

Global Social Innovation Starts with European Digital Platforms

Philipp Plugmann

1 Developing Innovative Environments as a European Social Strategy

It is at the point of interaction between global social innovations and a regional perspective that European digital platforms will gain in significance in the first place. The new digital business models are changing the rules of the game that some company leaders have been following for the last 20 years. After a thorough analysis of competition and business models, it is important to look at our own field of activity to see whether it is vulnerable and, if so, to become "disruptive" ourselves rather than be overtaken by competitors in the next few years. The development of innovative environments and the resultant improvement in promoting innovation is also always a European strategy in the midst of global competition.

Alongside the development of innovative environments as a European social strategy in part 1 of this chapter, part 2 describes possible focal points for European social digital platforms.

1.1 Digital Platforms Open Up Opportunities for Social Advancement

Do you remember what things used to be like when you wanted to make a career in the tourism and hotel industry? After completing school, you applied for an apprenticeship. If you were among the lucky ones who were invited for an interview, you might have had to take tests, have discussions, and have to survive a trial period of several months, even after a contract had been signed. After 3 years of apprenticeship, many years working up through the hierarchy and maybe a few spells abroad,

P. Plugmann (🖂)

SRH University of Applied Health Sciences, Leverkusen, Germany e-mail: philipp.plugmann@srh.de

[©] The Author(s), under exclusive license to Springer Nature Switzerland AG 2022 A. Ruthemeier et al. (eds.), *The Global Impact of Social Innovation*, Management for Professionals, https://doi.org/10.1007/978-3-031-03849-5_4

far away from the family, it was possible, with diligence and discipline, to become a deputy hotel manager and then, with a bit of luck, to manage a hotel, after 20 years in the industry, or even to establish one of your own.

Over 10 years ago, a number of Americans on the US West Coast set up the accommodation platform Airbnb. None of them had done a hotel apprenticeship, and none of them owned a hotel either. They did not have the many years of expertise in the industry, and the moral legitimation, we might say, and the concept of working one's way up "with diligence and discipline" by building up one's reputation over 20 years in the industry are missing too. Despite this, the company grew steadily, so that it is now worth several billion US dollars and still happily attacking the traditional hotel and accommodation market.

This means that a competitor does not necessarily have the level of industry expertise that might be expected (Gassmann & Sutter, 2016; Meier, 2018) nor does the new competitor necessarily need to have any material assets. The creation of digital marketplaces, the ability to handle large volumes of data ("big data"), and the striving for absolute market dominance can also be seen in companies such as Uber, Amazon, or Google and characterize digital platforms. The mutual networking of customers, price transparency, and influence of customer desires directly on production are only a few factors affecting the digital business models and presenting entrepreneurs with new challenges.

1.2 Customer Centricity and a Culture of Innovation as the Drivers of Social Transformation

The new digital marketplaces, digital platforms, and Internet-based applications (apps) are attacking competitors not only in terms of knowledge or skill but also as fair as business models are concert. A war on two or three fronts has broken out, resulting in higher costs for established companies as more people have to be employed and additional processes designed and implemented (Shah et al., 2006). Customers are being diverted, and with aggressive market strategies, this can become an existential threat for some companies. Uber, Netflix, and Amazon are classic textbook examples that have dramatically affected the passenger transport industry, the television and entertainment business, and the retail sector globally. And yet we cannot blame these new companies in the last 10 years, because they have used "customer centricity," i.e., focus on the customer, to invent excellent business models for the customer's benefit and combined this with sensationally good service. That also means, by implication, not only that the new technologybased companies have succeeded but also that the severely battered competitors have failed completely, including companies worth billions, such as Toys "R" Us, Blockbuster, AGFA, or Nokia's cellphone sector.

Matters do not always need to end up in insolvency; companies can also suffer such dramatic losses that they are taken over by competitors or financial investors, resulting in unforeseeable developments for the companies in question. This culture of taking over stricken companies and the number of international insolvencies could accelerate in the future, as innovation cycles are speeding up, the number of international competitors is rising, and the Internet has reached such an advanced stage of maturity in the past 10 years (knowledge, networking, communication, business models, customer behavior on smart phones) that the next 10 years will see even more companies sleepwalking toward oblivion. The cliché of "Germany's service desert" would be unhelpful if it was not true. In the future, we will be even more dependent on high potentials in companies who take innovation projects forward and bring interdisciplinary solution approaches to companies within an inviting culture of innovation (Capon & Senn, 2020).

