Introduction

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The 2012 ItAIS[1] ninth conference, from which this book is titled, attracted contributions far beyond the Italian IS community. In fact, the 202 authors—whose 86 papers were selected for presentation at the conference by means of a double-blind review process—include researchers from Italy and from more than 16 countries of 5 continents (i.e. Australia, France, South Africa, Sri Lanka, etc.). Moreover, the 17 tracks of the conference addressed many aspects of the relationship between "Organizational Change and Information Systems" and the contributions included in this book are signed by researchers working in different disciplines: organization, management, accounting, human-computer interaction, knowledge management, IS design, IS development, and IT governance studies. Authors have considered ItAIS as a suitable and stimulating arena for sharing and enriching their research endeavors within, and often beyond, their primary areas of interest. The outcome of the conference was consistent with its subtitle: "working and living together in new ways" since different backgrounds and perspectives shed light on the multi-faceted relationship between organizations and information systems.

Almost two decades after the establishment of the majority of IS basket journals[2] and one decade after the establishment of ItAIS, the IX edition of the Italian conference has been an opportunity to comment on the achievements of the community and to discuss the challenges ahead within the international debate. The closing plenary session was devoted to consider the main trends emerging

[1] ItAIS is the Italian Chapter of the Association for Information Systems, www.aisnet.org.

[2] AIS has identified a "basket" of 8 journals that are recognized as top journals in the field. These are listed below in chronological order starting from to the oldest (in parenthesis the starting year): *MIS Quarterly* (1977), *Journal of MIS* (1984), *Journal of Information Technology* (1986), *Information Systems Journal* and *Information Systems Research* (1990), *European Journal of Information Systems* and *Journal of Strategic Information Systems* (1991), *Journal of AIS* (2000).

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from the analysis of the papers that have been presented at ItAIS in the last three years. First, there is an increasing presence of contributions from the managerial disciplines as opposed to the engineering and computer science papers. Second, in most of the contributions there is a strong focus on organizational aspects. Third, change in the track list shows the evolutionary character of the conference: for example, the track on "e-Business, Communities, and Social Networks" replaced "e-Service", a track that was introduced in 2010.

Other interesting comments can be made if the papers are positioned on the map of 'theories-in-use' by IS researchers described in a recent essay [1] published in the 25th anniversary special issue of the Journal of Information Technology. Allen Lee[3] makes a retrospective and prospective examination of five foundational concepts: 'information', 'systems', 'theory', 'organization', and 'relevance'. The result of this exercise is designing the contour of a discipline where 'information' includes syntax, representation, and adaptation besides the traditional data view. A 'systems' discipline that focuses on ties and interfaces instead of single organizational or technical subsystems. A research area where the notion of 'relevance' is not only referred to scientific knowledge (*epistêmê*) but takes also into account the *technê* and *pronêsis* of IS professionals, managers, executives, and consultants. A field whose theories go beyond the explaining and predicting goals by including also design and action as final objectives. Finally, a discipline in which the term 'organizational' is not used interchangeably with 'social', 'group', 'behavioral', and 'human' and monolithically referred to any and all people-related issues but that recognizes the importance of a meso-level of analysis.

Although a thorough examination of theories-in-use by ItAIS authors is beyond the scope of this introduction, the results of a preliminary analysis, is depicted in Fig. 1 and is built on the abstracts of the five tracks that attracted more papers in the last three years. Among the five foundational concepts mentioned above, the meso-level and design orientation have been adopted as dimensions for evaluating the theories-in-use with respect to 'organization' and 'theory' respectively. Abstracts of papers selected in these tracks have been attributed a score between −5 and +5 according to the extent to which they correspond to the ideal typical theories-in-use in the Lee's classification. Results are shown in the two-dimensional map in the figure.

Contributions from the human-computer interaction and from the more organizational[4] tracks are intuitively positioned in the right/lower corner and in the left/upper corner respectively. This result reflects both the explanatory and predictive nature of organization studies and the design orientation of human-computer interaction studies in which the individual lens prevails over the collective one. On the contrary, both management and accounting contributions show a better balance

[3] Allen S. Lee is former Editor-in-Chief of MIS Quarterly and founding Editor of MIS Quarterly Executive.

