previously, appropriate action is only required if partners already developed a conflict of interest or if negotiation has already started and network members threaten to end participation. For network management it is therefore either a matter of raising latent tensions well-controlled to the network surface or of transforming ongoing disputes into a negotiating situation.

Since conflicts process an enormous destructive power network management comes close to playing with fire. In order not to burn themselves network managers have to handle two issues skillfully. They have to deal with mutual recrimination while at the same time legitimizing their own moderating or facilitating role in the event of a conflict. For this purpose, it is very helpful to reflect on the two different strategies that can be brought into play when it comes to discovering the reasons for the malfunction of any system. Either mal-functions are attributed to the entire system or they are assigned to one individual element.

In formal organizations, typically single employees are blamed in case of failure. Therein lies an important function for self-protection of the organization, as Niklas

Luhmann recognizes. As problems can be attributed to the misconduct of individual members, their personal sensitivities or individual interests, there is no reason to question the functioning of the organization as a whole (and all other members). Alternatively, malfunction can be traced back to the paradoxes of systems. The fault for wrong developments or even failure then goes beyond the individual manager (despite the fact, that he/she did wrong, too) and is traced back to counterproductive incentive structures or to the corrupt culture of the system. The adequacy of each argument has always been contested by moral philosophers, and the controversy about the reasons for the global financial crisis and the role of some banks culture or the managers' behaviour proofs the currency of this twofold way of thinking.

If networks are characterized by contradictions, it is obvious that they accommodate conflict, that is to say, they lead to disturbance or deviance. What seems to be a problem at first may serve as a potential because conflict can become a normalized issue in networks. More precisely, conflicts are a sign of a healthy and vivid network. Network managers who know the structural properties of their networks and how they lead to contradiction can use this insight to legitimize up-coming conflict situations. Thereby disputes do not have to be ascribed to the misconduct of individual persons. Besides, the pursuing its own interests in a network not automatically becomes an indication for breaking with the values of cooperation and trust but as a justified intention. Due to this strategy conflicts are de-personalized. This increases the chances of debating rationally thus making productive use of the contradictions as an innovative and creative force of networks. In contrast, if conflicts are not skilfully brought to surface by the network management the apparent avoidance of disharmony inhibits communication and possible new ideas are not followed up. The network falls asleep.

Within this process of communication, the network manager needs to be legitimated, too. Despite the importance of the personality and the presence of network managers mentioned earlier in this text the principle of de-personalization also underlies the new understanding of the network management's role. As a person the network manager must remain neutral in respect to each network partner's perspective. In mediation, it is often an external person or entity that due to its impartiality qualifies as a neutral third party. Usually, this leads to the question of how to find an instance that is accepted by the conflicting parties. Instead, network management is committed to the network as a whole. This position can be used to legitimize that it forces itself, unprompted, into a conflict situation or that it urges the contesters to remain at the negotiation table. Network management failures are therefore based on the fact that the logic and the role of network management are not appropriate reflected.

Failure 7: Only Trust and No Distrust

The reference to the cultural basis of networks and the need to build up trust holds a paradox. Trust becomes only relevant for transaction if the important parameters of the exchange cannot adequately be reduced to explicit figures. This is true, for

example, with implicit knowledge, human capital, market power, etc. Nevertheless, some theoreticians argue that trust can be calculated and thus reduced to a rational decision (Coleman, 1990, p. 99). In contrast, we believe that trust and calculus are incompatible (Ortmann, 2008; Williamson, 1993). If trust cannot be rationalized, how can it then be managed? In order to escape from this seemingly paradoxical situation it is necessary to look more carefully at how trust works.

At the culminating point of a hopelessness no good drama forgoes the appeal: "You have to trust me!" However, this expression induces something disconcerting. Either it insinuates that something really is not in order and should be further investigated. As a result, the sentence leads precisely to the opposite of its intention. Or the affirmative character of the utterance prevails. But then the addressee decides to trust against reasons and to indulge in self-deception (Möllering, 2009). For the sake of starting or maintaining a (business) cooperation both alternatives turn out unrealistic. Such demands to trust will probably be answered: "You first!" The norm of reciprocity and trust is nothing someone can count on in a network unconditionally. Besides, it is just not appropriate as a "starting mechanism" (see Gouldner, 1960, p. 176f.; different at Axelrod, 2006). So if one can neither invoke nor control trust one ought to investigate indirect measures to promote the positive aspects of trust in networks.

An alternative is the conscious handling of distrust. In everyday language and also in some theory distrust finds its place as merely the opposite of trust (as in Deutsch, 1973). However, social relationships and human minds are far more complex than this simple juxtaposition suggests (Lewicki & Bunker, 1996; Lewicki, McAllister, & Bies, 1998). The coexistence of trust and distrust does not result from a linguistic sophistry but from their distinct effects on social action (Luhmann, 2009). Distrust has not to be understood as absence of trust but as its active counterpart. Despite our intuition distrust can be functional.

One positive side of distrust is to protect networks from lock-ins. In networks, excessive confidence in a technology and in a particular partnership can blindfold its members and can lead to neglect important changes in the environment. Gernot Grabher has described this effect for regional networks as a lock-in (Grabher, 1993). One way to preserve for instance the crusted German industry networks form this kind of failure is to inject well defined doses of distrust in order to survive within global competition (Kern, 1996). To use distrust as a strategic impetus for change and innovation it has to be cultivated as a productive factor (Ellrich, Funken, & Meister, 2001).

Admittedly, distrust is a provocative term. Regardless whether in the initiation of collaboration or in long-standing relationship one is more inclined if anything to use less radical expressions such as scepticism, inhibition, doubt. The benefit of the concept of distrust is that it addresses another level at the same time: Distrust is mostly based on mis-representations and conjectures that lack a rational foundation. This inevitable correlation of the potentially rational and irrational highlights the core issue for the cultivation of distrust by a network management.

As shown in the example above, to open Pandora's box by raising trust issues explicitly in a communication probably results in destabilizing the foundation of a

relationship. But the same goes for the communication of distrust. By communicating issues of distrust in networks one can turn conjecture into facts and get rid of groundless suspicion. Thus, the task of network management could be summed up as follows: Instead of trying to build up trust in networks a productive approach to distrust can be a promising alternative because network management can at least go about the latter actively and thus prepare strategically against a lock-in based on too much trust in trust.

Summary

In the end, we return to the introductory thesis: The possibility of failure insinuates that something has been functioning before. However, it would be optimistic to think that the discussed pillars that form a network are actually established in many so called networks today. It is much more plausible to assume that the logic of the network fails because it simply remains unrecognized. Put another way: A network provides the breeding ground for technical innovation but at the same time it calls for a management innovation by itself.

To promote networks first and foremost managers has to complement the unique logic of networks. Only then tools and tactics can be put into action that anticipate – and at best – prevent failure of networks. We consider the arguments in this article to be an impulse to rethink the management of networks and to bring forth the necessary professionalization of network management – so that in future fewer networks fail and more move on successfully.

References

Aderhold, J., & Wetzel, R. (2005). Netzwerkmoderation – Grundprobleme und Gestaltungsvorschläge für ein handlungsfähiges Netzwerkmanagement. *Zeitschrift Führung + Organisation, 74*(1), 18–24.

Alter, C., & Hage, J. (1993). *Organizations working together*. London: Sage.

Axelrod, R. M. (2006). *The evolution of cooperation*. New York: Basic Books.

Baitsch, C., & Müller, B. (Eds.). (2001). *Moderation in regionalen Netzwerken*. Mering: Hampp.

Becker, A., Küpper, W., & Ortmann, G. (1988). Revisionen der Rationalität. In W. Küpper & G. Ortmann (Eds.), *Mikropolitik: Rationalität, Macht und Spiele in Organisationen* (pp. 89–113). VS Verlag für Sozialwissenschaften: Opladen.

Benz, A., Lütz, S., Schimank, U., & Simonis, G. (Eds.). (2007). *Handbuch Governance. Theoretische Grundlagen und empirische Anwendungsfelder*. Wiesbaden: VS Verlag für Sozialwissenschaften.

Böhle, F., & Bolte, A. (2002). *Die Entdeckung des Informellen. Der schwierige Umgang mit Kooperation im Arbeitsalltag*. Frankfurt a.M.: Campus-Verlag.

Brass, D. J., Galaskiewicz, J., & Greve, H. R. (2004). Taking stocks of networks and organizations. A multilevel perspective. *Academy of Management Journal, 47*(6), 795–817.

Buhl, C. M., & Meier zu Köcker, G. (2009). *Innovative Netzwerkservices. Netzwerk- und Clusterentwicklung durch maßgeschneiderte Dienstleistungen*. Berlin: Bundesministerium für Wirtschaft und Technologie.

Burt, R. S. (1992). *Structural holes. The social structure of competition*. Cambridge: Harvard University Press.

Castells, M. (2010). *The rise of the network society* (2nd ed.). Malden, MA: Blackwell.

Chesbrough, H. W. (2003). *Open innovation. The new imperative for creating and profiting from technology*. Harvard: Harvard Business Review Press.

Coleman, J. S. (1990). *Foundations of social theory*. Cambridge: The Belknap Press of Harvard University Press.

Coser, L. A. (1956). *The function of social conflict*. New York: The Free Press.

Deutsch, M. (1973). *The resolution of conflict. Constructive and destructive processes*. New Haven, CN: Yale University Press.

Ellrich, L., Funken, C., & Meister, M. (2001). Kultiviertes Misstrauen. Bausteine zu einer Soziologie strategischer Netzwerke. *Sociologica Internationalis, 39*(2), 191–234.

Faltin, L. (2012). *Erfolgreich führen in Netzwerken. Gemeinsamkeit gestalten*. Wien: Signum.

Glückler, J., & Hammer, I. (2013). Situative organisatorische Netzwerkanalyse – Ein Instrument zur Beratung von Unternehmensnetzwerken. In J. Sydow & S. Duschek (Eds.), *Netzwerkzeuge. Tools für das Netzwerkmanagement* (pp. 33–45). Wiesbaden: Springer Gabler.

Göbel, M., Ortmann, G., & Weber, C. (2007). Reziprozität. – Kooperation zwischen Nutzen und Pflicht. In G. Schreyögg & J. Sydow (Eds.), *Kooperation und Konkurrenz*, *Edition Managementforschung* (Vol. 17, pp. 161–205). Gabler: Wiesbaden.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review, 25*(2), 161–178.

Grabher, G. (1993). The weakness of strong ties: The lock-in of regional development in the Ruhr area. In G. Grabher (Ed.), *The embedded firm: On the socioeconomics of industrial networks* (pp. 255–277). London: Routledge London.

Grabher, G. (2005). Switching ties, recombining teams: Avoiding lock-in through project organization? In G. Fuchs & P. Shapira (Eds.), *Re-thinking regional innovation and change. Path dependency or regional break-through* (pp. 63–84). New York: Springer.

Hannan, M. T., & Freeman, J. (1984). Structural inertia and organizational change. *American Sociological Review, 49*(2), 149–164.

Helmcke, M. (2008). *Handbuch für Netzwerk- und Kooperationsmanagement: Theorie, Praxiswissen, Praxisbeispiele, Tools*. Bielefeld: USP-Publishing.

Jappe-Heinze, A., Baier, E., & Krol, H. (2008). *Clusterpolitik: Kriterien für die Evaluation von regionalen Clusterinitiativen. Arbeitspapiere Unternehmen und Region (3)*. Karlsruhe: Frauenhofer ISI.

Jessop, B. (2003). *Governance and metagovernance. On reflexivity, requisite variety, and requisite irony*. Department of Sociology at Lancaster University. Retrieved February 6, 2017, from http://www.lancaster.ac.uk/fass/resources/sociology-online-papers/papers/jessop-governance-and-metagovernance.pdf

Kern, H. (1996). Vertrauensverlust und blindes Vertrauen: Integrationsprobleme im ökonomischen Handeln. *SOFI-Mitteilungen, 24*, 7–14.

Kowohl, U., & Krohn, W. (2000). Innovation und Vernetzung: Die Konzeption der Innovationsnetzwerke. In J. Weyer (Ed.), *Soziale Netzwerke: Konzepte und Methoden der sozialwissenschaftlichen Netzwerkforschung* (pp. 135–160). Oldenbourg Verlag: München.

Krücken, G., & Meier, F. (2003). Wir sind alle überzeugte Netzwerktäter – Netzwerke als Formalstruktur und Mythos der Innovationsgesellschaft. *Soziale Welt, 54*, 71–92.

Kühl, S. (2007). Formalität, Informalität und Illegalität in der Organisationsberatung. Systemtheoretische Analyse eines Beratungsprozesses. *Soziale Welt, 58*, 269–291.

Lewicki, R. J., & Bunker, B. B. (1996). Developing and maintaining trust on work relationships. In T. R. Tyler & R. M. Kramer (Eds.), *Trust in organizations. Frontiers of theory and research* (pp. 114–139). Thousand Oaks, CA: Sage.

Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *The Academy of Management Review, 23*(3), 438–458.

Luhmann, N. (1987). *Soziale Systeme: Grundriß einer allgemeinen Theorie*. Frankfurt a.M: Suhrkamp.

Luhmann, N. (2009). *Vertrauen*. Stuttgart: Enke.

Lundequist, P., & Power, D. (2002). Putting porter into practice? Practice of regional cluster building: Evidence from Sweden. *European Planning Studies, 10*(6), 685–704.

Mayntz, R. (1997). Policy-Netzwerke und die Logik von Verhandlungssystemen. In R. Mayntz (Ed.), *Soziale Dynamik und politische Steuerung. Theoretische und methodologische Überlegungen* (pp. 239–262). Frankfurt a.M.: Campus.

Miles, R. E., & Snow, C. C. (1992). Causes of failure in network organizations. *California Management Review, 34*(4), 53–72.

Möllering, G. (2009). Leaps and lapses of faith. Exploring the relationship between trust and deception. In B. Harrington (Ed.), *Deception. From ancient empires to internet dating* (pp. 137–153). Stanford, CA: Stanford University Press.

Neuberger, O. (2006). *Mikropolitik und Moral in Organisationen. Herausforderung der Ordnung* (2nd ed.). Stuttgart: Lucius und Lucius.

Ortmann, G. (2008). Die Ehre der Prizzis, oder: Vertrauen ist nicht der Anfang von allem: Über Vertrauen und Relianz. In G. Ortmann (Ed.), *Organisation und Welterschließung* (pp. 245–258). Wiesbaden: VS Verlag für Sozialwissenschaften.

Porter, M. E. (1998). Clusters and the new economics of competition. *Harvard Business Review, 76*, 77–90.

Powell, W. W. (1990). Neither market nor hierarchy: Network forms of organization. *Research in Organizational Behavior, 12*, 295–336.

Powell, W. W. (1996). Trust-based forms of governance. In R. Moreland Kramer & T. R. Tyler (Eds.), *Trust in organizations: Frontiers of theory and research* (pp. 51–67). Thousand Oaks, CA: Sage.

Powell, W. W., Packalen, K., & Whittington, K. (2012). Organizational and institutional genesis. The emergence of high-tech clusters in the life science. In J. F. Padgett & W. W. Powell (Eds.), *The emergence of organizations and markets* (pp. 434–465). Princeton, NJ: Princeton University Press.

Provan, K. G., Fish, A., & Sydow, J. (2007). Interorganizational networks at the network level: A review of the empirical literature on whole networks. *Journal of Management, 33*(3), 479–516.

Rammert, W. (1997). Innovation im Netz: Neue Zeiten für technische Innovationen: heterogen verteilt und interaktiv vernetzt. *Soziale Welt, 48*, 397–416.

Rammert, W. (2003). Zwei Paradoxien einer innovationsorientierten Wissenspolitik: Die Verknüpfung heterogenen und die Verwertung impliziten Wissens. *Soziale Welt, 54*(4), 483–508.

Schein, E. H. (2010). *Organizational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.

Schreyögg, G. (2003). *Organisation. Grundlagen moderner Organisationsgestaltung. Mit Fallstudien* (4th ed.). Wiesbaden: Gabler.

Snow, C. C., Miles, R. E., & Coleman, H. (1992). Managing the 21st century network organization. *Organizational Dynamics, 20*(3), 5–20.

Sydow, J. (2005). *Strategische Netzwerke: Evolution und Organisation*. Wiesbaden: Gabler.

Sydow, J. (2010). Management von Netzwerkorganisationen – Zum Stand der Forschung. In J. Sydow (Ed.), *Management von Netzwerkorganisationen. Bei-träge aus der 'Managementforschung'* (5th ed., pp. 373–470). Wiesbaden: Gabler.

Sydow, J., & Lerch, F. (2013). Netzwerkzeuge – Zum reflexiven Umgang mit Methoden und Instrumente des Netzwerkmanagements. In J. Sydow & F. Lerch (Eds.), *Netzwerkzeuge – Zum reflexiven Umgang mit Methoden und Instrumenten des Netzwerkmanagements* (pp. 9–17). Heidelberg: Springer.

Sydow, J., Schüssler, E., & Müller-Seitz, G. (2016). *Managing inter-organizational relations. Debates and cases*. London: Palgrave.

Thoma, J. (2016). Die kulturelle Basis innovativer Wertschöpfung in Netzwerken. In J. Wulfsberg, T. Redlich, & M. Moritz (Eds.), *1. interdisziplinäre Konferenz zur Zukunft der Wertschöpfung* (pp. 317–328). Hamburg: Deutschland.

Thompson, G. F. (2003). *Between hierarchies and markets. The logic and limits of network forms of organization*. Oxford: Oxford University Press.

Thompson, G. F. (2004). Is all the world a complex network? *Economy and Society, 33*(3), 411–424.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Weber, M. (2005). *Wirtschaft und Gesellschaft: Grundriß der verstehenden Soziologie*. Frankfurt a. M: Zweitausendeins.

Wellman, B. (1983). Network analysis: Some basic principles. In R. Collins (Ed.), *Sociological theory 1983* (pp. 155–200). San Francisco, CA: Jossey-Bass.

Wetzel, R., Aderhold, J., Baitsch, C., & Keiser, S. (2001). Moderation in Netzwerken – Theoretische, didaktische und handlungsorientierte Betrachtungen aus einer internen Perspektive. In C. Baitsch & B. Müller (Eds.), *Moderation in regionalen Netzwerken* (pp. 7–123). Mering: Hampp.

Williamson, O. E. (1991). Comparative economic organization. The analysis of discrete structural alternatives. *Administrative Science Quarterly, 36*(2), 269–296.

Williamson, O. E. (1993). Calculativeness, trust, and economic organization. *Journal of Law and Economics, 36*(1), 453–486.

Williamson, O. E. (2005). Networks – Organizational solutions to future challenges. In *Business administration: Economics of interfirm networks* (pp. 3–27). Tübingen: Mohr Siebeck.

Windeler, A. (2003). Spuren im Netzwerkdschungel – Typen von Unternehmensnetzwerken und Besonderheiten ihrer Koordination. In H. Hirsch-Kreinsen & M. Wannöffel (Eds.), *Netzwerke kleiner Unternehmen. Praktiken und Besonderheiten internationaler Zusammenarbeit* (pp. 35–60). Berlin: Edition Sigma.

Failure in Volunteer Work: A Call for Strategic Volunteer Management

Romualdo Ramos and Theo Wehner

Introduction

Occupational sciences have traditionally focused on remunerated work, and this will continue to be the case as the job market faces new challenges regarding digitalization, automation, demographic changes and environmental sustainability. Moreover, all these characteristics of the globalized job market are also accompanied by a shift in values, mostly prevalent in postmodern societies, in which work is no longer seen as a mere path to financial security, but also as a way of self-actualization. It is in this context in which the literature on unpaid, voluntary work has come to proliferate in the last two decades.

We define voluntary work as the sustained, unpaid work within an organization for the benefit of the environment or individuals other than, or in addition to, close relatives. It requires time expenditure, and it could theoretically be remunerated and carried out by other people (Wehner & Mieg, 2006). In Switzerland, where the authors of this chapter have conducted most of their studies, 25% of the population (15 and older) is engaged in some type of club or non-profit organization (Freitag, Manatschal, Ackermann, & Ackermann, 2016). The same participation rates are found in the US, where in 2015 a total of 7.9 billion hours of volunteer service were completed, valued at $184 billion (Corporation for National and Community Service, 2016). This engagement makes the provision of many community services possible, for which there would otherwise be little or no funding. It also translates into a substantial relief for the welfare system. At a more individual level, volunteering has been associated with well-being, a better work-life balance and

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other health benefits (see Ramos, Brauchli, Bauer, Wehner, & Hämmig, 2015 for a review of the literature and empirical evidence).

Yet the non-profit sector is currently experiencing difficulties when it comes to retention of volunteers. Reports in Switzerland show a declining tendency in participation (Freitag et al., 2016). In the US, one out of three volunteers will not continue their services in the following year (Corporation for National and Community Services, 2016). In other words, non-profits are failing to hold on to their most valuable resource, and in the eyes of many scholars, this failure is attributable to a lack of strategic volunteer management (Eisner, Grimm, Maynard, & Washburn, 2009). But at a deeper level of understanding, we could legitimately ask ourselves: what is actually failing?

In this chapter, we will focus on the individual experience of failure as the triggering factor leading to turnover and, ultimately, organizational failure in the non-profit sector. We define failure as the sense of infeasibility of a self-defining, meaningful goal (Thomann, Wehner, & Clases, 2015). It should be distinguished from errors and mistakes, which represent hurdles on the way toward an anticipated goal. Based on this understanding, those who do not know self-defining, meaningful motives cannot fail. What fails is the self (Rüdiger & Schütz, 2014).

While extrinsic motives (i.e. a monetary income) may, to some extent, override intrinsic, self-defining goals in our paid jobs, the non-profit sector depends on the willingness and intrinsic motivation of millions of volunteers who will be equally willing to leave the organization when they perceive their goals are not being met. The voluntary nature of participation is also what might create a sense of complacency at the managerial level. When the prevailing rationale is that people volunteer "because they want to" rather than "to fulfil a self-defining goal", organizations lose from sight people's deep-rooted motivations, which will eventually translate into expensive, time-consuming recruitment processes and the loss of invaluable human capital. Some non-profits are becoming aware of this issue and are now adopting a "talent management" approach, which creates the infrastructure to recruit, develop, place, recognize and retain volunteers.

This chapter will first provide a theoretical blueprint on motivation research, which will illuminate the underlying basic human needs in general, and our engagement in voluntary work in particular. We will then delve into issues that may arise when no strategic volunteer management is implemented, ultimately evoking the experience of failure in individuals. We will organize the evidence in three areas: task-related characteristics, social characteristics and structural characteristics. Case studies from interviews conducted by the authors will help to illustrate many of the ideas put forth in this chapter and will set the stage for best practice recommendations.

Theoretical Background: Volunteering and Human Motivation

What motivates individuals to undertake voluntary, unpaid work during their spare time? Research has adopted two different yet highly intertwined frameworks in order to explain this phenomenon: the functional approach to volunteering and self-determination theory.

In line with earlier theorizing on attitudes (Katz, 1960), the functional approach posits that people's engagement in voluntary activities serves different psychological functions (Clary et al., 1998). Based on exploratory and confirmatory factor analyses, researchers found six categories, which are the building blocks of the Volunteer Functions Inventory (VFI). They labelled these functions as follows:

- Values: Volunteering is a way of expressing personal values for a cause that is important to the individual, often related to altruistic and humanitarian concerns.
- Understanding: Volunteering brings about new experiences, and thus, the opportunity to learn new things and to exercise abilities, skills and knowledge that might otherwise remain unused.
- Enhancement: Volunteering helps to maintain or enhance positive affect (e.g. self-esteem, growth and self-development).
- Social: Volunteering offers the opportunity to be with one's friends or to engage in activities viewed favourably by relevant others.
- Career: Volunteering serves as a facilitator of career-related benefits, shedding a positive light on our professional endeavours.
- Protective: Volunteer can function as a self-protecting tactic, shielding the ego from negative feelings such as guilt, loneliness or other personal problems.

Recent studies have called for an extension of the VFI, finding empirical support for a "social justice" function (Jiranek, Kals, Humm, Strubel, & Wehner, 2013). Volunteers driven by this motive are morally concerned with promoting social equality. This function brings in an other-oriented motive, which counterbalances the predominantly self-oriented categorization of the VFI.

It is legitimate to ask whether these volunteer functions serve extrinsic or intrinsic motives. In this respect, self-determination theory (SDT) offers a more holistic view on human motivation. SDT (Deci & Ryan, 2000) is a robust theoretical corpus based on the assumption that individuals have an innate desire for personal growth and this can be attained by fulfilling three basic psychological needs: the need for autonomy, which refers to our freedom of action in accordance with our views and values; the need for competence, i.e. the experience of mastery and self-efficacy derived from the use of one's skills and knowledge in ways that bring about positive change; and the need for relatedness, which alludes to our social nature and need for close interpersonal relationships (Weinstein & Ryan, 2010). It follows that the fulfilment of these psychological needs is associated with a myriad of positive outcomes including performance, organizational commitment, self-esteem and well-being (Gagné & Deci, 2005; Ryan & Deci, 2001).
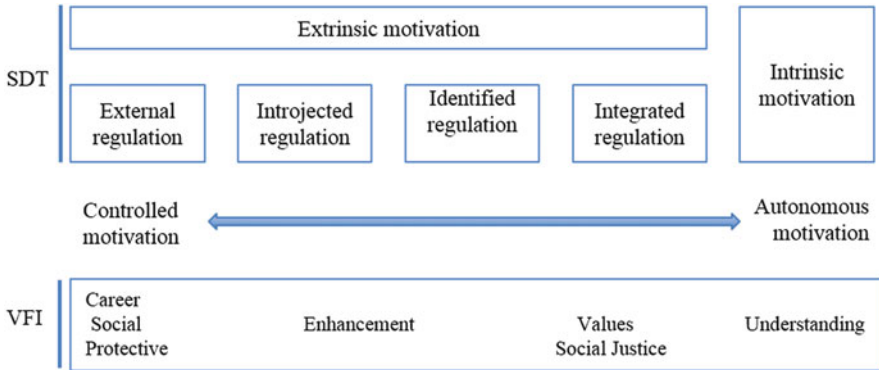
Fig. 1 Controlled and autonomous motivation based on the VFI and the SDT

SDT further suggests that motivation be understood in terms of a continuum rather than as an extrinsic–intrinsic dichotomy. It distinguishes between controlled motivation, which is contingent to forces extrinsic to the self, and autonomous motivation, where the locus of causality lies within the individual. Based on SDT premises, controlled (extrinsic) behaviours can also become autonomous (and even intrinsic) by means of internalization. As shown in Fig. 1, behavioural regulations can be found at different levels of internalization (for a detailed account, see Gagné & Deci, 2005). Furthermore, the categories of the functional approach can be placed along the SDT continuum of controlled and autonomous motivation (see Oostlander, Güntert, van Schie, & Wehner, 2014).

An important tenet of the SDT is that regulations should not be treated as developmental stages, in which individuals have to complete a certain level of internalization in order to move on to the next. Rather, behavioural regulations can be readily internalized at any given point of the continuum depending on personal experience and situational factors (Ryan & Deci, 2000). This premise has important reverberations on our understanding of work; both paid and unpaid. On the one hand, it is safe to assume that all paid work is, to some degree, externally regulated by contingencies (e.g. a salary) that secure our living or our mere social status. Autonomous, self-determined motivation might be given from the very beginning, it can be gradually internalized, or it might never materialize. On the other hand, the motivation for volunteering is primarily autonomous. Although controlled volunteer functions (e.g. protective, career) might sometimes be at play, research reliably shows that they are not as pronounced as autonomous motives (e.g. values, understanding, social justice; Jiranek et al., 2013). Hence, the motivational logic in volunteering is reverse: the challenge at stake might be less characterized by the need for internalization and more so by the need to prevent self-alienation, i.e. the process by which individuals lose their sense of autonomy and self-determination. In the following section, we will illuminate scenarios that can undermine volunteers' motivation and the underlying basic human needs.

Ways to Fail in the Non-profit Sector: Three Levels of Analysis

People may experience failure while volunteering if the tasks and roles they have been assigned prevent autonomy and competence from unfolding, if they are unable to build social bonds that are both appreciative and supportive of their work, or if the overarching infrastructure, in which volunteering takes place, is ill-managed. We will now consider some of these task-related, social and structural characteristics as they pertain to volunteers' motivation.

Task-Related Characteristics

Role Ambiguity

Role ambiguity can be defined as the lack of necessary information with respect to a job or position (Rizzo, House, & Lirtzman, 1970). A specific, agreed-upon set of tasks and responsibilities is of paramount importance when entering a new position. This is the only way supervisors can hold workers accountable for their performance, and how workers know what is expected from them. When roles are not clearly defined, role incumbents will either follow a trial-and-error logic, or adopt coping strategies that either avoid the source of stress altogether or distort its perception. This scenario can seriously harm the need for competence, ultimately leading to negative outcomes such as anxiety, dissatisfaction, poor performance and withdrawal tendencies.

Role ambiguity highly correlates with the complexity of a position (Rizzo et al., 1970), so it comes as no surprise that volunteer boards are particularly prone to this problem. A committed board of trustees/directors is crucial for the success of a non-profit organization. However, they are often confronted with multiple, conflicting expectations in regard to their governance tasks. Oftentimes, there is a blurred line between the responsibilities of board members, board chair and chief executives, leading to confusion and a lack of accountability. In sum, board members experience role ambiguity due to inadequate communication, leading to inefficient performance and reinforcing turnover intentions, as empirical research has shown (Doherty & Hoye, 2011; Wright & Millesen, 2008).

Role ambiguity is particularly insidious in a specific form of volunteering known as "voluntourism". This has become a popular form of engagement while exploring a new country or culture. In a world of increasing mobility, many have touted voluntourism as a chance to expand human agency in community work. However, studies show that this form of volunteering can create several ambiguous and conflicting roles, that can not only thwart their feelings of competence but also their need for autonomy (Lyons, 2003; Lyons & Wearing, 2008). Case Study 1 depicts the detrimental effects of role ambiguity on a longstanding volunteer in the aftermath of the 2013 super typhoon Yolanda in the Philippines, and the challenges faced in international volunteer assignments.

Role Ambiguity in Disaster Operations Abroad

"As soon as I heard about the typhoon in the Philippines, I contacted my organization to see how I could actively help. Two days later, I was on a plane on my way to the affected areas", commented a 40-year-old engineer, who had been offering his services to a renowned NPO for many years. But this assignment marked a turning point, after which he left the organization *"I was supposed to work in a team responsible for smoothing out the logistics of food and medicine on site. But it all ended up in an organization chaos, in which logistics abroad and on site were not synchronized and we were literally left out there without much else to do. I wanted to use my time in some productive way, so I tried to help other units, but I couldn't see any sense or result in anything I was doing. I felt powerless and very frustrated. When I came back, I decided that I would stop volunteering"*. This was clearly a drastic decision; a decision one would not normally make after a single case of failure. But further statements made by the volunteer expose the scathing emotional toll this situation has had on him. Thus, while we should not fail to acknowledge the extraordinary circumstances that exacerbated the feelings of failure, poor organization and ambiguity were clearly at the root of his decision.

Unmet Role Expectations

There are times in which roles might be crystal clear, but they simply do not measure up with what we had in mind. Unmet role expectations emerge when there is a negatively connoted discrepancy between volunteers' expectations of the job and the actual job experience, leading to a decrease in job satisfaction, organizational commitment and intent to remain (Wanous, Poland, Premack, & Davis, 1992). This situation is most likely to surface during the very early stages of a voluntary engagement; what some have come to name newcomers' entry shock (Lopina & Rogelberg, 2013). Many volunteers join an organization with the hope of making an immediate impact. However, it is often the case that they either hold unrealistic expectations, they lack the necessary know-how to make that happen (see Case Study 2), or the organization fails to provide the working conditions to materialize their goals (see Case Study 3). As a result, many volunteers feel frustrated and helpless, what might lead to an abrupt termination of their engagement (Breaugh & Starke, 2000; Haski-Leventhal & Bargal, 2008). A qualitative study has also shown that volunteers prefer relational rather than transactional HR practices (Stirling, Kilpatrick, & Orpin, 2011). In other words, volunteers prefer being involved in activities rather than being entangled in bureaucratic procedures, they expect organizations to create a supportive environment with enjoyable volunteering opportunities and they expect public recognition for their contributions. These expectations throw light on the feelings of competence and relatedness that volunteers yearned for in their activities.

Case Study 2

Unmet Expectations in Patient Care Volunteering

A bank employee wanted to volunteer in the field of terminal patient care. He participated in a preparation workshop and started his shifts as a sitter soon thereafter. It did not take long (namely still before his patient passed away) until he quit. Full of resignation, he felt that he had "downright failed" in his mission: *"I realized that I was really scared; not of the dying patient, but of myself. In my mind, it was not clear anymore, what I was doing and why I thought I could be of any help to a dying person".*

A similar scenario characterizes the experience of a young woman who, after much self-reproach, terminated her engagement. She had come to this volunteering opportunity at a clinic through her employer, and she decided to start visiting patients with acute dementia: *"Shortly after I realized that it was impossible to establish a relationship or bond with the patients. Even after a short break to the toilet, patients wouldn't recognize me anymore. That was not quite the way I imagined it, although I no longer knew, what I was expecting to begin with. It was frustrating, but I had to quit."*

In both cases, it becomes apparent that the volunteers had not fully thought through the demands and implications of their engagement, and what a successful mission might have entailed. Those who experience failure have, at least in hindsight, an idea of what success might have looked like.

Case Study 3

"It All Just Got Out of Hand"

In the face of the ever-increasing rate of asylum-seekers in Switzerland, a middle-age librarian enrolled in a volunteering program that provides German courses to refugees. His module was conceived as a "conversation practice" course. He started with 15 attendees; already a sizeable, but still manageable number. Two months later, that number had doubled. *"It just didn't make any sense for me anymore. It was impossible to engage 30 people at the same time into a conversation. It all just got out of hand and they (the organization) were not efficient at all in coordinating the influx of students and the creation of new courses. It was all very chaotic".* Frustrated with this experience, he quit his job, but not his commitment to the cause. *"I want to volunteer and give German classes, but not under these conditions. I am currently looking for new opportunities".* The problem clearly lay in the infrastructure and conditions that the organization provided (or failed to provide). This could not, however, undermine the volunteer's motivation to make an impact.

