

# Recent Trends in Innovation and Business Models in the New Digital Economy

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## ABSTRACT

In this paper, we present a model that shows how the new innovation environment defined by co-creation experiments within a value chain and supported by e-networks connecting suppliers, partners and customers at world level is changing business models. Due to the ongoing convergence of products, industries and technologies at world level, innovation capacity is rapidly improving. To succeed in this new environment for innovation, multinationals will have to rely on an “ecosystem” (M.Iansiti and R.Levien, 2004) made of external competencies and bear on all participants in the value chain from customers to suppliers, partners and universities R&D departments.

## CONVERGENCE OF PRODUCTS, TECHNOLOGIES AND INDUSTRIES AS THE SOURCE OF NEW WAYS FOR GENERATING INNOVATION

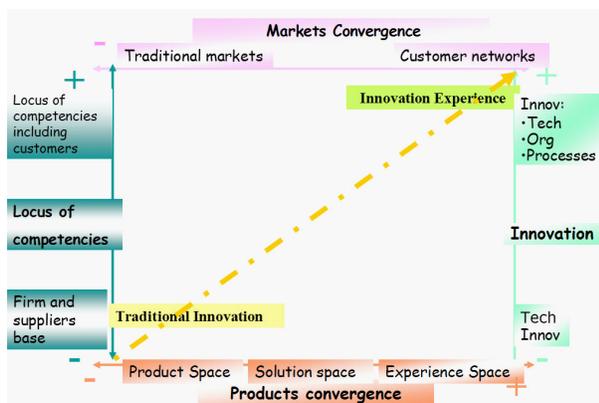
The convergence of technologies, industries and markets is transforming the process and even the meaning of innovation (Prahalad and Romaswamy, 2003). The digital era is remodelling the industries boundaries and even the frontiers of products and services. Before the Internet revolution, education, communication and leisure markets for example, used to be linked to very specific industries such as electronic (including TV, audio and video products), computer (PCs, laptops and video consoles), communication devices (phones, pagers), software, movies and music industries (Prahalad and Romaswamy, 2003). Each industry had well defined competitors. A computer was different from a mobile phone, and a mobile phone was different from a music player. As the digital economy unfolds, the frontiers between computers, mobile devices, video cameras, and music players tend to disappear. A mobile phone is no more a mobile communication tool, but is used as an Internet access and music download device.

New technologies and the ability to bundle services on competing infrastructures, are driving this convergence and transforming many industries. The digital technology is eroding the traditional space of products and reshaping the solution space into an experience space including new ways of creating value and generating innovation. The product space is defined by the traditional way of innovating and producing goods and services (technological features generated by the firm and its base of suppliers) whereas the solution space is characterized by the recent trend of bundling sets of interconnected products and services to customers. On the other hand, networks effects and customers’ communities form the new emerging experience space. Moreover, innovation includes changes not only in the products technology or features, but also encompasses changes in processes, organizations or business models. Furthermore, disrupting factors in any competitive landscape, due to deregulation, opening of borders and new customers’ behaviour or new commercial channels, naturally lead to the new experience space involving more and more stakeholders. The model depicted in diagram 1 illustrates these new trends.

## THE NEED OF FLEXIBILITY, MASS CUSTOMISATION AND RESPONSIVENESS

Companies are currently facing the strategic challenge of improving their customer relationship management as on-line technology makes it possible to customize products and also makes both individual and business customers much more informed than they were not so long ago about prices, quality and other dimensions of goods and services. As a consequence, to survive, businesses can no longer keep the customers outside their core innovation process. Thus, customer retention and strategic competitiveness required redefining business models based on a close relationship with the customers to make them active partners within the innovation and marketing process.

Diagram 1. New trends in market innovation: main components

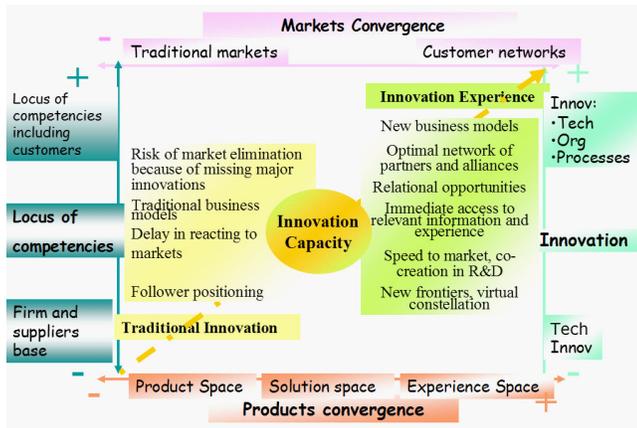


## THE CO-CREATION OF VALUE

Information-based economy has encouraged the trend of co-competition between all the industries. Competitors work in a network of shared resources and competencies for a better performance. Information networks are including competitors, who behave as co-operators in a co-production and co-innovation process (B. Chakravorti, 2004 and C.K Prahalad and V. Ramaswamy, 2003).

As markets are more and more global, co-creation of value through customized experiences is becoming the new opportunity space. Firms will rely on a locus of competencies including partners and customers, far beyond internal and suppliers’ frontiers base. The innovation process is no more the strategic competency of large companies, but tends to be developed by e-value added chains including small to medium suppliers. As there are less and less geographic constraints, new relations of alliances of all sorts are shaping complex co-production constellations of actors. The co-creation and the expansion of sharing information and experience among the value constellation drive financial

Diagram 2. The new dynamics of market innovation



technological synergies and help to generate more and better innovative initiatives.

As shown in the model of diagram2, the space experience creates the required new environment for exchange, closeness and interaction within a network. This experience space will maximize the capability of innovation of interconnected companies as they benefit from a faster access to strategic information, a faster innovation process due to the network cooperation and a faster speed to market. In addition, the organization of markets as networks will also facilitate implementation of an innovation introduced by small but often imaginative players.

The globalization of value chains is no more based only on the traditional competitive advantages of countries and firms. "Integrated chains of innovation" (J.Santos, Y.Doiz and P.Williamson, 2004) encompass high added value activities like marketing intelligence and R&D. Companies adopting this new business model succeed in implementing innovation processes beyond regional perspectives and national boundaries, creating a "metanational" opportunity of innovation.

**REFERENCES**

Chakravorti, B. "The new rules for bringing innovations to market", *Harvard Business Review*, 2004.  
 Iansiti, M. and R. Levien. 2004. "Strategy as ecology". *Harvard Business Review* (March): 68-78.  
 Prahalad C.K .and V. Ramaswamy, "The New Frontier of Experience Innovation", *MIT Sloan Management Review*, Summer 2003.  
 Santos J., Y.Doiz and P.Williamson, "Is your Innovation Process Global", *MIT Sloan Management Review*, Summer 2004.

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