[4] Tracks titled "Organizational change and impact of ICT" and "New ways to work and interact via the internet" attract most of the traditional organizational works.

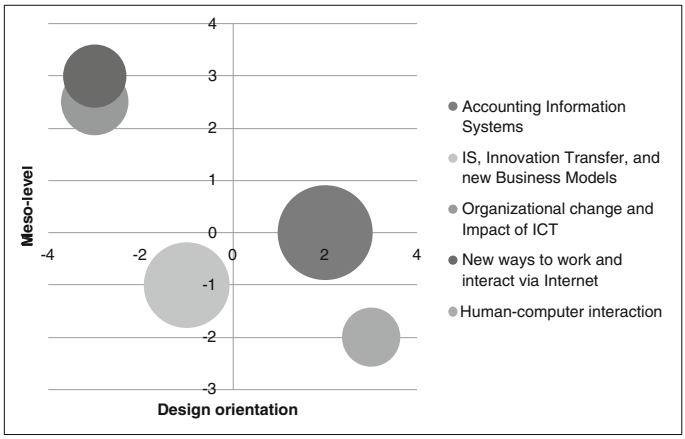

Fig. 1 Positioning of ItAIS 2012 contributions

of theories-in-use and therefore their position is closer to the center of the map. Since none of the tracks is positioned in the left/lower corner, the community shows a behavior similar to the one envisaged by Allen Lee.

This achievement is coherent with the research path that was outlined by Professor Alessandro (Sandro) D'Atri when he co-founded ItAIS.[5] Prof D'Atri has always promoted a design orientation of IS research and stressed the importance of addressing multiple and interconnected levels within a systemic approach. His contribution to organization and IS studies [2] has been recently commemorated in a book edited by Richard Baskerville, Marco De Marco, and myself that started the new Springer series Lecture Notes in Information Systems and Organisations (LNISO). From now on the best papers presented at the ItAIS conferences will be further revised and then collected in the issues of the LNISO series with the intent of advancing towards the research goals that Sandro was pursuing.

This book collects 45 chapters that are based on a selection of the best contributions submitted at the conference in Roma. Chapters are grouped in 8 parts that are briefly introduced in the following sections. They contain the topics that where conceived by the Track Chairs.

This volume is the outcome of the joint effort of a community of people that have offered their valuable contribution to collate, review, and organize the chapters. I am grateful to all the members of the Editorial Board and of course to all the authors. I am also grateful to Marco De Marco, the VP and co-founder of ItAIS, to Cecilia Rossignoli and Americo Cicchetti, the ItAIS 2012 Conference Chairs, and to Daniele Mascia and Lapo Mola who shared with me the responsibility of chairing the Programme Committee. Finally, a particular thanks must go to the members of CeRSI "Alessandro D'Atri", the Research Centre on

[5] Prof. D'Atri passed away in 2011.

Information Systems at LUISS Guido Carli University, for their unique contribution in organizing the conference.

1 Part I: Organizational Change and Impact of ICT in Public and Private Sector

ICTs are part of corporate transformations in today competitive environments. The vast majority of change projects imply redesign and adaptation of ICT solutions, and in many cases they are entirely centered around these technologies. Organizations expect to use the new ICT to run new processes, innovate products and services, gain higher responsiveness, and implement new corporate environments aimed at transforming their internal structures into better achieving organizations. To date, both practice and literature have widely shown that the effective implementation of new ICT is one of the most challenging tasks faced by managers, since it requires people to understand, absorb and adapt to the new requirements. The capacity to absorb and to fully implement the adoption of new ICTs is a key factor to gain extra competitive abilities, because the ultimate impact of ICT is mediated by a number of factors many of which require an in-depth understanding of the organizational context and human behavior. Despite the many change strategies and tactics applied so far and the fact that many research findings have associated successful tactics with organizational contexts, it is proving difficult to develop a comprehensive theory of change management and change implementation. Empirical investigation must be conducted hand-in-hand with theory building if we want to better interpret today's corporate environments.