Psychological Contracts and Illegitimate Tasks

Despite all efforts to eradicate unmet expectations through clear, a priori information about the job, there might still be unspoken rules that will shape the relationship

between role incumbents and the organization. Volunteers rarely sign a formal contract upon entering a position, bringing psychological contracts all the more to the forefront in the non-profit sector. Psychological contracts are unwritten mutual beliefs, perceptions and obligations that employers and employees have of each other and their roles in an organization (Rousseau, 1995). Given the lack of any other instrumental means of retention, adherence to these implicit rules (as paradoxical as it may be) becomes critical for non-profits in order to maintain a motivated volunteer staff. Psychological contracts can be violated, for instance, by assigning illegitimate tasks. These are *"tasks that are perceived as unreasonable or unnecessary, as not being part of one's role, thus violating expectations about what can reasonably be required of a given person"* (Stocker, Jacobshagen, Semmer, & Annen, 2010, p. 117). Illegitimate tasks can trigger feelings of offense toward one's role identity and, thus, the self. They can be distinguished in unnecessary and unreasonable tasks. Whereas unnecessary tasks might be seen as a "waste of time", unreasonable tasks are thought of as incompatible with one's role. Illegitimate tasks have been related to strain, counterproductive work behaviour, lower job satisfaction and work engagement as well as feelings of resentment (Semmer, Tschan, Meier, Facchin, & Jacobshagen, 2010; Stocker et al., 2010). In the realm of voluntary work, Van Schie, Güntert, and Wehner (2014) found differential effects for the two types of illegitimate tasks. Volunteers of a charitable organization who reported being subjected to unreasonable tasks had a significantly lower intent to remain in the organization, whereas unnecessary tasks were associated with lower self-determined motivation. Case Study 4 exemplifies the reactions to illegitimate tasks in a volunteer workforce.

Case Study 4

Illegitimate Tasks

Volunteers' time is precious; thus, it is not surprising that they reluctantly carry out administrative tasks. That was the case in a NPO that offered a sport program for senior citizens. The organization received a subsidy from the state. An important requirement was, however, that participants be registered in a database and that they confirm their participation through a signed document. Many volunteers felt unease with this administrative load and strictly refused to accept such a "bureaucratic job" or "controlling task".

Lack of Matching Between Volunteers' Skills and Job Tasks

The average volunteer has high education levels (Wilson, 2012), bringing along not only the desire to make an impact, but also invaluable human capital. Highly skilled volunteers are oftentimes sent out to perform manual work, unable to unfold their full potential. This is particularly the case in corporate volunteering programs, where building team spirit is one of the intended goals and can be achieved through this type of activities. While such a task-skill disparity might be acceptable for one-shot projects, they might not enthral volunteers for long-term commitment. In fact,

statistics show that people who find no applicability of their skills in their assignments are less likely to continue serving the following year (Corporation for National and Community Service, 2008).

However, a matching process should not see volunteering as a continuation of activities done in one's occupation. In fact, such a scenario could backfire, as the Case Study 5 portrays. This tip over effect, in which "too much of the same thing" can become damaging for engagement, might be contingent to the line of work. Whereas people in fields such as art, healthcare and management show higher retention rates when they volunteer in activities related to those in their profession, volunteers who work in service (e.g. gastronomy, retail) or highly routinized jobs are less likely to remain in non-profit organizations where they perform similar tasks (CNCS, 2008). In sum, lack of matching between volunteers' skills and assigned tasks can thwart motivation by underutilizing volunteers' potential. However, volunteering should not become the unpaid prolongation of paid work activities.

Case Study 5

"I Didn't Come Here to Continue Working"

"I chose (the Organization) because of its mission and values", said the 35-year-old accountant, who had recently started to work in a charitable association that offers at-risk youth programs. At the time, a bookkeeping position was open, so it seemed as the logical step for her to take up this role. She did it for some time, but soon she realized this was not what she was intended to do. *"I kinda do the same thing in my regular job every day, so it felt like more of the same. I just needed some other kind of impact. I am a good listener, and I had psychology as a minor during my studies. So I guess that kind of listener's side to me was always kind of there. And that is what I saw myself doing here"*. Fortunately, she voiced her concern and the organization took action promptly. After a brief preparation workshop, she started volunteering as a mentor.

This case shows that matching skills with tasks does not have to be based on a person's résumé. It is thus a sound advice to look also beyond formal education in order to unearth unpractised skills and interests.

Social Characteristics

Voluntary assignments take place in a social setting, and that setting's capacity to provide a safety net of support, feedback and recognition is pivotal for the survival of the organization.

Lack of Recognition

When organizations fail to acknowledge the efforts of their volunteers, motivation is prone to suffer. It undermines both our needs for relatedness and competence, as we become uncertain of the quality and impact of our work on the life of others. In fact,

lack of recognition is one of the leading causes of volunteers' turnover (Wilson, 2012). A major problem in addressing this issue is the limited scope and understanding of what recognition actually entails. It is widely agreed that saying "thank you" on a regular basis is the most fundamental form of acknowledgement. However, in a recent study, volunteers reported that the best way to be thanked and recognized is by hearing how their work has made a difference (Dixon & Hientz, 2013). Feedback is widely known for its motivating potential ever since the seminal work of Hackman and Oldham (1976). This holds also true for voluntary work. The way and the circumstances under which feedback is given, however, should be carefully planned in order to avoid backlash effects (see Case Study 6). The aforementioned study also found that banquets, yearly dinners and gifts are the least preferred methods of recognition by volunteers (Dixon & Hientz, 2013). This form of acknowledgment might be even frowned upon if they feel that their contributions are otherwise overlooked the rest of the year (Ellis, 1994). This is consistent with meta-analytical findings of the SDT, which show that extrinsic rewards can undermine intrinsic motivation (Deci, Koestner, & Ryan, 1999). Finally, and most importantly, recognition begins long before outcomes are tangible. If people's voices are not heard and their ideas are not taken into account (i.e. recognized), they may feel frustrated and precipitate toward withdrawal.

Case Study 6

When Recognition Backfires

A big misunderstanding led to the "resignation" of some of the 100 volunteers working at a hospital. Volunteers were considered "workers/employees" in both internal and external communication, what was thought of as a way of appreciation. It was thus consequent to offer them "appraisal interviews" on a regular basis. This well-intended practice resulted in ten volunteers abandoning their engagement. They did not want to be treated as "employees": *"Appraisal interviews? Me? A 63-year-old? I've had enough of them during my working years, and I know that it is mere formality. I do not need that here"*, said one of the volunteers. A lady that had volunteered at the hospital for years added: *"They probably meant it well, but I was still angry. I am not an employee"*.

This brings into light that recognition in the form of feedback must be a thought-through process in which volunteers do not feel apprehended or in real job-like situations.

Lack of Social Support

In work design research, social support *"reflects the degree to which a job provides opportunities for advice and assistance from others"* (Morgeson & Humphrey, 2006, p. 1324), be it co-workers or supervisors. It also refers to the extent in which comradeship and friendships can develop in a work environment (Sims, Szilagyi, & Keller, 1976). Social support at work is a reliable predictor of well-being, and is particularly relevant in stressful or emotionally demanding jobs. In the

non-profit sector, this becomes apparent in fields like hospice care and crisis management. The case studies presented earlier also illustrate failed tasks in which social support could have had a buffer effect. It is also of value in activities that might otherwise lack motivational job characteristics (e.g. trash pick-up in a reservoir), bringing the sense of social bonding and connectedness to the foreground, whatever the task may be. Organizational connectedness, a more encompassing form of social support engrained in the organizational culture, has shown to reduce turnover intentions in emergency service volunteers (Huynh, Xanthopoulou, & Winefield, 2014).

One of the issues that some NPOs face is a disparate volunteer–employee ratio. In other words, staff members lack the time resources needed for ongoing mentoring and support of volunteers; especially in the initial phases of their engagement, when many questions and challenges are likely to arise. New volunteers might also refrain from reaching out staff members for help. In addition, some volunteers might require special support in order to fulfil their assignments (e.g. people with disabilities). To counteract the undesirable feeling of "being left alone" in volunteers, we propose a volunteer peer support scheme in the closing segment of this chapter.

Structural Characteristics

Negligence at the task and social levels are often the result of a missing or faulty overarching strategy; a strategy that provides guidance in achieving the organization's mission and utilizes human resources in an optimal manner. We herein consider lack of vision and goal-setting as well as the lack of strategic planning regarding diversity and the changing work environment as two fundamental structural flaws.

Lack of Vision and Goal-Setting

Visions are clear, comprehensive pictures of an organization at a given time in the future; they are trailblazers of what the organization is yet to become. Visions take form by setting goals that serve as milestones of the vision's progress. Unlike private companies, the vision of an NPO constitutes one of the main, if not the reason why people volunteer for a specific organization. After all, as the functional approach has shown, the "values" motive (i.e. volunteering for a cause that is important to the individual) ranks the highest from all six categories (Clary et al., 1998; Jiranek et al., 2013). To the layperson, visions are not much more than labels that help to cluster organizations based on their missions (i.e. what they do rather than what they intend to become). It is not until people are enmeshed within the daily grind of a non-profit that they begin to grasp the vision of an organization (or lack thereof). In a recent survey of NPOs from over twenty countries (Nonprofit Sector Leadership Report, 2016), one out of four non-profits reported not having a compelling vision that

would unify the board, staff, and donors, which could facilitate decision-making processes.[1] There is also a discrepancy in this regard based on organizational hierarchy, with only 19% of CEOs admitting that their organization lacks a unifying vision and 41% of middle managers making such assertion. This comes as no surprise in a way, as the creation of a guiding vision is prime responsibility of top-level management. The clarity or blurriness of a vision will eventually trickle down to the lower levels of the organization, yielding positive and negative outcomes accordingly. The Non-profit Sector Leadership Report also shows that 85% of nonprofit leaders consider a compelling vision as one of their top priorities; however, two thirds confess having difficulty in articulating that vision or creating it in the first place. The result of an ill-conceived vision (or its complete absence) will end up reflecting in uncoordinated, ambiguous tasks (see Section "Task-related Characteristics") and in a loss of volunteers' morale.

Lack of Strategic Planning in Terms of Diversity and Changing Work Environment

The lack of strategic planning in regard to diversity can be approached from two different perspectives depending on the dimension of diversity that is being considered. When it comes to ethnic and racial diversity, statistics show that the nonprofit sector falls extremely short in recruiting and engaging minorities. A study in the US shows that 82% of nonprofit employees (the pattern holds also true for volunteers) are Caucasian, and the gap widens even more at top management levels, where only 1 out of 20 organizations is led by a minority member (Schwartz, Weinberg, Hagenbuch, & Scott, 2011). A similar picture is found in Switzerland and its large foreign population (25%), which is significantly underrepresented in the third sector (Freitag et al., 2016). This perspective sheds light on the (mostly unintended) selection bias found in the recruitment process of NPOs, which goes beyond the scope of this chapter. However, these findings are not fully detached from the underlying individual motivation to volunteer and to remain in an organization. Perceptions of diversity and inclusiveness play an important role in recruitment and retention of employees and volunteers, especially of those that are members of a minority themselves. If the latter do not perceive a culture of diversity within the organization, they will be more inclined to quit or less likely to get involved in the first place (Thurman, 2011). Finally, although 90% of NPO employees believe that their organization values diversity, more than 70% assert that their employer does not do enough to promote diversity and inclusion (Schwartz et al., 2011).

The second perspective (and most relevant to this chapter) concerns lack of strategic planning based on age and cohort diversity. Failing to see and manage diversity of this type can lead to inefficient use of human resources and an increase of ongoing recruitment costs. The key in developing a strategic plan for different age groups and cohorts is understanding both developmental (i.e. intraindividual) and generational (i.e. interindividual) differences in motivation. There exist both

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[1]See also Bedenk and Mieg (2018).

theoretical and empirical guidelines to undergird strategic decision-making in this respect. The selection–optimization–compensation theory (Baltes & Baltes, 1990) and the socioemotional selectivity theory (Carstensen, 1992), for instance, show how our availability of resources such as experience, cognitive abilities, physical health and time will dictate how we allocate those resources and the type of activities we are drawn toward. At a young age, when time is perceived as open-ended, people are driven by knowledge-related goals, which provide leverage in future life experiences. This aligns well with motives such as career or enhancement posed by the functional approach (Clary et al., 1998). As we get older and time is perceived as limited, we gravitate more toward emotional experiences from which we can derive meaningfulness (Carstensen, 1992). From a cohort perspective, we are currently witnessing the most diverse workforce in history. With people living and working longer, the interaction among different generations has become ubiquitous in the workplace. There are at least four cohorts currently active in the remunerated workforce, and at least five when considering voluntary work. Different generations have different skills, ways of communication, motives, values, and preferences in terms of recognition, all of which reflect changes and critical events in the work environment and society as whole. Millennials (aka Generation Y; 1984–2004), for instance, are a highly educated and technologically savvy generation. The observed decrease of formal volunteering rates among younger generations might thus be nothing more than a shift toward other, more digital-based forms of volunteering. The last Volunteer Monitor in Switzerland has assessed the growing trend of online volunteerism, showing that indeed, people under 30 are now opting for this form of engagement (Freitag et al., 2016). Given that this participation is largely informal, the challenge for the nonprofit sector is to find ways in which this commitment can be institutionalized to serve the greater good. On the other end of the generational spectrum, we find the baby boomers (1946–1964), who are beginning to retire in large amounts and represent a promising asset for the sector. This cohort brings years of experience and they are eager to make use of it in leadership positions (Edwards, Safrit, & Allen, 2012). Generation Xers (1965–1982), in turn, are more drawn toward episodic forms of volunteering. In short, understanding the motivation of different generations, the critical events that marked their lives (e.g. the advent of the internet, wars, political atmosphere, etc.) and seamlessly linking these patterns with stages of human development will be part of the artistry in non-profit management in years to come.

Recommendations

In view of the scenarios considered in this chapter, which can lead to feelings of failure in volunteers (and ultimately organizational failure), we have assembled a set of best-practice recommendations that can be implemented in a volunteer management program:

- Evidence from salaried jobs shows that some extent of role ambiguity is tolerable (and even beneficial) in specific, time-constraint stages of a job, as it may allow employees to explore and broaden their competences in an attempt to master different tasks (Yun, Takeuchi, & Liu, 2007). However, volunteers can rarely afford the luxury of "exploring", as their engagement is normally limited to a handful of hours per month, and still a substantial time investment in the face of the multiple roles they already fulfil (parents, full-time workers, etc). Role clarity is thus crucial for volunteers' commitment to their job and their organization. Defining roles should not be a unilateral process, however, and all stakeholders should be involved. Unambiguous tasks and roles, that have been agreed upon before taking a position or a particular assignment, will allow role incumbents to make efficient use of their limited time, boosting their sense of self-efficacy and their intent to remain. As a rule of thumb, the more complex the role (e.g. management level, board of trustees, etc), the greater the need for debriefing and clarity. Clear tasks are also of utmost importance in emergency situations, not only to maintain volunteers' level of self-efficacy, but also in order to provide effective service to the recipients.
- In order to avoid the feelings of frustration that can ensue from unmet role expectations, the reality of everyday volunteering in the organization and the expectations of prospective role incumbents should be on the table prior to entering the position. This can be addressed during the recruitment process by means of realistic job previews (RJPs; Lopina & Rogelberg, 2013). This approach provides applicants with accurate information about the job (considering both positive and negative aspects), allowing them to opt out, should it not turn out to be what they hoped for. As noted elsewhere (Breaugh, 2008), RJP offers a unique research opportunity in the nonprofit sector, as the two key determinants of its utility are, by and large, given: unrealistic expectations from volunteers and their ability to opt out from the job. In a more general sense, organizations should strive to offer the infrastructure and conditions that can be reasonably expected for volunteers to succeed in their endeavours.
- Organizations should regularly evaluate the adequacy and necessity of certain tasks, policies and procedures, in order to ensure that they are still aligned with volunteers' needs and expectations as well as with the changing work environment. Some procedures are anchored in an organization's protocol with a substantiated rationale (e.g. financial strategy, risk management). Others continue being implemented simply because "we have always done it this way". Shattering such notions from time to time can prevent the onset of illegitimate tasks.
- Organizations should know the ASK (abilities, skills and knowledge) of their volunteer staff and capitalize on them. Skills-based volunteering (McCallum, Schmid, & Price, 2013) can bring about a sense of competence and autonomy, which fosters retention. When matching skills with assignments, organizations should not limit themselves to formal education or work experience. Rather, they can delve into volunteers' interests, hobbies and passions, in order to unpack the potential they might not live out in their daily jobs. That been said, the activities

they perform should differ from those in their paid jobs, particularly in the case of highly routinized jobs.

- When it comes to recognition, many organizations opt for yearly dinners and gatherings, which in some cases can represent a burden on their limited financial resources. However, the most desired form of recognition is cost-effective and requires the creation of bidirectional communication channels. On the one hand, organizations should provide feedback on a regular basis on the impact and results of volunteers' participation. This can (and should) be carried out in groups for at least two reasons: first, it is time-effective, and second, group feedback creates a comforting, candid atmosphere, which prevents any sort of apprehensive reaction from job-like appraisal interview situations (See Case Study 6). Savvy use of social media is also key in making the efforts of the voluntary workforce visible, particularly in younger generations. Finally, volunteers' voice should be recognized just as much as their actions, providing a platform where their ideas can be exposed, discussed and, eventually, put into practice.

- Meaningful, transformative experiences that promote long-term commitment to an organization are more likely to emerge from the joint efforts of individuals rather than work in isolation. Creating a volunteer peer support scheme can facilitate this objective by pairing senior with novice volunteers in relevant ways. Volunteer coordinators should look for the one bonding commonality within the dyad or group of volunteers (e.g. life circumstances, language, set of skills), yet still maximizing the enriching diversity they bring along. A thought-through volunteer peer support scheme will reinforce people's need for related-ness and acquit NPOs' employees of ongoing mentoring obligations.

- One of the biggest challenges non-profit CEOs face is articulating a guiding vision for their organization. Learning storytelling techniques and resorting to cascading goals can help to overcome this hurdle. Storytelling has a resonating power on its recipients, creating persuasive, relatable and memorable pictures of what the organization is yet to become. Cascading goals will streamline the way toward that vision, ensuring that goals at different levels of the organization (i.e. CEOs, middle managers, board, staff members and volunteers) are connected. This will trigger a domino effect, aligning the organization's strategy with individuals' tasks and goals. Such an approach can boost volunteers' motivation and palliate turnover intentions.

- It is crucial that NPOs begin to diversify their staff (both employees and volunteers), sending out an inspiring, inclusive signal as messengers of noble causes that they are. They should then reap the benefits of that diversity by laying out a strategic diversity management plan. This should also apply to the already existing age and cohort diversity found in the non-profit sector. It is essential that managers understand the "seasons of service" in human development (Edwards et al., 2012), matching tasks with motivations and predicting turnover. In other words, some fluctuation should always be expected and understanding those fluctuations across age groups and generations can help to better coordinate volunteer efforts, know where to invest in long-term human capital, and who to allocate in short-term, project-based assignments. Although age and cohort trends

are still in need of disentanglement (Twenge, 2010), and the patterns discussed in the literature (Edwards et al., 2012) should not be seen as monolithic truths, they do provide a reliable guideline to understand the drive and motivations of volunteers and to allocate their resources accordingly. Finally, NPOs should become aware of the window of opportunity that is currently opening, as baby boomers retire from the workforce and millennials continue developing their sense of civic responsibility. Young adults show particular interest to work for companies that provide volunteering opportunities (Eisner et al., 2009), asseverating once again the ever-growing overlap between work and civic society.

Conclusion

Our understanding and the study of work have long been confined to remunerated activities. As social values evolve and we submerge deeper into the post-industrial era, work acquires a new essence; no longer seen only as a way of securing existence, but also as a fundamental source of meaningfulness and self-realization. At the crossroads, we find voluntary work and a prolific non-profit sector, which stand at the core of our civic society. Much like the HR department in a private company, NPOs also need volunteer management plans in order to recruit and retain volunteers. Given the inverse motivational logic found in voluntary work, which allows to assume that most people engage out of autonomous, intrinsic motives, and where extrinsic contingencies play a subordinate role, the retention of volunteers is one of the biggest challenges NPOs area confronting. But as the need for self-actualization grows and an immense pool of potential volunteers begins to retire from the workforce, NPOs are starting to give up on complacency, taking responsibility in their own hands and starting to build the infrastructure so that the initial, heavy-lifting efforts of recruitment are not in vain.

References

Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging. In P. B. Baltes & M. M. Baltes (Eds.), *Successful aging. Perspectives from the behavioral sciences* (pp. 1–34). Cambridge: University Press.

Bedenk, S., & Mieg, H. A. (2018). Failure in innovation decision making. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools.* Heidelberg: Springer.

Breaugh, J. A. (2008). Employee recruitment: Current knowledge and important areas for future research. *Human Resource Management Review, 18*(3), 103–118.

Breaugh, J. A., & Starke, M. (2000). Research on employee recruitment: So many studies, so many remaining questions. *Journal of Management, 26*(3), 405–434.

Carstensen, L. L. (1992). Social and emotional patterns in adulthood: Support for socioemotional selectivity theory. *Psychology and Aging, 7*(3), 331–338.

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., & Miene, P. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*(6), 1516–1530.

Corporation for National and Community Service. (2008). *Capitalizing on volunteers' skills: Volunteering by occupation in America*. Brief report. Retrieved June 10, 2017, from https://www.nationalservice.gov/pdf/08_0908_rpd_volunteer_occupation.pdf

Corporation for National and Community Service. (2016). *Volunteering and civic life in America 2015*. Retrieved June 10, 2017, from https://www.nationalservice.gov/vcla

Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychological Bulletin, 125*, 627–668.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self determination of behavior. *Psychological Inquiry, 11*(4), 227–268.

Dixon, A., & Hientz, M. (2013). *Volunteer recognition study*. Retrieved June 10, 2017, from http://pcdscr.ca/userdata/files/66/2013-volunteer-recognition-study.pdf

Doherty, A., & Hoye, R. (2011). Role ambiguity and volunteer board member performance in nonprofit sport organizations. *Nonprofit Management and Leadership, 22*(1), 107–128.

Edwards, H. C., Safrit, R. D., & Allen, K. (2012). *Volunteer demographics: The volunteer management handbook: Leadership strategies for success* (2nd ed.pp. 31–53). Hoboken, NJ: Wiley.

Eisner, D., Grimm, R. T., Jr., Maynard, S., & Washburn, S. (2009). The new volunteer workforce. *Standford Social Innovation Review, 7*, 32–37.

Ellis, S.J. (1994). *When recognition isn't enough*. The Nonprofit Times. Retrieved June 10, 2017, from https://www.energizeinc.com/art/when-recognition-isnt-enough

Freitag, M., Manatschal, A., Ackermann, K., & Ackermann, M. (2016). *Freiwilligenmonitor Schweiz 2016*. Zürich: Seismo Verlag.

Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior, 26*(4), 331–362.

Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance, 16*(2), 250–279.

Haski-Leventhal, D., & Bargal, D. (2008). The volunteer stages and transitions model: Organizational socialization of volunteers. *Human Relations, 61*(1), 67–102.

Huynh, J. Y., Xanthopoulou, D., & Winefield, A. H. (2014). The job demands-resources model in emergency service volunteers: Examining the mediating roles of exhaustion, work engagement and organizational connectedness. *Work & Stress, 28*(3), 305–322.

Jiranek, P., Kals, E., Humm, J. S., Strubel, I. T., & Wehner, T. (2013). Volunteering as a means to an equal end? The impact of a social justice function on intention to volunteer. *The Journal of Social Psychology, 153*(5), 520–541.

Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly, 24*(2), 163–204.

Lopina, E. C., & Rogelberg, S. G. (2013). Recruitment, retention, and motivation of volunteers in the nonprofit sector: A volunteer socialization perspective. In J. Olson-Buchanan, L. K. Bryan, & L. F. Thompson (Eds.), *Using industrial-organizational psychology for the greater good: Helping those who help others*, SIOP Frontiers (pp. 290–313). London: Routledge.

Lyons, K. D. (2003). Ambiguities in volunteer tourism: A case study of Australians participating in a J-1 visitor exchange programme. *Tourism Recreation Research, 28*(3), 5–13.

Lyons, K. D., & Wearing, S. (Eds.). (2008). *Journeys of discovery in volunteer tourism: International case study perspectives*. Wallingford: CABI.

McCallum, S., Schmid, M. A., & Price, L. (2013). CSR: A case for employee skills-based volunteering. *Social Responsibility Journal, 9*(3), 479–495.

Morgeson, F. P., & Humphrey, S. E. (2006). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91*(6), 1321.

Nonprofit Sector Leadership Report. (2016). Retrieved June 10, 2017, from http://concord leadershipgroup.com/clg/wp-content/uploads/2016/03/NonprofitSectorLeadershipReport.2016. pdf

Oostlander, J., Güntert, S. T., van Schie, S., & Wehner, T. (2014). Volunteer functions inventory (VFI): Konstruktvalidität und psychometrische Eigenschaften der deutschen Adaptation. *Diagnostica, 60*, 1–13.

Ramos, R., Brauchli, R., Bauer, G. F., Wehner, T., & Hämmig, O. (2015). Busy yet socially engaged: Volunteering, work-life balance and health in the working population. *Journal of Occupational and Environmental Medicine, 57*(2), 164–172.

Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*, 150–163.

Rousseau, D. M. (1995). *Psychological contracts in organizations: Understanding written and unwritten agreements*. Thousand Oaks, CA: Sage.

Rüdiger, M., & Schütz, A. (2014). Das Selbst, wenn es scheitert. In R. John & A. Langhof (Eds.), *Scheitern – ein Desiderat der Moderne?* (pp. 263–278). Wiesbaden: Springer VS.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68–78.

Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology, 52*(1), 141–166.

van Schie, S., Güntert, S. T., & Wehner, T. (2014). How dare to demand this from volunteers! The impact of illegitimate tasks. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations, 25*(4), 851–868.

Schwartz, R., Weinberg, J., Hagenbuch, D., & Scott, A. (2011). *The voice of nonprofit talent: Perceptions of diversity in the workplace*. Retrieved June 10, 2017, from http:// commongoodcareers.org/diversityreport.pdf

Semmer, N. K., Tschan, F., Meier, L. L., Facchin, S., & Jacobshagen, N. (2010). Illegitimate tasks and counterproductive work behavior. *Applied Psychology, 59*(1), 70–96.

Sims, H. P., Szilagyi, A. D., & Keller, R. T. (1976). The measurement of job characteristics. *Academy of Management Journal, 19*(2), 195–212.

Stirling, C., Kilpatrick, S., & Orpin, P. (2011). A psychological contract perspective to the link between non-profit organizations' management practices and volunteer sustainability. *Human Resource Development International, 14*(3), 321–336.

Stocker, D., Jacobshagen, N., Semmer, N. K., & Annen, H. (2010). Appreciation at work in the Swiss armed forces. *Swiss Journal of Psychology, 69*, 117–124.

Thomann, G., Wehner, T., & Clases, C. (2015). Scheitern in der Führung: Eine Option? In S. Kunert (Ed.), *Failure management* (pp. 95–117). Berlin/Heidelberg: Springer.

Thurman, R. (2011). *Nonprofits don't really care about diversity*. Stanford Social Innovation Review. Retrieved June 10, 2017, from https://ssir.org/articles/entry/nonprofits_dont_really_ care_about_diversity

Twenge, J. M. (2010). A review of the empirical evidence on generational differences in work attitudes. *Journal of Business and Psychology, 25*(2), 201–210.

Wanous, J. P., Poland, T. D., Premack, S. L., & Davis, K. S. (1992). The effects of met expectations on newcomer attitudes and behaviors: A review and meta-analysis. *Journal of Applied Psychology, 77*(3), 288–297.

Wehner, T., Mieg, H., & Güntert, S. T. (2006). Freigemeinnützige Arbeit. In S. Mühlpfordt & P. Richter (Eds.), *Ehrenamt und Erwerbsarbeit* (pp. 19–39). München: Hampp.

Weinstein, N., & Ryan, R. M. (2010). When helping helps: Autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology, 98*(2), 222.

Wilson, J. (2012). Volunteerism research: A review essay. *Nonprofit and Voluntary Sector Quarterly, 41*(2), 176–212.

Wright, B. E., & Millesen, J. L. (2008). Nonprofit board role ambiguity: Investigating its prevalence, antecedents, and consequences. *The American Review of Public Administration, 38*(3), 322–338.

Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. *Journal of Applied Psychology, 92*(3), 745.

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Failure in Public Institutions: Characteristics of Organizational Culture in the Military

Martin Elbe

Failure and Success: Logic of the Military

The famous sentence that war was the continuation of politics by other means (Clausewitz, 1990) defines the military as an instrument of politics and therefore of what people belief you are capable of. Military power is the belief of people in an organization's ability to excerpt collective violence with massive weapons. This belief refers to the organization's members as well as to people outside the organization. So talking about failure or success of military organizations, we do not necessarily have to deal with the actual performance of violence, most of the time the belief in the ability to do so will do the trick. If we follow this logic having to go to war is where failure starts.

It is a deep misunderstanding to think that the military's central task would be to defend or attack—quite to the contrary: it is not to have to defend or attack because potential opponent's belief that in military confrontation the loss would be bigger than the gain or the damage to be dealt with would be unacceptable. This idea is not new but has influenced political thinking as well as political action since ancient times: si vis pacem para bellum (if you want peace prepare for war). If a specific military organization fails to produce this belief in others, the degrees of freedom in taking action for political leaders are limited.

Maybe it is this double-bind that makes military organizational culture special and hard to understand from a non-military perspective: the ultimate success is to build up personal, technical and tactical abilities so you don't have to use them. In the military sociology the phrase of a cold and a hot state of military organizations has been established (Elbe & Richter, 2011; Soeters, Winslow, & Weibull, 2003). The hot state of the military refers to deployment or going to war, when uncertainty, time, space and logistics become crucial for the organization's success and when its culture switches into the state of flexibility and combat. The cold state refers to times,

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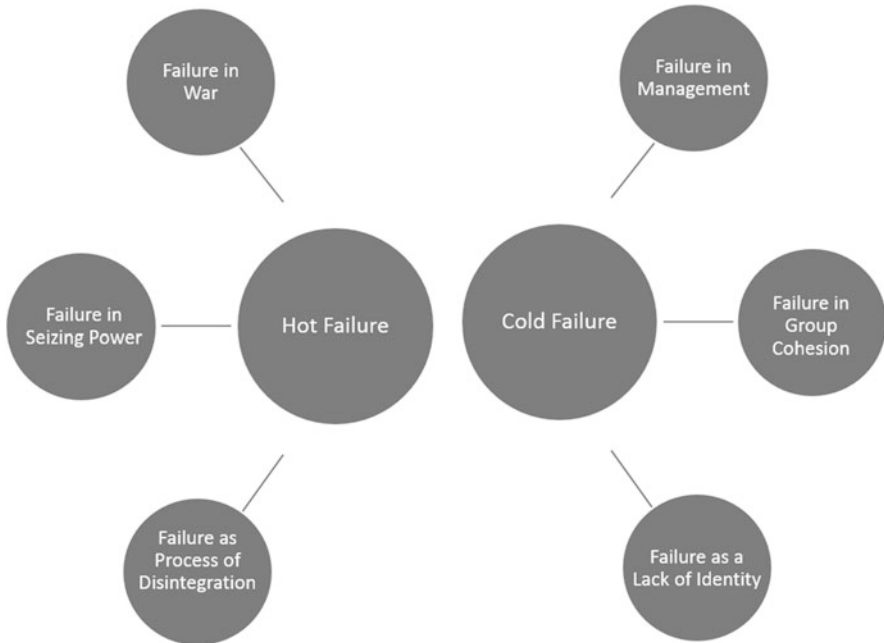
Fig. 1 Overview of failures in hot and cold states

when the organization is in the mode of training and preparing for combat. Here rules and regulations, order and continuity, the place in society—in short a culture to reassure oneself and others of the own abilities and importance—are dominant. (overview see Fig. 1). Failure can be very different in these two states.

Hot Failure

Our definition of military success as not to have to proof one's own abilities is linked to a rationality of survival and therefore to the meaning of live as a social factor. An individual or collective aesthetic of combat and death (e g. the description of combat in World War I by Junger, 2016) may be fascinating to people who have the feeling they've got nothing left to lose and the gain is not so important, as long as it goes along with *"a bit of the old ultraviolance"* (as Alex in "A Clockwork Orange" by Burges 1986 in the Kubrick film adaption would put it). Basically, violence is the ultimate currency of the military. Here military organizations are like predators: you only put up a fight when the odds for winning are good and when victory doesn't cost too much—this has to be discussed in depth.

Failure in War

Failure in war doesn't mean to lose a fight or a battle, it means to find out, that in the end you have no more strategic options whereas the other side still does. This basically means that for you there are no more *relevant* resources left. Resources are relevant, when you think that in the long run they can make a difference, and what's even more important: your opponent has to think that too. Many writers on strategy and military have spelled that out through the ages but for organizational science especially Crozier and Friedberg (1979) have introduced this more political way of thinking—in favour of a mere economic perspective. For military leaders it is crucial to increase the opponent's uncertainty in what their course of action will be as well as what resources they have, and at the same time decrease uncertainty in their own organization towards what to do, and that in the end they will win. Ambiguity tolerance (as an important aspect in the organizational culture of the military in the hot state) has to proof itself in being successful, and that means to win the war and not the battle.

To make my point clear here—from a military point of view it is good to win battles. The problem is: You may win all the battles, however still lose the war in the long run if your enemy's resources are larger than your own resources are. That's what can be learned from Pyrrhic victories.[1]

Failure in Seizing Power

"Normally states have their own military, in Algeria the military has its own state." (Pointner & Schäfer, 2007, S. 97) Algeria is just an example for a situation where the military is in a hot condition but not fighting an alien enemy. Coup d'états and civil wars are situations where we see a failure of a very important institution for modern societies, the state. In modern states the military has many aspects of typical organizations: it is a socio-technological system with certain tasks to fulfill, a clear hierarchy and rational regulations for the relations and interactions of its members (Elbe & Peters, 2016). But there are two aspects that make the military a special institution different to standard organizations in modern times: membership and the exclusive right to possess heavy armament.

Organizations are special institutions to comprise the differentiation of society (next to state, profession and nuclear family): coercive power is transformed into normative or utilitarian power. Although Etzioni (1997) distinguished those three forms of control in organizations, Elbe and Peters (2016) argued that the specificity of organizations as important elements of modern society is, that membership is voluntary. Coercive institutions are therefore logically marked as asylums (Goffman,

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[1]Phyrrus was king of Epirus (after 300 B. C.) who triumphed over the Romans in several battles, but lost so many men, that Plutarch quotes him with the word *"If we are victorious in one more battle, we shall be utterly ruined."*

1961). For the military this is important, because the suspension of conscript that had been brought to reality in many countries found its theoretical background with the institution/occupation-debate (beginning with Moskos, 1977) which has been going on for the last 40 years. In many countries you can make 'being a soldier' your profession or you can decide not to join the army—however there is just one organization to join, if you want to be a member of the armed forces, in a modern state. Thus, the military is tied to the modern state by its uniqueness as institution and organization with the task to give the political leaders the option of continuation of politics by other means: military power.

