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## Presentation

# ICT Users: The New Innovation Driver

*Alfons Cornella-Solans, Teresa Turiera-Puigbò, and Mads Thimmer*

Innovation drives ideas x value = results.

The crisis that the international financial system is currently immersed in, and the impact that it is already having on the global economy, is giving rise to an equation in which innovation is one of the fundamental factors. There are now hundreds of sectors of the economy that need to reinvent themselves: reinvent their business models, their products and services, their operational procedures, their internal management, and even the way in which they have been innovating up until now. In other words, they also need to innovate innovation management.

Another vital factor in this equation is Information and Communication Technologies (ICT), thanks to which enterprises have been able to lower the cost of processes (accessing knowledge, exchanging knowledge, accessing new and distant markets, hybridizing services, innovating, etc.).

For this reason, at a time of crisis perceived by many sectors, tools that allow us to "do more with less" (that is, access a wide range opportunities to innovate at a very low cost or, in many cases, at practically zero cost) are going to be of vital importance. The massive use of the Internet and 2.0 tools that has made the exchange of information on a global scale by millions of users so much easier, has opened up innumerable possibilities that many enterprises are already taking advantage of, for their own benefit and for the benefit of the community at large.

For this reason we thought that the topic was important enough to merit a monograph focused on users as a source of innovation as a result of the increasingly more complex use they make of ICT. The economic system we will be living in for the coming decades will no longer have a vertical organization, one in which companies sell products or services and the customers simply buy them. Now it is the customers, the users, the citizens, in short the people, who, as a closely interconnected group thanks to ICT, will decide what products or services they wish to buy, in what context, under what terms and conditions, and even at what price. All of this will involve a great many changes in the very structure and management of organizations, and in their processes for strategy setting, planning, operations and marketing.

We have to innovate how we manage talent and create knowledge networks both inside and beyond our own enterprises, and how the sum of knowledge (that may be spread over remote areas of the planet, but is now readily accessi-

### The Guests Editors

**Alfons Cornella-Solans** is the founder and president of Infonomia. He is a graduate in Physics, and he holds a Master of Science in Information Resources Management and a Diploma in Executive Business Management. Alfons has published 16 books on science, technology and innovation, as well as hundreds of articles on how technologies can transform enterprises. His latest two books are entitled "*Futuro Presente: 101 ideas fuerza para entender las próximas décadas*" (Future Present: 101 power ideas to understand the coming decades), and "*La Alquimia de la Innovación*" (The Alchemy of Innovation) which he co-wrote with Antonio Flores. <ac@infonomia.com>.

**Teresa Turiera-Puigbò** is responsible for content at Infonomia and editor of the innovation journal "If...". She is a graduate of Political Science and Information Science (*Universidad Autónoma de Barcelona*) and holds a Master in International Relations (Columbia University, New York). She has been Head of Programmes of Catalunya Radio, producer of programmes and news broadcasts, and has worked as a correspondent in Madrid and Brussels. She was responsible for the content of the Web page of the Spanish Presidency of the European Union (2002). She has been awarded a Fulbright scholarship (1998) and the Salvador de Madariaga prize for European journalism (1997). <tereturi@infonomia.com>.

**Mads Thimmer** is Co-Founder of Innovation Lab, an International Non-Profit Knowledge center for New Technology based in Denmark. Mads is a thought-leader within the area of the innovative use of new technology within business, society and everyday life. He is consultant in high demand and a speaker at international conferences around the world. He has tried his hand at translating Virginia Woolf to Danish and developing computer games for Games Workshop. Mads is Literary historian from Aarhus University and has studied at University of Cambridge. <mads@ilab.dk>.

**Infonomia** is a leading supplier of tailor-made innovation services and contents, for a large number of public and private organizations in different sectors: from consultancy and knowledge capture, to courses, workshops and in-company projects. Based in Barcelona (Spain), it is also the main provider of contents on innovation, change and competitive growth in Spanish language. The company edits, produces and distributes knowledge in multiple formats, through multiple media: printed magazines, websites, books, multimedia & TV channels, biweekly newsletters to a network of 20.000 subscribers. <http://www.infonomia.com/>.

ble thanks to the Internet) will be the key to taking the next step forward and to avoid stagnating in a fast and complex world.

In the first article of this monograph, "*Is the Online Volunteer the New Capitalism?*", Antonella Broglia uses specific examples to explain how thousands of volunteers join forces every day to collaborate on complex projects being developed by a digital network, thereby creating a new model for production and business that may become the basis for the capitalism of the future.

In "*The IT Role in Innovation*" Esteve Almirall shows us the new ways used by many companies to generate innovation, by opening up channels of participation to experts and users and even remunerating these contributions, as a vital source of ideas in their cycle of invention and improvement of their products and services.

In his article "*From the Physical U-Biquity of Networks to the Virtual I-Biquity of Information Provided by the Users Themselves*", Alfons Cornella-Solans puts himself in the shoes of the man in the street and also uses practical examples to call for the need to innovate in terms of receiving the right type of timely information that will help make our lives easier in a message saturated society.

Oscar Rived presents us with "*Five Practical Cases of Content Generated by the Consumer, for the Consumer*". In this case the author looks at five experiences of environments in which the contribution of the customer-users benefits other users and the supplier. The examples are taken from the worlds of Business to Consumer (B2C), Business to Business (B2B), freelance individuals, the public sector, and major companies.

One of the sectors that is most changing how it uses ICT is the healthcare sector, a traditionally vertical environment in which the enterprise-user (or healthcare provider -patient) relationship used to be totally one-way. This prompted us to include this article by Jorge Juan Fernández-García, "*The New ICT Driven Doctor-Patient Relationship*", in which the author explains how the use of ICT by healthcare system users is changing the relationship between the various players and even the design and implementation of new services.

Traditional industry is not excluded from this trend. However remote the process we are concerned with is from the end user, in today's economy it will be increasingly more important for a product's end consumers to be involved in the definition and design of that product. Many Japanese companies have taken this message on board and are applying the principles of *Kansei Engineering*, as Adrián-Alejandro Castro-Busto describes in his article "*The Importance of Users as a Source of Information When Designing Interfaces*".

From the Innovation Lab in Denmark, a country that has declared "user experience" to be a national expertise, Mads Thimmer contributes the article "*Inno-this and Inno-that*" on the essence of innovation, based on maximum consumer involvement in the design of new products.

The authors of the article "*When Products Communi-*

*cate*" are also from this prestigious Aarhus based think-tank. The article deals with the largest user-generated innovation project ever undertaken in Scandinavia, in the food sector to be more precise.

Finally we thought it would be interesting to include some reflections in the form of interviews with three experts from widely disparate geographic origins and fields of study, but who all agree in the growing importance of users in the economic system in which we will be living in the years to come.

The philosopher, engineer and professor of the Tama University (Tokyo), Hiroshi Tasaka, explains how collective wisdom will be a major asset in our future economy, since he believes that, in the present day knowledge society, knowledge per se has ceased to be of value.

Nicolas Nova, a researcher from the Media and Design Lab of the Swiss Institute of Technology, Lausanne, explains how urban computing is able to gather valuable information about the daily life of users in a major city that can then be used to design more appropriate transport, mobility, and urban services strategies.

And Ed Parsons, responsible for the geographic content of Google Earth and Google Maps, highlights the growing role played by users in the provision and updating of content for GIS (Geographic Information Systems), which are ever more essential in our daily life.

We hope that these articles will help readers gain a clearer idea of to what extent the active use of ICT by users is radically changing previous business models, and of the approach that we ourselves can adopt, whether as managers of a company or organization or as individual users.

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