It is always exciting to find out what makes high potentials leave Germany and to discover what they are looking for—and find—elsewhere. We can all learn from this. Experience abroad is a good idea, but when these talented up-and-coming entrepreneurs build up and help shape companies elsewhere, far away from home, either permanently or at least for many years, we must question if conditions could be improved here to keep people in Germany.

The following is a **guest comment**, **"Ideas for a better innovation culture in Germany**," from Jannik Peters, mechanical engineer and co-founder of a start-up at the world-famous MIT in Cambridge, Boston (USA):

"Innovations are only made in an environment that enables people, promotes willingness and provides opportunities for innovative work. It is not just about the next world-changing start-up; it is more about any innovative change, however marginal it might seem to be. The willingness to make innovative contributions or even to create start-ups does exist in Germany. For this reason too, it is generally opportunities that are the focus in discussions about the innovation culture. But even the best financial and structural conditions will not lead to a success story if skills are neglected. Since 2011, according to the Federal Statistics Office, more than half of all young people have consistently been striving to achieve a higher qualification beyond a university degree. Surely this answers the question of skills? Unfortunately, however, our educational system focuses more on written exams than projects, more on the final qualification than on expertise and more on the prospects of a well paid job than on the ability to make independent innovations. No-one is blaming the students—it is more a criticism of a system that promotes this behavior.

The USA is a country that has produced some of the most innovative, successful companies in recent years. A direct comparison between countries often reveals the opportunity to innovate as a factor in this, which is more marked there because of the greater availability of risk capital. However, apprenticeship, especially at universities that produce a large number of innovative start-ups, also has another focus. The famous elite universities focus more on projects and interactions than on the pure passing on of knowledge. This also leads, for example, to topics for dissertations not being set by the institutions, as in Germany, but being developed by the students themselves. This actively promotes both the ability and the willingness to innovate, which is of major benefit to the US culture of innovation. This is also reflected, for example, in the falling average age of company founders from the Massachusetts Institute of Technology. In order to improve the culture of innovation in Germany permanently, we must be committed not only to 'opportunities' as a

factor but also to skills training. Otherwise, we cannot be surprised if a competitive innovative environment fails to develop despite the best structures."

- Source: university entrants: https://de.statista.com/statistik/daten/studie/72005/ umfrage/entwicklung-der-studienanfaengerquote/
- Source: MIT average age of start-up founders: https://de.statista.com/statistik/daten/ studie/72005/umfrage/entwicklung-der-studienanfaengerquote/ (page 15)

1.3 Further Training for School Teachers as Part of Social Innovation Promotion

A number of our teachers could be made more aware of the need to encourage talented, motivated young people who want to be guided, within the context of creative thinking and ideas management, through projects aimed at training a problem-oriented way of thinking and developing the skill of independent learning. The further training of teachers itself thus offers enormous potential (Missal, 2019). This means the skills which allow competitors to dominate today and to continue to do so in the future. Phases such as the project week, which was around in my school days, or voluntary project requests by pupils for the long summer vacation would be possible times for this. In implementing new concepts in schools, pupils and head teachers are caught between programmatic traditional targets and everyday practice (Tulowitzki et al., 2019).

In the future, simple tasks will be dealt with by AI, robots, or standard programs, and the pure recitation of blocks of knowledge will increasingly become less important as a critical decision-making factor because knowledge is becoming more available globally, sometimes at no cost. The questions will be: what products and services will we make out of this knowledge and how will we bring it to the market reliably and quickly? In my opinion, the typical teachers of tomorrow should attend courses and training sessions themselves on subjects relating to business, research, and innovation. Nowadays, this can also be done online, as a webinar or video (possibly on YouTube). By enabling the teachers in this way, it can also be expected that they may develop a sensitivity (emotional intelligence), have discussions with each other at this new level, and thus not perceive their class as a uniform gray mass into which blocks of knowledge have to be dropped; instead, they must convey knowledge and have an attitude to pupils that is characterized by openmindedness and a perception of the diversity of learning types, characters, and ideas in order also to provide pupils in the long term with the necessary self-confidence in themselves. This is an idea, and it undoubtedly makes sense, in a large community made up of pupils, parents, and teachers, actually to discuss for the first time what expectations there are. I am constantly impressed at what motivated young people can achieve, but we are inclined to distrust them because they are so young. We divide classes into good and bad learners and form an early judgment about the potential of our pupils and students.

Can we really only classify them as good and bad learners or could we move to a broader point of view? The subject of the quality of teaching remains a challenge, because there will be a need in the future for "knowledge and application orientation" in the context of interdisciplinary problems. Generating strategies during the learning process itself for developing and using ideas, trying out debating clubs based on the example of some English schools, and running projects in mixed groups are just a few ideas for helping pupils to enjoy learning and improving their learning experience.