When the military is no longer an instrument of power but seizes power itself, the differentiation of society that is fundamental for modern states does not work anymore. From this point of view a coups d'état by the military is a failure of the modern state when the military takes over power itself and thus ends pluralism: The military has its own state. On the other hand, if a coups d'état is not successful and power is not gained, it also has to be considered a failure—in this case for the organization as it has existed so far. From the perspective of modern society, a coups d'état can't really be successful because whatever the outcome might be, core institutions of the modern state are damaged.

Failure as Process of Disintegration

The same applies to civil wars. Here the state and with the state the military fails. In classical conditions there are two opposing groups, that claim political power and try to enforce this by using military force. Consequently, two military organizations fighting each other and two political ideas on how the state should be organized occur. Basically, there is not one state but two. Here the military has failed to defend the unity of a single state. And that is not the worst case of disintegration.

The climax of disintegration is what could be called a polypoly of armed forces. In this case it is not a state breaking up but it is the end of the construction of a modern state. When local ethnic groups or war lords take over, conquer and defend their own dominions, there is no such structure as a state any more. Recent examples for such developments can be found in Arabia (e. g. Syria) or Central Asia (e.g. Afghanistan). In these cases, the military has failed to fulfill its task: With the loss of integrity of the state, the options of action have moved from a central political power to several decentralized powers.

Another form of military disintegration is desertion. Desertion is basically al failure of organizational culture. In this case soldiers don't believe in the chance of an organization's success any more. Either they calculate their individual chance of survival as being higher when they are on their own or in a small group—which is just an expression for failure of trust in the organization itself. Or soldiers don't see any sense in the stated goals of a campaign—which again is an expression for failure of trust in the organization. Desertion as a mass phenomenon shows that the military as an expression for a state's integrity has ceased to exist. And when there is no belief in a common goal and a good reason for cooperation, then an organization has truly

failed. A recent example would be the disintegration of the Iraq Army in Mosul in 2014.

Cold Failure

With the hot state of military action and its potential to fail, we have been discussing what is expected, when military and failure are associated. On the other hand, we have argued that having to activate the hot state is already a failure, because if you have to fight, deterrence has failed. Does this mean that there wasn't any failure as long as the cold state of the military is in place? By no means—the military does not only fail when it goes to war. The cold state just gives the chance to hide every day failure up to the point where there is no more hiding.

Three forms of cold failure are common: failure in management, failure in group cohesion and failure as a lack of identity.

Failure in Management

Military leadership and management differ from the market driven logic of private enterprises. The military is part of the state, whether institution or organization, it follows the rationality of the public sector. It is government-financed and, on a macro-level of management, therefore has to render account according to the rules of public budget. The logic of fiscal accounting provides the military with resources which cannot be accounted for in a profit and loss statement. The profit of the military is immaterial and inaccountable. Either you decide to spend the money or not. What you gain is freedom of action on the level of state politics. The logic of military management is: You have a budget to spend and you have to account for its use according to the rules of fiscal accounting. Like in any other bureaucratic organization the military has rules and regulations in accordance with military tradition, the requirement of preparing for military action and to support personal leadership. This set of management-tools has to be in accordance with the fiscal system (Richter & Elbe, 2011).

But for the military, more than for other administrations, there is a problem, when it comes to new public management. For in the military, there is a lack of measurability (safety, freedom of action) for the performance, as long as it is in its cold state. To compensate this, complex systems have to be construed, and to increase legitimacy in the public these systems have to follow a logic which is widely accepted in the economized public. This is where controlling-oriented management methods come into account. Especially the balanced scorecard approach has produced legitimacy for organizations of all sectors, and therefore it seemed logical to apply it to the military as well. What has not been taken in account here was that there already had been a management and controlling system, that did its job, but followed a different rationality: the fiscal system (Elbe, 2014). Now the management system was likely to produce two different messages: what may be considered a success in one system

may just as well be a failure in the other. Which rules are to be followed now: private economy or military logic? A typical double-bind (Bateson, Jackson, Haley, & Weakland, 1962). Whatever you do, you will fail. Now this sounds like a strategy to destroy an organization's culture.

Failure in Group Cohesion

The existence of military shows that social conflict as a fundamental form of social relation (Coser, 1964) is accepted. This refers to social relations between states, groups or individuals. In external relations (between states or groups) it is important to construe a feeling of ambiguity (this is called politics) but for the internal relations—between individuals a group consists of—, it is important to increase the feeling of reliability (Elbe, 2011). As Winslow (1999) states, rites of passage as an instrument for group bonding have had an important function for groups in the military (platoons, task forces etc.), especially when they consider themselves as a kind of elite.[2]

In Germany, the public was taken aback when the press published degrading rites and rituals in several military units in 2017. These kinds of rites and rituals are usually connected with a secret that binds the participants to each other in keeping the secret from the public as well as from their family and friends. That's why they have to be loathly and often connected with sexual symbols or action: participating involves embarrassment (Elbe, 2017). Cohesion seems to be increased by these kinds of rituals, for the price of having to keep a secret.

In general, the military is used to rituals and uses them extensively to stage leadership and other social interactions. Goffman (1961) construes these theatrical performances and special practices in rites and rituals basically to avoid embarrassing themselves or others, that's what Biehl and Kümmel (2014) mark as official rituals. However, this just works on an organizational level. On a group level these rituals are needed as well and this is where loathly rites and rituals are put on stage. These rituals take place behind the curtain, in front of the curtain the usual play of order and obey in an accepted manner is performed for the public. Nevertheless, there must be something else, there must be more to the cohesion of elite groups, the public just doesn't know. And for the members there are good reasons not to reveal this secret—unless you are not an accepted member of the group anymore, or never have been. Whatever the reason for the revelation of the secret may be, it leads to a scandal, because now the curtain is lifted and what becomes public is that the formally stated principles of leadership have failed.[3]

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[2]See also Badke-Schaub and Hofinger (2018).

[3]See also Tesch (2018).

Failure as a Lack of Identity

Last but not least, it is the individual soldier, who can be a source of failure for the military. In 1960, Janowitz published his essay on the professional soldier, which became a milestone for modern military sociology. Reflecting on the military elite, this study revealed how military leadership and organization in modern times changes from a formal, disciplinary model towards more civilian forms of coordination and leadership. Along with this civilization of the military there goes professionalization of the occupation as a soldier. But the less the military is a state within the state, the less clear it is what defines a soldier's identity.

This is where again organizational culture has to be taken into account. Like in other organizations in modern society organizational culture in the military covers a set of common beliefs (Schein, 2010) and assumptions together with practices and symbols that form a specific military culture. This culture is dynamic and develops with the socialization of the organization in society and the socialization of members inside the organization. The experience of ambiguity in modern society by individuals and organizations leads to standardization of management systems which makes specific cultural standards of the military increasingly vague for individuals. From this perspective, it is not so important what organization you work for as the specific organization cannot contribute to your identity. This constitutes a failure in retention but impedes the coupling of individual and organizational identity as a foundation of organizational attractiveness (Elbe, 2013). For the German Bundeswehr the system of civic education and leadership (Innere Führung) provides this potential.

Breakfast in the Culture Club

The management author Peter Drucker is often ascribed with the quotation that *"Culture eats leadership for breakfast"*.[4] As we have seen throughout this paper, organizational culture has interfered with the military in the cold state as well as in the hot state of action. Military failure is intertwined with military culture—this determines whether it is an organization in a modern state or a different form of institution as in totalitarian states or failed states. Military culture defines what is success and what is failure for specific armed forces. Organizational culture in the military is the expression for the relation between this organization and its social, political and economic environment. Basic assumptions, norms and socialization practices are embodied by this.

This applies to leadership and management as well. Leadership behavior in practice is part of the individual performance of a certain person. The acceptance of this behavior by subordinates and supreme officers is what binds it to the organization's culture. If shortcomings in leadership behavior are singular cases, the problem can be dealt with quite easily by training, relocation or exit. If these

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[4] See also Kunert and Staar (2018).

shortcomings occur on a regular basis there is a cultural problem that cannot be changed easily. Kunert (2016) has shown empirically that culture dominates leadership and therefore success and failure of an organization—this applies to the military just as well.

So, it is important for the military as an organization in the modern state as well as for its members to avoid failure, by cultivating civilized standards of behavior and accept that the military needs to remain part of the society. Metaphorically spoken, one could say that the military has to be a member in the breakfast club, where culture is produced in an act of socialization in progress.

Conclusion

Failure is more than just making a mistake. Failure is when you keep on making the same kind of mistake over and over again or when there is no more chance to improve the outcome in the long run. It is important to learn from mistakes and to do so you must be allowed to make mistakes. Whether it is a mistake or a success is shown by the outcome, not by the input—and that is what management by objectives is all about. This applies to the cold and the hot state just alike.

But does it really make sense to divide those two states as strictly as we have done so far? In times of increasing asymmetric warfare cold and hot states of the military seem to subsist at the same time. This leads to the question whether tepid failure exists. Well, as we just argued failure means to come to an end, to collapse in a certain action or attitude. Failure is radical, not tepid. Obviously the cold and the hot state exist side by side, the military may be in the cold state in the home country and in the hot state in deployment somewhere else. For the last decades, this has been the reality for most western states. If you fail in one of the states it is not tepid. But after 2000 years the ultimate recipe for military success still is: si vis pacem para bellum.

References

Bateson, G., Jackson, D., Haley, J., & Weakland, J. (1962). A note on the double bind. *Family Issues, 62*(1), 154–161.

Biehl, H., & Kümmel, G. (2014). Ritual und Bundeswehr. In M. Staak (Ed.), *Im Ziel? Zur Aktualität der Inneren Führung* (pp. 43–75). Opladen: Budrich.

Burges, A. (1986). *A clockwork orange*. New York: Norton.

Clausewitz, C. v. (1990). *Vom Kriege*. Augsburg: Weltbild.

Coser, L. (1964). *The functions of social conflict*. New York: Free Press.

Crozier, M., & Friedberg, E. (1979). *Die Zwänge kollektiven Handelns. Über Macht und Organisation*. Königstein: Athenäum.

Elbe, M. (2011). Uncertainty in institutional change. Individual resources as potential. In S. Jeschke, I. Isenhardt, F. Hees, & S. Trantow (Eds.), *Enabling innovation. Innovative capability – German and international views* (pp. 85–96). Berlin/New York: Springer.

Elbe, M. (2013). Employography: Flüchtige Identitäten in Zeiten der Ungewissheit. *Journal für Psychologie, 3*, 1–24.

Elbe, M. (2014). Das double bind-problem – Kann man zwei Herren dienen? *Controlling & Management Review. Special Edition, 3*, 96–102.

Elbe, M. (2017). Ritual, Führung & Skandal: Alte Stücke neu inszeniert. BehördenSpiegel newsletter Verteidigung. *Streitkräfte. Wehrtechnik, 181*, 1.

Elbe, M., & Peters, S. (2016). *Die temporäre Organisation: Grundlagen der Kooperation, Gestaltung und Beratung*. Berlin: SpringerGabler.

Elbe, M., & Richter, G. (2011). Militär: Institution und Organisation. In N. Leonhard & I.-J. Werkner (Eds.), *Militärsoziologie – Eine Einführung* (2nd ed., pp. 244–263). Wiesbaden: VS Verlag für Sozialwissenschaften.

Etzioni, A. (1997). *Modern organizations*. Englewood Cliffs, NJ: Prentice Hall.

Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. New York: Doubleday.

Janowitz, M. (1960). *The professional soldier: A social and political portrait*. New York: The Free Press.

Junger, E. (2016). *Storm of steel*. New York: Penguine.

Kunert, S. (2016). Lernförderliche Arbeitsgestaltung und Innovation. *ABWF-Bulletin, 16*(1), 6–9.

Moskos, C. (1977). From institution to occupation: Trends in military organizations. *Armed Forces & Society, 77*(4), 41–50.

Pointner, N., & Schäfer, S. (2007). Algerien. Unabhängigkeit, verhinderte Islamisierung und Stabilisierung. In A. Straßner & M. Klein (Eds.), *Wenn Staaten scheitern: Theorie und Empirie des Staatszerfalls* (pp. 93–108). Wiesbaden: VS.

Richter, G., & Elbe, M. (2011). Militär und Verwaltung. In N. Leonhard & I.-J. Werkner (Eds.), *Militärsoziologie – Eine Einführung* (2nd ed., pp. 264–283). Wiesbaden: VS.

Schein, E. (2010). *Organizational culture and leadership* (4th ed.). San Francisco, CA: Jossey-Bass.

Soeters, J., Winslow, D., & Weibull, A. (2003). Military culture. In G. Caforio (Ed.), *Handbook of the sociology of the military* (pp. 237–254). New York: Kluwer.

Winslow, D. (1999). Rites of passage and group bonding in Canadian Airborne. *Armed Forces & Society, 99*(3), 429–457.

Badke-Schaub, P., & Hofinger, G. (2018). Failure in teams – Why successful teams do not fail (so often). In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Tesch, C. (2018). Failure in public relations – Non-profit organizations facing growing challenges. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

Kunert, S., & Staar, H. (2018). Failure in organizational change. In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

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Failure in Health: Burnout as an Intuitive Competence for Setting Health-Conducive Personal Boundaries

Gunther Schmidt, Florian Pommerien-Becht,
and Nora Daniels-Wredenhagen

Words and Other Focussing Measures Produce Reality

Our experience is determined by the meaning we attribute to it—nothing IS simply what it IS. That is why it makes more sense to consider how concepts act as frameworks or filters for the attribution of meaning than to merely assess their "reality content".

From a hypnosystemic perspective, quite in line with the insights of neurobiology (autopoiesis, Maturana & Varela) any human reality is formed in autonomous inner self-organisation, largely at an involuntary and unconscious level. (Maturana & Varela, 1980) In this sense there "failure" as an objective phenomenon does not exist. In fact, "observers" of these phenomena subjectively describe, define and assess behaviour and other experience-related processes as "failure" and draw certain conclusions from them. This creates an effective reality. If the client perceives this as a "problem", this presupposes that there is a discrepancy between his/her conscious descriptions, definitions, assessments etc. and his/her involuntary actions and reactions, which emerge from within on their own accord, and which go in an opposite direction not desired consciously. So "failure" as a problem is always an expression of inner conflicts between the conscious and the involuntary. Conscious thinking will then define the involuntary reactions as deficient, as incompetent, often even as pathological.

So how can "failure" affect individuals and their social environments? Of these effects, which are considered relatively desirable and which more or less incidental? What are the contexts in which it could make sense to strive for these effects? How could we bring about the desired effects at a lower cost?

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> For example, I could see my collaboration in this article as a kind of invitation to fail. I could ask myself: "Who am I to believe that I have anything to say in this field. Can I even keep up with such competent co-authors?" etc. The short-term effect of such thoughts could lead to a fear of failure. In order to avoid this fear, I might considerably increase my readiness to perform. I might enhance my intellectual preparedness, read even more literature on the subject, collect even more quotes, try to further refine my language—all of which are strategies to diminish my fear, at least for the moment, and to reduce the probability that it will recur, but cost a relatively high price: namely the tendency to overwork and the feeling of "having to appear to be something" which "is not me".

Concepts Shape Relationships with Experience

The way we relate to our perceptions determines how we perceive our relationship with what we call reality. This linkage must be thought of as a closed causal ring (circle): At a higher level of emergence, the interactions between the elements of our perceptions (represented through our senses of sight, hearing, touch, taste, smell) produce patterns, which we experience as concepts, meanings and assessments, but also as emotional and physical effects. The concepts in turn operate as attractors that sort and restrict the complexity of perceptions. *"Be what you would seem to be—or, if you'd like it put more simply—Never imagine yourself not to be otherwise than what it might appear to others that what you were or might have been was not otherwise than what you had been would have appeared to them to be otherwise!"* (Lewis, 1996, p. 89)

To what kind of self-relationship does the notion of failure invite us? The reality construct "failure" entails an invitation to deny the social context of one's own behaviour: *"This turns failure into an individual threat scenario:"* (Kunert, 2016, p. 3). For the context itself, i.e. the social system to which the "failure" relates, this means an offer of relief: *"At the same time social systems rid themselves of their collective guilt that way and at the same time reduce the complexity by blocking out the conditions, simplifying causalities and projecting mishap onto an individual. Thus, the members of an organisation regain their control illusion, which enables them to act again."* (Kunert, 2016, p. 8).

> The system which desires me to write this article could pretend that it is my individual "fault" if I don't, without having to ask about the ways in which the system may have contributed to this behaviour (e.g. setting overly tight deadlines, providing insufficient options for reducing the workload, formulating overly broad job descriptions, etc.).

But what makes this notion attractive for an individual? The fear of failure permits individuals to activate performance reserves, i.e. has the effect of enhancing performance over the short-term, as any "procrastinator" can confirm.

> I could use the missing of deadlines for submitting this article to help myself overcome internal and external obstacles and push myself to peak performance, albeit at the high cost of subjecting myself to pressure.

Finding out subsequently that this effort has failed may make it highly unlikely that a similar effort (a more-of-the-same strategy) will be repeated. But it may also well be that just because of the assessment as "failure" someone will shape his/her self-perception and the appraisal of the situation (which is normally involuntary rather than unconscious) such that this makes a repetition even more likely—with increasing frustration and self-reinforcing dynamics. "*He (the sociologist René John) describes failure as a significant restriction of one's own possibilities to act.*" (Kunert, 2016, p. 13). This restriction of the possibilities to act may be wanted—both by the social environment and by the individual.

> I could delay submitting this article so long that it would no longer be published. This would protect me rather well from similar enquiries in the future—at the high cost of a stigmatisation that would also severely reduce my choices of participating in desirable future projects of a similar kind. My client system could also deliberately create conditions that would make it almost impossible for me to "achieve my objective", in order to prevent my participation in future projects, if—for whatever reasons—this promised any benefits, but openly communicating this would at the same time be disadvantageous.

Favourably Shaping a Relationship with Experience

Heinz von Foerster's ethical imperative *"Act always so as to increase the number of choices!"* (von Förster, 1973, p. 49) is based not least on the dynamics of living systems, which preserve themselves only through the flow of energy and informational coherence. This means that a strategy such as the one outlined above is "unethical" vis-à-vis one's self because it impairs its own growth in favour of short-term relief.

But with systematic support (e.g. psychotherapy, coaching) hypnosystemic concepts ("problem-trance reconstruction") can, for example, always be used to show that the involuntary processes consciously perceived as a problem become understandable as an expression of valuable, but contrary value systems and objectives. "Failure" can then be seen as valuable feedback, e.g., on somebody's

orientation by objectives which make excessive perfectionist demands on the person and could not be achieved with the competences available (destruction of self-effectiveness), and/or that somebody does not see the aspired objectives as being harmonious and sensible at an involuntary and often hitherto unconscious level and blocks them, which is, however, not consciously experienced as a competence, but as "failure". It can then be shown that something in the person is in refusal, but out of the associated perspectives of this side of the person this is in a competent and harmonious manner for his/her values. The massive inner struggle which is usually triggered by this often weakens the person so badly in the synergy of his/her strengths that this may result in complete exhaustion with the definition of "burnout". Burnout can typically be seen as an expression of such situations.

Why Burnout?

Using a notion such as "burnout" has a relationship-shaping impact on the space between the individual and his/her social system. In the hypnosystemic approach, every "symptom" is regarded as a high-cost attempt to find a solution. Decoding the need relationships in this attempt to find a solution makes it possible to find ways of satisfying the same needs at a lower cost, i.e. of helping to increase the possible choices within the meaning of the ethical imperative.

> Writing an article this way, I could construct a reality which could later be described as "burnout", particularly if I had previously made great efforts over a lengthy period of time to cope with projects by relying on the effects of the given meaning of "fear of failure" and at some point failed to meet the requirements of a very large project in the sense of "failure". This would have the benefit of enabling me to move around in performance spheres which, for whatever reasons, I would not be able to enter feeling relaxed and to leave again without being aware of the responsibility for this decision. The price would be the non-sustainability of my own performance, organic reactions to overload, the functionalisation of my private environment for regeneration and the feeling of not being free in organising my life.
>
> This is how a client system could construct a reality which could later be described as "burnout",—particularly if a high degree of appreciation was offered for relatively little effort over an extended period of time, in order to switch at some point to a threat scenario for relatively great efforts. The benefit for the system would be, for example, obtaining great performance without having to offer commensurate appreciation and being able to hire the next generation of the willing to perform after "burning out" their current resources. The price would be: not developing the potentials of those involved and having a system lacking sustainable success.

The prices that have to be paid by the individual and social systems result in the insight that the attempts to find solutions are not sustainable. This demonstrates that—strictly speaking—conflicting interests always exist only briefly.

Burnout as a Contribution to Overcoming the Effects of the "Failure" Construct

So "burnout", seen as a reality-building concept, presupposes "fear of failure" in the genesis and "failure" in the escalation of the crisis. So what fails, if it is not the individual who "produces" the failure? So what fails, if it is not the social system which "produces" the failure?

"Burnout" has its effects mainly on the interactions between individuals and their environment. "Burnout" is behaviour in the form of communication. When words fail, communication turns into action. "Burnout" acts on the level of the individual's organism following a failure of verbal communication. The communication effects which one can strive to bring about vary from one case to another, just as do the reasons that may have made verbal communication appear to be no longer possible.

Using the term "burnout" brings the context relation blocked out by the term "failure" back into the interaction between the individual and the system. By "accepting" the "diagnosis" of burnout we communicate to the system that our "failure" has system-related causes. This basically opens up the possibility of finding new forms of interaction at the cost of giving up verbal communication, which is often wrongly experienced as a denial of relatedness in general.

So what would be the effect if we were to use "burnout" experience in both the individual and the system as a mnemonic aid to invent new cooperative ways of communicating with each other verbally in such a way as to say what had hitherto seemed unsayable? Even if we use the same term, the effects we hope to bring about and the price to be paid for them could vary extremely widely, depending on whether they are expressed by the internal or the external system. In the search for ethical solutions, however, the possibility of finding cooperative solutions that help to increase the number of choices for both systems will always arise and thus open up ways of overcoming the effects of the of "failure" construct.

This is where clinical work will come in: inviting individuals in their inner systems to engage in new forms of inner cooperative communication and thus empowering them to offer new forms of verbal communication in their environments as well. These may be of a cooperative or distancing (protecting inner cooperation) type, depending on the readiness of the environmental system. So it is not a matter of "treating patients", but of inviting individuals to extend their choices in their attempts to find solutions.

Burnout as a Competence?

Burnout can be seen as a kind of rescue competence in which the involuntary self-regulation of the organism assumes responsibility for the essential process of setting boundaries, but unfortunately at a very high price. Burnout may function as a competence in the sense of an effective way to achieve particular objectives. For example,

- as an intensive and effective feedback process generated by an intuitive inner knowledge of what is missing for a healthy and satisfying way of life
- as an indication of value systems, visionary capabilities, of loyalty, a readiness to assume responsibility, a readiness to commit etc.
- as an involuntary—rather than deliberate—boundary-setting mechanism and as an effective intuitive defence against overload (both internal and external)
- as a helpful "warning light" when there is a danger of repeated overload tendencies
- as an important indication that conditions in the context in which burnout phenomena develop (e.g. in an organisation) should be changed.

However, the intense inner struggle and the functions of the organism listed above usually do not manifest themselves in a verbally or cognitively understandable form, but tend to be expressed via physical and emotional feedback (e.g. in feelings of dejection, listlessness, bitterness, tension, or in physical symptoms such as headaches). But since at this stage the organism is usually still seen—as it were—as a machine which has to work, these phenomena are by no means first and foremost experienced or assessed as a competence in the habitual mindset of those who are affected, but as an expression of weakness and failure. The reaction this triggers only aggravates the problem.

Burnout: The Intuitive Competence of Setting Health-Conducive and Meaningful Personal Boundaries

The major increase in cases of burnout syndrome will serve as a starting point to set forth some considerations that may prove useful (from a hypnosystemic perspective) in helping to build and maintain a healthy and fulfilling life balance, even in the sometimes extremely complex and challenging contexts that most people experience in our "post-modern" era (at least in Western, late-capitalist societies).

> "Along the analytical categories of flexibilisation, dissolution of boundaries and subjectivisation occupational sociology has identified a fundamental change in the structure of work for some time now. This can be seen not only as a change in the 'external' relationship between companies and employees, but also and mainly as a transformation in the relationship between the worker and his/her own labour—with profound consequences for the work and lives of employees. Flexible working hours and company structures, increasing mobility requirements, increasingly project-organised and output-

oriented work processes—in particular, but by no means exclusively, in the service industry—mean that the potential and requirements for autonomy and self-control rise, while 'time, task-related and social pressure on employees' (Voss & Weiss, 2013) is stepped up in parallel." (Graefle, 2015).

Hypnosystemic Strategies for Optimal Self-Regulation

Meta-Balance as an Ambivalence Competence

Nevertheless, the considerations presented here need not be discouraging. They can also be used as valuable indications of how health may be promoted in a fulfilling way in the social and organisational contexts described. In such contexts it is almost inevitable for us to keep activating networks of stress experience, guilt feelings, fear, anger, despair, impotence, disappointment and bitterness from our involuntary repertoire of experience, however balanced our basic attitude may be. Popular instruction manuals on how to find an optimal "work-life balance", how to simplify life etc. tend to create even more pressure with their promises that this balance will be achieved permanently, if only the advice given is followed closely enough. After reading such publications, we may see losing that balance from time to time as a personal failure, even though this is something nobody can avoid completely in the long run. Therefore, it is important to be equipped with strategies for repeated reorientation, which can effectively reactivate the experience networks associated with a fulfilling way of life.

We perceive the external stimuli and inner impulses that activate stress networks unconsciously, so achieving an optimum life balance may not mean being in an ideal state of mind all the time. Such an expectation would only result in yet another perfectionist, unrealistic objective, which is precisely what causes pressure and the feeling of inadequacy to which it is supposed to provide an alternative. It is, therefore, more helpful to strive for a "meta-balance", i.e. a balance between "being in balance" and "losing balance" and vacillating between these two states, if only because our inner values, needs and objectives are highly contradictory (e.g. wanting to be completely independent and free and at the same time able to rely on very safe relationships and attachments etc.).

Harmonious Unhappiness

Accordingly, if instead of submitting to the pressure "to be happy" propagated increasingly by the media, we will experience ourselves and our values as much more harmonious if we allow ourselves to be sad, frustrated, even outright unhappy in certain contexts.

In certain circumstances, we do not actually want to feel good. For example, when I was invited to speak in South Africa and provided with comfortable accommodation in a 5-star resort I did not want to feel happy driving through the townships of Cape Town; and I certainly don't want to feel good when I see the refugee camps in Greece on television. My "feeling bad", however, is not something

I would perceive as a weakness in these situations, but rather as a process required to mobilize myself in order to do what I can to help within the limited scope I have. Experiencing ourselves as unhappy may be seen and used as an expression of inner wisdom, but also as a competence. In these instances, undesirable experience processes should not be treated as a "problem", but as a helpful reminder of the task of reorientating ourselves towards a never-ending multivalence management (multivalence as opposed to ambivalence, to describe being pulled in more than two directions).

Building Empathetic Regulation Positions

If we already experience ourselves in a process perceived as fulfilling, we need not do anything but can just allow ourselves to be carried along by it, let things happen (which is also the typical basic attitude in any trance experience). If, however, we experience ourselves as being under massive stress, under a lot of pressure etc., our "stress networks" will "fire" with enormous involuntary power. In many cases it will then not be sufficient for us just to refocus on the desirable networks (e.g. with "miracle questions"), because the stress networks will still be firing involuntarily and will initially be faster and more powerful. Therefore, we should first build a supporting, empathetic relationship with our own stress experience rather than fighting it. In hypnosystemics "side models" (similar to "ego state" concepts) are used for this c. These are based on the discrepancy that arises between involuntary reaction and intentional aspiration when problems are experienced, i.e. the total experience system becomes split. In the inner dialogues that occur during this process we identify at one moment with the overloaded stressed side, and then at the next moment with "inner drives", causing us to tell ourselves "Don't be silly, you just have to. . ." etc.

By changing the description pattern from the usual "I have or experience stress" (identifying with what is described), e.g. to "one side of me is experiencing massive stress and another side of me has always been fighting it, these are two sides of me, not as a complete person. . .", a meta-observer position is reactivated (which is already part of the stored involuntary repertoire). This is associated with an attitude of distance and hence greater protection. It now deliberately becomes networked with using all our senses to project ourselves into a state in which we experience ourselves as able to act and as capable of empathy, i.e. by deliberately modelling our body coordination, gestures, the way we hold our head and the direction in which we look as well as our facial expression, to match the state associated with such experiences. We then activate our breathing accordingly and use specific gestures to activate our ability to set boundaries ("palm paradigm", see embodiment research, e.g. Storch, Cantieni, Hüther, & Tschacher, 2006, Storch & Tschacher, 2015). It will also be highly effective to imagine a boundary protecting this space, e.g. as an energy envelope or a protective air bubble, which simultaneously takes into account the need for protection and the need for contact with the outside world ("related individuation" as proposed by Stierlin, 2005).

From this position associated with the experience of protection, security, ability to act and a liberating experience of space we can now direct our empathy to the "side suffering from stress" and translate the stress reaction as important information, as competent feedback on what is missing at this point in time and what is needed to be able to regain a fulfilling balance. After all, the stress reaction is an expression of the feeling that important needs are not being met. The reaction usually triggered spontaneously in our culture of wanting to fight, avoid, deny, or ignore the symptoms will only aggravate the problem, because it will not remedy the deficit but tend even to compound it. This puts even more pressure on the "suffering sides" of ourselves, because it expects them to change, while they are currently experiencing themselves as powerless, helpless and in need of support.

Utilising Symptoms as Competent "Ambassadors of Valuable Needs"

A loving, supporting relationship with our own "suffering sides" can be built, e. g. by imagining these needy sides as real human beings with needs. The suffering sides with which we have—in a way—confused (identified/associated) ourselves while experiencing stress will then turn out to be either considerably younger (age regression) or much older (age progression) than our real selves. They will often experience the situation as an overwhelming flood, as an oppressive mountain etc. In fact, these sides will react in a highly appropriate manner to these unconsciously experienced contexts, for here involuntary experience—in a manner similar to what happens in dreams—will transpose inner images literally into psycho-physiological phenomena. Our suffering sides live—as it were—"in a different, very oppressive world of great distress" and need help. This help can be modelled in the imagination, like supporting someone in need of help in real life. This also means that our suffering sides need not change anything, i.e. they are allowed to continue reacting by suffering for the time being, because only if they are "picked up" in this very state and accepted lovingly will this be experienced as the kind of support they have always longed for. Thus, even very intensive stress reactions can still be utilised as a great chance to finally fulfil these desires. This in itself will create a greater inner independence from the external stimuli which have always caused stress.

It may initially seem paradoxical not to want to change the very burdensome phenomena, when we desperately want to change. But the very attempt to change them deliberately and to take action "against them" is a particularly problem-stabilising component of the problem processes. It will make a very helpful difference to change them.

Focus on Inner Harmony

In order to be able to act in an optimal way in complex situations when we are faced with many, often contradictory, expectations, we continually have to make choices, because we cannot meet all of them all the time; yet in our own inner dialogue or

multilogue all the various expectations and tasks are—as it were—shouting for exclusive and immediate consideration.

In order to be able to set priorities constructively in these difficult circumstances we need a set of inner criteria to allow us to make choices and decisions. In our experience, in many counselling processes focussing on the experience of inner harmony, i.e. on "somatic markers" (Damasio, 1997), has proven to be particularly successful. This means felt knowledge, something akin to what is called "felt sense" in focusing, i.e. an intuitive feedback experience gained from an unconscious intuitive knowledge of what we experience as harmony or disharmony. This manifests itself via the emotions, often as a "gut feeling", i.e. via non-verbal perceptions that are often not readily understandable or classifiable cognitively. Such feedback is often denigrated in our culture if it cannot be substantiated rationally. But neurobiology shows that it constitutes a particularly important form of competence that is indispensable if we are to be able to consider a person's (partly unconscious) values and needs in a more holistic approach and to make constructive decisions (Damasio, 1997). These experiences are part of our inherent intuitive knowledge. As a valuable form of feedback competence they can guide us in making decisions and can help us to achieve inner peace and calm, confidence and faith and can thereby reduce the complexity very successfully.

"Squash Point" Strategy

Hypnosystemic methods can show us that everything we experience is unconsciously represented spatially in the "unconscious inner experience space". When we experience pressure, this is a result of instinctively narrowing our "control space", to such an extent that we unconsciously allow expectations and tasks to get so close to us that we experience them as if they were real physical phenomena that can literally exert pressure on us. If pressure is experienced, something must be pressing. This is the point when an "ego process" is activated, which is linked with an increasing perception of overload, ineptitude, impotence. To resolve such situations relaxation techniques such as autogenic training are not sufficient, for the desire to tackle pending tasks and expectations and to be successful remains.

It will be helpful, however, to change "the organisation of our inner space" in an optimum way in our imagination [as in system sculptures, line-ups or system choreographies (Weber, Schmidt, & Simon, 2004)]. To do this, an optimum control position is first modelled using the associated body coordination (see 1.). Once we are well connected with this, all relevant effective forces (tasks, expectations, but also "driving forces") will be relocated outside the protective boundary of the "control space". In analogy to a game of squash, in which there is a place in the rectangular court from which all points in the room can be reached from an optimum distance (I call it the "squash point"), these forces are positioned so that they are all at an optimum distance. The perception feedback (somatic markers) of the organism (see 3.) is used for orientation to determine where this position will be. In the same way, a supporting place is sought for the side which was so under pressure before

(the "impotence ego"), which is normally near the "control ego" within the protected space. Given that we will still want to cope with and organise tasks, it now becomes possible for us to model (again using the somatic markers) which of the tasks etc. should be "served" first and for how long, always going back to the "squash point" again, when the somatic markers (to which we should always pay attention) signal that we have spent long enough at the place just selected for the moment. Thus, several demands can be met in sequence, allowing us to devote ourselves intensively to a specific task at any one time without losing sight of the others altogether. This could be called "diachronic multitasking". This makes multitasking possible as a fulfilling flow experience, while the usual way of wanting to do several things at the same time can make us feel inundated and exhausted with increased ADHD tendencies in the long run.

