Chapter 82
Web-Based Services and Future Business Models

Valentina Ndou  
University of Salento, Italy

Pasquale Del Vecchio  
University of Salento, Italy

Giuseppina Passiante  
University of Salento, Italy

Laura Schina  
University of Salento, Italy

ABSTRACT

A paradigm shift is taking place today that provides a compelling value proposition for organizations and requires the adoption of new business models for the management of their core activities in a competitive way. The new emerging business models are related with open innovation, cloud computing approach, as well as social networking, which creates opportunities for firms to harvest the resources and knowledge that could be found outside the firm’s boundaries. However, in order for firms to grasp most of the emerging technologies, they should reconfigure their activities to tackle the challenge and opportunity presented by new innovations and technology trends. In this chapter, the authors demonstrate the changes that these new trends are witnessing for the business models of firms from a provider and user perspective.

1. INTRODUCTION

The emergence of the Internet as a platform has created new opportunities as well as challenges for firm’s management. A paradigm shift is taking place where Internet is being used as a “Web infrastructure to deal with the Internet data storage, scalability, and computation” (Kambil, 2009). This new paradigm shift provides a compelling value preposition for organizations and requires the adoption of new business models for the management of their core activities in a competitive way.

In particular, the new emerging business models are related with open innovation model, cloud computing approach, as well as social networking. Through these new emerging approaches and technologies firms are able to outsource some high cost activities as well as to create competitive networking links and ties that enable them to find the right set of capabilities and competences required for managing technology, innovation and product development in a cost efficient way.

These opportunities are considered to be highly relevant for the competitiveness of businesses as...
well, being that the new emerging technologies help them to address some of the barriers and impediments they encounter. In this paper we aim to demonstrate the changes that these new trends are witnessing for the business models of firms, how they are reconfiguring their activities in order to grasp the most of the opportunities offered by the emerging technologies.

We start by providing the main literature review related to the new emerging technologies and business models. Therefore, we focus on delineating the components of the business models of providers and users of the new technologies.

2. LITERATURE REVIEW

2.1. Web-Based Technologies

The Internet technology, as an open, cost effective and ubiquitous network (Afuah, 2003), is one of the most characterising features of current socioeconomic scenario. It offers different mechanisms to facilitate innovation process by harvesting the knowledge and talents that could be found outside firm’s boundaries, enlarging, so, the physical boundaries of the organizations and reconfiguring their structures and strategies.

Consequently, firms are changing radically their business models and configuration in order to tackle the challenge and opportunity presented by new innovations and technology trends. In particular, Open Innovation, Cloud Computing, Web 2.0, and social networks give companies enormous opportunities to open up their boundaries and to experience different forms of relationships and networking with suppliers, competitors, customers, research institutes and universities, government labs etc, aimed to enhance value and achieve a sustainable competitive advantage.

Different companies have seized the opportunities offered by technology, in particular Internet and Web 2.0 technologies, by creating specific virtual places/environments to tap into external knowledge. The number of firms that use Web 2.0 technologies is growing, underlying the importance of these tools in order to support patterns of innovation oriented to the collaboration.

Web 2.0 technologies are considered the main factor enabling the creation of new patterns of interaction and enhancing collaborative innovation paths on the Web. The collaborative dimensions of the Web 2.0 is the establishment of a new organizational phenomenon in which the competitiveness is defined as the resulting process of knowledge sharing among users; in other words, a proposed solution to deal with complexity, characterizing typically the communication of ideas and the process of value creation (Tapscott, 2006).

As described by O’Reilly and Battelle (2007), in the opening of the first Web 2.0 Conference, the main key principles characterizing these new generation of Web applications are:

- The Web as a platform, delivering applications directly through a browser.
- Data as the driving force, users can continuously monitor and control data.
- Network effects created by an architecture of participation.
- Innovation in assembly of systems and sites composed by pulling together features from distributed, independent developers (a kind of “open source” development).
- Lightweight business models enabled by content and service syndication.
- The end of the software-adoption cycle.
- Software above the level of a single device, leveraging the power of the “long tail.”
- Ease of picking-up by early adopters.

The most diffused Web 2.0 technologies are represented by the Blog or Weblog, the Wiki, and Blicki (a new hybrid form that combines the cross-referencing and open edit-ability of the Wiki with the simpler blog format), RSS (Really Simple Syndication), and XML (Extensible Markup Language) (Edington, et al., 2005).