1.4 The Lifelong Learning Society and New Social Networks

Lifelong learning in various scenarios is becoming a necessity if the goal of keeping up internationally is to be achieved (Lassnigg, 2019). The idea that, in current times, a single course of study, or first degree, will be enough to last forever is a great misconception. A second- or even third-degree course over a period of 20–30 years seems likely since, internationally, initial learning environments such as "fast-track learning" are developing. In July 2019, I was allowed to spend a few days with a Russian-Chinese start-up in Hong Kong (China) which was looking at a new concept. This concept picks up points such as global shifts in the scientific community, the solving of tasks in diverse teams, and self-teaching components. The world of knowledge in the future will be multidisciplinary, interdisciplinary, and transdisciplinary, and it will be assumed that people are able to self-learn.

At the Russian-Chinese fast-track learning start-up, a project is testing whether it is possible to combine, for example, two or three study courses in 7 years, such as medicine, computer science, and design. This might be irritating to start with, but we need to think about this: if a young person is taken "out of the system" and fully financed for 7 years, so that no temporary work alongside studies is required, if the holiday times (here in Germany totaling around 5 months of summer, Easter, autumn vacations and semester breaks) are reduced, and if what is taught is cut and compressed to the relevant blocks of knowledge and all of this mixed with gifted, highly motivated lecturers, might it be possible to achieve this goal? I was approached about this project by a Chinese fellow-student living in England who was also completing his part-time doctorate of business administration in London. He felt that, because of my three master's degrees in very different areas and the founding of companies in a range of industries (medtech, strategy consulting), I was well-qualified to provide some input.

However, the project within this start-up is still in an experimental phase and is designed to run over the long term. The outcome is completely unknown, but the approach is clear: testing whether gifted 20-year-olds can cope with gaining a triple qualification in 7 years. Against the background of international competition among gifted people or high potentials combined with progress in AI, this will exert an enormous pressure on German medium-sized companies that they currently cannot really imagine. Once I was back in Germany, I had a few discussions about this project, and interestingly, it was thought to be irrational, ridiculous, and impossible

to implement. From my point of view, the bad thing is that chronically underestimating our international competitors and their long-term projects will blow up in our faces in the near future if we continue to behave as if we were the intellectual and entrepreneurial center of the earth.

1.5 Start-Ups as a Social Springboard

When younger people in particular establish start-ups, they depend on support in some form. This can mean risk capital, but attracting the right team members, building up skills, and tackling organizational matters are also challenges on a daily basis. Start-ups are newly established or young companies in their growth phase that challenge mid-sized companies by establishing new business models and often use transformation and the digital world to provide benefits to the customer (Kochhan et al., 2019). They serve as drivers of innovation, and, as a source of renewal, they are very important for our national economy. It is important to use the momentum of digital transformation and to maintain the motivation and keenness of their founders. Entrepreneurship and start-ups are the fuel needed for innovation (Plugmann, 2018).

Here is a guest comment from Marcel Engelmann about the significance of start-ups:

Innovation takes society forward and creates the jobs of the future. Only through innovative ideas can the prosperity of society be increased in the long term and people's quality of life improved. The establishment of new companies in particular helps establish technologies in the market, so that people are provided with added value by these innovations. Digitization and global competition in particular are increasing the pressure on existing companies to develop further and face up to the new competition. This development is further accelerated primarily by automation and the use of artificial intelligence in all areas of companies.

And the key German industries are looking at some far-reaching changes, especially due to the increasing competition from abroad but also because of the changes in the working demands of future employees. These changes, however, also open up many opportunities for entering a growing market and allowing new world market leaders to emerge from Germany. Start-up companies are the key here to a strong economy in the future.

Particularly the strong mid-sized company sector and the high level of education in Germany must be used to drive innovation forward and establish new companies. Cooperation between mid-sized firms and start-ups should therefore be expanded in any event. Support from the state must also be expanded in order to help start-up companies and thus improve the implementation of innovations in the market. In particular, the promotion of entrepreneurship activities at colleges and universities must be increased. Only when all these activities are interlinked can innovation be established and start-ups be used as drivers of innovation.