"Problem Solution Exercise or Problem Solution Tai Chi" with Utilisation of Stress Triggers and Stress Reactions

Since the old problem patterns may still be virulent (Hebb's rule), it is now high time to use body coordination interventions to expand the chances of sustained effectiveness. Our experience with various intervention strategies to break burdensome involuntary reaction patterns and activate health-conducive networks have shown that body-oriented (ideomotor) interventions are some of the most effective measures. These can always be activated deliberately and have the effect of intensive priming (attractor effect), whatever the state of mind may be at a particular time, but very effectively involve the desired involuntary networks (see Fig. 1).
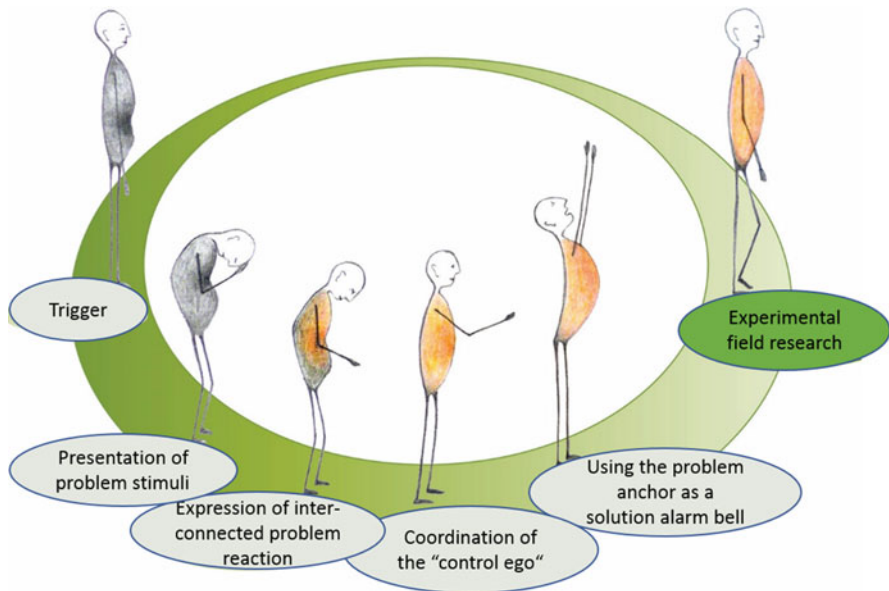

Fig. 1 Problem solution exercise or problem solution Tai Chi

1. For this purpose, clients are invited to express the old problem pattern again in an intentionally exaggerated, stylised, slow-motion version. This can be reinforced by adding a matching onomatopoeic expression for the problem experience ("from silent movie to talking picture") (some clients are reluctant to do this, which should, of course, be respected).

2. Now typical stimuli (triggers) which have always invited the client to show a problem reaction in the past (problem anchors or problem invitation stimuli) should be recalled and imagined.

3. The next step is for the client to follow a ritualised "multi-step programme" in which he or she intensively pictures the problem stimuli internally.

4. Now he/she will express the problem reaction which was automatically linked with the stimuli in the exaggerated slow-motion version described above (ideally: with matching sounds).

5. He/she, however, will now frequently associate this with the intensively activated coordination of the "control ego", leading him or her to make comments like (if he/she is still within the problem reaction) "this reminds me of my optimum reaction", which he/she will then adopt immediately.

This procedure should be repeated several times with accompanying explanations, so that a new helpful "bridge pattern" is built, which can be automated and will even help utilise the problem anchors to help trigger the solution pattern (I call this "using the problem anchor as a solution alarm bell").

6. This strategy normally very quickly makes clients feel much stronger, enabling them to experience courage, confidence, hope again. When clients have practised this strategy several times, I often hear that they can hardly wait to encounter the old "problem anchors" again in order to apply it. Nevertheless, it becomes much more helpful, when the clients are invited to try this as "experimental field research" than when it is described as homework (which normally reminds them of unpleasant experiences at school) and to use every experience as a valuable research result, even the experience in which it has not "worked" yet. This can be used as important information for the future, as a pointer to what else should be taken into account (prevention of the clients' own perfectionism, utilising each client's experiences as a learning field).

Development of Meaning and Decision-Making Strategies for Life Balance in These Double Bind Situations

As shown, conditions in the contexts described give rise to permanent dilemmas (double-binds), where we should actually speak of "multiple dilemmas" or "multi-binds", since clients are normally subject to many contradictory expectations, objectives etc. at the same time. The persons affected tend to enter inner stalemate situations very easily, because each option normally has good arguments in its favour, so that just as the person is tending to opt for one direction, many opposing

"yes, buts. . ." enter the involuntary dialogue or multilogue and may cause confusion or even paralysis. Since each of the options is also associated with other aspects of purpose, a confusion of purposes soon arises and may even lead to the burdensome experience of emptiness, with access to the solution competences stored in the unconscious being dissociated. Therefore, specific strategies are needed to be able to experience and use these competences again. I will describe a small selection of such strategies below, which have shown to be effective particularly quickly and sustainably in our hypnosystemic counselling work. Normally the best results are achieved, if they are used in combination, whereby different sequences work for different people, so the sequence may be different from what will be described below.

Agreements in Solidarity with Our Own "Future Ego"

Most of us have certainly been at odds with themselves about decisions made in the past. This style is particularly obstructive when decisions have to be made in double bind situations. First, we often say "I cannot make up my mind", ignoring the fact that this very position is an effective decision in itself (and as such goes to show that decision-making competences are present, otherwise it would not be possible to decide not to make a decision). A systematic reconstruction of the associated problem trance always shows that in these cases clients are desperately looking for the "right" decision, but have not found it yet. When I ask about the criteria for the "right" decision, clients' most frequent answer is that they will be able to make a decision, if the outcome will definitely be what they had hoped for. This is an unresolvable construct, because it involves knowing the future. But apparently the clients' worst fear is not that the results might not be what they wanted, but rather the fear of themselves and of being massively denigrated and accused by their own "inner driving forces", if the decision produces undesirable consequences (in the habitual style of the reproachful attitude that characterises being at odds with ourselves). It is this very dynamic, which clients recognise all too well in themselves, that reinforces a hesitant attitude, which in turn causes further stress due to the massive inner pressure to finally make a decision, while the longing for certainty about making the right decision increases at the same time.

This certainty cannot be obtained from external sources, since for that to happen the future would have to be known. So a (relative) certainty should be built, which can only come from within. Since the inner uncertainty and the stress are mainly caused by the client's own inner dynamics, by the feared denigration of the self, this is also where there is a chance for a solution. In terms of hypnosystemics this dynamic can be described metaphorically in terms of the person's own "future ego" not later blaming the "present ego", which has to make the decision here and now, but instead showing inner "self-solidarity".

The state of being at odds with ourselves is completely unfair and inadequate anyway, for the "future ego" will blame the former "ego", which has made the decision, for something which it could not even know, and indeed the "future ego" owes its enhanced knowledge to this very former "ego" (see Fig. 2). If any unwanted results occur, this should be seen as valuable (albeit not positive) information that
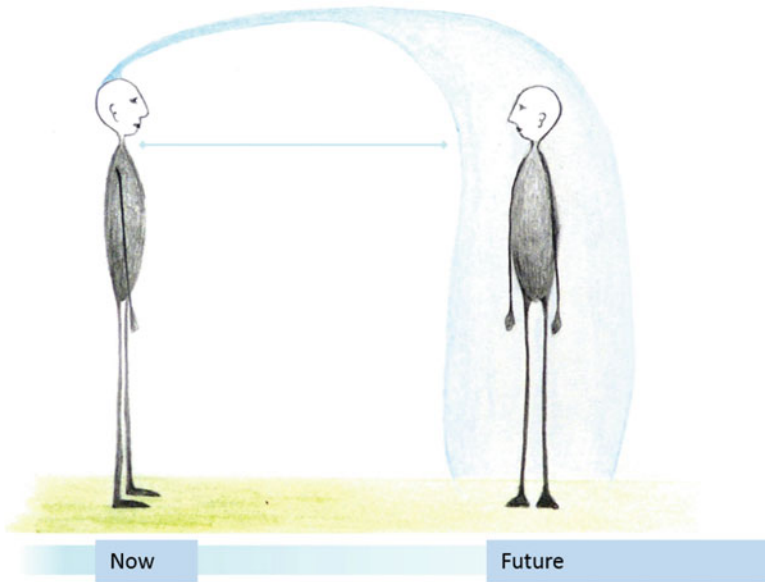
Fig. 2 Agreements with your own "Future Ego"

this can be a lesson, which in turn will work better if we comfort (instead of blame) ourselves about the unwanted results and acknowledge the former "ego's" courage in making a decision at all under the continued conditions of uncertainty. These encounters between the various "egos" can be acted out very nicely in the imagination, with often very touching results for the people concerned, making them feel stronger. This allows them to experience greater self-respect, peace and inner confidence again, while not only respectfully allowing themselves to feel their finiteness, but also to use it as a valuable competence tool and decision-making aid, which means decisions are then more likely to be made as well.

Inner "Parliamentary Democracy"

It often proves to be very obstructive if the criterion for a decision being "right" is whether we feel at peace with the decision made and avoid any further "yes, but" reactions. In the situations described it is anyhow an unrealistic expectation. Since decision-making only becomes a conflict because all the relevant options that need to be considered have some value, choosing certain options and necessarily having to disregard others does not lessen this value. Therefore, it is practically certain that after deciding to prioritise one option we will involuntarily experience a feeling of strong ambivalence triggering "yes, but" reactions and inner impulses telling us that a different decision might have been better. What is more, we are constantly pursued by inner "driving forces" demanding that we do justice to everything, and chastise us particularly sternly for making a decision, for this always means some options being discarded. We then desperately wait for a solution at no cost, which never exists in

these situations, and eventually denigrate ourselves again for any decision we make, because it cannot meet the criterion that there must be no "yes, but".

This is where the hypnosystemic strategy of applying "inner parliamentary democracy" proves to be particularly helpful. I have developed this strategy especially for the situations described above. The clients are invited to imagine their various contradictory inner tendencies as a parliament which has been convened to decide on the questions at hand. I ask them up front whether at a socio-political level they prefer a parliamentary democracy or else the kind of circumstances that prevail in dictatorships, in which pseudo-parliaments usually vote with a 95% majority. Just about everyone prefers the parliamentary democracy. Then I ask them what percentage of their inner parliament would have to vote in favour of something for them to view it as a "good" decision. Often to their own surprise they find that they expect at least 70%, often more than 90% of themselves. Using parliamentary procedures as an example I can then easily explain to them that a parliament is quite capable of taking action even when there is still a lot of "inner opposition" ("yes, but. . ."), and that it is even particularly effective and stable if the opposition is allowed to voice its opposing views very strongly before and especially after a decision has been made and that this can even improve the quality of the decisions and is not an argument against them. This metaphorical propagation of the multivalence competence of the people concerned often causes them to react with dignity and inner calm when they grasp their own multivalences and come to regard them as valuable competences in themselves, which in turn makes their decision-making competence much more perceivable.

Journey into the Solution Times for the Development of Meaning

"Hope is not the conviction that something will turn out well, but the certainty that something makes sense, regardless of how it turns out" (Vaclav Havel). Any decision is made under conditions of unresolvable uncertainty, so that fear, avoidance strategies, hesitation etc. are simply natural expressions of our competent solution strategies developed in the course of evolution. In particular, this is inextricably linked with the longing for stable certainty, which may seem paradoxical and unresolvable under conditions of uncertainty. As in the strategies described above, the certainty aspired to can ultimately only be achieved via autonomous inner processes. The central point is to be able to gain orientation by seeing sense in our own actions. Havel expresses this very concisely. Indeed, Havel himself is certainly a very good illustration of how decisions and the actions derived from them can be arrived at with inner clarity and strength in the way he describes even in the face of the fiercest oppressive forces.

But how do we experience our actions as having purpose, meaning or sense? From a hypnosystemic perspective the meaning is not derived from the respective actions, experiences etc. as such, but is always developed by the people experiencing them as a form of autonomous self-organisation assigned to the phenomena, i.e. it presupposes an active process here as well.

It is no coincidence that purpose means sense as well, since it is always experienced as something sensory, i.e. it cannot be developed primarily via cognitive,

rational processes only, but only with reference to "somatic markers" (Damasio, 1997), i.e. sensory harmony feedback (e.g. via feelings, moods, other physical signals) derived from intuitive knowledge. In order to make this "somatic marker knowledge" utilisable for the harmonious development of a sense, I have developed the following strategy especially for this purpose:

1. One defines the various options for decisions considered to be relevant and acknowledges both the decision options and the decision-maker's act of selection.
2. One focuses on instances in which one had a strong experience of inner harmony and on the physical signals (including the nature of the signals and their location in the body) that transmitted this experience. One then uses these experiences as a "calibration criterion".
3. One selects a point on the time axis, from which one can go through the various options in the imagination and check them for their "somatic marker effect". This is almost always a point in time in the imagined future, where any value criteria considered to be important can also be taken from the past. From this "sense reference point" in the future, the present situation in which one wishes to or must make a decision is reviewed by the imagination. Now the various options are played through, always with an intensive focus on how the somatic markers (the body feedback) react to the choice between the respective options. From this perspective, one often soon notices that certain options are perceived to be more harmonious and indeed as clearly the only harmonious ones, whatever the cognitive considerations indicated earlier. Sometimes cognitive preferences and those on this harmony level turn out to be completely identical, which results in rapid and powerful decisions. However, cognition and intuition may also often point in different directions. The same procedure can then be applied again as a "meta-strategy", in order to weigh up whether to follow the cognition, the intuition or a compromise between the two or whether to put off deciding for the time being. Sometimes, however, it also turns out even if one can do as one pleases, the desired clarity about which direction to go in is not achieved. This in turn can now be used freely either to postpone the decision or to go in one of the directions, because then they are all equivalent and all equally uncertain.

The key point with all these variants is that whatever one decides one should remember the process as a comparison of purpose or sense and should realise that this does not mean any objective certainty, but a certainty of purpose or sense. Even if unwanted developments occur later as a consequence of the decisions, the memory of these sense references will make it easier to use the helpful strategies described in 6a and 6b and to enter into a relationship of self-respect with oneself, which will provide inner support. In addition, under the conditions of finite human existence this certainty of purpose is the most appreciative and humane approach. Remembering this is most likely to create meaningful, fulfilling experiences and to achieve what can be called "safety in uncertainty", allowing you to navigate your journey through life with loving respect for your own fear, ambivalence and remaining uncertainty with your head held high in the heaving "sea of options".

Relationship-Forming Effect of a Different Attitude to One's Self

The German Association for Psychiatry, Psychotherapy and Psychosomatics is quite right when it demands in its position paper on burnout that *"the aim of a therapy should not be to enable the patients to temporarily tolerate unacceptable working conditions again with which they cannot cope"* (Berger et al., 2012, p. 12).

This aim is not only pursued by "evil" employers, but in many cases also by clients, mainly at the beginning of their therapeutic process. Usually the first approaches to a solution including therapy tend to come from the very networks which were already used to cause the problem. This means that the above-mentioned "strategies for optimal self-control" could be mistaken for tools to raise the client's "marketability".

"The paradigmatic figure of the "Arbeitskraftunternehmer" (entrepreneur of one's own labour power), first described by Pongratz & Voss in 1998, is characterised by the simultaneous increase in the demands and the extension of the competences of self-control, self-economisation and self-rationalisation. With respect to health this constellation may be reflected in the phenomenon of "interested self-endangerment" (Storch & Krause, 2012), when employees do not stick to working hours, do not take time off for overtime, work while they are on holiday etc. in their own interest (of success at work or of meeting requirements or for the success of the "team" (see Siemens & Frenzel, 2014). In this description, it becomes clear that "more-of-the-same" strategies cannot provide any sustainable results for both the individual and his/her social system.

So the point is to see and learn to apply those "strategies" which were experienced as reducing the burden during therapy as a basis for a different way to form relationships with the social system. In terms of empowerment it is also important to check whether the context in which the burnout developed is in a position and prepared to deal with changed behaviour and find new ways to interact. (This is certainly by no means the case in all systems—burnout can also be interpreted as the ability to survive for some time in particularly rigid environments.). Such considerations often result in decisions to change the context, to explore new career perspectives etc.

Analysing the Effects of Changed Behaviour with Respect to the Context of the Causes

- Metabalance and Harmonious Unhappiness: Can space be created for the feedback of adequate "disturbing emotions"? etc. Is there a culture of appreciation for critical feedback, or could it be encouraged?
- Building Empathetic Control Position: Could the therapeutic experience be appreciated as expertise in sustainability both in the internal and the external systems? Is impathy (empathy for oneself) appreciated by the system as a valuable competence? How would the other parties involved in the system realise the new experience of "protection, safety and the ability to act"? Can the changed

communication with its loving appreciation be used as a model for changed external communication?

- Utilising Symptoms as Competent "Ambassadors of Valuable Needs": Is there a readiness (or can a readiness be induced) to see "disturbing emotions" and disturbing perceptions as valuable feedback not only for the mental state of those who are involved, but also for the quality of the value-added processes.
- Focus on Inner Harmony: Can "somatic markers" be used and provided for the perception of "harmony"? Is there a readiness—or can a readiness be propagated—to see human beings as holistic beings?
- "Squash Point" Strategy: Can the experience of regeneration be integrated right in the middle of day-to-day work? Can team structures be built, in which the team members support each other in inviting each other not only to engage, but also to care for themselves?
- "Problem Solution Exercise or Problem Solution Tai Chi" with Utilisation of Stress Triggers and Stress Reactions: What would have to happen for the recurrence of the problem behaviour (e.g. readiness to overwork) to be used as a mnemonic aid for the application of new resources? Are colleagues willing to make their perceptions available to provide an early warning system?
- Development of Meaning and Decision-Making Strategies for Life Balance: Can the construction of a meaning which has been found be brought and integrated into the social context? Can common developments of meaning be encouraged? Are questions about experiencing meaning even possible, is feedback on such experiences desired? Or can the construction of meaning which has been found be implemented irrespective of any collective construction of meaning anyway?

This is where the question is often decided whether staying on permanently is conceivable or not. The mere decision to find a more appropriate environment at some point in the future often has drastic effects on the perception of the here and now. If the situation which may be impossible to change is reframed as a "springboard", the attitude to it normally changes drastically, while at the same time valuable information on maximum periods of time can be gathered, during which the situation which cannot be changed can be tolerated.

Case Study

Can "Failure" Be Overcome?

Taking as an example a case report on a burnout client, we show the extent to which the above-mentioned competence and empowerment strategies have a practical impact.

During her four-week stay at the hospital, the client had both kept a therapy diary and filled in an individualised questionnaire every day for the purpose of process observation. After being discharged, she continued to fill in daily questionnaires for another 6 weeks to support her transfer process.

Individualised Case Construction

Client: 58 years old, F33.1 (recurrent depression, currently moderate on ICD10 scale)

Own report:
- Sadness, lack of motivation, sleeplessness, brooding, feeling of a burden on the hear
- Irritability, rage, anger, helplessness, over-sensitivity to criticism
- Work: Perception of injustice (promotions)
- Private context: Providing care for her mother, who requires it; weakness and guilty conscience

Final report:
- Excessively performance-oriented coping pattern, spiral of self-neglect and exhaustion
- Self-assessments: *"I am only of worth, if I perform and look after others". "If I do not meet expectations, I will be rejected"*.
- Problematic behaviour thus far can increasingly be seen as a context-related attempt to find a solution. Initial experience of self-efficacy and growing self-confidence, considerably improved mood

As often occurs in practice, the therapist(s) in the above case did not make a Z-diagnosis[1] corresponding to burnout even though it is the main stress factor. Clients are often afraid of suffering disadvantages or stigmatisation when their condition is clearly differentiated from depression. A synopsis by Burisch (2010) lists no fewer than 133 symptoms which can be attributed to the burnout syndrome. It remains unclear which of these symptoms are the consequences of chronic stress or depressive reactions. So apart from the conclusion that burnout has something to do with exhaustion, nothing of general validity can be said. This means that unless we are willing to do without a relatively rational basis of therapeutic action, we need the client as an expert on his/her experience of his/her inner world.

During their stay at the SYSTELIOS-Klinik, clients are offered an ideographic system model for this purpose (ISM according to Schiepek, Eckert, & Kravanja, 2013, p. 73, see Fig. 3). To start off with, clients are interviewed regarding their objectives. The results of these interviews are then used to generate the model's variables, i.e. the ways in which the client experiences the world, expressed in their own way and in their own words. The contexts are then entered using positive and negative correlation arrows to create a network of the client's thoughts about himself/herself.

This modelling process is not so much a description of the past as a co-construction of the desired future, and explores resources that help outline the objective, obstacles, consequences and the "prices" that have to be paid to achieve the desired objective.

The next step is to define initial therapy projects (dashed arrows) as a preliminary structure for the therapeutic process, like a "guideline" worked out by the

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[1] Additional diagnosis Z73.0 according to ICD10: Difficulties coping with life.
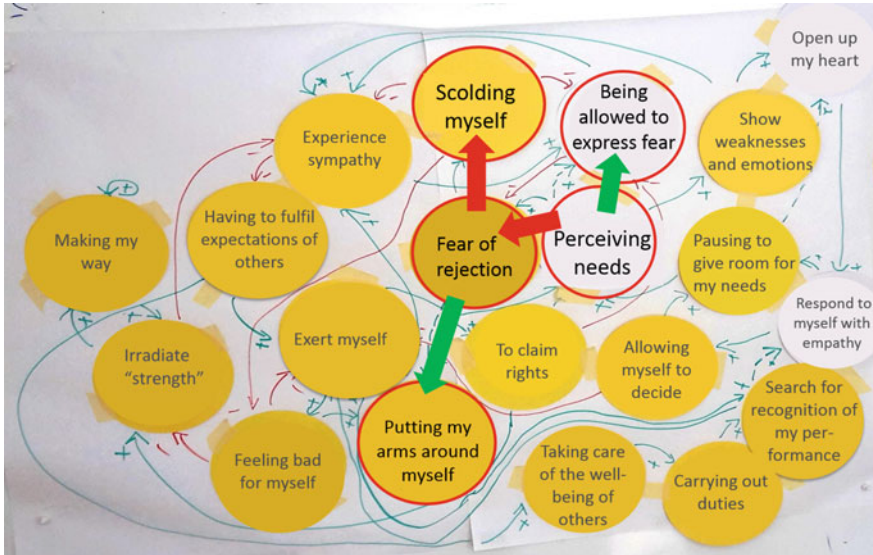
Fig. 3 Original image of an ideographic system model (ISM). The model's variables are the ways the client experiences his/her world, expressed in his/her own words

client himself/herself. This type of model cannot be grasped as a whole, but only piece by piece, by telling the "stories" that develop when the arrows are followed. For example, when I "perceive my needs", I experience "fear of rejection" (learned in a context in which my needs threatened my relationships). I could then "scold myself" so that I will "experience less understanding". This will result in an impulse to "fulfil the expectations of others" and to "try hard", which in turn will lead to greater neediness.

Change could occur if, at the moment when I "feel my needs", I succeed in remembering that I am "allowed to express fear" or to utilise the symptomatic feeling of "fear of rejection" in order to "put my arm around myself". This gesture could produce more "experience of understanding", which will reduce the impulse to "fulfil the expectations of others", etc.

These models deliberately focus on the complex dynamics of human behaviour and therefore go significantly beyond the linearly causal "vicious circle" approaches of behavioural therapy.

Process Observation to Help Focus

For each element of the model, the therapist and client devise a question which makes it possible to observe the associated processes in such a way that the observation itself makes a positive contribution toward bringing about the desired change (2nd order cybernetics). The point is to work together with the client to achieve an optimal balance between good will and confrontational clarity. In this process, they can also edit the labels at the slider's extremes. For example, the label for the extreme of the following question regarding symptoms recalls the

Fig. 4 Questionnaire entry regarding the experience of effort (see ISM model)

Fig. 5 Questionnaire entry regarding the client's "opening my heart" experience (see ISM model)

result of the interview, namely that the client gets the feeling of strain whenever he/she expends his/her energy for others[2] (see Fig. 4).

The extreme of the following question regarding resources recalls a physical feeling described by the client which can be used as an anchor. "Releasing from a clasp" is itself an element in the model, so a question is asked about this experience (see Fig. 5).

Process Monitoring as a Self-Generated "Guideline"

Following the hospital stay in the pilot project, therapists conduct fortnightly feedback interviews with clients (by phone and within the framework of outpatient therapy). Together with the clients involved, therapists use the information from these interviews, as well as raw data and evaluations of curves and correlations) to develop the next therapy steps for each client. In the transfer phase following the hospital stay, these steps are designed to raise clients' awareness of the practical effects resulting in all relevant contexts of the advantageous strategies[3] devised in the clinic.

The questions can be presented in groups created according to factors. The assignment of the questions to the respective factors is also discussed with the client. For example, it is often no a trivial matter to decide whether a given behaviour is currently to be considered more as a "symptom" or more as a "resource". In fact, it depends on the context, i.e. the question is what other

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[2]Graphs from the questionnaire editor of the SNS = Synergetic Navigation System software", developed by G. Schiepek: http://ccsys.de/

[3]See Sections *Burnout: The Intuitive Competence of Setting Health-Conducive and Meaningful Personal Boundaries* and *Relationship-Forming Effect of a Different Attitude to One's Self* of this article.
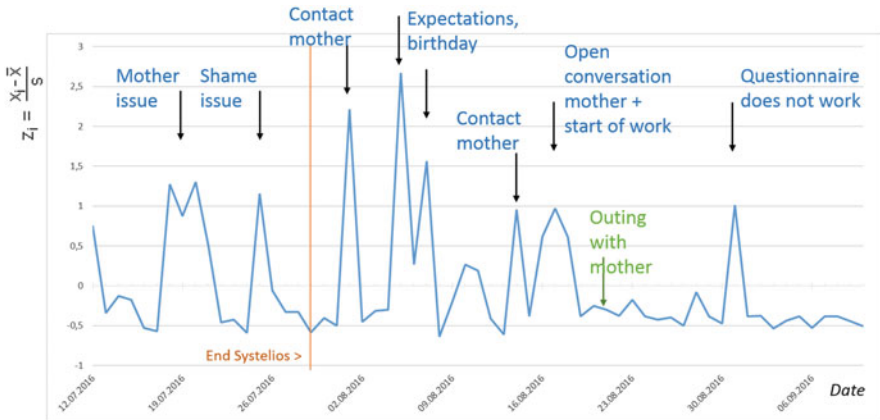
Fig. 6 Z-transform of the questions grouped according to symptoms over time

variables are involved or affected. The z-transform[4] of the symptom factor[5] clearly shows the connection with live events and therapy-related content (see Fig. 6):

It is particularly interesting to see that the clearest symptom peaks do not occur until just after the hospital stay, when the client is confronted with the mother in need of care. In the course of telephone feedback interviews, the therapist had the opportunity to remind the client of her new strategies (being allowed to express needs). During the last third, there is a frank conversation with the mother, the consequence being that the outing with the mother shortly after that passes without any symptoms being perceived. The client can also successfully delegate responsibility for providing care for the mother to the brother. What used to be a symptom becomes a mnemonic aid for self-care.

In the course of the subsequent weeks symptoms are perceived only once, the one occasion when technical problems prevent the client from sending the questionnaire. This shows, however, that the questionnaire also continued to provide important support for the process up to that point in time. The graph for the emotions factor clearly shows the connection between emotional development and therapy sessions or telephone feedback (see Fig. 7).

Here it is clear that contact with the sense and meaning of her own, also difficult, feelings is stimulated considerably during the hospital stay, but is not immediately available afterwards. At this point the inner system of the client could also slip back into the old stable condition at the cost of excessive strain. But through the further support of the therapy sessions and healing contacts with her grandchildren, she gradually manages to use feelings to recognise her own

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[4]Scaled according to its own mean value—a graph that reveals trends.

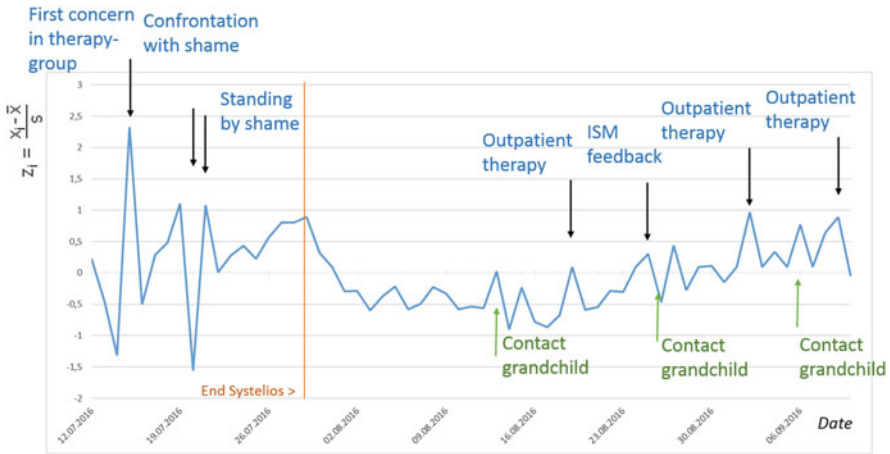[5]Graphs of data exported by the SNS = Synergetic Navigation System software developed by G. Schiepek: http://ccsys.de/

Fig. 7 Z-transform of the questions grouped according to the experience of emotion over time
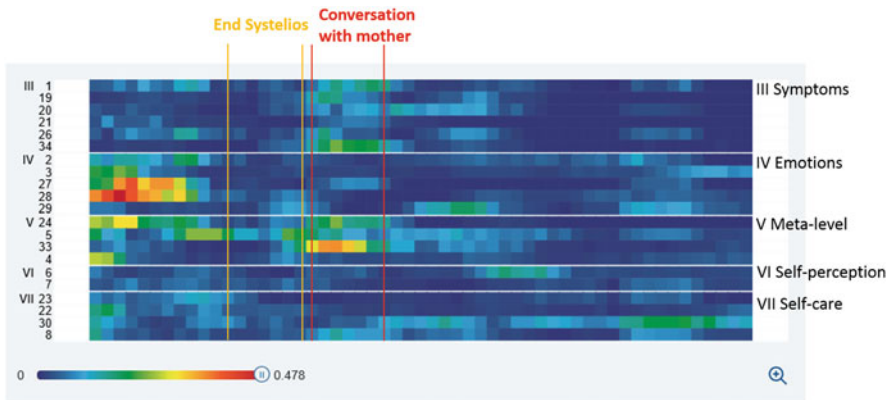

Fig. 8 Complexity resonance diagram for the hospital stay and transfer process

needs and to espouse them. The curve provides a clear indication of the amount of work it took.

The complexity resonance diagram (see Fig. 8)[6] shows a colour code ranging from blue to red that indicates how complex the curve for each question of the questionnaire is. Each pixel represents a period of 7 days of analysis, which is always advanced by one day for the next pixel (sliding screen). The increasing complexity is an indication of transitions between orders or changes in experience and behavioural patterns. Critical fluctuations prepare the inner system for

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[6]Representations from the analytical function of the SNS = synergetic navigation system software" developed by G. Schiepek: http://ccsys.de/

change. This is particularly apparent in phases during which many questions raise their chaoticity at the same time. Questions of high complexity are often highly relevant for the process.

Reading the questions of high complexity in the sequence of their three phases will reveal a kind of "therapy history" that shows very clearly how the inner focus shifts from the perception of symptoms through the perception of the transfer to self-care.

Phase 1 up to "end Systelios"[7]—perception of symptoms:

- Item 27: Today I had contact with my fear of rejection.
- Item 28: Today I could show weakness and feelings.
- Item 24: How much did I use my ability to radiate strength today?

Question 2 demonstrates a belief that "showing feelings" is the same as "showing weakness". Question 3 demonstrates a coping strategy in which tough behaviour ensures invulnerability at the cost of not being able to express one's own needs.

Phase 2 up to the "conversation with mother" transfer:

- Item 34: How strong was my feeling today that I was doing my duties, without considering whether this would be good for me?
- Item 24: How much did I use my ability to radiate strength today (again)?
- Item 33: Today I looked after the well-being of others

All three questions are directly linked with the encounters with the mother in need of care. In this case, this is where the more important source of the "burnout" feeling is. The coping strategies which had ensured success at work (question 5) had the function of being a source of appreciation. Appreciation was important because unconditional maternal love was not available AND it was not possible to confront the mother with this feeling (question 6). Taking on the task of providing care causes a massive eruption of the feeling of injustice (also in the work sphere) (question 4).

The burnout crisis presents an opportunity to change long-established patterns that had obstructed access to her own emotions. The main change results from the change in communication with the mother. This is the point at which the transfer takes place. The advantageous strategies for dealing with herself devised at the hospital become a new means of shaping relationships.

Phase 3 (end of the process)

- Item 30: Today I used pausing to think in order to give my needs space.
- Item 29: Today I had the feeling of opening my heart.

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[7]The events always influence seven sliding screen blocks (pixels).

- Item 8: Today I was able to look after my needs very well.
- Item 3: Today my feelings make sense to me.

My new attitude toward my own needs starts with my being able to feel them at all (question 7) and then continues with my actively espousing them (question 8). This creates a completely different kind of access to her own emotional experience (question 9), which culminates in her feeling of meaningfulness (question 10).

Not until she experiences this increasing feeling of meaningfulness will the symptoms disappear (see symptom factor). Even more importantly, the new-found feeling of meaning has become more important than the disappearance of the symptoms. Seen from its conclusion, the therapeutic process was in fact aimed at constructing a changed reality. *"The nature of human existence is in its self-transcendence. Self-transcendence of human existence denotes the fundamental anthropological fact that being human always points, and is directed, to something, or someone, other than oneself—be it a meaning to fulfil or another human being to encounter."* (Frankl). In re-inventing the meaning not only of one's action, but also of one's being lies the ever-present possibility of dispensing with "failure" as a construct.

Failure: Is Not the End

What effects would there be if we could agree that the only thing that can fail in a phenomenon described as "burnout" is the communication between an individual and a system—not the individuals themselves or the system? In that case, we would come to understand that "failure" relates to our interactions and not to "reality". We would also know that communication never "ends".[8]

So "failure" would always merely signify the end of a particular type of communication, rather than denoting an absolute endpoint of the interaction. It could have a feedback effect on its own causes, modifying the style of future communication and thereby increasing the number of choices again. The formation of "cooperation" patterns would become more likely, while that of "competition" patterns would become less likely. The one who "fails" could be understood as inviting the one who "knows what has to be changed" to achieve cooperating patterns. Understood in that way, it should be valuable to spend your time with a person like this, sharing perspectives about change, wouldn't it?

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[8] *"It is impossible to not communicate."* (Watzlawick, Bavelas, & Jackson, 2011, p. 53).