2 Part II: New Ways to Work and Interact Via Internet

Internet has created new ways of working and interacting, reduced the geographic, temporal, and organizational distance between individuals. Internet facilitates dispersed interaction across time and/or space, allowing at individuals, groups or organizations, to communicate and collaborate sharing knowledge and information. In particular, new Internet applications, such as Web 2.0 applications, allow a strong level of interaction among users and provide new work arrangements supporting both work activities and social relationships such as: remote work, telecommuting, telework, telecommunity, global and virtual teams, mobile offices, web community, social network, microblogging, etc. Recently, social networks have been growing significantly in the private and leisure sphere of people, while a similar diffusion has not been achieved in the business world. However, there is a great expectation that this will happen in the near future. The expected benefits will be very relevant, starting from the improved cooperation opportunity to the

possibility of unleashing new forms of collective intelligence and open innovation. In this direction, there is the emerging idea of Enterprise 2.0, where new forms of collaboration and knowledge sharing will be achieved. In general, scholars have mainly focused on the role of technology in supporting communication and coordination processes among employees, investigating some constructs such as autonomy, job performance, motivation, worklife balance, conflict, socialization processes, quality communication, etc.

The chapters presented in this part contribute to the ongoing debate on the role of Internet facilitating new ways to work and interact and its social and behavioral consequences on individual employees.

3 Part III: E-Business, Communities and Social Networks

Since the introduction of pioneering strategic information systems at the end of the 1970s, a dual perspective has emerged within the discipline of information systems: the business strategy perspective focused on the role of the organization itself, whereas the industrial economic perspective privileged the role of the competitive environment. Chapters presented in this part aim to overcome this dualism as a sustainable competitive advantage requires considering what actually takes place both within the walls of an organization and in the market. Information technology gives chance to reconfigure entire businesses due to the possibility to, first, unbundle sets of economic activities and, second, reallocate them in an innovative way. Production, finance, marketing, research and development, distribution channels all are subject to ongoing revaluation and improvement via new solutions. Solutions that take shape as businesses consider customers, providers, and competitors as potential partners for co-designing and co-producing. External actors and new competences are mobilized, old business borders are overcome and actors roles are reshuffled. If this reconfiguration involves not only products or services but a whole business system, an ecogenesis occurs. The rules of the game transform, leading to a new infrastructure and new business ideas that influence strategies, actions and networks of other actors within the system. Nevertheless, the spread of the internet has affected not only the business world but also the society at large. The proliferation of virtual communities is a recent but relevant event. All over the world individuals exchange information and share knowledge. Distance, time, culture, and organizational membership are no more an obstacle to collaboration and interaction. A new environment for free discussion about different topics is at hand and the literature agrees that virtual communities exist and play a key role in fostering the socialization process as well as learning. Phenomena such as peer production, user-generated content and crowdsourcing can be seen as the combination of the spread of ICT and the internet in the business world and in society. For instance, virtual communities do not only represent a virtual place to socialize and interact, but also an opportunity for marketing strategies.

4 Part IV: Information Systems, Innovation Transfer, and New Business Models

Chapters presented in this part examine how new ICT tools may support firms rejuvenating activities by providing support on reorganization, and promote new business models by rethinking firms R&D strategies. Consistent with open innovation approach, firms can profit of their R&D activity by transferring the results of their innovation processes to external organizations aiming at further adopting and applying that knowledge. In ICT fields, a great opportunity is given by cooperative projects focused on research and development technologies and innovation transfer, provided that technology-based innovation processes be adapted to deep changes in organisational contexts. Advanced ICT tools offer a set of new possibilities to facilitate the use of open cooperative and decentralised models where different entities asynchronously cooperate by adapting transfer/diffusion processes and roles to specific cases, situations, countries and cultures. This part of the volume provides insights on how information systems enable and facilitate the leverage of technological knowledge supporting (open) innovation by handling ICT based innovation. Moreover it addresses new theories and tools and best practices in cooperative and network-based ICT transfer and diffusion.