1.6 New Ideas for Grants to Support Students, Taking Account of Social and Other Factors

The "second row" is undervalued and is being sent the wrong signals. As stated at the beginning, our long-term hopes in the "20-year scenario" are resting on the young people who are going to school today and will be starting an apprenticeship or course of study shortly. They must be supported. One way of being supported is a grant system. There are grants from foundations of the political parties, the Stiftung des Deutschen Volkes foundation and, for example, the Deutschlandstipendium initiated by the Federal Ministry for Education and Research (Bauer, 2017; Tiefenbacher, 2018), where private sponsors or companies donate \notin 1800 per year and the federal government matches it with the same sum. This means that the student receives €3600 per year. My wife and I have been donating regularly for over 10 years, including donations for the Deutschlandstipendium grants and innovation prizes. I question the assumption that supporting the students with the highest grades will advance the innovative strength of Germany more than if we were also to support "the second row." The origin of my idea of supporting the "first" and "second row" lies in the process of how an idea arises, is developed, and finally is taken to the market launch. In my understanding, an idea matures like a ball of modeling clay with various colors in it. A founding team works on an idea, modifies it, and, in parallel, adapts it to their interactions with each other and with people with whom they have discussed certain aspects, following the principle of the feedback loop. In this, individuals with different areas of expertise, creativity, and performance levels work with each other. Supporting an individual with very good grades, who stands out anyway because of their top grades, while simultaneously neglecting a good student who can make a decisive contribution in an innovation team would mean that innovation and entrepreneurship would be supported less efficiently by only supporting the top-grade students. Grades on their own are a poor basis for distributing funds. However, because I have heard many times that parents would actually complain if their children with very high grades were not considered when allocating grants, it is high time to adjust the basis for evaluations.

In the context of promoting innovation, we might consider a brief lecture, a presentation, or an essay about topics that connect the person's course of study with society and the general area of innovation. Potential applications would have to be supported in their search for the right grant query; there are plenty of examples of a similar type in Germany, such as the KIT (Karlsruhe Institute of Technology) (Paltian, 2019). Students should show how they intend to use their knowledge after the course and what they intend. Then points could be awarded based on a transparent system, such as grades 40%, essay 40%, and social commitment 20%. We need to pay more attention to those who are "good" and not be blinded by the "very good" grade. The ability to recite a poem does not justify any sensible grant. In addition to supporting the best, we also want to encourage creative minds and spend the necessary time on identifying these. For this, we must give these individuals the opportunity to present themselves and their ideas.

Another idea would be for teams to apply. If we assume teams of three, it could be established that one team member achieves good or very good grades and the other two team members could be defined by this one. This is reminiscent of the principle in industry of "employees recommending employees." These teams of three could apply for grants and would have to present a viable project, an idea, or a long-term solution. Admittedly, this is considerably more demanding and complex for both sides. I am open to suggestions and ideas as to how something like this could be structured. We know from the world of start-ups that when private equity funds or companies buy up these young companies, the focus is also always on ensuring contractually that the full start-up team stays on board. This shows the importance and relevance of thinking as a team. The structure of grant allocation should therefore also adapt, with the possible initiation of additional grant formats.

2 Focal Areas of European Social Digital Platforms

Education and health represent two central factors for guaranteeing prosperity, safety, and self-determination in Germany and Europe. The possibility of rising socially irrespective of age and background conditions combined with access to health-related information increases society's productivity in the long term and is also a step toward social innovation. Before we can start talking about global projects, it must be possible to initiate a pilot project at European level. The following looks at the two areas of education and health in the context of digital platforms.

2.1 Education

The European Commission (2021) is considering, in the area of education, "a wide range of possibilities for training and further education throughout Europe for students in all age groups, information about studying abroad, for vocational education, for the recognition of qualifications and skills."

In Europe, digital platforms provide opportunities in the area of education:

- Bridging language differences
- Balancing information inequalities
- Explanatory videos
- Tele-consulting
- Round-the-clock accessibility
- Feedback opportunities for European institutions to bring them closer to citizens
- Service tool

2.2 Health

The health system is a very large field, and I would therefore like to focus on one area as an example—mental health. The regional office for Europe of the World Health Organization (WHO) has recently published a paper entitled "WHO Europe brings mental health out of the shadows with new pan-European coalition" (WHO, 2021, 13.10.21) with the aim of closing gaps in services and taking the needs of those affected and their families into account.

Digital platforms have many different advantages:

- Those affected can obtain information around the clock.
- There is massive scope for expanding the amount of information available.
- Explanatory videos can be offered.
- Self-help groups can be organized.
- Emergency situations can be dealt with appropriately through tele-consulting.