References

Berger, M., Linden, M., Schramm, E., Hillert, A., Voderholzer, U., & Maier, W. (2012). *Positionspapier der Deutschen Gesellschaft für Psychatie, Psychotherapie und Nervenheilkunde (DGPPN) zum Thema Burnout*. Retrieved June 10, 2017, from http://www.dgppn.de/fileadmin/user_upload/_medien/download/pdf/stellungnahmen/2012/stn-2012-03-07-burnout.pdf

Burisch, M. (2010). *Das Burnout-Syndrom: Theorie der inneren Erschöpfung – zahlreiche Fallbeispiele – Hilfen zur Selbsthilfe* (5th Rev. ed.). Heidelberg: Springer.

Damasio, A. R. (1997). *Descartes' Irrtum: Fühlen, Denken und das menschliche Gehirn* (3. Aufl.). München: List.

Dilling, H., Mombour, W., Schmidt, M. H., & Schulte-Markwort, E. (Eds.). (2016). *Internationale Klassifikationen psychischer Störungen: ICD-10 Kapitel V (F): diagnostische Kriterien für Forschung und Praxis* (6th Rev. ed.). Bern: Hogrefe.

Graefle, S. (2015). Subjektivierung, Erschöpfung, Autonomie: eine Analyseskizze. Ethik Und Gesellschaft. Ökumenische Zeitschrift Für Sozialethik, 2. Retrieved June 10, 2017, from https://doi.org/10.18156/eug-2-2015-art-3

Kunert, S. (Ed.). (2016). *Failure Management. Ursachen und Folgen des Scheiterns*. Berlin: Springer Verlag.

Lewis, C. (1996). *Alice's adventures in wonderland. The complete illustrated*. Ware, Wordsworth Editions.

Maturana, H. R., & Varela, F. J. (1980). *Autopoiesis and cognition. The realization of the living*. Dordrecht: Reidel.

Schiepek, G., Eckert, H., & Kravanja, B. (2013). *Grundlagen systemischer Therapie und Beratung. Psychotherapie als Förderung von Selbstorganisationsprozessen* (1st ed.). Göttingen: Hogrefe.

Schiepek, G., Eckert, H., Aas, B., Wallot, S., & Wallot, A. (2015). *Integrative psychotherapy: A feedback-driven dynamic systems approach*. Toronto: Hogrefe Publishing.

Siemens, S., & Frenzel, M. (2014). *Das unternehmerische Wir: Formen der indirekten Steuerung von Unternehmen*. Hamburg: VSA Verlag.

Stierlin, H. (2005). *Gerechtigkeit in nahen Beziehungen. Systemisch-therapeutische Perspektiven*. Heidelberg: Carl-Auer Verlag.

Storch, M., & Krause, F. (2012). *Ressourcen aktivieren mit dem Unbewussten. Manual und Bildkartei*. Bern: Huber.

Storch, M., & Tschacher, W. (2015). *Embodied Communication: Kommunikation beginnt im Körper, nicht im Kopf*. Bern: Huber.

Storch, M., Cantieni, B., Hüther, G., & Tschacher, W. (2006). *Embodiment. Die Wechselwirkung von Körper u. Psyche verstehen und nutzen*. Bern: Huber.

von Förster, H. (1973). *Über das Konstruieren von Wirklichkeiten*, *Wissenschaftstheorie Wissenschaft und Philosophie* (Vol. 21, pp. 25–42). Heidelberg: Springer.

Voss, G. G., & Weiss, C. (2013). Burnout und Depression – Leiterkrankungen des subjektivierten Kapitalismus oder: Woran leidet der Arbeitskraftunternehmer? In S. Neckel & G. Wagner (Eds.), *Leistung und Erschöpfung. Burnout in der Wettbewerbsgesellschaft* (pp. 29–57). Berlin: Suhrkamp.

Watzlawick, P., Bavelas, J. B., & Jackson, D. D. (2011). *Pragmatics of human communication: A study of interactional patterns, pathologies and paradoxes* (1st ed.). New York: W. W. Norton & Company.

Weber, G., Schmidt, G., & Simon, F. B. (2004). *Aufstellungsarbeit revisited . . . nach Hellinger?* (1st ed.). Heidelberg: Carl-Auer-Verlag.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Design

Bernhard Rothbucher and Katharina Rothbucher

Failure in Design: Definition

If we talk about failure in design, we want to start to explore the very initial idea of design. To design something, to have the desire to actively change something, is contextually closely related to failure—to a product or object that one considers to be inadequate and therefore failed, that one therefore wants to actively change.

> "Things and the ideas for things come from our dissatisfaction with pre-existing things and from the want of a satisfactory existing thing for doing what we want done. More precisely, the development of new artefacts and new technologies follows from the failure of prior ones to perform as promised or as well as can be hoped for or imagined." (Petroski, 2008)

The term Failure in Design is therefore part of the agenda for any designer; failure of a design or a function is seen by the designer as an assignment, "improve the thing". As Jerome Bruner considers learning from experiencing success and failure to be life itself, designers see themselves as problem-solvers. To live is to learn and to learn is to change, adapt, evolve, transform and be transformed. If as adults we can, in Bruner's words *"experience success and failure not as reward and punishment but as information"* then we are on our way (Bruner, 1961).

Successful designers have often developed a sense of failure, similar to a concept that Oser and Volery recommend for the education of future entrepreneurs. They call for a more balanced approach between developing a sense of success and a sense of failure (Oser & Volery, 2012). The Japanese scientist Hatamura uses a long and detailed group of failure cases, not only to unearth the often suppressed Design Failures but also to look into the patterns that can be traced from them. His intention is to allow learning from them and to avoid repeating the same mistakes in the future (Hatamura, 2009).

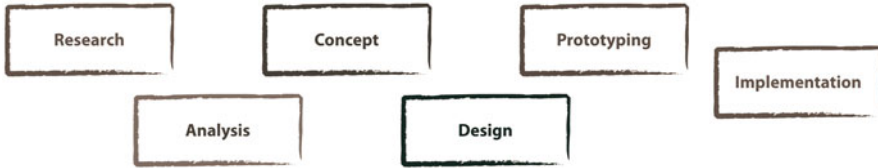B. Rothbucher (✉) · K. Rothbucher
Salzburg, Austria

Fig. 1 Exemplary design process

The Oxford Dictionary from the year 1588 mentioned the term "design" for the first time with the meaning of a plan thought up by a person, or a scheme for something to be realized. The meaning of the term "design" as an activity also emanates very strongly from the etymology of the word. In his book "Design-Driven Innovation" Roberto Verganti mentions Klaus Krippendorfs definition, which also explains the dimensions and aims of design: *"The etymology of design goes back to the latin de + signare and means making something, distinguishing it by a sign, giving it significance, designating its relation to other things, owners, users or gods. Based on this original meaning, one could say: design is making sense [of things]."* (Krippendorff, 1989, in Verganti, 2009). In the context of industrialization, design is used increasingly for the creation of mass products and is thus a substantial component of product development.

This article concentrates on the discipline of industrial design, which is defined as follows: Industrial design is the planning of the creation of industrially produced products or systems. Industrial design is a holistic problem-solving process in close cooperation with interdisciplinary development teams, with the objective of adapting consumer goods to the needs of users on the one hand, and to the rules of the market and economical production in the sense of the company on the other (Heufler, 2016).

Design shapes not only products but also everyday culture. Good design promotes the image, the identification of employees with the company and the marketing. Anyone who neglects design must expect to see losses in sales. (Bayern Design, 2004). This leads to the following simple conclusion, which Thomas Watson Jr. (Chairman of IBM 1961–1971) proclaimed at the University of Pennsylvania: *"Good Design is good Business."*

An identified problem, an impulse to improve a non-functioning product, is therefore not just a challenge to the designer to solve the problem, but it also initiates a process. This problem-solving process or design development process therefore not only has to satisfy the designer but also involve and satisfy corporate stakeholders, developers, target groups, and business decision-makers.

Everything that a designer produces, whether conceptual sketches, physical and virtual models, function diagrams, technical drawings, cost analysis calculations, verbal explanations, etc. ultimately uses the process of negotiating the best solution (Rothbucher, 2004). Herbert A. Simon summarized many of these considerations in "The Science of Design" as follows: *"to design is to devise courses of action aimed at changing existing situations into preferred ones."* (Simon, 1988). To better understand the design process, one potential base structure is cited here (Fig. 1).

In addition to this process it should be mentioned that the practical function of a product and functions based on the human being, human-centred design, such as perfect ergonomic fit, is a prerequisite for any design process.

Failure in the Design Development Process

The design process begins with an idea and ends, ideally, with a successful product in the marketplace. This path has several stumbling blocks, and the end of this design process does not always result in a product that succeeds on the market. Archives full of discarded design drawings and technical developments, along with the costs of development and even some production costs, bear witness to failed design processes. The causes are as manifold as the products themselves, but certain patterns can be seen in every organization, in every design process. Some of the recurring causes for failure in the design process are addressed here, along with recommendations and learnings from these findings. Naturally there are intersections between failure in the product development process and in the innovation process, but they are not addressed explicitly here.[1]

The outcome of the normal heuristic design process in developing products and services is far from reliable. Much like the process of evolution in nature, heuristic processes work effectively at a high price in failed developments and extinct lines. The evidence of new product failure is clear. In one study, Mansfield, Rapaport, Schnee, Wagner, and Hamburger (1971) concluded that once new product ideas move beyond the proposal stage, 57% achieve technical objectives, 31% enter full-scale marketing, and only 12% earn a profit (Lukas, 1998; McMath, 1998).

It should also be mentioned here that a non-functioning design process is often simply a manifestation of a company's lack of or poor organization. Design and new product development represent major organizational challenges. There are many reasons for this, including the non-routine nature of new product development, the high uncertainty inherent in doing something that is new or different and the fact that many different specialists may make inputs into the design process (Bessant & Bruce, 2002).

Problems in Interdisciplinary Cooperation

Design developments, more narrowly industrial design developments, require interdisciplinary cooperation of several competency teams, as well as a sequence of certain process steps with an output target, a time target, and a budget target.[2]

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[1]See von Stamm (2018).

[2]What happens when these parameters are lacking is vividly described by Thomas Thwaites in his book "The Toaster Project". The obstacles to developing a simple consumer product, such as a

Both conditions, interdisciplinary cooperation and adherence to process steps within a defined scope, can cause a project or a company to fail. One cause of this failure in interdisciplinary cooperation is the lack of interface communication (Stamm, 2008).[3]

Specialists in various areas of competency generally focus on the partial processes that have been consigned to their responsibility, using the language of their own discipline and possibly their own imagery. Within the overall design process, this can lead to different interpretations and therefore different objectives of an initial idea or partial process step. The implementation of the design idea as an objective construed according to the design idea can therefore fail.

After several cooperation projects and expert interviews, the research group of Lackus, Kolar, Walcher and Rothbucher identified the following key factors for sustainable improvement within medium-sized and large-scale companies: mentality differences, communication gaps as well as a missing knowledge in design management competency (Lackus, Kolar, Rothbucher, & Walcher, 2007). The question that remains is that of correct, appropriate interface communication (Lefever, 2013), and here one can learn from designers themselves.

Recommendation

Calibration of the vision, the objective, and thus also the images in the heads of all participants in the process is a proven, successful way to prevent failure. Visualizations and tangible objects, models, and prototypes are the ideal basis for this interface communication. Design tools, and design methods defined under the term "design thinking" have been successfully incorporated into the world of the design process for optimizing interface communications and comparing the desired common output. Visualizations can therefore also accelerate your decision-making process in complex situations. In the five principles of business design thinking, Marc Sniukas describes the second principle as follows: *"Think visually and tell stories: Visualization enables us to more easily and clearly share our ideas and develop them with others. Visual storytelling brings ideas to life and creates the understanding and alignment that accelerates decision making."* (Sniukas, Lee, & Morasky, 2016).

Thomas Lockwood wrote about this in his introduction about design thinking, *"that one key tenet of design thinking is, to accelerate learning through visualization, hands-on experimentalism, and creating quick prototypes. The more experimentation the better, quick, simple prototypes also help grasp a potential implementation well before many resources are spent in development. Often the*

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toaster, seem to be a mythical work of art if there is no interdisciplinary expertise, no process, and no organization behind the development.

[3]See also "Educating Designers for a Global Context?" on this topic. An Interdisciplinary Education Model for Design Education at the Salzburg University of Applied Sciences, where this insight has already made its way into the curriculum for designers.

goal is to fail quickly and frequently so that learning can occur. In fact, failing quickly is stated objective at award-winning Pixar Animation Studios, because it leads to better work done more quickly." (Lockwood, 2010).

Visualizations and fast, simple prototypes help not only with communication in collaborative teams, but also to effectively accelerate the design development process.

Failure Due to Lack of Adherence to Process

A design process can also fail, of course, like any other development process, in that partial steps are skipped or inputs from certain disciplines are ignored. *"Market-driven pressures plus an engineering-driven company yield ever-increasing features, complexity, and confusion. But even companies that do intend to search for human needs are thwarted by the severe challenges of the product development process, in particular, the challenges of insufficient time and insufficient money."* (Norman, 2013). Management responsibility, after all, means making decisions and setting priorities. These decisions may be wrong. A special case of failure due to wrong management decisions can occur because power structures are too strongly centralized. Inputs from important process steps and participants are annulled and overruled.

One prominent example of this is found in the recent history of the automotive industry. *"Because they saw no legal way to meet exhaust gas requirements within the company's time and cost constraints, in the mistaken understanding of acting in their customers' interests, they lapsed into the idea of cheating."* (Frankfurter Allgemeine Sonntagszeitung, December 13, 2015). In companies run in a rigidly technical manner, for example, a distorted power structure is often seen between customer desires, design implementation, and the actual technical realization.

Recommendation

Inspiration for optimizing the design process sequence can be found in Heufler's "Design Basics," or generally in the stage model. The sequence of a design process defines certain steps, but the sequence must necessarily be modified to the particular task at hand and the focal points must be set differently. The reference to feedback is important. Whenever a path has not led to the objective, or to an optimal partial solution, feedback is needed. This is also necessary if new insights occur during the work that completely change the actual situation (Heufler, 2016).

In summary, one can say that iteration is a general characteristic feature of a design process. We return here to the initial topic: iteration provides the opportunity for failure. In fact, it is a positive and necessary prerequisite in the design development process, where loops and repetition must be made possible. *"The number of repetitions and loops in any given innovation project is largely a function of project's budget and scope. In some cases, multiple loops may be necessary, in*

others merely desirable, and in still others totally unfeasible. Doing more iterations generally leads to higher value, more successful innovations, although not if pursued for too long or without discipline." (Kumar, 2013). Iteration can be seen as an artificial way of evolution.

Case Study

A proper example can be given with the development of the world's first bagless vacuum cleaner. As part of their design process, Dyson build detailed prototypes of their innovative products before manufacture, to ascertain the best design solution, and to provide a platform for debate amongst fellow design team members, engineers, business and marketing specialists, and of course, the customers themselves (Best, 2006). *"After hundreds of prototypes, thousands of changes, and millions of tests, I was hopelessly mired in debt. Today, in 2004, 40 percent of Britons over the age of 16 own a Dyson, almost three times as many as the next competitor. I sell 1.5 million vacuum cleaners a year in 37 countries around the world."* (Dyson, 2004)

Failure in Design: New Ideas Are Based on Design Failures

"No matter how well developed a thing or system becomes, however, it will never be without limitations. Therefore, there will always be room for improvement. The most successful improvements are those that focus on the limitations—on the failures. Failure and responses to it may not explain every aspect of every design, but from the engineering perspective, it is a unifying theme for describing the functional evolution of things." (Petroski, 2008).

"Failure and responses to it" play a unique role in the idea generation phase of the design process. Fundamentally, every creativity process uses the technique of letting go of rational, logical thinking and forcing lateral thinking. This type of thinking must allow failure, and evaluation of the idea in the lateral thinking phases should not be allowed at all. For example, in classical brainstorming, the cross-pollination of "wrong" ideas and correct ideas is used as inspiration; 100 crazy ideas are better than ten good ones. Osborn puts it this way: *"It is easier to water down a wild idea than to think of a new one."* (Eastaway, 2009)

Recommendation

In the design process, however, another special tool is used, that is, the sketch: The ability to sketch is one of the most valued skills among industrial designers,—and it is not without reason. Sketching has proved over the years to be one of the fastest ways for designers to define problems, explore ideas and develop form (Olofsson & Sjölen, 2005).

Communication on the page makes it possible to interpret lines, to interpret mistakes, to challenge oneself to form analogies with the mistaken lines on the page. This produces a unique creativity technique that also leads immediately to a visible result.

A similar type of this creativity technique is used in collaborative sketching, a type of brain-sketching, in which the participants first all draw alone, then the sketches are passed around so that the other participants can add or change something. Because this method requires sketching, a different thought process becomes possible, helping to generate new ideas. (Mis)interpretation of other people's sketches often gives rise to potential new, creative solutions that no one would otherwise have thought of. This means that the method is especially well suited for complex problems, such as the generation of new business model ideas (Eppler, Hoffmann, & Pfister, 2014).

In "Sketches of Thought" there is a chapter about the "Role of Sketching in Design problem Solving" which describes a study carried out around one of the following topics: *"Ambiguity of the symbol system of sketching insures that the referents and/or contents of symbols during the early phases of design are indeterminate. Ambiguity is important because one does not want to crystallize ideas too early and freeze development."* (Goel, 1995).

It is important to pay attention to what type of drawing is used, and what level of detail is selected. Depending on the stage of the design process, the drawing style should be chosen accordingly, as the normative power of the actual should not be underestimated.

Ambiguity is related to fidelity in many ways. Good ambiguity is intentional and works like a good low-fidelity sketch: it focuses the conversation on a sketch's many possible interpretations as opposed to its final resolution, which is typically a middle- or high-fidelity sketch rendering. The right amount of ambiguity allows even the designer to see possibilities that may not have been intended. The competent quick sketch is read as an idea in motion rather than a fully resolved idea (Henry, 2015).

One of the basic cognitive benefits of sketching is that the mere acts of formulating a mental image in a concrete way on paper makes it possible for the designer to reflect over the concept at once almost instantly develop further into a new concept, a so called iteration (Olofsson & Sjölen, 2005).

This leads us to the interpretation that designers are willing to fail with their lines on a blank sheet of paper, in a sense to open up an inspirational "communication process" while sketching. This communication process means a kind of iterative process of seeing, interpreting, finding analogies to patterns, artefacts, and symbols, and sketching reactions to it. It is more than trial and error, it is interactive. There is no so-called error in it.

Further Creativity Tools

As indicated above, many creativity techniques work with the possibility of failure, or at least the rule that no judgment of wrong or right should be made during lateral

thinking. A special creativity technique that also has great influence in the engineering disciplines is bionics. The term bionics is defined as follows: learning from nature as an inspiration for independent technical configuration. Bionics as a scientific discipline also systematically encompasses the technical implementation and application of designs, methods, and development principles of biological systems (Nachtigall, 1997).

The context of the topic of failure is interesting in this connection. Examples are found in nature, that is, what evolution has produced. Evolution as a process of producing as many variants as possible with as few resources as possible, so that at least one of these variants survives in the continuously changing environmental conditions. This is nothing other than millions of years of iterative results of failure. In this sense, the process of evolution can be understood as a method and developmental principle of biological systems that can be applied in bionics as inspiration for independent technical design.

Failure in Design: Listen to Your Customers?

If a designer identifies a problem with an existing product or creates a new idea for a serial product, how does he know that his customers have experienced the same problem or will like his idea for a new product? As every creative inventor and every creative engineer can be too convinced of his own genius, lack of reflection or lack of market research can lead to design solutions that the customer does not want or does not really need. But even with a great deal of market research effort, there is still room for interpretation of what the customer really wants. The risk of selective perception of customer needs is high. We see only what we want, or what we can. *"If the only tool you have is a hammer, you tend to see every problem as a nail."* (Abraham Maslow, American Philosopher and Psychologist, 1908–1970).

> "The key is to start from a seeking to understand point of view—not in seeking persuasion, as has been the practice in many traditional push-product development methods." (Lockwood, 2010).

> "Jeff Bezos, the founder and CEO of Amazon.com, calls his approach 'customer obsessed.' Everything is focused upon the requirements of Amazon's customers. The competition is ignored, the traditional marketing requirements are ignored. The focus is on simple, customer-driven questions: what do the customers want; how can their needs best be satisfied; what can be done better to enhance customer service and customer value? Focus on the customer, Bezos argues, and the rest takes care of itself. Many companies claim to aspire to this philosophy, but few are able to follow it. Usually it is only possible where the head of the company, the CEO, is also the founder. Once the company passes control to others, especially those who follow the traditional MBA dictum of putting profit above customer concerns, the story goes downhill. Profits may indeed increase in the short term, but eventually the product quality deteriorates to the point where customers desert. Quality only comes about by continual focus on, and attention to, the people who matter: customers." (Norman, 2013)
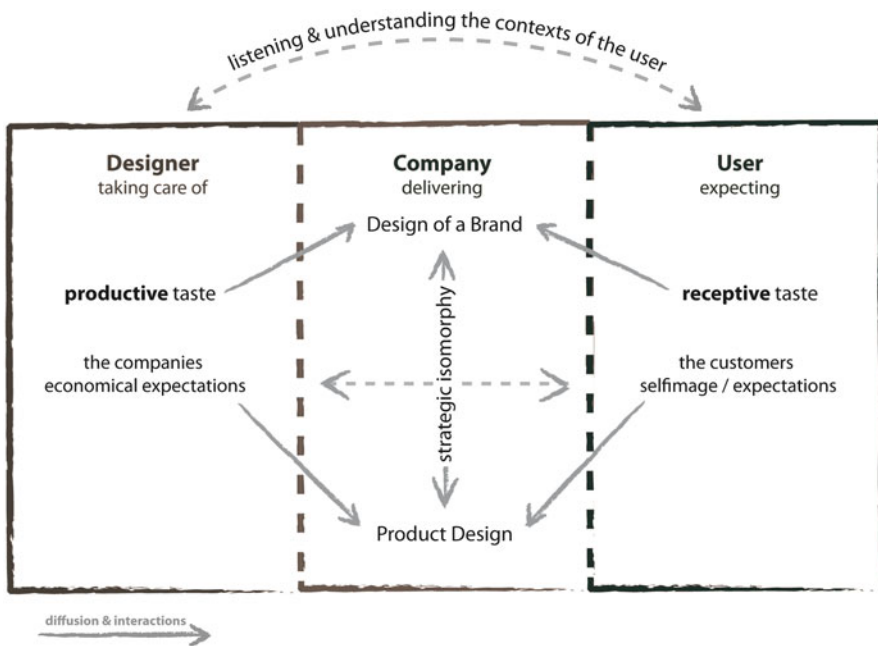
Fig. 2 Dependencies in the design eco-system

Is it really a good idea to implement customer desires directly? Do the customers' desires even fit our brand, our strategy, our vision of the company that is to develop the product? Or does a new company need to be founded just to fulfil a specific customer desire? Can the company really be successful by implementing this customer desire?

How to turn the implementation of customer desires into corporate success is the subject of the discipline of design management. Design adds most value when it operates within the overlap between an organization's objectives and the desires of its customers. If unmet wants and needs can be identified, then they can be interpreted into ways in which design can contribute to a viable business solution (Best, 2006) (Fig. 2).

There are thus many reasons why a design solution can fail: if the customer is not properly listened to, or if the customer is given too much space. The first leads to narcissistic solutions with no market, and the second to product ideas that the company is not able to implement efficiently with its strategy and its setting. The company fails because the implementation does not produce corporate success.

Recommendation

A promising solution for preventing both aspects of failure is the holistic process of design thinking. Design thinking is essentially a human-centred innovation process that emphasizes observation, collaboration, fast learning, visualization of ideas, rapid concept prototyping, and concurrent business analysis, which ultimately influences innovation and business strategy. The objective is to involve consumers, designers and businesspeople in an integrative process.

One key aspect is to develop a deep understanding of the consumer based on field research. Using an empathic approach can be both a source of inspiration and an aid to reaching consumer insights and discovering unarticulated user needs. The best way to do so is by getting out in the real world with consumers, with open minded collaboration, even with co-design concepts. Often, this involves observational research and ethnographic methods, by watching, listening, discussing, and seeking to understand (Lockwood, 2010).

Special tools for how learning about others can take place are provided, for example, by Daniel Ling in the first phase of his Design Action Plan, the emphasize phase. The recommended activities are: user interview, informal chats, observation, shadowing, mystery shopping, picturetaking and immersion. Outputs of these activities are: personas, empathy map, list of user feedback, problems identified (Ling, 2015).

Case Study

Correct understanding of the customer is without a doubt the basis for all corporate success. Conversion into sustainable business success occurs reliably only if, as described above, a comparative weighing of corporate objectives and customer desires takes place. In his book The Design of Business, Roger Martin describes the "knowledge funnel," a compression of customers' desires, the "mystery" in heuristics and its potential implementation in an algorithm, in order to turn a customer desire into a product or service and then a reproducible, successful business. The first stage of the funnel is the exploration of this so called "mystery". For example, the journey of the McDonalds brothers began with the question, which so perplexed them, as they watched a new culture grow up around them: what and how did the mobile, leisured, mass middle class of Southern California want to eat? That was the mystery. The next stage of the funnel is a heuristic, a rule of thumb that helps narrow the field of inquiry and work mystery down to a manageable size. In the case of McDonalds, it is the concept of a quick-service, drive through restaurant. As an organization puts its heuristic into operation, it can convert from a general rule of thumb to a fixed formula. That formula is an algorithm, the last of three stages of the knowledge funnel. The McDonald brothers and Ray Kroc picked up the baton all the way to an algorithm by continuing to cut away vast tracts of possibility. Kroc plucked one answer along innumerable dimensions to construct McDonalds defining algorithm. Once that algorithm was in place, Kroc pushed it as far as it would

go, adapting its elements to changing markets and economic conditions, but leaving its essential outlines unchanged (Martin, 2009).

On a larger, cultural scale, objects of design fail because the factors that determine the meaning of design vary by culture. One example is the design element of colour: white in western cultures stands for heaven and marriage and is used for weddings, while in the Hindu religion it stands for death.

Recommendation

Cultural customization, as this practice is called, widens the view to other cultural perspectives. In a globalized market this becomes enormously critical to the market success of global players that base their products on few technical platforms, but need to adapt their products to local markets in terms of human factors and cultural recognition if they want to succeed over other (local) competitors. Here we can see a shift in perception of specific products from one market (here also: culture) to another. For example, the Volkswagen Jetta was perceived as a sporty sedan in the US while in its German home market it was seen as a typical car for retired couples in their 60s. The managers of global brands are well advised to check the cultural fit of a specific product in its specific market prior to start the marketing campaign. This starts with obvious culturally specific features of design like colours (see above), but does not end there (Rothbucher, 2003).

Failure of Design Recognition

Failure of Communication on the Level of Perception

If humans fail to recognize an object, the explanation for such errors is presumably the failure of the perceived object to access the internal stored representation of the familiar object's appearance (Smith, Collins, Morris, & Levy, 1995). Another possibility is their misinterpretation of what they see, or mistaken judgment about the importance of the visual information. The result can sometimes be catastrophic, as described by Edward R. Tufte in his case study "The PowerPoint slide that brought down Space Shuttle Columbia". The failure to choose the appropriate font size led to a fatal misjudgement of the content described in the text.

Another design failure (misalignment) apparently occurred in the 2000 US presidential election, where according to some experts the Palm Beach "butterfly ballot" produced an "unexpectedly" large number of votes for third-party candidate Pat Buchanan due to an unclear design (Tufte, 2006) (Fig. 3).
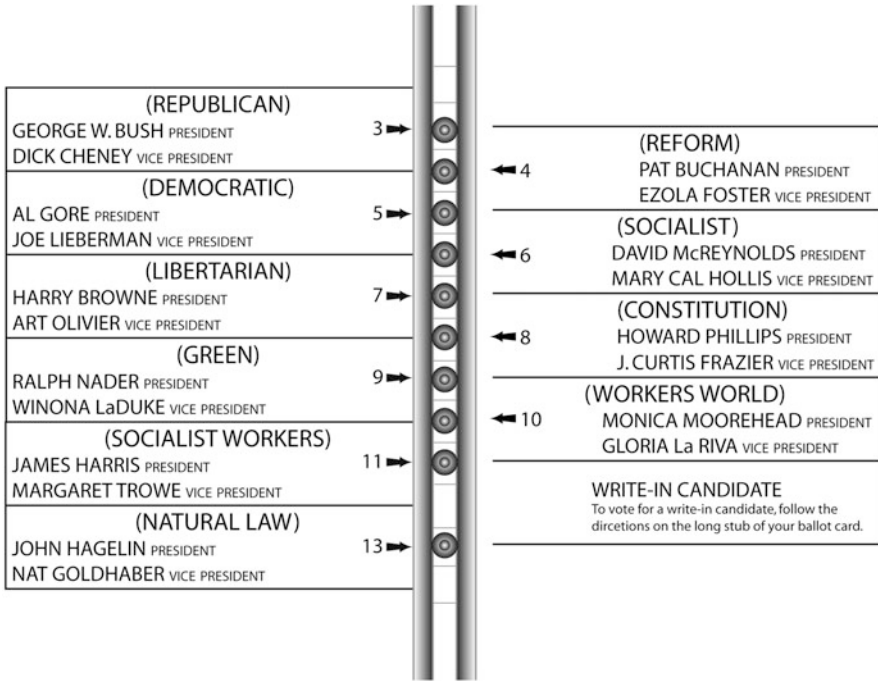
Fig. 3 Ballot card (based on original ballot card picture)

Failure of Communication on the Level of Meaning

An interesting example of a failed handover on the core value of a product took place in the early 2000s in the Austrian Headquarters of the Porsche trading company (the biggest car dealership in Europe at that time.) The new Audi A2, a small, high-tech vehicle and brainchild of genius engineer and boss of VW Group Ferdinand Piech, was internally introduced as "the little brother of the Audi A3." As the stylish A3 was popular with people in the junior management ranks of big companies, the simple and bold conclusion that the marketing people drew from these two beliefs was to market the A2 to owners of small shops, such as makeup and hairdressing studios. In terms of the qualities of the product, it would have been a must-have for technology connoisseurs who cared more about the high tech inside than the rather bulky design of the car. It took this target group many years to identify the A2 as the object they had been looking for, but ultimately this led to a steady demand for second hand Audi A2 ever since. Tragically, Audi ended production of the A2 before this hype started and ever since has tried to re-establish its claim of "Vorsprung durch Technik" in the minds of the people who would pay for this value.

Recommendation

German competitor BMW has developed an internal strategic tool that interprets the findings of one stakeholder in the design development process for the downstream departments. This means that the values that are derived from the brand core values, and that all the experts along the chain need to follow, have a good chance of making it into the final product and being perceived by the potential customer. In the case of BMW it is the core value of "sheer driving pleasure" that needs to be felt, for example in the design of the driver's seat, but also in the engineering of the steering system and in the advertisements that introduce the new car to the market.

Only if the values that are intended to be felt in the finished products are translated into the specific vocabulary of each discipline along the process it is possible to make and sell complex and attractive products that meet the expectations of the targeted customer (Rothbucher & Lackus, 2008).

Design Failure as a Value

A unique phenomenon can be seen in the appreciation of failure in the finished design object as something valuable. An example of this can be studied in the Japanese concept of wabi-sabi: *"Things wabi-sabi are indifferent to conventional good taste. Since we already know what the 'correct' design solutions are, wabi-sabi thoughtfully offers the 'wrong' solutions. As a result, things wabi-sabi often appear odd, misshapen, awkward, or what many people consider ugly. Things wabi-sabi may exhibit the effects of accident, like a broken bowl glued back together again. Or they may show the result of just letting things happen by chance, like the irregular fabrics that are created by intentionally sabotaging the computer program of a textile loom."* (Koren, 1994).

Generally, a growing enthusiasm for patina can be reported from the design scene. Though the ability to show patina, as in the scratches of a leather suitcase (whereby the proud owner could connect every scratch to a story of a specific scene on an epic trip long ago), has always been appreciated by certain people, it became a sign of bad quality in the centuries of mass production because shiny new products lose value with the first scratch.

Walter Benjamin wrote in his major book "The Work of Art in the Age of Mechanical Reproduction" on the loss of aura when art is (re)produced using industrial methods such as printing (Arendt & Benjamin, 1968). This may also apply to objects of design and stands in opposition to the human search for individualistic expression. A recent answer to this need is the mass customization movement. Here the product can be configured by the individual customer, but is based on an industrial product architecture. It thereby combines the individual look of a product with a platform that is easy to (re)produce. Independent of this is the ability of a product to age well, as described above.

Planned Failure of Design: Obsolescence

A story tells of Henry Ford's buying scrapped Ford cars and having his engineers disassemble them to see which parts failed and which were still in good shape. Engineers assumed this was done to find the weak parts and make them stronger. Nope. Ford explained that he wanted to find the parts that were still in good shape. The company could save money if they redesigned these parts to fail at the same time as the others (Norman, 2013).

Who hasn't experienced the irritation of a printer that stops working exactly 1 day after the warranty period expires? Or fruitlessly looked for spare parts or services for a high-end, but sadly no longer functional design item? It is possible that it is not at all intended for there to be a potentially life-extending repair, and the service life of the product is intentionally shortened.

More perfidious, because it is usually perceived subconsciously, is the aesthetic deterioration of an object, or as is well-known from the world of fashion, the industry's ever-shorter seasonal need to shorten societal acceptance of certain trends in order to use the "out of fashion" phenomenon to generate a new impulse to buy. Failure in design is therefore used intentionally for aging products in order to give the functions of design a time factor, or an expiration date.

Two needs define the essence of fashion: on one hand, the need to fit in, that is, design guidelines that are accepted within one's social group are preferred. On the other hand, there is a need for differentiation. One wishes to stand out from other groups, from the crowd, looking for individualization (Heufler, 2016). In order to meet both of these needs in a continuously changing society, the individual demands new, different configurations and different aesthetic sensibilities.

Product usage can also be used as a means of self-expression through the dictates of fashion often achieved through suggestive advertising (Heufler, 2016).

Case Study

For a deeper understanding of this phenomenon, we look back at the history of design in the USA: American industrial design had strong growth from the twenties to the forties, differentiating itself from European design. At the centre of its own understanding was "styling" as an instrument to promote sales. The best-known industrial designers all came from the advertising industry, such as Raymond Loewy, who caused a stir with his MAYA formula. "Most Advanced Yet Acceptable" was the formula for design success. That is, meeting the expectations of consumers by expressing a balanced relationship between the familiar and the new. Producing this balance required knowledge from market and motivation research and a market policy supported by advertising psychology (Schneider, 2005).

In his book The Waste Makers, Vance Packard especially addresses the American designer Brooks Stevens, who openly called for planned obsolescence in the fifties in order to increase product sales. Packard delineates three potential forms of planned obsolescence. First, it can be achieved through functional

deterioration; second, by qualitative deterioration; and third, by psychological deterioration or the loss of the psychological attractiveness of a product (Packard, 1960, in: Lang, 2015).

