Preface

What is social computing? One could not fail to realize that, in one way or another, computing was always social. Machines were made by humans to serve human needs, wants and aspirations. Information systems were identified as primarily socio-technical systems and have been approached and studied as such: systems that can enable communication, that can help in cutting down costs, that can help an organization achieve a competitive advantage and as such sustain the well-being and safeguard the prosperity of all its members. And then, with the emergence of the World-Wide-Web, their applicability and uses seem to multiply, breaking the threshold barrier that dictated that those were primarily machines we used when at work. A social dimension? Yes. But, they were mostly deemed as things one tends to forget when the office building door is closed behind on the way home after a long day. What happened? What does it really mean when Twitter announces that it’s expecting more than 30 million users by the end of the first half of 2010 and Facebook informs us that its membership exceeded 300 million users?

Social computing encompasses many now-familiar terms like social networking and social media. This broad term has been given to a phenomenon which in so little time has blossomed into a myriad of manifestations, transforming the way we conduct ourselves, build, nurture and sustain relationships, and run business. The social is fusing with the technological, personal lives are being changed in the process, the boundaries of industries as were standing traditionally are becoming fuzzy, and governments are striving to understand how to harness the power of the new or, indeed, control it, so as not to lose the benefits of the prior status quo.

This book aims to paint the landscape. Not exactly to depict in a detailed manner how it stands now or to predict its future form, for the today is already yesterday, and no crystal ball is good enough to be able to predict a future when one is faced with transformative powers of such disruptive power.

We have divided the chapters in this book into four main sections representing the perspectives from which our contributors viewed social computing: from social, organizational, technical and marketing perspectives. Having in mind the prospective audience, these we believe, suffice to organize the material in a manner that can help the reader to choose how to engage with the book; he can begin with the section he is more interested in and continue in this fashion or he can start from the beginning going through the sections and reading the chapters in succession.

The chapters in the first section focus on social aspects by addressing behavioral and cultural issues in tandem. Benjamin Yeo of the Milken Institute holds that social technology differs distinctly to information technology regarding innovation creation. What this assumption entails is that we should perhaps need to re-focus and that what we have learned thus far about information technology may already be outdated or not sufficient in versions 2.0 and 3.0 of the knowledge economy. Yeo builds and backs his argument about a shift in perspective by presenting and analyzing data from three case studies in the
The book opens with three sections, each focusing on a different perspective. The first section, which explores the role of communities, is highlighted by Shen, Lee and Cheung. They examine the wisdom of crowds, questioning what prompts us to join a community and share its purpose. They also discuss collective attitude and We-Intention, an individual’s perception of the extent to which all participants in a collective will engage in joint-action and act together. Jacqui Taylor from Bournemouth University contributes a chapter that reviews theories from social science, offering a critical analysis to help us explain and better understand the psychological processes users of social computing applications undergo. Social identity and social capital theories are highlighted, with Taylor arguing they are the most promising in terms of explanatory power. Thomas Mandl’s chapter investigates the role of culture in the design and use of social media, noting that there is no one culture and seeking to pinpoint the main differences in the perception of social media as influenced by the culture of peoples in various countries.

Most organizations today recognize the business benefits of applications such as LinkedIn and Twitter, starting to integrate Web 2.0 and social media applications into everyday corporate practices. The second section of the book, which addresses organizational perspectives, begins with Williams and Poernomo from King’s College, London, who identify the challenges of the institutionalization process of social computing technologies. Have organizations the choice to opt-out? Maybe not, but in any case the authors correctly point out that as in any business decision one must first elicit the precise social behavioral models in which he is trying to improve or replicate and some measure to gauge those improvements. Chaka Chaka’s chapter which follows may indeed be used as a strong argument in favor of a go-for-it decision simply because the benefits of exploring the relationship economy inherent in enterprise social networking can far outweigh any costs. Anyone who ever built an information system in an organizational setting knows that the system’s value must be made clear to its users. No perceived value means rapid disillusionment, as users would ignore the system, stick with the old informal way of doing things, and even sabotage it. Why cannot users get what they want? What if you let the user be the designer himself? Through the description of two cases studies on knowledge and intellectual capital management systems for teaching and learning, Jean Eric Pelet’s contribution explores the effectiveness of user-generated content technology to support knowledge creation and sharing in an academic and business setting. In doing so he helps us to understand user practices that can be leveraged to enhance the use of information systems in organizations. The final chapter in this section by Sanchez and Valdiviezo discusses the implications of social computing on organizations and productivity in particular, showing how applications such as social networks, collaborative tagging and multi-user immersive environments in general can become platforms for enhancing productivity. Is it now, perhaps, the right time to start revisiting the old IT-Productivity Paradox?

The four chapters comprising the third section of the book place the emphasis on the technology itself. Recently, we do encounter all too often the notion of a semantic web as an evolving development towards a stage where machines will be able to process the wealth of information by understanding its meaning and reference. The first chapter by Toma, Caverlee, Ding, Jacob, Yan and Milojevic explores the relation between social networks and semantics, identifying and assessing the synergies between them. Before a truly world-wide semantic web and networks are possible, researcher must confront the ambivalence that language brings into any attempt in defining meaning. To the interested reader, this chapter serves as an appetizer for issues such as these. Everything has (or has not) a value so Christopher Douce from the Open University, UK, seeks to frame the evaluation aspect of software and in particular social software. This is a big field not only for social media but for the more traditional types and forms
of information systems and software. The next chapter by Avola, Del Buono and Spongardi address human-computer interaction arguing that the approaches that inform the design of traditional systems do not address adequately the requirements imposed by applications build around social media. Their solution lies on multi-modal frameworks, and they explore the ways in which these can be applied. The contribution by Koumaras, Farnado, Liberal, Sun, Koumaras, Troulos and Kourtis close this section with the identification of the possibilities emanating from the convergence of the multi-modal social networking environment with mobile/fixed networks. They then continue to present an architecture of an environment for the provision of services, adaptable enough to allow for the optimization of Quality of Experience (QoE) level according to user preferences and favorites.

Social media and marketing seems like a marriage made in heaven. The last three chapters in the book deal with a number of issues and particularly how these technologies can be used to drive competition, bring business benefit and even shape whole industries. Jason G. Caudill examines the histories of marketing and social computing and analyzes how the two fields are linked and have come together to revolutionize on-line marketing today. Kaplan and Haenlein, both professors of marketing at ESCP Europe, are targeting the IT industry by examining how the key players in the field such as Dell, IBM and Microsoft utilize virtual social worlds. They conclude, in their own words that “… they have the potential to be of similar importance as the Internet is today.” Viral marketing is a term used to refer to techniques used to achieve increases in product sales through self-replicating processes much like the way pathological viruses develop. Social networks lend themselves physically to such techniques and the study by Jayasekera and Papadopoulos ascertains that companies which were active in social networking sites developed a positive effect on attitudes towards them, but little or no effect on the actual customer behavior patterns.

In the foregoing paragraphs we have offered a base outline of the wealth of contributions that make up this book. However, it is the chapters themselves that matter and by going through them the reader will most likely start to acquire a social computing view of reality—perhaps not the most fitting choice of words—to describe what the goal of this book is. It is a worthy, candidate, however, considering the chameleontic nature of social computing itself.

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