2.3 Conclusion

In the digital era, the development of European social digital platforms is already an integral part of the major institutions such as the WHO and the European Commission. As always with digital projects, the services offered need to be constantly further developed. The digital platforms offer opportunities at national and European level to improve language barriers and social conditions and to interlock nations more closely with each other.

Improving the quality of health and education for citizens can be successful as a European model and would then, as a "proof of concept," be transferable to other regions of the world as a global social innovation. By developing social digital platforms, Europe can thus link innovation and social welfare for the benefit of all citizens.

References

- Bauer, M. J. (2017). Komplementäre Finanzierung von Hochschulstipendien, Das Deutschlandstipendium als Reverse Matching Funds-Konstruktion zwischen Hochschulfundraising und Public Private Partnership. (Complementary financing of college grants. The Deutschlandstipendium grant as a reverse match funding construction between college fundraising and public-private partnerships.)
- Capon, N., & Senn, C. (2020). Customer-centricity in the executive suite: A taxonomy of top-management customer interaction roles. In *New leadership in strategy and communication* (pp. 165–176). Springer.
- European Commission .: https://ec.europa.eu/info/education_de _ accessed on Oct. 12, 2021.
- Gassmann, O., & Sutter, P. (2016). Digitale transformation im Unternehmen gestalten. (shaping digital transformation in the company.) Geschäftsmodelle, Erfolgsfaktoren, Handlungsanweisungen, Fallstudien. (business models, success factors, instructions for action, case studies.). Hanser.

- Kochhan, C., Könecke, T., & Schunk, H. (Eds.). (2019). Marken und start-ups (brands and startups): Markenmanagement und Kommunikation bei Unternehmensgründungen (brand management and communication with company start-ups). Springer-Verlag.
- Lassnigg, L. (2019). Anerkennung von Kompetenzen, Lernergebnissen und Qualifikationsrahmen: internationale Perspektiven und Erfahrungen. (Recognition of skills, learning results and qualification frameworks: International perspectives and experiences.) Magazin erwachsenenbildung. at, 37.
- Meier, P. (2018). Digitale Plattformen als Innovationstreiber. (digital platforms as innovation drivers.) in Innovationsumgebungen gestalten (shaping in innovation environments.) (pp. 207–217). Springer Gabler.
- Missal, S. (2019). Erfolgreiche Konzepte der Weiterbildung von Lehrkräften. (Successful concepts for further training of teachers.) Lehrerbildung-Potentiale und Herausforderungen in den drei Phasen, 109. (Teacher training potential and challenges in the three phases).
- Paltian, A. (2019). KIT Karlsruhe School of Optics & Photonics External Scholarship Providers.
- Plugmann, P. (Ed.). (2018). Innovationsumgebungen gestalten: (Shaping innovation environments) Impulse f
 ür Start-ups und etablierte Unternehmen im globalen Wettbewerb. (Impulses for startups and established companies in global competition) Springer-Verlag.
- Shah, D., Rust, R. T., Parasuraman, A., Staelin, R., & Day, G. S. (2006). The path to customer centricity. *Journal of Service Research*, 9(2), 113–124.
- Tiefenbacher, A. (2018). Acht Jahre Deutschlandstipendium. (Eight years of Deutschlandstipendium) WiSt-Wirtschaftswissenschaftliches. Studium, 48(1), 50–53.
- Tulowitzki, P., Hinzen, I., & Roller, M. (2019). Die Qualifizierung von Schulleiter* innen in Deutschland—Ein bundesweiter Überblick. (the qualification of head teachers in Germany— A national overview.). Die Deutsche Schule, 111(2), 149–116.
- WHO (2021). https://www.euro.who.int/de/health-topics/noncommunicable-diseases/mentalhealth/news/news/2021/10/whoeurope-brings-mental-health-out-of-the-shadows-with-newpan-european-coalition _accessed on Oct. 13, 2021.

Philipp Plugmann has been doing multidisciplinary work for the last 22 years in parallel to practicing as a dentist and implantologist in his own clinic in Leverkusen, Germany. He is also full professor for interdisciplinary periodontology and prevention at SRH University of Applied Health Sciences. His first book on innovation in medical technology published in 2011 was reviewed by Cisco. His second book on innovation published with Springer in 2018 got more than 100,000 chapter downloads in its first 30 months. Previously, he held multiple adjunct faculty appointments and has won multiple teaching awards. Plugmann has given research talks in the field of innovation at conferences at Harvard Business School, Berkeley Haas School of Business, Max Planck Institute for Innovation and Competition, and Nanyang Tech University, Singapore. Plugmann is a serial entrepreneur and advisor to several companies.