The psychological attractiveness of a product is mainly determined by the design of the product. Put simply, this is the aesthetic function of the design, as well as the symbolic function of the design. In his book "Design", Bernhard E. Bürdek mentions Mary Douglas, Tilmann Habermas und Helene Karmasin, who identified the process, that enables social groups to take part in culture by consuming goods, suggesting, that these goods (products) can even be regarded as means of communication. An individual's own apartment can become a place that symbolizes social identity. The body takes on this task all the more. Clothes, shoes, glasses are all unmediated fields of action for the construction of personal symbols. The worldwide cult associated with cell phones also has its source in these symbolization rituals (Bürdek, 2005).

Case Study

Here is a contemporary example that clarifies the symbolic function of the design: One of the most successful new categories of automobiles is the SUV (sports utility vehicles), which secured a considerable market share in the second half of the 1990s. The practical functions of these products (four-wheel drive, step down gears, differential lock) can actually be used by very few owners (farmers, foresters). However, the symbolic effect of SUVs is unmistakable: the owners clearly set themselves apart from the drivers of other mass-produced vehicles: they increase the individuality of the driver. The driver sits high, looking down not only on traffic, but on the world in general.

"Tell me what you buy and I tell you who you are" opens up a broad field for the study of design (Bürdek, 2005). As a consequence of a changing society with rapidly changing demands, the symbolic functions of products have to change quickly as well. Even more than that, the industry uses this effect of aging symbolic functions to accelerate the need for new products.

Conclusion

For managers and organizations: What can they learn from designers? Failures are an essential part of exploration and creativity. If designers do not sometimes fail, it is a sign that they are not trying hard enough. *"It is possible to avoid failure, to always be safe. But that is also the route to a dull, uninteresting life."* (Norman, 2013). Or, as Steve Jobs once put it: *"Why join the army if you could be a pirate?"* To accept failure as a rich source of information rather than a defeat or moral judgment is the key that can make designers successful in what they bring into organizations.

This attitude makes designers experts in using failure to achieve a rewarding result. We have identified different phenomena in which failure appears in design on different levels. These include the levels of customer, process, perception, meaning, and communication. Various conclusions can be drawn and used, whereby it is essential to apply the right approach at the appropriate moment. In other words, it is not appropriate to be a pirate 5 min before the final board presentation of a multi-million-euro project, but it is very much so at the beginning of a new chapter of an old brand that is stuck in its own history.

On the *level of customer fit*, a very hands-on approach is recommended by the authors. Managers can generally trust that experienced designers are experts in human factors, human-machine interfaces, and visual language. Nevertheless, it is always necessary to test the designs and prototypes in their intended target group and let the designers reflect on the findings. To make the findings acceptable to the designers, they should be included in the design clinics.

On the *level of process*, many researchers have already collected best practices for the overlapping processes in innovation and product development. Generally speaking, a stable process landscape helps the designers to do a good job in their risky quest to invent the future.

On the *level of communication*, a more empirical approach is needed to digest the complexity of the matter. Many findings from cognitive sciences still need to be translated into the tools and daily practice of designers. Designers by definition should be experts at communication, but sometimes focus too much on technology and style and fancy software instead of the proper delivery of a specific message to the chosen recipient.

The *level of cultural acceptance* of design is essential for the success of products in different markets. Again, this is partly a matter of human factors (e.g., to adjust the height of a bike seat to the average height of the people in that specific market) but on a more hidden layer this is rooted deep in the heritage of a culture. So technologies like 3D printing can help to customize products for specific markets without losing the profitability of mass production. But before this can happen, the right cultural fit has to be found by the designer. It helps to send designers to the targeted markets and have them experience a deeper understanding of the needs.

Here it is central for designers and managers to understand that a message that cannot be connected to the meaning in the mental and physical world of the consumer will not be successful in the market either. Design is central in catching the emotions of humans, but only a fraction of that happens on the conscious level of product features. And yes, designers can be used to put an attractive layer on the surface of mediocre products, but this will not last long and will damage the brand behind the product. So it is more sustainable to align the briefings for a designer with the values of a brand and make sure that the designed products are also communicated consistently from the marketing department to the market.

The *method of sketching* is both a universal language for better understanding in groups and an interactive conversation. The medium allows quick and unconscious expression that may lead to new beginnings. Its ambiguity can be key to giving birth to new ideas. Furthermore, in interaction with others it allows a change of

perspective and makes it easier to see the world through the eyes of person across the table. This quality can make sketching a helpful tool in bridging gaps between disciplines and cultures if cultivated in education and not mystified by society as an inborn talent. The widespread usage of sketching as a general tool can be found in Design Thinking toolboxes which are highly usable in many business contexts.

The specific *method of prototyping* as part of design thinking is powerful but, like any other approach, needs direction and a basic understanding of its limitations. The key to successful use of prototyping is to answer the right question at the right time. Simply put: if I want to learn about the mechanical behaviour of a future product, you need to make a mechanical representation out of original materials, without much concern for its look and feel. If you want to research the proportions of a design at 1:1 scale, it could be made of any material that is cheap and available as long as it can be put in front of a potential customer for him to have the illusion of the future design. Then the nature of the failing of a prototype will answer questions.

Having said this, it is sometimes the questions you have not thought of that are answered by a broken or misinterpreted prototype.

The knowledge of designers in designing objects that fit into their time can be used to synchronize the physical and psychological lifespan of a product. This gives consumers a clear message of what life expectancy a product may have, thereby leading to more sustainable consumption habits. To design an object in a way that signs of usage are not seen as a defect but actually make it perceived as even more valuable is something design can add towards a sustainable life style. In this way, timeless design and the phenomena of patina could contribute to less waste.

One Last Remark on the Development of the Discipline of Design

The formerly rather unique methods of design, including its use of failure to develop new things, have already been integrated into business education programs over the last 20 years and are now marketed as design thinking, business design, etc. This is a great success and a step forward. Still the question remains whether one discipline can adapt the methods of another discipline without losing a part of its own core. While it is valuable that many other disciplines are now adapting design methods for their own disciplines, it is hard for any expert in any field to apply complementary approaches at the same time. In the development of an iconic design it is often the complementary part of engineers or business people that led the final result to be greater than the multiple concepts on which it was originally based.

This is meant as a recommendation to cooperate at a high level of awareness, rather than simply collect methods. This is to gain understanding from our face-to-face partners rather than wasting energy on competing with a counterpart.

References

Arendt, H., & Benjamin, W. (1968). *The work of art in the age of mechanical reproduction, illuminations*. London: Fontana.

Bayern Design (Ed.) (2004). *Design, ja aber . . . Der Rang des Designs in Bayern 2004*. Nürnberg: Bayern Design.

Bessant, J., & Bruce, M. (2002). *Design in business. Strategic innovation through design*. London: Pearson.

Best, K. (2006). *Design management. Managing design strategy, process and implementation*. Worthing: AVA.

Bruner, J. S. (1961). The act of discovery. *Harvard Educational Review, 31*, 21–32.

Bürdek, B. E. (2005). *Design. History, theory and practice of product design*. Basel: Birkhäuser.

Dyson, J. (2004). *Sturm gegen den Stillstand*. Hamburg: Hoffmann und Campe.

Eastaway, R. (2009). *Kreatives Denken. 101 Wege neue Ideen zu entwickeln*. Köln: Evergreen GmbH.

Eppler, M. J., Hoffmann, F., & Pfister, R. A. (2014). *Creability. Gemeinsam Kreativ – Innovative Methoden für die Ideenentwicklung in Teams*. Stuttgart: Schäffer-Poeschel.

Goel, V. (1995). *Sketches of thought*. Cambridge: The MIT Press.

Hank, R. & Meck, G., (2015, December 13). *Piechs Erbe. Frankfurter Allgemeine Sonntagszeitung*.

Hatamura, Y. (2009). *Learning from design failure*. Heidelberg: Springer.

Henry, K. (2015). *Drawing for product designers*. London: Lawrence King.

Heufler, G. (2016). *Design Basics. Von der Idee zum Produkt* (5th ed.). Zürich: Niggli.

Koren, L. (1994). *Wabi-Sabi for artists, designers, poets & philosophers*. Berkeley, CA: Stone Bridge Press.

Kumar, V. (2013). *101 design methods. A structured approach for driving innovation in your organization*. Hoboken, NJ: Wiley.

Lackus, M., Kolar, M., Rothbucher, B., & Walcher, D. (2007). *Communication gaps or mentality gaps – Why do product development and design processes get unsuccessful?* Puch bei Hallein: Salzburg University of Applied Sciences.

Lang, J. (2015). *Prozessästhetik. Eine ästhetische Erfahrungstheorie des ökologischen Designs*. Basel: Birkhäuser.

Lefever, L. (2013). *The art of explanation, making your ideas, products, and services easier to understand*. Hoboken, NJ: Wiley.

Ling, D. (2015). *Complete design thinking guide. For successful professionals*. Singapore: Emerge Creatives Group LLP.

Lockwood, T. (2010). *DesignThinking. Integrating innovation, customer experience, and brand value*. New York: Allworth Press.

Lukas, P. (1998). The ghastliest product launches. *Fortune*. Retrieved June 10, 2017, from http://archive.fortune.com/magazines/fortune/fortune_archive/1998/03/16/239261/index.htm

Mansfield, E., Rapaport, J., Schnee, J., Wagner, S., & Hamburger, M. (1971). *Research and innovation in the modern corporation*. New York: Norton.

Martin, R. (2009). *The design of business. Why design thinking is the next competitive advantage*. Boston, MA: Harvard Business Press.

McMath, R. (1998). *What were they thinking? Marketing lessons I've learned from over 80,000 new product innovations and idiocies*. New York: Times Business.

Nachtigall, W. (1997). *Vorbild Natur. Bionik-Design für funktionelles Gestalten*. Heidelberg: Springer.

Norman, D. A. (2013). *The design of everyday things*. New York: Basic Books.

Olofsson, E., & Sjölen, K. (2005). *Design sketching*. Klippan: Keeos Design Books AB.

Oser, F., & Volery, T. (2012). «Sense of failure» and «sense of success» among entrepreneurs: The identification and promotion of neglected twin entrepreneurial competencies. *Empirical Research in Vocational Education and Training, 4*(1), 27–44.

Packard, V. (1960). *The waste makers*. New York: Ig Publishing.

Petroski, H. (2008). The evolution of useful things: Success through failure. In S. Heller (Ed.), *Design disasters: Great designers fabulous failures & lessons learned* (pp. 133–137). New York: Allworth Press.

Rothbucher, B. (2003). Framework toward cultural customization of design. *Bulletin of Japanese Society for the Science of Design, 49*(5), 51–60.

Rothbucher, B. (2004). *IDEA, executive training*. Linz: University of Applied Sciences.

Rothbucher, B., & Lackus, M. (2008). Interdisciplinary method development for the operationalization of product and brand communication. *4th Swiss design network symposium 2008*.

Schneider, B. (2005). *Design – Eine Einführung. Entwurf im sozialen, kulturellen und wirtschaftlichen Kontext*. Basel: Birkhäuser.

Simon, H. A. (1988). The science of design: Creating the artificial. *Design Issues, 4*(1/2), 67–82.

Smith, M. M., Collins, A. F., Morris, P. E., & Levy, P. (1995). *Cognition in action* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Sniukas, M., Lee, P., & Morasky, M. (2016). *The art of opportunity. How to build growth and ventures through strategic innovation and visual thinking*. Hoboken, NJ: Wiley.

Stamm, B. v. (2008). *Managing innovation, design and creativity* (2nd ed.). Hoboken, NJ: Wiley.

Thwaites, T. (2011). *The toaster project. Or a heroic attempt to build a simple electric appliance from scratch*. New York: Princeton Architectural Press.

Tufte, E. R. (2006). *The cognitive style of powerpoint: Pitching out corrupts within* (2nd ed.). Cheshire, CN: Graphics Press.

Verganti, R. (2009). *Design-driven innovation. Changing the rules of competition by radically innovating what things mean*. Boston, MA: Harvard Business.

von Stamm, B. (2018). Failure in innovation: Is there such a thing? In S. Kunert (Ed.), *Strategies in failure management: Scientific insights, case studies and tools*. Heidelberg: Springer.

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Failure in Use of Technology

Hartmut Wandke

Introduction

We live in the developed countries of the world with a variety of technical systems that make our everyday life easier, supposed that we are able to use them properly. Some things we have already learned as children, for example, how to read the time from a dial, for others we have studied special courses, e.g. how to drive a car. However, most of this we have learned in dealing with technology by individual experimenting (trial and error), and this process does not stop, since the digitalization of the world, of life, and of work continues unceasingly. If we use digital techniques that were already present at the time of our birth, we are considered as "digital natives". Otherwise we must acquire digital techniques, what Prensky calls "digital immigrants" (Prensky, 2001). As a prototypical representative of these two categories, the pre-schooler uses effortlessly touching gestures on a tablet computer in an interactive picture book, and the senior is struggling hard through the menu structure of his newly acquired smartphone. Completely independent from the age of life and from the concrete technique which is to be mastered, it is always a learning processes that is taking place. Learning, however, is not a process that always leads from success to success. To reveal which is the right touch gesture or the right menu option at the moment, we also choose wrong actions. The result can be an error message, a simple persistence of the system in an unchanged state, or the transition to a state that we did not expect and which we do not want. We learn that the action just performed was not the right one. If we do only correct actions, we would have learned everything and would not fail. But there are good reasons why learning—and thus failure—will never cease.

The first reason is that our technical environment continues to evolve at increasingly shorter intervals. Those who had learned the use of a telephone set around

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287

1900—picking up the receiver, waiting for the lady from the office, and then saying the name or the number of the desired participant to the speaker—could also use the same method and apparatus in 1915 to phone. 100 years later, users of mobiles have to learn about eight new devices between 2000 and 2015, with new functions, interaction techniques and operating modes. The same is true for web-based applications such as social networks, online commerce, photo cameras and assistance functions in the car. Operating systems of computers of all kinds change approximately every year. In between there are regular updates. That leads to a constant state of deficient literacy (Rosa, 2005).

The second reason is the constant and also accelerating expansion of digitization. Anyone could cut himself off from this development and lead a hermit life without digital tools. But, in certain areas such as the work places, financial transactions or even buying a bus ticket, nothing goes without machines, software, computers, smartphones and Apps.

Finally, many things that used to work mechanically or electromechanically have become more difficult because of the digitization and the expansion of the functional scope. For example, the magazine "Automotive Tests" has presented an investigation in which the operating times for typical settings in the vehicle (e.g. heating up the seat, changing the temperature of the heating to 25°, changing the sound of the radio, and others) were measured. Ten different cars from the year 2007 had been compared, from the small Peugeot 207 over a 3er BMW up to luxury vehicles like the Porsche 911 and the Mercedes S-Class. Added to this was a 24-year-old Mercedes 190 (built in 1983). This vehicle, which came with conventional mechanical rotary switches and push buttons, occupies the best position over all eight operating tasks because it required the shortest operating times. For example, the change in the air distribution (windscreen/footwell) lasted only 7 s, with the 2007 S-Class it was 47 s (Automotive Tests, 2007). In the meantime, automotive manufacturers have learned to provide additional direct buttons for particularly frequent settings, since the search in the depths of the menu distracts strongly from driving. Examples like that can be seen also in other areas of life. Driven by the desire for more comfort and greater efficiency, technical systems become more complex and humans become more likely to fail using them properly. While in the past the temperature in an apartment was changed by turning radiator valves, people can now program complete temperature profiles for different times, weekdays or activities and control the heating from afar in case of unforeseen events.

The third reason for failure is quite simple: technical systems are often designed by engineers and computer experts who take their own or their colleagues as a model for the user. What seems obvious and logical to the developer of a technical system can be a barrier for later users. That causes a high probability of failure. Quite a few buyers of a new car model went to the garage soon after the purchase, because obviously the sunroof of their new car did not open properly. When the button was pressed, the roof always open only a little bit. It opened up completely after a second press. The driver could uncover that function only by continued exploring (and possibly new failures), many even did not try. It is also known that operating manuals are often not read. In the meantime, there are, of course, elaborate methods

Table 1 Schematic example for an easy to build—but hard to operate—user interface, which can lead to failure

Press button A	Press button B	Resulting function
Once short		1
	Once short	2
Once long		3
	Once long	4
Twice short		5
	Twice short	6
Both at the same time short		7
Both at the same time long		8
First A then B		9
First B then A		10

and techniques for recognizing and eliminating barriers that can lead to failure in the development phase of technical systems at an early stage. Innovative approaches to the development of technical systems such as design thinking, usability engineering, user experience methods, human-centred design, and rapid prototyping provide principles, methods, and criteria to reduce the likelihood of failure. However, these approaches are not yet widespread, and often economic reasons lead to reducing the development effort and product costs. If only two buttons A and B can be used to perform ten functions, as shown in Table 1, you need little space for the controls and can produce corresponding hardware components simply and cost-effectively. However, the users have to learn a rudimentary "Morse alphabet" and they will most likely forget the actions if they rarely deal with it (Table 1).

What has been shown in the two-buttons-example also applies to other operating techniques, such as the popular gestures navigating through the menu structures of a smartphone.

What Means Failure of Technology?

In dealing with technology, failure is usually trivial, it often happens, it happens quickly and it usually has no serious consequences. Nevertheless, it is annoying, frustrating, and can lead to stress and sometimes even to health problems, precisely because of the relatively high frequency of occurrence (Hurtienne & Prümper, 2003; Lazar, Jones, & Shneiderman, 2006; Triebe & Wittstock, 1997).

The notion of failure and the concept of human error, which is even more focused on personal guilt, is used in everyday life rather than in technology science. It is more a matter of miscarrying. That means, not a person fails, but an action does not lead to the goal. In this chapter, action is always related to the use of a technical system. Often, the terms "operator", "operation", and "operative errors" are used in the literature. They all deal with mastering technology and using it for own goals. User should not be seen as a passive and, if possible, an indirect beneficiary, but also as an active agent using technical systems as tools to achieve goals. The theory of action regulation offers a good basis for analysing failures in the use of

technology. Within this framework we are talking about the failure of an action, not the failure of a person. For example, a user could want to send an e-mail to a friend. For this purpose, a number of prerequisites have to be met, namely, the following:

- Human-related factors: motivation, knowledge and ability of the person acting
- Task-related factors: complexity of the task to be solved
- Organization-related factors: social rules and standards in the handling of technology
- Technology-related factors: design of the technical system

Subsequently these factors should be considered in greater detail.

Human-Related Factors in Failure of Technology

Human-related factors contain the motives, knowledge and abilities of the user. If you want to send an e-mail, clearly, you must be able to read and write, know the functions of an e-mail program and the address of the recipient or at least where to find it. Additionally, the sender must, of course, also have a corresponding motive, which is usually associated with a superior goal of behaviour. Actions are hierarchically structured. On an upper level, activities (such as profession) are located, including a variety of actions. Actions themselves consist, in turn, of several acts and these, in turn, of singular cognitive or senso-motoric operations (Hacker & Sachse, 2013). A person who performs the activity of a manager usually has a strong motive to communicate with others (as a major part of his job) on diverse channels. A complete action can be the writing and sending of an e-mail. This action consists, in turn, of several acts, such as opening the mail program or entering address data. Operations are seen as the atomic units of an act, such as clicking on a mail icon, opening the address book, marking, copying, and inserting text pieces. If the person does not know how to perform certain features of the e-mail program, or if he does not have the skills to do so (for example, tapping on a touch screen on tremor), the action will not be successful. In that case, we are talking about failure.

Task-Related Factors in Failure of Using Technology

In order to successfully complete a task, the action must have certain characteristics. It must, for example, be doable with an e-mail system. If you want to communicate with someone in real time, this only works in direct conversation or with other technical systems (e.g. telephone or chat), but not with an e-mail program. However, the task must also be realizable by the respective person. Very often an action fails because the task is too complex for the user. Some tasks, such as sending an e-mail to one or more recipients, or simply replying to a received e-mail, are easy for everyone. Other tasks, such as delayed or anonymous mails, are too difficult for many users, although they are possible. Task-related and Human-related factors are,

Fig. 1 Relationship between characteristics of task and user
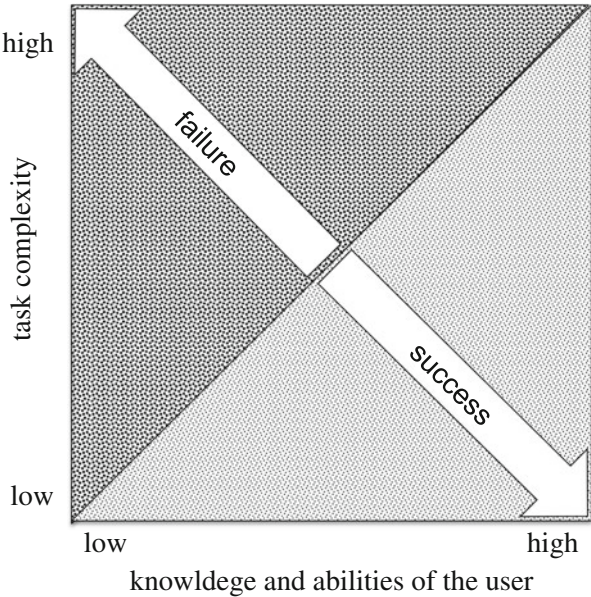
by nature, not independent but form two dimensions of the success or failure of an action, schematically illustrated in Fig. 1. For tasks with low complexity, most users will be successful, for highly complex ones very few will be left. This can be compared with the requirements in sport: lifting 2 kg is possible for literally all, 20 kg can also lift many, 100 kg the fewest and 200 kg lifts only a handful highly trained weightlifters.

When we consider task complexity as something objective (comparable to the weight of a dumbbell), then questions of definition and measurement arise. When using technical systems, these questions are relatively easy to answer—compared to other domains: A task is the transformation a current state of a technical system into the desired target state. The example of the e-mail program shows limited complexity, if the initial state is a finished message and all the information regarding the recipient, the subject, and so on is provided. The target state of this message being in the "Sent Mailbox" is reached by a single transformation step (a click with the left mouse button on the "Send" button). Same target state but different initial state may occur if the application is not yet activated, there is no Internet connection, the smartphone battery is empty or other difficulties. That may require a long chain of transformation steps or interactions between the user and the technical system. The number of steps is a first measure of task complexity but not the most important. More crucial is the number of action opportunities per step, and even more, the relationship between correct, i.e. purposeful, and other possible opportunities. Furthermore, similarity between the purposeful and the abusive actions plays a role. On numerous websites, tasks of high complexity are created by a high likelihood confusing the links, which are present in large numbers. Figure 2 illustrates that.
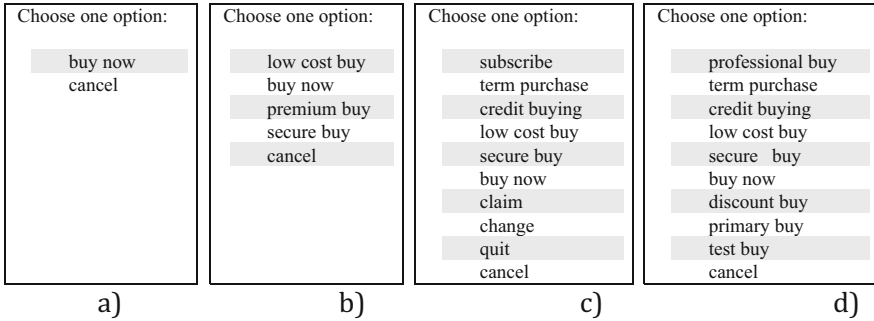
Choose one option:	Choose one option:	Choose one option:	Choose one option:
buy now	low cost buy	subscribe	professional buy
cancel	buy now	term purchase	term purchase
	premium buy	credit buying	credit buying
	secure buy	low cost buy	low cost buy
	cancel	secure buy	secure buy
		buy now	buy now
		claim	discount buy
		change	primary buy
		quit	test buy
		cancel	cancel
a)	b)	c)	d)

Fig. 2 Increased complexity in different versions of an online shop

In this notional example, a costumer of an online shop has chosen a product and is now going to buy it. In all four versions, there is only one single step necessary. The buying task has a very low complexity in version (a). From (b) to (d) complexity rises. This risk that this action step will fail rises too.

The same problem exists also with ticket vending machines that offer many different and very similar fares. The same is true with software programs for office work or photo processing, which offer a variety of similar menu options.

The example in Fig. 2 demonstrates the effect of similar labels for a large number of different processing options. Clearly, in the case of failure, there is not only a connection between personal and task characteristics, but also between task characteristics and characteristics of the technical system (e.g. the menu design).

According to Streitz (1985) a content problem can be distinguished from an interaction problem. Both together make up the complexity of a task. However, the content problem is initially independent of a technical system.

It is also the content problem that the user wants primary to be solved. In our e-mail example, the content problem is represented by the semantics of the message (for example, finding a shared appointment for a meeting with multiple attendees). The interaction problem result from the technical system (e-mails are sent asynchronously, read and answered, the incoming mailbox of some recipients can be extremely filled, messages are mistakenly classified as spam, etc.). From the technical point of view, the interaction problems could be reduced (and thus also reduce the complexity of the task) by using a different tool for this problem. This would be, for example, the Doodle platform for the scheduling problem.

Often the interaction problem is not at all the source of the failure. Nearly every one of us knows how to press the buttons or use the touch panels at a ticket machine in a foreign city. People rather fail on the complex fare system (content problem). If a ticket vending machine shall be easier, a simplification of the fare system would be the first choice. However, there is also an opposite trend, especially because computer-based systems (machines, online platforms) are becoming more and more complex. If human employees were to determine the price of a flight ticket without computer assistance, today's price systems would not be conceivable. In

order to reduce the probability of failure, content problem as well as the interaction problem should be addressed.
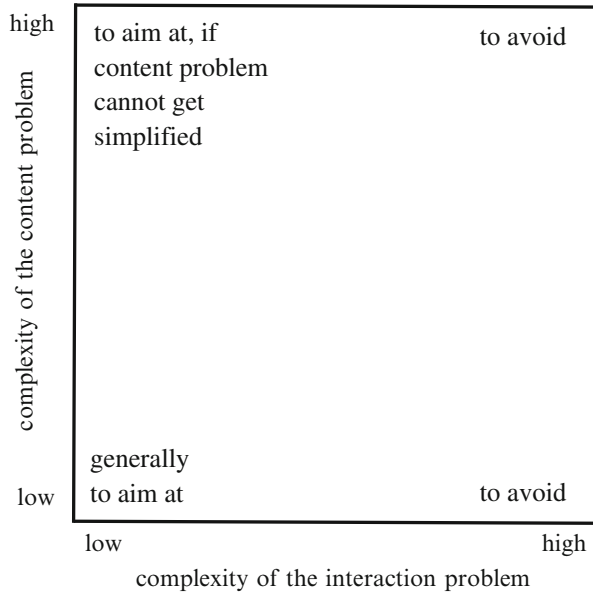
However, making things easier is very difficult. Already Friedrich Schiller, the famous German writer and philosopher, wrote in a letter to Christian Gottfried Körner in 1788, *"Simplicity is the result of maturity."* i.e. it is not present in the beginning of any activity like writing a poem or designing an user interface (Schiller 2015). More than 200 years later, the software developer and designer John Maeda expresses this insight something more dramatically in his book "The Laws of Simplicity" (Maeda, 2006): *"Easy is damn hard."* However, he also represents something like the Ten Laws of Simplicity, which, if met, make it more likely but don't guarantee that users will not fail. They provide a good heuristic basis for the human-centred design of technical systems. Particularly interesting is point 9 in which the failure in the design of technical systems is explicitly addressed as ultimately unavoidable.

1. Reduce: The simplest way to achieve simplicity is through thoughtful reduction.
2. Organize: Organization makes a system of many appear fewer.
3. Time: Saving in time feel like simplicity.
4. Learn: Knowledge makes everything simpler.
5. Differences: Simplicity and complexity need each other.
6. Context: What lies in the periphery of simplicity is definitely not peripheral.
7. Emotion: More emotions are better than less.
8. Trust: In simplicity we trust.
9. Failure: Some things can never be made simple.
10. The one law: Simplicity is about subtracting the obvious, and adding the meaningful.

If we summarize at this point, the complexity of tasks results both from the characteristics of content problems and from interaction problems. Both can be simplified and this simplicity counteract the failure of actions. Generally, the content problem can often not be simplified (law 9), especially if it is subject to technical-physical laws. In order to fly a modern commercial aircraft, for example, one has to be very familiar with aerodynamics and know how to control a machine weighing more than 100 t by means of various interventions in three dimensions. Therefore, an aircraft cockpit also provides numerous display and control elements for the pilot. These elements, in turn, can be simplified (the artificial horizon is a known example), which in turn simplifies the interaction problem (see Fig. 3). Reduction of complexity is an effective strategy to avoid failure in using technology. Please note that most of the use cases are somewhere in the middle of field in Fig. 3.

A radical simplification is achieved through automation: functions that were previously executed by a human being are done by the technical system. However, professional users often don't perceive the task and the interaction as a "problem", but rather as a "challenge", which is fun to handle and which people reluctantly submit to an automatic system for execution. The experience of one's own abilities is enjoyed, e.g. as a "joy of driving", which some would not want to lose by an autonomous vehicle.

Fig. 3 Complexity dependent on interaction and content

high	to aim at, if content problem cannot get simplified	to avoid
low	generally to aim at	to avoid

complexity of the content problem (vertical axis)

low   high

complexity of the interaction problem

Organization-Related Factors in Failure of Technology

In addition to the human, task and technology-related issues also organization-related factors can contribute to the success or failure. This includes official rules, overlapping social norms, legal requirements and social standards. Many organizational regulations address data privacy, IT security, individual rights, and property of users.

Organizational factors usually increase the complexity of the interaction. For example, when it comes to financial transactions on the Internet, it is necessary to enter passwords, PINs and TANs. This can lead to failure, for example, in case of forgetting or confusion. Some organizations limit the size of e-mail attachments. Certain file types (e.g. like .exe) are not accepted in the attachment at all. Some organizations even prohibit the use of email attachments completely. Files can only be uploaded and downloaded on a password-protected server, whereby passwords are generally not transmitted by e-mail. This makes it more difficult to send digital material to other users. Notarially certified contracts require that messages be sent by letter. Sending such a contract by e-mail would technically be possible, but the aim of execute a legal action would not have been achieved and the action would fail.

Cloud based solutions can be seen also in the private sector. For example, if someone wants to share many photos with others, this person will not do this by e-mail, but will upload the pictures to an online album and only the link to it will be sent by e-mail.

All of these rules have been introduced to prevent unauthorized data access, negligently caused transmission problems, and malicious attacks on IT systems. Unfortunately, it is also the case that not only the malicious but also the comfortable (i.e. ordinary) users can fail because the interaction has been deliberately made more difficult.

Technology-Related Factors in Failure of Technology

So far, non-technology-related factors were discussed. Obviously, causes of the failure of technology are not always rooted in machines and computers, sometimes not at all. In psychological error research, a mismatch concept (Frese & Zapf, 1991; Norman, 2013; Reason, 1994) is quite fruitful when it comes to dealing with technical systems. An action failed because—similar to a puzzle in which the parts come from different sets—one or more factors discussed above do not match the others.

Users, Tasks, Context and Technology Do Not Match

The concept of "mismatch" is non-judgmental. It allows the causes of failure to be sought in the various factors (not just the person), as has long been standard in scientific error research. On the other hand, those directly concerned, i.e. those who fail in using a technical system, unfortunately have a different opinion. Falsely, they are often found to be guilty of misbehaviour in themselves and not in the device, manufacturer or provider. In some organizations, the arrogance of administrators from the IT department increases these feelings of guilt. For example, in a representative survey among British workers, the MORI research institute in 1999 concluded that, especially in small enterprises (<10 employees), 43% of employees felt that they were to blame for computer problems (as opposed to only 15% in larger firms) and that this share increases with increasing age. In the case of the older employees (>55 years), more than one-third assumed the guilt in themselves (BBC News, 1999). Anecdotally, we can report from our own studies in which hundreds of elderly people have been invited to our lab to analyse how they deal with computer-based systems. Almost all of them stated spontaneous comments such as *"Soon, you will see how stupid I am."* This kind of preventive apology did not fit to the outcomes of tests, which did not lead to failure at all. Obviously, a suspected failure can also become a self-fulfilling prophecy, namely when this presumption leads to the avoidance of interactive systems.

In order to understand the various mechanisms when (usage of) technology fails, let us consider how a successful action takes place. If we carry out an action correctly, we can, depending on the learning state, fall back on different levels of action regulation.

Levels of Action Regulation

The first level is the knowledge-based (Rasmussen, 1983) or intellectual level (Frese & Zapf, 1991; Hacker & Sachse, 2013) of action regulation. Behaviour is controlled at this level when you are at the very beginning of learning. This state is conscious, every action step and every operation is explicit.

Dreyfus and Dreyfus (1987) settle on this level the behaviour of newcomers and advanced beginners. Let's suppose someone changes to a new e-mail editor and has a detailed description of the features and interactions, or a suitable video on the Internet. His first steps will be slow, he will keep reading, checking, verifying where the next entry has to be, and thus writing his first mail. The knowledge that is used here is mainly declaratory (knowing what functions the system offers and where they are). This knowledge is explicit, for example, it can be verbalized. Solving the task will strongly demand the memory, it will be cognitively demanding, and the user will not be able to perform other things at the same time.

If the user now uses this system for a long time, he becomes more and more secure in handling. He changes to the level of flexible patterns of action (Frese & Zapf, 1991) or the perceptual-conceptual regulation (Hacker & Sachse, 2013) or rule-based behaviour (Rasmussen, 1983). Dreyfus and Dreyfus (1987) speak of competent and—still an intermediary—of skilful behaviour. In order to achieve a particular goal, several steps are summarized and stored together with the target as a chain of operations in the memory. The result is procedural knowledge, which we also call "ability". This knowledge is at least partially implicit, that is, we have not consciously made it available. The execution of actions on this level takes place routinely and without much effort. For each initial situation, a structured set of if-then rules is available, which are easily executed without the necessity to think about which operations should be applied in which order. If a user receives a lot of mails every day for a long time, answers and writes new ones, he does not have to think about the steps that are needed, the fields to fill, how to choose an address, etc.