5 Part V: Information Systems Management: A Critical Perspective

Approaching the research on information systems adopting a critical view seems to be challenging, since it remains poorly adopted, mainly in the Mediterranean area. The aim of this stream is to stem from this marginalization of the critical approach within the IS and IT research. This part of the book is dedicated to understanding of the concept of value for business. Theoretical reflections on the concept of value are deemed central to any understanding of market exchange and the recent financial crisis has contributed to engage in a rethinking of market exchange relations pulling towards a re-conceptualization of the idea of value, including the perspective of ethical economy. The widespread diffusion of internet-platform related based upon forms of social production has represented the field for a new analysis of the concept of ethical value, stimulating new insights on the emancipator potential of new social media and any future infrastructure. Chapters in this part give the audience critical insights on the current challenges and new perspectives for the future of critical IS research, taking into account the implications on the concept of value.

6 Part VI: Professional Skills, Certification of Curricula, On-line Education

The research stream on IS professional skills includes issues pertaining to education and training as well as with and through information technologies. The education and development of Information Systems professionals in the emerging technological and economic world of the 21st century will require innovative methods and approaches. Both formal education programmes and assessment/certification frameworks are affected by continuous developments in digital technologies whilst the new possibilities and challenges of IS and IT have implications for both IT specialists and non-specialists within organizations. The cognitive ICT chain could use the independent standards of process and governance (like ITIL, COBIT, etc.) and the competence and profile standards like EUCIP and e-CF as habilitation technologies to enhance the value of learning outcomes. Furthermore, IT has led to the enhancement of the educational experience across disciplines and to the proliferation of online groups and communities both within and across organizations. Many, originally off-line activities (such as quality circles, task forces, and communities of practice) now take place online whilst IT enables knowledge creation and diffusion, co-production, mentoring, networking, and learning processes within organizational contexts. These groups, communities and activities can be highly heterogeneous in their structural configurations and span temporal and spatial boundaries; something which requires a diverse range of technological and organizational support systems and solutions. However, the necessary management competencies and support structures are often lacking whilst conflict and negative dynamics may also surface and undermine group outcomes. Furthermore, there is limited understanding of how group success is achieved in different work practices and industry contexts. Companies also find it challenging to design business models to leverage the potential of these communities.

This part of the book aims to contribute to the current debate on professional skills, certification of curricula, on-line education and communities.

7 Part VII: Human-Computer Interaction

Human-computer interaction (HCI) is an interdisciplinary research and practice field that deals with the design, evaluation, and use of interactive technologies. The field has gained increasing attention in the last decades due to the pervasiveness of Information Technology in our lives. Traditional HCI topics, such as user-centred system design, usability engineering, accessibility, and information visualization are important to Management Information Systems (MIS) as they influence technology usage in business, managerial, organizational, and cultural contexts. As the user base of business interactive systems is expanding from IT experts to

consumers of different types, including elderly, young and special needs people, who access services and information via Web, new and exciting HCI research topics have emerged dealing with broader aspects of the interaction, such as designing for improving the overall user experience, favouring social connections and supporting collaboration. Moreover, the introduction of advanced interactive devices and technology is dragging researchers attention towards innovative methods and processes for interaction design, modeling and evaluation, which take fully into account the potential of modern multimodal user interfaces.

Chapters in this part of the book discuss theories, practices, methodologies, techniques and applications about the interaction among humans, information and technology.

8 Part VIII: Information and Knowledge Management

In the recent years, with the emergence of multiple Webs, like Web 2.0, the Social Web, and the Semantic Web, the variety of available web resources has been growing significantly, from unstructured messages or posts to structured data and ontology specifications. In this scenario, modern organizations require new advanced methods and tools to support effective and pervasive information and knowledge sharing, on and across the different Webs. Integrated exploitation of available web resources can allow people in organizations to achieve a number of aims: to improve business processes; to extend business knowledge; to collaborate with potential partners; and to develop, share and access huge quantities of available resources from different sources. This part of the book presents research contributions on information and knowledge management and collaboration in modern organizations. Such contributions provide insights on the ways in which new technologies and systemic tools and techniques may contribute to "extract", represent, and organize "knowledge" and provide effective support for collaboration, communication and sharing of information and knowledge.

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