Certain partial handling of a technical system and even writing an e-mail can be further automated. Actions are senso-motorically regulated at this next level (Frese & Zapf, 1991; Hacker & Sachse, 2013). Rasmussen (1983) speaks of skill-based behaviour. In contrast to the two upper levels, which allow to control a broad (knowledge-based) or narrow (rule-based) spectrum of actions, the skill-based level is highly specialized. When writing an e-mail, typing the message text and moving the mouse pointer are common to many users. The operations are based on eye-hand coordination or on the basis of proprioceptive signals which indicate the position of limbs and joints. Frequently, the feedback loop is replaced by a straight-forward approach. Such sequences of operations cannot be interrupted at will, but run through to their natural end. One can observe this very nicely in itself if one wants to correct two or three letters within a single word. Often, without wanting it, you type instead the whole word.

In the last few years a simplified version of the hierarchy of the regulation of action has gained a considerable popularity. The Nobel laureate Daniel Kahneman introduced a dichotomization of action control and, above all, the formation of

judgments, in which he summarized his decades-long researches on judgment and decision-making (Kahneman, 2012). In a "System 1", sensorimotor automatisms and flexible action patterns are summarized. It is characterized by the following mode of operation: fast, automatic, always active, emotional, stereotyping, unconscious. On the other hand, "System 2" has the following characteristics: slow, strenuous, rarely active, logical, calculating, conscious. "System 2" corresponds to the knowledge-based or intellectual action regulation and also to a further level, which, however, is only found at the authors Frese and Zapf (1991): the level of abstract thinking that always comes into play when a technical system is completely new and we have no reliable knowledge of its functioning. On the level of abstract thinking, "mental models" can also be formed (Gentner & Stevens, 1983; Johnson-Laird, 1983). These internal models are mechanisms that enable people to produce descriptions of the system objectives and system interfaces, to explain the functioning of the system and the observable system states, and to predict future system behaviour (Rasmussen, 1987).

In the context of the use of technology "system 1" works in a way that is also often described as "intuitive operation" (better: use). Through a corresponding design, developers and designers try to enable the user to execute a correct and successful action without the need for learning, without reading an operating manual, automatically and unconsciously. Unfortunately, "intuitive operation" is almost always a marketing claim, since almost all technical systems require a prior learning process for their use. The customer is misled here, he could unpack a new device and use immediately.

Typically, all three levels (or both in Kahneman's scheme) are involved in an action to use a technical system. Some parts of an action require reflection and conscious, judicious decision making, others are routinely carried out, but they can be vary in various parameters, others are completely automated and are no longer consciously perceived. The latter work with fixed parameters, e.g. forces in pressing a button.

Failure at All Levels

What happens if an error occurs and therefore a sequence of actions steps or an operation fails? The action regulation then changes to the next higher level. Let us assume, at the lowest, the sensorimotor level happens an error (mistyping or misclicking). Users will initially try to stay at this level and achieve success with repeated operations. We often see users who, if nothing happens after pressing the return key, press this key again (only stronger), and then again and again. Only after a certain period of time (and eventually looking to the screen) do they check whether all the prerequisites and conditions are met in order to successfully press the return key at this point. Thus, they have switched to the level of perceptual–conceptual or rule-based behavioural control. In the case that there is no troubleshooting possible at this level, the next level, the intellectual or knowledge-based action regulation, is concerned. The user thinks about whether or not a special case is unknown to him, in which one does not press the return key, but the other key. How would this look in our (fictitious) email example? A highly experienced user clicks on the submit button after finishing the text. Nothing happens, even if he repeatedly clicks.

However, this mail may arrive several times at the recipient without the sender noticing it. Possibly, the user now looks more closely at the address field information to see if all entries are complete and correct. Only then he checks whether his mail account is online. In contrast to our fictious system real e-mail programs support this level change by the design of the user interface in a variety of ways, in particular through acoustic and visual feedback. For example, the absence of an acoustic signal is clarified. Errors in the address and the offline state of the mail account are displayed via message windows. Thus, a good design of the system can reduce the risk of failure. However, some typical mailing errors are not detected and corrected by most standard mail programs. The most frequent "highlight" is the forgetting of attachments.

Why do users need to fail at all three levels of action regulation? In general, failure is the necessary downside to the efficiency of human action (Rasmussen, 1983). A trivial example from traffic psychology shows that we could drastically reduce the failure in driving (number and, above all, the severity of accidents) by failing to achieve efficiency, for example by limiting the maximum speed of vehicles to 20 km/h. Practically, however, there is always a balance between efficiency and safety. In the following paragraphs failures on different levels are discussed in greater detail.

Failure at the Level of Automated Skills

All interaction with technology is subject to a conflict between speed and accuracy. If one took 10 s for each mouse click, misclicks would be possible, but extremely rare. Errors of this type are referred to as volatility errors, attention defects, or motion errors. They always concern the execution of a proper action. Reason (1994) calls this failure class "slips", in contrast to "mistakes", which are knowledge-based. The slips also include errors that occur at the level of flexible, rule-based and routine actions:

Rasmussen (1983) states frequency-gambling and similarity matching as underlying mechanisms. One can imagine that in the highly automated, fast and unconscious search for the appropriate action, the various options are already pre-activated in the memory. The more often an option has been implemented in the past, the more it is already activated and the faster it reaches the activation threshold, which must be exceeded in order to actually execute an action. We call this type of error also habitual errors. The second reason is the comparison between the perceived current state of the technical system and the conditions stored in the memory for the if-then rules. A high similarity between the if-components of the rules, in combination with the already mentioned high pre-activation, provides for the triggering of the wrong rule and thus for the failure of the action. Typical errors that can be classified here are confusions, which Norman (2013) calls capture slips. Identical beginnings of two different chains of action can lead to the more frequent (but false) choice. A passionate card player may slip in the sequence "1, 2, 3, 4, 5, 6, 7, 8, 9, 10, Jack, Lady, King, As". In technical systems, mode errors are particularly common as a

form of slips. In setting an alarm-clock many people have already experienced that the time set was not the alarm time, but the current time, because you had previously not changed the mode.

Failure on the Knowledge-Based Level

On the knowledge-based level, failure is ultimately inevitable. On one hand, knowledge can simply be incomplete, on the other simply be wrong. In addition, it can happen that actually existing and correct knowledge cannot be retrieved, perhaps because there is too much activation in a dangerous situation. We all know this from a stress-producing examination, where certain facts simply not come to mind, but are easily retrieved later in a relaxed situation. In addition to missing and wrong knowledge and the mistakes and forgetting errors the following mistakes belong to the group of knowledge-based mistakes:

Wrong target formation The action is completely correct, and someone notices afterwards that he missed the goal. Someone can, for example, manually complete a formatting with a text processing system before the text is finished. Subsequent deletions, inserts and other changes then re-form the beautifully formatted text.

Forecast errors People tend to simplify, linearize and persist existing trends in the forecast. As Reason (1987) showed in the analysis of the accident in Chernobyl, exponential processes, such as nuclear fission, are difficult to predict because such processes cannot be observed in our natural environment. You may also think of various puzzling tasks in which exponential growth rates play a role, like the so called wheat and chessboard problem (Pappas, 1989).

In addition to the above-mentioned causes of the failure, the knowledge-based level also suggests that there may be situations in which the knowledge to solve a problem is not yet present. This does not play a major role in dealing with established technology (except in the case of faults and breakdowns), but probably in the development of new technical systems or completely new technologies. In this case, people always know afterwards, whether the hitched way leads to success or failure. This is the area where the inevitability of failure is most obvious.

Desired Failure

Failure in dealing with technology may be desirable. As we have seen, it is easily possible that in using technology mistakes happen. Failures (based on a mistake or ignorance) which possibly have dangerous consequences should be prevented. Technically spoken that means to build barriers. Emergency stop buttons are well marked and easy to reach, but are located in a recess, so that you do not press them accidentally. If you want to delete files permanently, you are explicitly asked whether you actually intend. We also know that this is not always enough. If one deletes 20 files successively and then comes to the 21st, which you do not really

want to delete, the security query becomes ineffective. Here, it might help to offer a different question (with modified text, different graphics, different colours) with each elimination. Good barriers delay the execution (similar to the time lock in the vault of a bank) or require a different input (TAN principle) for each action. For security-critical actions, it is also a good idea to make the action more difficult by, for example, pressing not only one key but three at the same time. This is to prevent the user from acting alone only on the sensorimotor, unconscious level.

Barriers Let Mistakes Fail

Norman (2013) has distinguishes three categories of barriers: so-called *interlocks* temporarily exclude certain actions that may have dangerous consequences or may require certain additional conditions. For example, you can start a car with an automatic transmission only if you have your foot on the brake. Train drivers can only control a train if they show to the system that they have not fallen asleep during a long night trip by frequent pressing on the so-called "dead man" button. Otherwise the train stops automatically. *Lockins* hold the user in a certain situation that is unsafe for the technical system until he has opted for a specific option. For example, you cannot end an e-mail program if you have not previously decided to save or delete unfinished e-mails as drafts. *Lockouts* are barriers that prevent users from accessing specific functions. The examples range from child safety devices to sockets or closures to detergent bottles to the withdrawal of the money card after three incorrect PIN input.

As we have seen from a different perspective failure is sometimes helpful, but above all, you cannot assume that it can be completely excluded. If someone can make a mistake in the use of a technical system, after a long or short time there will be someone will do so. It is therefore worthwhile not only to think about the avoidance of errors in terms of the described barriers when designing technical systems, but also about fault management. What can users do to correct errors? An elegant and widespread method is the UNDO function. With that, a dream of previous generations has been fulfilled: one can undo a mistake. Of course, this dream was, and is more, related to physical events (for example, you might want to undo a driving error that led to an accident), or to defeats in social conflicts (afterwards the best arguments come to mind). But is it not a wonderful way to retrieve an inadvertently deleted extensive document from the recycle bin? UNDO assumes that everything has not been irrevocably erased or destroyed.

In the case of safety-critical systems, the term "fail-safe principle" is used. If an error occurs, irrespective of whether this error was caused by the actions of a person or by a technical defect, the system should go into a safe state after failure or accident. The best-known example is the use of gravity in the event of the failure of electro-mechanical devices. Thus, nuclear reactors are designed such that, in the event of a power failure, the braking rods, which lead to a stopping of the nuclear reaction, fall into the reactor core only by the gravity. This happened in the catastrophe of Fukushima. Unfortunately, there was no fail-safe technique which

can prevent the subsequent heat development in the remaining residual radiation, which then led to the destruction of the reactor blocks.

Fail-safe in the use of computers in everyday life means, above all, to put back-up solutions. They provide a way to use the UNDO function on a larger scale, and to fix errors even if they were not noticed until much later.

The Misconception Not to Fail

The observation that people can make mistakes and actions can fail, has repeatedly driven developers of technical systems to make their products safer and more reliable. Two major ways can be stated: on one hand, communication between humans and technology is to be improved. This includes an ergonomic and user-friendly design of functions, dialogues, interaction techniques, system interfaces with display and control elements. The other big tendency is to replace the "unreliable" human, limited in their perceptive, motor, and cognitive resources, by reliable and more powerful technology. It is about automation, which means the transfer of human sensory, cognitive, motor operations, and complete actions to technical systems. The best-known example is the system of several computer-based control circuits in an aircraft, which is named in a simplified manner as "autopilot". These system monitors and controls, among other things, the stability, course, flight manoeuvre and power of commercial aircrafts. In the area of car driving, the technology is not yet far enough, even if high effort is spent for automatic driving. While in the military field there have been aircraft without a pilot for a long time (drones), it is more likely in the car-driving scenario that selected actions and operations are done now by humans will be handed over to technology (e.g. speed and distance to the preceding vehicle, directional stability, brake, maintain stability, find the way, park). The assistance systems that take over these functions now support the driver, but will be able to completely replace him in just a few years. Despite this far-reaching automation of flight and vehicle management, people are not completely removed from the system. There are still two pilots in the cockpit, for example. However, they have new tasks. They do not fly the plane, but they monitor the board systems. Only if they recognize a fault that cannot be adequately handled by the automatic, they revert to their original role. A dramatic example of such a successful roll-over was the ditching of an Airbus A320 at the Hudson on 15 January 2009. However, such a takeover is not always successful as the crash of a French Airbus A330 on the Atlantic Ocean on June 1 of the same year showed. The pilots did not understand the situation of the aircraft and were unable to take control over the plane after several automatic systems had switched off themselves.

On the basis of these dramatic events, the so-called paradoxes or ironies of automation can be understood (Bainbridge, 1983). The first irony is that an unreliable system (errare humanum est) is replaced by a highly reliable system (technique). However, since the technique is not one hundred percent perfect, the human system comes again into play (in the case of a failure of the reliable one). Thus, in the event of a fault, something highly reliable is replaced by something unreliable.

The second irony is that the unreliable human is not only poorly suited for the role of passive supervisor, but is becoming increasingly weaker the longer he performs this role, that is, the more reliable the technical system. It is precisely in the short-term and time-critical readmission of control functions that an attention gap can arise. Drivers driving themselves are mentally ahead of the current vehicle position, and additionally the more ahead the faster they drive. In the event of a sudden takeover, they must first establish this anticipatory attention. In the long term, people lose sensory motor skills if they do not exercise them regularly. Someone who exclusively drives cars with automatic gearbox loses his sense of interaction for clutch and gas and has the same problems like beginners. Both effects are well known and much effort is taken to counteract them. For the short-term reconstruction of the situation awareness during the takeover, minimum announcement times of 4–10 s are required. Simulator trainings are to counter the long-term loss of skills.

The third irony has a fundamental character and cannot be vanished by warning and training. The (reliable) technical systems are also developed, designed, programmed, tested, maintained and configured by (unreliable) people. Recent engineering history shows many examples of failed technical systems because they were mistakenly programmed: The first flight of the European rocket Ariane 5 was a disaster. The rocket crashed on June 4, 1996, only 36 s after start. The damage was about 500 million US $. An error in the central control system had triggered the self-destruction mechanism. The control software of the rocket was taken over from the predecessor rocket Ariane 4 and adapted only incompletely to the dimensions of the Ariane 5. The Ariane 5 was not only bigger but also accelerated five times more. The software had to reckon with speeds, which never occurred with the Ariane 4. The on-board computer falsely recognized a slanting position of the rocket and caused the blast.

On 11 December 1998, NASA launched the Mars Climate Orbiter. The vehicle was to be brought into a 400 km high orbit of Mars by a deceleration manoeuvre at the beginning of September 1999. After approximately 200 Mars circumnavigations in 57 days the satellite would have had to take the desired circular orbit. However, the satellite had already penetrated too far into the Mars atmosphere during the first elliptical orbit, so that it burnt. Because some of the engineers of a supplier calculated in outdated English units (pound) and the rest according to the rules of NASA in modern metric units (Newton), the navigation of the Mars Climate Orbiter went completely wrong. Loss: US $ 165 million.

Both catastrophes happened in large space organizations with high budgets and high reliability standards. Software running daily on computers in offices and on private desktops has a much lower level of reliability, which can easily be seen in frequent crashes or freeze of software.

Surely, automation has prevented many mistakes, accidents and the failure of human actions. But it is not true that automation can completely prevent a failure. Cases are particularly tragic in which automatic systems prevent the successful, even the life-saving behaviour of humans. On September 14, 1993, an Airbus A321 of Deutsche Lufthansa flew over the end of the runway in Warsaw, hit an earth wall and set off. Two people were killed in this casualty. Like always in such a case, there

were several factors that contributed to this. One of these was an automatic safety system, which prevented the pilot from switching on the braking systems, especially the thrust reversals of the engines, for 9 s. The aircraft was slightly slanted due to the side wind and the left main gear was still not sufficiently loaded. For the computer, the aircraft was still in the air, where a thrust reversal must necessarily be prevented. The computer did not know anything about the earthwalls that the pilots could see well, without a sufficient braking distance.

You could see this as an example of a fourth irony that would be added to Bainbridge's three: automatic systems are designed to prevent erroneous and dangerous actions of people. However, they can also make necessary and meaningful human actions impossible in dangerous situations.

Failure Due to Inappropriate Trust in Technology

The paradoxical "side effects" of automatic systems also include the unjustified, partially blind confidence in automatic systems, as well as the exact opposite like excessive distrust in such systems. We know "blind" trust from numerous curious reports that tell drivers how they failed to reach their goal because they simply followed the instructions of their navigation system without considering other information. Instead of arriving in the English village of Crackpot, drivers always landed on a 30 m cliff. Using the navigation system GPS, the drivers were forwarded to the mine and could hardly turn around, such as buses and trucks. The villagers were often called for rescue—they towed the vehicles with tractors (Shortnews.de., 2006).

Due to an error in the navigation system, a British hospital car with a patient on board has arrived 7 h too late to reach the destination. The device inadvertently sent the ambulance to Manchester, 350 km away, although the man was supposed to be brought from a London suburb clinic to another. Instead of 20 min the ride lasted nearly 8 h. The health authorities explained the mistake that the satellite system had not recognized the new clinic named Mascalls Park and had led the car to Manchester—alphabetically the next target. The hospice crew followed the navigation system blindly and noticed much too late. The patient nevertheless came to a comfortable conclusion: He had slept most of the time (Focus.de, 2006).

A Czech truck driver in the south-west of England has also become a failure because of his navigation system. The man, with his 40-tons vehicle, was stuck in a curve for 3 days on a country road that was full of thick scrub. All attempts to reset his truck failed because the wheels spun. The driver followed GPS, even though he had become suspicious. He asked passers-by if he was really on the right track, but nobody understood his broken English. After 3 days, the truck was finally towed free by a tractor (rp-online.de., 2007).

Ferry boat passengers and beach walkers on the North East Australian coast were astonished: They saw a Hyundai Getz, in the waters of Moreton Bay, bathed by the waves. Its drivers were able to rescue themselves on land: three Japanese tourists, who had given too much faith to the navigation system in their rental car. The three

students from Tokyo wanted to take a day trip to Stradbroke Island, 16 km east of Brisbane, but their GPS device forgot to mention the 15 km of water between the mainland and the island. At low tide, it led the three friends over a gravel road and then in the middle of the mud. After 500 m they had to finish—the small car was stuck in the mud. When some time later the flood came, the car was quickly sunk in the water (Spiegel Online.de, 2012).

Besides those amusing reports of navigational mishaps, is there scientific evidence for reduction of the situation awareness caused by trust in navigation devices (in the sense of the second irony of Bainbridge)? Franzen (2011) has investigated this question in a small study. Although she had only twenty participants in her experiment, the results are so clear that they should be reported. The author asked the car drivers to drive an unknown route with their own vehicle. The routes were in the Salzburger Land (ten drivers) and in Upper Austria (ten drivers). Both routes were approximately 10 km in length and lead through a rural area with several junctions and crossroads. Half of the drivers had a printed map, the other half a navigation system. During this first trip, there was a clear advantage of automation: the people with the navigation system lost their way on average less than once, the people with the maps on the other hand about three times. Then all test drivers surprisingly were requested to drive back the same route, but this time they had neither a map, nor a navigation device available. How well memorized participants the route? On the return journey without any aid, the conditions of the outward journey were reversed; the former map drivers now lost way only once, the former navi-drivers three times. The map drivers were also faster on the return trip (they saved about 30% of the journey time) while the nav-sat drivers needed 25% more time. A clear proof that the probability of failure significantly increases if you rely too much on a technical support system and suddenly they are no longer available.

Summary

Failure of technology is part of our daily lives. Several factors contribute to the failure. The probability of failure can be reduced by reducing the complexity of technical systems and simplifying the tasks to be solved. In addition, failure can be prevented by means of knowledge transfer and practice (e.g. by error management training in the sense of Keith & Frese, 2008). In all efforts, however, failure in technology cannot be completely eliminated. A failure-focused design of a technical system can make sure that users get more chances after the failure. A good way to achieve this is to bring the failure to the early stage of technology development as far as possible. That can be done by iterative testing of cost-effective and easy-to-modify prototypes. That makes possible what Stanford professor and founder of the IDEO design company, David Kelly, says: *"Fail frequently, fail fast."* (cited according to Norman, 2013, p. 229). In this sense, it is quite logical to speak of a "successful failure".

References

Bainbridge, L. (1983). Ironies of automation. *Automatica, 19*(6), 775–779.

BBC News. (1999). Accessed May 7, 2015, from http://news.bbc.co.uk/2/hi/business/353563.stm

Dreyfus, H. L., & Dreyfus, S. E. (1987). *Künstliche Intelligenz. Von den Grenzen der Denkmaschine und dem Wert der Intuition*. Rheinbeck bei Hamburg: Rowohlt.

Focus.de. (2006). http://www.focus.de/panorama/welt/endlos-fahrt_aid_120342.html

Franzen, A. E. (2011). *Navi denkt, FahrerIn lenkt. Aktive vs. semi-passive Ortserfahrung beim Autofahren*. Bachelorarbeit, Naturwissenschaftlichen Fakultät der Paris-Lodron-Universität Salzburg, Fachbereich Psychologie.

Frese, M., & Zapf, D. (Hrsg.). (1991). *Fehler bei der Arbeit mit dem Computer: Ergebnisse von Beobachtungen und Befragungen im Bürobereich. Reihe*. "Schriften zur Arbeitspsychologie" (Bd. 52, hrsg. von E. Ulich). Bern: Huber.

Friedrich Schiller @ www.Wissen-im-Netz.info. (2015). Accessed May 7, 2015, from http://www.wissen-im-netz.info/literatur/schiller/briefe/koerner/1788/90.htm

Gentner, D., & Stevens, A. L. (Eds.). (1983). *Mental models*. Hillsdale: Lawrence Erlbaum Associates.

Hacker, W. & Sachse, P. (2013). *Allgemeine Arbeitspsychologie. Psychische Regulation von Wissens-, Denk- und körperlicher Arbeit* (3. Aufl.). Göttingen: Hogrefe.

Hurtienne, J., & Prümper, J. (2003). Stress in the office: The influence of software-ergonomic quality. In D. Harris, V. Duffy, M. Smith, & C. Stephanidis (Eds.), *Human-centred computing: Cognitive, social, and ergonomic aspects* (pp. 63–67). Mahwah, NJ: Lawrence Erlbaum Associates.

Johnson-Laird, P. N. (1983). *Mental models: Towards a cognitive science of language, inference, and consciousness*. Cambridge: Harvard University Press.

Kahneman, D. (2012). *Schnelles Denken, Langsames Denken*. München: Siedler Verlag.

Keith, N., & Frese, M. (2008). Effectiveness of error management training: A meta-analysis. *Journal of Applied Psychology, 93*, 59–69.

Lazar, J., Jones, A., & Shneiderman, B. (2006). Workplace user frustration with computers: An exploratory investigation of the causes and severity. *Behaviour & Information Technology, 25*(3), 239–251.

Maeda, J. (2006). *The laws of simplicity*. Cambridge: MIT Press.

Norman, D. A. (2013). *Design of everyday things: Revised and expanded*. New York/London: Basic Books/MIT Press.

o. A. (2007). idrive – und wer fährt? Automobil-Tests. *Heft, 5*, 44–49.

Pappas, T. (1989). *The joy of mathematics*. San Carlos, CA: Wide World Publ./Tetra.

Prensky, M. (2001). Digital natives, digital immigrants. *On the Horizon, 9*(5), 1–6.

Rasmussen, J. (1983). Skills, rules, knowledge; signals, signs, and symbols, and other distinctions in human performance models. *IEEE Transactions on Systems, Man and Cybernetics, 13*, 257–266.

Rasmussen, J. (1987). Mental models and the control of action in complex environments. *Selected papers of the 6th interdisciplinary workshop on informatics and psychology: Mental models and human-computer interaction 1* (pp. 41–69). Amsterdam: North-Holland Publishing Co.

Reason, J. (1987). The chernobyl errors. *Bulletin of the British Psychological Science, 40*, 201–206.

Reason, J. (1994). *Menschliches Versagen*. Heidelberg: Spektrum Akademischer Verlag.

Rosa. (2005). *Beschleunigung. Die Veränderung der Temporalstrukturen in der Moderne*. Frankfurt a.M.: Suhrkamp.

rp-online.de. (2007). Accessed May 14, 2015, from http://www.rp-online.de/panorama/ausland/lastwagenfahrer-drei-tage-in-kurve-gefangen-aid-1.2030139

Shortnews.de. (2006). Accessed May 14, 2015, from http://www.shortnews.de/id/617449/gb-navigationssystem-fuehrt-autofahrer-anstatt-in-dorf-auf-30-meter-klippe

Spiegel Online.de. (2012). Accessed May 14, 2015, from http://www.spiegel.de/reise/aktuell/navi-leitete-touristen-mit-mietwagen- ins-meer-a-821757.html. letzter.

Streitz, N. (1985). Die Rolle von mentalen und konzeptuellen Modellen in der Mensch-Computer-Interaktion: Konsequenzen für die Software-Ergonomie? In H.-J. Bullinger (Ed.), *Software-Erqonomie '85: Mensch-Computer-lnteraktion* (pp. 280–292). Stuttgart: B.G. Teubner.

Triebe, J. K., & Wittstock, M. (1997). Die Gebrauchstauglichkeit von Software im Dienste einer gesundheitlichen Prävention. In R. Liskowsky et al. (Eds.), *Software-Ergonomie 1997* (pp. 297–306). Stuttgart: Teubner.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure in Sports

Uwe Freimuth

Introduction

Success in Sports Is all About FAILURE!

This article is all about failure and about learning to understand that the building blocks of success on and off the field are setbacks, mistakes and failures. Colin Powell once said: *"There is no secret to success. It is the result of preparation, hard work, and learning from mistakes. (cf. Price & Price,* 2016*)"*[1] Let us examine, whether it is that simple.

Basically, failure and success belong to sports—it always does. Therefore, so many people flock to the stadiums or attend competitions. We could see it all recently during the Olympic Games in Rio de Janeiro and we are still impressed by many of the athletic competitions and results. Many of the athletes, players and teams won medals and reached their goals, some of them perhaps their lifetime goals. If we remember Usain Bolt or Mo Farah in athletics, Michael Phelps in swimming, Angelique Kerber in Tennis, or our German Soccer Team, all of them did an extraordinary job. We have celebrated these athletes and teams and they deserve it.

But what about those who lost? Did they just lose? And those who won, did they win because the others lost? What makes athletes strong and successful? Is there any secret? Before athletes and players start a serious career, they will estimate their opportunities and chances. They must answer the question: Do they have enough talent to reach the top. Do they have all the necessary support? Are they able to leave friends and families to start a professional career? Do they have enough physical and

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psychological motivation? And finally, do they have the necessary financial resources? If they say "Yes", the adventure is about to start. They will describe future dreams and goals. And the thing is, they will not only set major or lifetime goals, they will also set milestones or short-term goals.

Once they have started on their way, they know that they must make a lot of sacrifices. They will go through a lot of pain—mentally and physically. And here we go: They will fail and lose again and again! I have never met a champion who liked failing, but I have met a lot of champions who told me that failure was necessary and important in order to become a real champion. (cf. Brophy, 2013).

When I remember my career as a coach or athlete, I can remember only a few occasions of success. And I was an athlete and coach who took part in World Championships, European Championships, Olympic Games, South-East-Asian Games, and Asian Games. Most of my time was marked by a busy agenda, pain, injuries or failures. That means the time as an athlete or coach will be filled with failures. Some people call that "experience". There is no other way to achieve something special. Once you have started such a career, one thing will come to your mind very quickly: to master something special, you must have the ability to go beyond your performance capability. You must overcome an inner border. You must become your greatest enemy. I had to learn it right at the beginning of my professional career, and perhaps this was my crucial experience in becoming one of the best decathlon athletes in the world.

Case Study

Our decathlon team went to a high-altitude training camp in Bulgaria. The sports complex Belmeken is situated at a height of 2050 m above sea level, between the mountains Rhodopes and Rila, 130 km away from Sofia. Belmeken provides perfect conditions for individual sports training, training camps for national and club teams in all kinds of sports, including mass sporting events, such as mountain biking, orienteering, ski orienteering or hiking. We travelled to "Belmeken" to train basics under high altitude conditions.

One day there was 10-km jogging on my training plan. I did not know the environment that well, because I was there for the first time. But what could happen? I wasn't afraid of anything and it could be exciting to check out the area. I started my training program and after a while I realized I was lost. It was approximately $-10°$. It was snowing and it was getting darker. I was just 17 years old and not really scared, but that situation felt very uncomfortable. I did not know how many kilometres I had already run, but I felt already exhausted. Even though I was young I knew this was not a game anymore. I had to find the way back to our camp, otherwise it could end deadly. Finally, I found my way back home and it turned out that I had run 27 km.

Can you imagine? Running 27 km as a decathlon athlete in such an environment is really beyond a normal training activity. And what was my lesson? I learned, there is something beyond your physical or psychological capability—some kind of an extra tank. Even if you feel totally exhausted and you think you

can't go any further, you are wrong—you can! You haven't reached your limit yet. You still can go further! Professor Jean-Francois Perrier from the University of Copenhagen's Department of Neuroscience and Pharmacology has explained that this limit of performance has its source in the brain. A surplus of serotonin is responsible for triggering a breaking mechanism in the brain. Other scientists talk about a special capability, self-confidence—the mark of a champion—the secret ingredient that all great athletes seem to possess, regardless of what level they compete at. Can you develop it? If so, how? Are there specific things that parents, coaches and teammates do that can kill it?

Self-confidence is that intangible factor, a "cousin" to positive mental attitude (PMA), that keeps athletes working hard regardless of how many times they may fail or how many obstacles get thrown in their path.[2] When you have that confidence in yourself, you just feel like you can do anything you want to. When you have enough confidence, you will walk on water. A quote from an unknown source says: *"When there is nothing left to burn, you have to set yourself on fire."* Whatever it is, scientific or not, this phenomenon makes the difference between success and failure. This extra mile took me somewhere and it has accompanied me all my life. On that day, I succeeded in a very meaningful way and gained the knowledge that our physical and psychological barriers are surmountable. And that can make the difference.

Before we go any further, we should clarify the word "failure", because we can find failure everywhere. What is the meaning of failure? A Definition by Merriam Webster says: *"Failure is the state or condition of not meeting a desirable or intended objective, and may be viewed as the opposite of success."* In sports, it is more differentiated. Not only the goals of athletes are different, also the time frames or qualities of performance are different.

That is why we must answer the following questions:

- Do we understand failure in sports as not reaching our goal?

or

- Do we understand failure in sports as a simple defeat?

Is failure really the master key to unlock the doors to all your career dreams? And how does it feel to admit "I didn't succeed". What are the consequences? Are there any consequences or influences in failing or in being defeated? To answer these questions, I prepared a questionnaire which I sent to athletes, coaches and sports experts. I received feedback from professionals in different sports, such as athletics, basketball, handball, golf and soccer. There is still not enough representation, but we have something useful.

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[2]cf. competitivedge.com/self-confidence

The following questions were asked:

1. What does the term "failure" mean to you?
   • Is failure simply failure?
   • Does failure always hurt emotionally?
   • Is failure important in becoming better?
   • Does failure show you that you need to change something?
2. What does it mean to you to lose a game or competition?
   • I am always upset and angry after a failure.
   • I don't like losing.
   • Failure shows me that I must be better.
   • Failure shows me that I must work harder.
   • Failure is OK with me. You can't always win.
3. What would it mean to you not to reach your career goal?
   • My career would have made no sense.
   • It would be a pity, but I believe I would have grown as a person.
   • Even if I don't reach my goals, I have tried. And that counts.

Failure is a terrible thing that you want to avoid at all costs—always. This nasty humiliating occurrence that destroys dreams and kills motivation! But is failure as bad as you think? It isn't easy to understand that failures, mistakes and losses provide you with a valuable source of feedback. Failure tells you what went wrong and what should not be repeated. Failure will do even more—it will highlight your weak points. What's so good about that? You can't get better, faster, stronger or more skilled in your sport without knowing your weaknesses or bad habits. Every time you fail or lose, you have the opportunity, to improve the level of your training in one or another direction. It's up to you to take advantage of your experience.

One of the most successful coaches in American football history, Vince Lombardi, wrote a lot about success and failure. From his point of view, failure is the foundation of your success. No failure—no success. Success is an attitude. Failure belongs to that. But he didn't like losing, even if losing belongs to success: *"Errors, mistakes are the necessary steps in the learning process; once they have served their purpose, they should be forgotten. If we constantly dwell on the errors, then the error or failure becomes the goal."* (Philips, 2002, p. 23).

Failure as a Short-Term Experience

Talking about short-term experience means we need to divide this in two terms:

• short-term experience as a time frame interval
• short-term experience as a simple defeat

Short-Term Experience as a Time Interval

When we start a career in sports, we must go through different performance levels and age classes. Some sports have so-called "performance standards".

These standards should ensure that only the best athletes reach the top level.

This means that on the way to the top level many young athletes must leave the professional training (Schubert, 1992). These phases are divided in:

- children or development phase
- youth or build-up phase
- junior or transition phase
- adult phase

Each phase plays a decisive role and holds many challenges. In each phase, we learn to deal with success and failure. In each phase, we try to grow and try to improve ourselves. In each phase, we grow in terms of physical and psychological competencies and skills. When we are children and don't understand the high-performance sports process yet, we tend to cry when we lose and hope for a better time to come, without thinking about our weak points or attitude. This phase is known as the talent or development phase—you are just a talent (age 9–12).

When athletes enter the next phase—the youth or build up phase (age 13–16), their behaviour, attitude and self-confidence is about to change step by step. Our brain is already questioning the process and consciously distinguishing between right and wrong. In this phase, we ask ourselves why things are going this way and not the other. When we reach that performance level, we are acting much differently than in the children or talent phase. Dealing with defeats and victories belong to our daily agenda. During that phase, athletes do not use the word 'failure', because they do not understand the high-performance process as their core business yet. It is still fun and a challenge at the same time. Athletes are still in school and in the same process as other teenagers.

When athletes reach the junior or transition phase (age 17–19), they have already passed a very difficult selection process. They have survived the system. They are among the chosen. And from the biological point of view they are almost ready to increase the training volume to a maximum in order to compete against the best adult athletes and teams. And something else is going to happen—you will be in the focus of the media. People are watching us. Friends, fans, sponsors, coaches, manager, family and the rest of the interested people want us to be successful. That is, as far as losing is concerned, a different and new dimension. When we fail, we must control ourselves. We must be careful with what we say and do. That means, athletes will experience their failure more consciously, because they must give interviews or statements for the first time and because of that they must learn to use their brain seriously to prevent trouble.

During the junior or transition phase, athletes are dealing more seriously with failure than ever before. When athletes have passed all these phases, they will step into the last phase, the phase all athletes are looking for, the adult phase or top-level

phase. From here on, athletes are thinking about a serious career, duration, physical condition, income, manager and much more about their future. That means the phrase "lifetime goal" will have a meaning now. And these lifetime goals can be very different. For some athletes, it means as much money as possible. A lifetime goal for others can mean the successful participation in a tournament or a very important competition like Olympic Games or World championships. And for some other athletes a special performance or a medal where the colour doesn't matter, could be a lifetime goal too.

In professional sports, more short-term experiences exist. These are:

- Olympic Cycle (4-year cycle), all sports
- World Cup Cycle (4-year cycle), soccer
- World Cup Cycle (2-year cycle), handball
- World Championships Formula One (annually) etc.

Whatever it is, it is a longer period. And that is the main difference to a defeat. Athletes now have a goal, a target to go for. If you don't have a goal, you wouldn't make it! All athlete's must set these goals and these goals are even wanted by umbrella organizations, clubs or sponsors. These stakeholders have their own performance or business targets. Let's consider their interests.

Umbrella Organizations

These institutions are responsible for all the activities of their sports. They are responsible for the annual sports calendar, in coordination with their International Federation, for organizing youth and junior sports, education and further education of coaches and officials, marketing, PR, cooperation with other clubs, ministries, sponsors, supplier or national associations etc. And they will select national teams. To do that they will set performance standards, which is quite easy for individual sports. This is a different story for team sports, because national coaches will choose players according to their tactical ideas or fitness level. Finally, umbrella federations must set goals, because athletes, coaches and associations are expecting targets in order to know how to get financially supported and how to be selected for the highlights. Those targets will be communicated annually to athletes, coaches and the governing body (this is the Olympic Sports Confederation in Germany, DOSB).[3]

The DOSB is the main supporter and promoter of umbrella organizations in Germany. Our sports system wouldn't work without these goals. That means if an athlete or team fails, the umbrella federation will fail too. And this can certainly have consequences for the human resources structure of umbrella federations.

Each association receives money according to its national and international performance. This procedure begins already at an early age with the existence of a

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[3]dosb.de/de/leistungssport/leistungssportreform/12.04.2017

distribution key for sports centres of excellence or sports schools. If they win medals, they will get points. And points mean money. If sports schools or sports centres don't collect enough points, they will lose staff. This tool to promote talents in sports has been criticized for a long time, because it is against a solid age-specific talent development. The main focus of a kids, youth and junior development should be skills, technique and tactics and not medals. That means that failures do not only play a major role for athletes and coaches but also for employees and even for the entire infrastructure of a club or federation.

Clubs

Haviland & Prins (2010) define sports clubs as *"a voluntary group or union is a group of individuals who enter into an agreement, usually as volunteers, to form a body (or organization) to accomplish a purpose. Common examples include trade associations, trade unions, learned societies, professional associations, and environmental groups."* Thus, a sports club is a sports organization which promotes sports locally. They have a great social responsibility to promote, in the first-place, kids, youth and junior sports. Furthermore, clubs provide framework conditions for sports activities. They develop a sports culture and they promote high performance sports too. They support athletes and teams and expect performance in return. Clubs are the basis for our sports development in this country.

Today clubs are divided in two different areas:

- Amateur Sports Clubs
- Professional Sports Clubs

Wikipedia provides a good definition: *"A sports club, sometimes called an athletics club or sports society or Sports association, is a group of people formed for the purpose of playing sports. A club is solely created by its members, players and supporters, hence a separate entity from its owning company."*

The importance of amateur sports clubs is the organization of sports for the public in general and the development of kids, youth and junior sports as one of the prime goals. Amateur sports clubs promote adult's sports without professional goals too. People enjoy being active. Especially seniors are very active today. Most of them pay a lot of money to be part of such a family. Failure does not play a role for seniors.

Professional Sports Clubs act like companies today. Some of them are even leading-edge enterprises. These clubs have a very clear commercial objective. And we are talking about a multimillion dollar business. Some clubs have already disconnected the professional sports department from the basic club because of the commercial orientation. Failure has great meaning for a professional sports club and it will even cost a lot of jobs if they fail.

The pressure for players, coaches, managers or team managers is increasing and is as high as never. Especially in soccer, it seems that standard performance doesn't play a major role any more. Players must be outstanding. They must give that special

performance and must be entertaining to be recognized by the spectators. People are expecting more than only sports. Spectators want entertainment and TV stations want the same. The best current example was the Super Bowl 2017. More than 1 billion people watched the show and the game. This event was more than just a game. It was a marketing event, a PR event and of course a great show for the sponsor. It was show time for the big sharks in the business. And that means failure was not an option at all (Kasabian, 2017).

Sponsors

Professional sports today would not be as it is today without sponsoring. Back in the 1970s and 1980s it was unimaginable that clubs, teams or athletes would have the names of sponsors on their clothing, sports equipment, in stadiums. It was a time when our soccer world cup team members received 30,000 D-Mark and a small car for the title (1974). And it was a time when professionals couldn't take part in Olympic Games because they received money.

I remember a TV show at the beginning of the 1980s in which Guenter Mast, owner of a liquor producer in Germany (Jaegermeister) introduced an idea to sponsor a team by getting the rights for shirt advertising. The general feedback was disillusioning and he was asked by the presenter of the show and the entire media whether he wanted to destroy sports. Everyone was against it.

Today we are watching games in the Daimler-Benz-Arena, Allianz Arena or Etihad Stadium and teams are wearing advertisements on their shirts from whoever pays more. Today it seems that money doesn't have a bad smell and ethics is a word with no meaning any more. The problem in our society is that failure has no right to exist. Everybody wants to be forever young, successful and rich. That's why the fitness industry has become the biggest sport in the world today, supported by the pharma industry, sports facility industry, sports fashion industry and health industry (Rein, 2014).

This development has also increased the pressure on athletes and coaches. A good example of that is the English Premier League. They received for the season 2016/17 more than three billion pounds from television broadcasting companies alone. And there is still no limit. The time of digitalization has just begun. Consumer behaviour has changed dramatically. The customer will get what he wants. For the future, it is easy to predict, that failure will have a totally different meaning than ever before.

Short-Term Experience as a Simple Defeat

Short term experience as a simple defeat is a defeat in a game or competition. This is the simplest and most common form of failure. As a matter of fact, all the athletes, players, coaches or sports experts answered that they 'don't like losing', that 'a failure shows me I have to be better', and "a failure shows me that I have to work harder". Basically, in all sports there is a winner and a loser. That makes sports so

interesting. No person enjoys being on the losing side of this elementary equation. Vince Lombardi once said: *"Winning isn't everything; it's the only thing."* This poetic quote seems to display the common view of competitors who dedicate their lives to sports. Lombardi also said: *"Winning is not a sometime thing; it's an all the time thing. You don't win once in a while; you don't do things right once in a while; you do them right all of the time. Winning is a habit. Unfortunately, so is losing."*[4]

What does it all mean to us? A defeat is a defeat, right? No, it's not that simple! Lombardi wants to tell us that your attitude is the most important thing—not a defeat! To lose means you must learn your lesson or you must improve your fitness or skills and so on. In other words, a defeat will not only tell you what you must learn, it will tell you how to handle it. And if you try to approach a defeat this way, you will come to the psychological consequences of a defeat. Do we really learn our lesson if we lose? According to my experience athletes and players tend to excuse themselves after a defeat by saying, 'I didn't feel well' or I've got psychological problems' and so on. They never confess that they didn't follow instructions from their coaches or other people involved in the high-performance process, or that they didn't train as hard as they should have. To confess 'I didn't follow instructions' or 'I didn't train enough' would most probably mean that you've got problems with your attitude. And no one wants to hear that.

Another question is quite interesting: What does a defeat have to do with failure? Is it the same? As wikidiff.com distinguishes: *"As nouns, the difference between defeat and failure is that defeat is an act of doing better than another in a competition or battle while failure is a state or condition of not meeting a desirable or intended objective, opposite of success."* This definition is an explanation, but it doesn't tell us how to handle or to use both.

Think about testing. During this phase, a defeat doesn't matter much to players, athletes or coaches. It is sometimes even wanted by the coaches and a crucial part of the trainings plan. A team or a player wants to check some important things like fitness level, tactics or different abilities under conditions of a real game or competition. This phase is a very important part of the whole performance process. That means players or athletes learn how to handle a defeat. Could we describe this already as a failure? Of course, not. We could say that a defeat is the way to our goal. If we didn't reach our goal, then we could say we failed.

Failure and the Development of Personalities

Everyone is different. Personality is difficult to define due to its complex nature. However, one definition in the literature is 'the characterization of individual differences' (Wiggins, 1996).

Athletes undergo a very hard procedure when they are part of the high-performance sports system. You can only survive when you are willing to learn to

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[4]vincelombardi.com/number-one.html/13.03.2017

control yourself, when you are willing to sacrifice most of your time, friends or family, when you are willing to train as hard as you can and when you are willing to win. To survive in a brutal system like sports, you must learn some very important core competencies, such as:

- winning attitude
- willingness to sacrifice
- team spirit
- discipline
- reliability
- punctuality
- self-confidence
- prudence
- adaptability
- diligence

These competencies are part of the learning process. *"The fact that everyone is different is extremely important when it comes to sports and coaching. As a coach, it is essential that you understand the personality of your athlete to optimize the transmission of your message and their subsequent performance as an athlete; it is important that you understand the significance of personality and its potential effect on performance."* (Sheath, n.d.). Since we are all individuals, we learn differently. That's why athletes handle a defeat or a failure in their own way. Otherwise we would be all winners or losers. But let it put it in this way: To learn some important core competencies means, you should be able to analyse and handle your goals. Goal-setting is an important aspect of sports, and a very large concept. However, goals are usually set to relate to the individual's personality. But if you didn't become a World or Olympic champion, you have still achieved something, haven't you? You have grown as a person! You have experienced a lot. You went through a lot of difficult situations and you have accepted all the challenges. And all these challenges have further developed you. So, when we look at this path, even if we have not won any titles, was the path useless? Everyone who took part in the survey said the way was worth it, or they think it will be worth it in the long run. And that counts.

Failure and Emotion

Sports is emotion, success is emotion, so is losing. Failure and emotion belong together. If you lose, you will be upset. Perhaps you will cry. Think about huge competitions, such as finals in team or individual sports. Could emotions be controlled? Taylor asked in his article "The Power of Emotions",[5] whether your

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[5]The Power of Emotions; psychologytoday.com

emotions help or hurt you in the heat of the competition. Emotions stay at the top of the Prime Sports Pyramid, even ahead motivation, confidence, intensity or focus.

Taylor (2017) explains that negative emotions (failure) can hurt performance both physically and mentally. They first cause you to lose your prime intensity. With frustration and anger, your intensity goes up and leads to muscle tension, breathing difficulties, and a loss of coordination. It also saps your energy and causes you to tire quickly. When you experience despair and helplessness, your intensity drops sharply and you no longer have the physical capabilities to perform well. If this process continues for a long time, it will be difficult to find the thread again.

Case Study

I know that well from my career. Just remember 1980. In that year, the summer Olympics took place in Moscow. The world political problem was that the Russians had invaded Afghanistan in 1979 and, as the consequence, some of the western countries like USA, West Germany or France did not participate in the games. Can you imagine, you train as much as you can and perhaps you belong to the best in the world and your government decided not to compete? This really can end up in frustration. And this wasn't the end yet. The XXIII Olympic Games 1984 took place in Los Angeles, USA. It should have been the best year of my career. I was among the best three athletes in the world and we all looked forward with anticipation to Los Angeles. Weeks before the games, the governments of the eastern countries decided not to participate. For the second time, the games were boycotted. It was revenge. I can hardly describe my emotions. It did not feel like a defeat. It did not feel like a failure. It wasn't my fault. But other people kept me away from winning a medal at my games, the Olympic Games in Los Angeles—my lifetime goal!

To lose is painful enough. A failure is painful too. But when others keep you away from something for which you worked and trained all those years, then this is more than just a mental pain. Taylor is right when he said: *"Your emotions are telling you that, deep down, you're not confident in your ability to perform well and achieve your competitive goals. Your confidence will decline and you will have negative thoughts to go along with your negative emotions. Also, since your negative emotions are so strong, you will likely have difficulty focusing on what will help you to perform well. Negative emotions draw your attention to all of the negative aspects of your performance. Finally, negative emotions can hurt your motivation to perform because you just don't feel good and it's no longer fun."* I kept going for another 4 years but stopped my career after the Olympic Games 1988 in Seoul/South Korea. I did not give 100% any more. It was over. I failed!

Failure and Core Competencies

In the business world, a core competency is a specific factor that a business sees as being central to the way it or its employees work. In the world of strength and conditioning, core competency is a specific factor that is central to the way athletes function and are trained. Simply put, these core competencies are to be developed first and foremost in athletes of any discipline before even beginning to consider other aspects and training interventions.

Sport and Society

Society is the foundation for all kinds of activities and sports play a giant role in contemporary society worldwide. Spectators and the industry benefit from it. The relation between sports and society has changed over the years, not only in terms of commercialization but in terms of the dimension. Back in the 1970s and 1980s we did not have internet, video games or mobiles. Athletes could concentrate without being watched by the whole society. We made mistakes, of course, but we were not criticised by the whole world right away. We didn't lose face in front of the whole world. We did sports and we wore normal sport clothes. Adidas or Nike were OK, but not necessary. And nobody cared. It was OK. Most of the people had a normal weight, because we didn't have a fast food mentality. We cooked at home. Sports were part of our life, but not a lifestyle yet.

If we look at sports and beauty commerce today we must admit that fitness has grown to the biggest sport in the world. Not soccer, baseball nor American football is the most famous and biggest sport; it is fitness. The media determine what is state of the art, what is in and what is out, how you should look, what should be your weight and what to eat. And sports are a major factor. The pressure is as high as never before.

One reason for this is the fast transport of messages. Facebook, Twitter, Instagram and other social media instruments are used as a platform for all those messages. And there is no escape. Everybody wants to be connected. Everybody wants to be part of the game—and in a successful way. We are living in this society and we want to communicate with each other. We want to share our results, our activities or adventures and sometimes our failure too. But this is not all. We are communicating globally. The world has come closer. That means there are many more competitors on the market, more lifestyles to choose from, more products and even more needs.

The same phenomenon has happened to high performance sports. I remember a time when athletes could train without being much disturbed. No one seemed to care. Everything was fine. The word failure did not yet have the meaning it now has. If we lost, we just lost and nobody called it a failure yet. It was just a defeat. And if we didn't reach our lifetime goal, we still had our education, our upbringing, our experience and our jobs we could work in. Nobody came and shouted at us, saying, "You failed". When we came back from major competitions, such as world championships or Olympic Games, and we hadn't succeeded, it was sometimes not even mentioned in the news. We didn't have internet or mobiles yet. We didn't

have social media. That meant when we failed, it was easier to handle. The pressure wasn't that high. If we look at the situation today, it has changed dramatically. Today we have live bets, live sports and live communication 24 h a day.

Athletes are observed around the clock. Everybody wants to have an impression of the current situation of athletes or teams. People seem to care what athletes eat, do or plan. It is like entertainment. Athletes don't feel free any more. They feel under pressure, they feel observed and controlled. And that makes the difference today. Failure has got a different meaning for the athletes and coaches today because of their transparency. There is no place to hide.

Sports and Social Media

Social media, since its start in the late 1970s, has become an integral part of the society. After the invention of blogging, social media began to explode in popularity. Sites such as MySpace and LinkedIn gained prominence in the early 2000s, and sites like Photobucket and Flickr facilitated online photo sharing. YouTube came out in 2005, creating an entirely new way for people to communicate and share with each other across great distances. By 2006, Facebook and Twitter both became available to users throughout the world. These sites remain some of the most popular social networks on the Internet. Other sites like Tumblr, Spotify, Foursquare, and Pinterest began popping up to fill specific social networking niches. More and more, social media is playing a large role in our society, and the influence of social media on the world of sports has become enormous. Sports is perceived as entertainment and people love entertainment. Sports offer theatre, opera, concerts, TV shows in one package. People love this kind of all-inclusive entertainment. The industry loves this business, the supplier, the sponsors and the administration of clubs or federations love it too, because it's business. Today everything seems to be digitalized and we are watching our favourite sports on our Smart TVs, tablets, laptops, PC's or mobiles. People are happy to get all these packages, and the players and athletes make all this possible.

Athletes and players are the key stakeholders in this process and they are more and more unhappy about the latest development in professional sports. These players are the pawn in the hands of the powerful. They are forced to be outstanding, they are forced to be successful. A recent example is the decision of the FIFA to increase the number of teams for the soccer world cup 2026, from 36 to 48 teams.[6] Nobody asked any player how they felt or what they thought about that plan. The player must be ready to accept decisions from above, no matter the costs. And since athletes are entertainers, they are watched and analysed by fans, society and social media around the world. Athletes are cheered when they win and cursed when they fail. It's difficult to handle such circumstances. Failure is no longer acceptable. It is increasingly noticeable that athletes turn off social media to focus on their goals. Some

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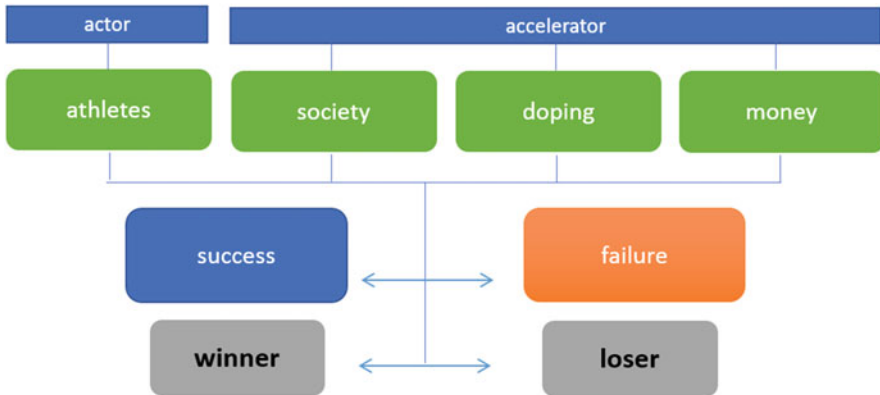[6]cf. BBC, Sport Football; bbc.com/sport/football/38565246

Fig. 1 Hierarchy of indicators to win or lose

athletes are leaving social platforms because of bad experiences. Once upon a time we knew that our society supported and protected our athletes and were proud of them, didn't matter how they finished the competition. Today we can observe an increasing pressure on our athletes.

So why are today's generation of athletes deleting their social media accounts and going offline? Join Lena Dunham and Jaden Smith asked that question about the new exodus toward IRL. They explained: *"It should be noted that some people develop unhealthy dependencies on social media, while others can indulge recreationally, without consequences. Perhaps the love–hate relationship many have formed with these instantaneous, all-consuming sharing platforms isn't about the tech itself, but how they're using and abusing it. As our social media lives have flourished, so too has the potential for unhealthy stalking, distracting over-engagement, jealousy attacks and the threat of too much outside noise."*[7]

But many people feel, that social media is a perfect tool for professional promotion. And there we go again—we are hooked on reactivating our accounts. So why can't we reduce the pressure by ignoring social media? The answer is simple: we must play the game. Athletes, coaches, managers and other stakeholders in sports are running the show and social media is the perfect platform to present it. Overcoming pressure or fear brings us to an ethical matter—doping! There is a clear link between athletes, society and doping. Today doping and money are the biggest accelerators in the sports business (see Fig. 1).

Especially in professional sports, money and doping is a huge topic. Performance enhancing drugs are substances that are ingested or injected by athletes to improve their performance, to give them an advantage which is not otherwise naturally possible. In other words, these drugs are a short-cut to excellence in sports. The business and financial interests that drive doping in sports do not end with the athlete

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[7]cf.: Lena Dunham & Jaden Smith, why generations z are deleting their social media accounts and going offline on i-d.vice.com
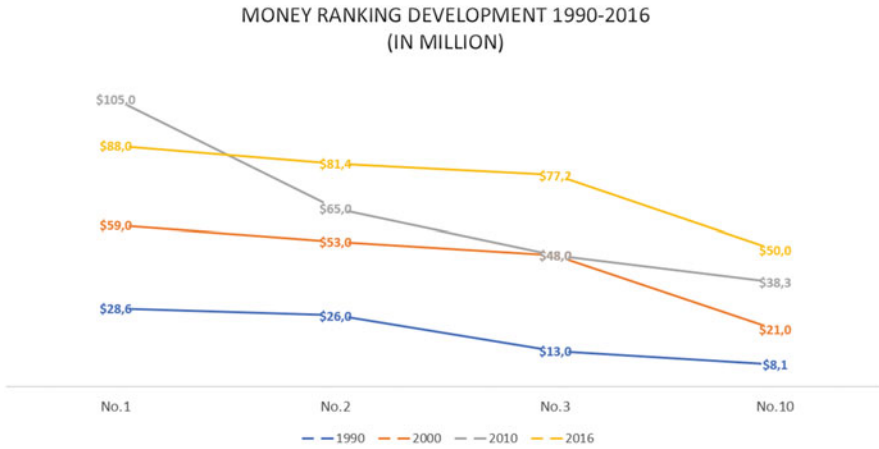
Fig. 2 World money ranking list development 1990–2016

and their coaches, trainers and agents. These are the demand side. The real driver—the supply side—lies with the rogue professionals who are engaged in providing the performance enhancing drugs.

The infamous Balco scandal in the US is a good example.[8] Britain's Sunday Times and Germany's ARD/WDR TV both said they had obtained secret data from the global athletics' governing body, the IAAF, showing that endurance runners suspected of doping have won a third of Olympic and world championship medals. And Victor Conte, president and founder of BALCO, told Reuters back in 2012 that he believed cheating was rife in sports despite improved testing, and that more than half of the sprint semi-finalists at the London Olympics were likely to use illegal drugs at some stage of their career.

Robin Parisotto, an Australian antidoping expert, and another scientist, Michael Ashendon, concluded in the Sunday Times report that more than 800 athletes had recorded one or more "abnormal results". The data was obtained after a leak of thousands of blood test results from 2001 to 2012.[9] These facts surely put pressure on athletes and coaches. If we look at the latest Forbes money list of professional athletes,[10] we realize the size of that business. At the top of the list is Christiano Ronaldo with a total amount of 88 million euro, followed by Lionel Messi with a sum of 81.4 million euro. Even the No. 10 of the ranking list 2016, Kobe Bryant, earned 50 million euro for his sports and endorsements. Forbes has been tracking the earnings of athletes for more than 20 years. The dynamics of the top-earners has changed dramatically over the last two decades. The following ranking list 1990–2016 will illustrate this development (see Fig. 2).

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[8]cf.: How fame, money and Olympics drive doping on theeastafrican.co.ke

[9]cf.: Doping Allegations against athletics on dailymail.co.uk

[10]forbes.com/athletes/list/#tab:overall

To summarize, it could be said that the involvement of money over the last decades, this increasing influence of money, has increased the pressure on athletes and clubs. Failure is not an option any more.

What It Takes to Be the Number One

People who never compete in sports, I feel they miss out on one of the best parts of life. Teamwork, competition, training, and so forth aren't everything in life, but they reach the deepest parts of you. They bring you as high and as low as any part of life (cf. Philips, 2002). Whoever has tried to achieve something special knows from the beginning it will be a journey of pain, luck, excitement, failure and in the optimal case the success you're looking for. Lombardi continues: "Winning is not a some-time thing; it's an all the time thing. You don't win once in a while; you don't do things right once in a while; you do them right all of the time. Winning is a habit. Unfortunately, so is losing". If you understand that, the chances are high that you will reach your goals.

But this is just one side of the coin. During my time in Asia I met many people working in the field of professional sports. Many of them thought that wearing a tracksuit made them professionals. And some thought that working on a lower performance level was enough. The question here is, does a failure or defeat hurt less if you don't have higher goals?

When I worked on my PhD back in 2000, I prepared approximately 1000 questionnaires for children and youth. One of my questions was: "What is your lifetime goal"? Only 9 out of 677 answered they wanted to become World or Olympic Champion, or even the best athlete in the world. The rest of the participants didn't have such dreams or goals. They just wanted to compete in local or national competitions. So once again, what does it take to become the number one? One of the first necessary requirements are your attitude—a professional attitude. It must be clear to you that there is no 90 or 95%. Your goals don't come to you, you must go for your goals. And if you don't set maximum targets, you will never cross your inner border, you will never become the best in the world.

Another factor is your physical condition. To become the number one also means you need to have a state of the art physical condition. A good example is the Malaysian sports in which I worked for a long period. We had first class sports facilities, technical support, medical support, we had sports experts from all over the world, education and further education activities and, last but not least, a huge budget! You would think all this should be a proper basis for successful develop-ment, right? You would be wrong! Up to today, Malaysia has never won an Olympic gold medal. And the main reason is their attitude and style of leadership. (There are some other reasons but these do not belong to this article.)

Let me summarize my arguments: You can be the number one if:

- your talent is enough
- your talent will be further developed
- your attitude is professional

- your physical condition is state of the art
- your human resources support is adapted to your goals
- your budget is adapted to your goals

The question here is, what is the link between failure and defeat? The link is the emotional part of failure. It is known that those athletes who don't have a professional attitude and haven't set higher goals don't feel such pain and disappointment if they fail or lose, because they didn't sacrifice so much. Athletes who spent everything, sacrificed a lot, paid a lot and fought for their goal day in and day out feel more pain and disappointment if they fail or lose. Athletes with a lousy attitude don't care much at all about this. Athletes with a professional attitude claim that this is their life.

Legends like Muhammed Ali or Michael Jordan have taught us a lot about attitude, pain, failure and why they succeeded. They described their way to the top and their way was full of problems, misunderstandings and failures. If we just looked at these examples, we would think it couldn't be that difficult to be the number one. You just have to follow some guidelines of professionalism. But this is wrong. If we don't live it, if we don't inhale it and don't practice it, we will never be the number one. On the way to becoming the number one, your way of dealing with the people around you is very important. Jim Collins described in his book "Good To Be Great" the skills you must have if you want to be great. And great means not just good. We have many good athletes, coaches and managers, but to become great means to do something others wouldn't do. First of all, on the way to the top you must have the right people around you. *"The wrong people off the bus and the right people on the bus. And then the right people in the right seat."* (Collins, 2001, p. 41). If we want to be the number one, we need unique people, engaged people, hard working people, people with a philosophy and vision.

Final Statement

Do what you love![11] And the way professional athletes and coaches do their work is top performance. This is what we believe in and what we love. Failure is a crucial part of anyone's development. Doesn't matter whether in sports, business or even privately. The experience of failure is important to improve your core competencies and to increase your physical and psychological performance. It is important not to lose faith in yourself. Failure should even provide motivation to increase your strength.

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[11]"You've got to find what you love. And that is as true for your work as it is for your lovers. Your work is going to fill a large part of your life, and the only way to be truly satisfied is to do what you believe is great work. And the only way to do great work is to love what you do. If you haven't found it yet, keep looking. Don't settle. As with all matters of the heart, you'll know when you find it. And, like any great relationship, it just gets better and better as the years roll on. So, keep looking until you find it. Don't settle." (Steve Jobs)

When we start performing, we will treasure very quickly the meaning of failure as a milestone to do things better. If we know the taste of failure, we treasure even more the taste of success. Success and failure will always be your companion, doesn't matter what you do. The perception of failure is different. Defeats are different. Life goals are different. And we have learned that failure in sports 2017 is not like failure in sports 1990 or 2000.

The world has changed. The influence of money has changed. The influence of the media has changed. And the transparency has changed. Athletes are entertainers today. Athletes are the main part of a brutal business system. Once you have started as a talent, you can't stop the influence of this system. We all know sports heroes today and we all want to be like them. We want to become famous millionaires and this desire increases the pressure on us.

Failure will have another meaning if you want to become such a person. You have to sacrifice many things you love, you even have to break with things you like. To make your dreams come true, you have to fail.

References

Brophy, J. E. (2013). *Motivating students to learn* (3rd ed.). Abingdon: Routledge.

Collins, J. (2001). *Good to great*. New York: HarperCollins.

Haviland, W. A., & Prins, H. E. L. (2010). *Cultural anthropology: The human challenge*. Boston, MA: Cengage Learning.

Kasabian, P. (2017). *Super bowl commercials 2017: Updated ad costs, value and leaks info*. Retrieved April 12, 2017, from http://bleacherreport.com/articles/2691089-super-bowl-commercials-2017-updated-ad-costs-value-and-leaks-info

Philips, D. T. (2002). *Run to win: Vince Lombardi on coaching and leadership*. New York: St. Martin's Griffin.

Price, A., & Price, D. (2016). *Psychology of success*. London: Icon Books.

Rein, J. (2014). *Fitness is the world's biggest sport*. Retrieved April 14, 2017, from https://www.lesmills.com/industry-insights/industry-insights/fitness-is-the-world-s-biggest-sport

Schubert, B. (1992). *Vom Anfänger zum Top-Athleten*. Darmstadt: DLV.

Sheath, B. (n.d.). *Personality in sports: Everyone is different*. Retrieved June 14, 2017, from http://believeperform.com/performance/personality-in-sport-everyone-is-different

Taylor, J. (2017). *Train your mind for athletic success - Mental preparation to achieve your sports goals*. Lanham: Rowman & Littlefield Publishers.

Wiggins, J. S. (1996). *The 5 factor of personality*. New York: The Guilford Press.

Online Resources

On the book website, additional content on failure is provided. Please visit: www.artop.de/en/failure

Failure on Stage

Sebastian Kunert and Harry Fuhrmann

Harry Fuhrmann sits relaxed on the couch of his office in Berlin. The evening before, a research theatre project ended, on the following day, he lectures at the Berlin college of drama "Ernst Busch". In just a few days, he will go to Tehran for a workshop with students on the methodology of the Bertolt Brecht Theatre. In between, he takes an hour to talk about Failure on Stage.

Sebastian Kunert: *I assume that more or less all the great plays on stage tell stories of failure: Shakespeare's Romeo & Juliet struggle against the conditions of their times, Brecht's Mother Courage becomes desperate facing what war does to her children, Harold Pinter's characters are unable to say what should be said... All epic plays show someone failing to meet his or her desires.*

Harry Fuhrmann: *Yes. I think that stories of failure rather than stories of success are told to encourage the viewer to change the prevailing conditions. This is a Brechtian approach to show the world as changeable. It is the task of the theatre address that issue. In stories of failure, there is always the possibility of success: what should be changed, what can I do?*

Sebastian Kunert: *Is there a message to take more responsibility?*

Harry Fuhrmann: *It is always a message to change the world. All we do is because we want to be loved. My basic motive for doing theatre is to make the contradiction between this longing and reality tangible.*

Sebastian Kunert: *What does failure mean to you?*

Harry Fuhrmann: *I wonder who usually fails and there are more male than female characters coming to my mind. Men often shoot themselves and escape the consequences of their failure, on the other hand women are interesting, usually, different.*

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Sebastian Kunert: *Men and women seem to be different in their way of dealing with failure?*

Harry Fuhrmann: *Women are more likely to suffer failure. They are slowly sinking, fighting longer, then giving way to the circumstances. In contrast, men escape, give up, and produce a great, theatrical end. That is much more egomaniac. For men, it is hard to confess, to accept. They blame others for their own mishaps instead of taking responsibility. Women endure their fate, try to save their relationships, and, finally, disappear quietly. I do not know females running amok.*

Sebastian Kunert: *Do you enjoy staging failed characters or pieces that are about failure?*

Harry Fuhrmann: *I rather show the search for success, a change in life. It is the longing for real, for a life-enhancing relationship. It is the human site that interests me and the pain when such desire is not satisfied.*

Failure as a subject for drama has a long tradition of more than 2000 years in Europe. In a *tragedy*, the story of a man from a high position, who is "guiltlessly guilty", is told with dialogues. According to Aristotle, audience shall feel pity (eleos) and fear (phobos) in order to get rid of such excitations (catharsis). The modern theatre continues this tradition. The contexts in which the story is embedded come from all sectors of society: politics, economics, military, art, family, partnership—failure as a cultural phenomenon seems to be reflected on stage.

Sebastian Kunert: *Why do I see so many characters on stage who try to satisfy their desires and finally fail? Is it boring to watch people succeed? Is it more exciting if people try hard and lose everything?*

Harry Fuhrmann: *People are packed with unfulfilled longings. We have great dreams, things we would like to realize. There is a <u>sense of possibility</u> inside of us, a creative, tackling, productive self saying "All that would be possible!" However, there is also a <u>sense for reality</u> saying "This will not work!" The realization of our dreams is postponed and what remains is that immense longing in ourselves.*

Sebastian Kunert: *This brings me to another assumption: failure seems personalized. People need a single character so apprehend a complex situation. Failure gets a face. In the moment, Guiseppe Verdi's Violetta suicides at the end of the opera La Traviata, we are touched because we identify with her. Is it the same in real life, do we need scapegoats to understand and cope with failure?*

Harry Fuhrmann: *Basically yes. But the process is different. Society usually choses its "protagonists of failure" in retrospect. An author does the opposite: Shakespeare wanted to talk about cultural realities, so he started to create two characters and their love across the borders of rival families. In reality, the scandal comes first and society or a company is subsequently looking for its protagonists. Then the story is basically re-written, telling what happens from a scapegoat's perspective. At the end, the failure seems inevitable and our protagonist is accountable.*

Sebastian Kunert: *Is failure a purely social phenomenon? Do we fail because of civic conditions?*

Harry Fuhrmann: *I think so. How do I measure whether I failed? Where can I find the positive response I expect? Who defines the standard? It is very hard to say: 'Well, I think I was great. I am very happy with it.'*

Sebastian Kunert: *How do you determine if you failed or succeeded with a theatre project?*

Harry Fuhrmann: *Inner satisfaction and response to my work. I produce stage plays for the audience. I decide to tell a certain story and want to trigger something inside the audience. If it causes some thoughts and triggers some emotions, then I am satisfied.*

Sebastian Kunert: *What about theatrical forms that lead to failure as their central element? Think of slapstick, unscripted theatre, and comedy. There, it is essential that the performers fail on stage, we suffer with them laugh at their mishaps.*

Harry Fuhrmann: *Yes, the clown lives from failure, that is true. He attempts over and over again and, nevertheless, does not reach his goals.*

Sebastian Kunert: *Why is that funny?*

Harry Fuhrmann: *Because we all know this. Because we all desire, try, and fail miserably. The more a clown wants to achieve the goal and does not achieve it, the more desperately he tries. The clown becomes loveable in the moment he accepts this failure. In fact, this is quite informative for our meritocracy, where failure is something bad, so we always try to cover it up instead of accepting it. We should learn to deal with failure more humorously and constructively.*

Sebastian Kunert: *What do you do as a director in order to show failure on stage as powerfully as possible?*

Harry Fuhrmann: *It is necessary to escalate a conflict: the greater the longing for something, the more desperation and failure when it is not fulfilled.*

Sebastian Kunert: *What would be your conclusion regarding the staging of failure?*

Harry Fuhrmann: *Individual dreams, the reality and interpersonal relationships—these three aspects feed a staging. The tension between desire and reality, embedded in a social relationship. Brecht once said fittingly: "The smallest social unit is not a single person but two."*