Typologies of Innovation in the Financial Services Sector: Limits and Implications

ION - DAN MICUDĂ
Marketing and Management in Economic Affaires Faculty
“Constantin Brâncoveanu “University
Calea Bascovului 2A, Piteşti
ROMANIA
dan.micuda@gmail.com

Abstract: - The management of innovation since the early 90s is more and more present in the business discourse, whatever the field of activity. However, the academic literature is often limited to technological innovations carried out in the industry and leaves the service sector which is a major source of innovative capacity. By nature, services are very heterogeneous and therefore they can’t be study as a whole ensemble. The present research focuses on the case of retail banking because, despite the growing appetite of banks for innovation, the academic literature in strategic management pays little attention to this sector (Jansen, 2005). This paper aims to review different typologies of innovation and their application to the retail banking sector, thus leading to a clarification of the concept and its implications for these companies. It also tries to capture the specificities of innovation in the banking sector and discuss future avenues of research.

Key-Words: – Innovation Needs, Services Industry, Banking, Changing Environment

1 Introduction

The Romanian banking sector has undergone profound changes in the last 20 years, in the post-revolution period and especially in the last two years in the context of the current economic and financial crisis that affected the local banks and also the Romanian banking market as a whole. After the accession in the European Union and the liberalization of the current account we have seen a significant enhancement of competitive intensity. In this difficult environment, banks must find solutions to remain competitive; either by reducing their costs or by trying to differentiate themselves from their competitors and therefore innovation becomes a strategic necessity.

The innovation process makes it possible to launch new products on the market that can provide a bank with a competitive advantage relative to its competitors (even if it’s only temporary). The often upstream integration of new technologies also permitted banks to reduce operating costs in the last years.

However, despite the growing number of innovations introduced in the banking sector, the literature rarely focuses on this sector. More generally, the services remain the "poor relative" of innovation management literature (Gallouj et all. 1996; Dumont, 2001 1). The majority of research in innovation management is more interested in technological innovations, particularly those developed in the biotechnology, semiconductor, etc fields. (Baum, Calabrese et Silverman, 2000 ; Gilsing et Nooteboom, 2005 ; Roijakkers, Hagedoorn et Van Kranenburg, 2005). However, the results of these investigations are difficult to transfer to the services setting (Sundbo, 1997). For example, the main criteria for measuring technologic innovation, such as the number of patents or research and development budgets, do not appear to be valid measures in services. Similarly, innovation in services is often less tangible, more human-related than technological and relational (De Jong and Vermeulen, 2003). Finally, within services, there may be specific forms of innovation (often called "tailored" that exist in many sectors of business to business services, but not necessarily apply to retail banking), which encourage researchers to focus on the study of a single sector: insurance (Gallouj and Gallouj 1997), hospitals (Djellal and Gallouj 2005), consulting (Gallouj and Gallouj, 1996), etc. The few researchers who were interested in banking innovations have either focused solely on the development of new products (De Jong and Vermeulen, 2003), either they concluded that banks could not innovate more besides the integration of new technologies (Karmarkar, 2000).

The mechanisms of innovation are complex and extensive literature seeks to explore the subject. The services companies’ management is also a complex topic and equally abundant literature was devoted to it. But the intersection of these two issues, innovation and services, forms a narrow niche were little research was done (Dumont, 2001, p.14, Ding, Verma and Iqbal, 2007). Therefore a framework for identifying all the innovations in banking is lacking.

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Innovation is the creation of new value, customer-oriented but can also involve other stakeholders such as the organization itself (Flipo, 2001). Innovation can take various forms: (Djellal et Gallouj, 2001; Avlonitis, Papastathopoulou et Gounaris, 2001) : the service concept, the process (computer system or work process), organization (hierarchy, structure, etc.) and type of external relationship (new interface types, implementation of a mediator, etc.) We can talk about innovation when it comes to actions having the deliberate aim of profiting from the changes made (De Jong and Vermeulen, 2003). Based on this definition, this article aims to better understand what is meant by innovation in the banking sector, show that there are several categories of innovation in retail banking

2 Constant changes in the financial services sector and the need for innovation

After explaining why innovation is an issue which particularly concerns the banks over the past years, presenting an overview of the literature on innovation in the banking sector is a normal research approach. This reveals two limitations: (a) focusing research on development of new products (innovations visible to customers) and (b) technological progress as the only source of innovation.

Over the past twenty years, the Romanian banking sector has undergone profound changes which forced banks to evolve from both a structural and policy perspective, leading them to seek to develop their innovation practices.

At the regulatory level, global deregulation and the accession in the EU have put an end to a period during which Romanian banks have been somewhat "protected". Especially the 2007 accession to the EU started a major change in the competitive landscape by changing the positions of traditional banks and facilitating the arrival of new entrants in the banking market. Competition has thus increased greatly, and especially since the market for banking services described as critical (checking accounts, credit cards ...) will reached saturation this competition will continue to increase. Along with this increased competition, banks are facing greater demand from their clients, including transparency of billing and investment returns. Better educated, they want to optimize their financial resources and do not hesitate to seize their consumer advantages in case of disputes.

Finally, technological, advances in IT have revolutionized the operation of banks. They have to cope with new types of competitors (the "virtual" banks, which have very limited physical infrastructure), leading them to seek solutions to reduce operating costs, they also benefited from the Internet opportunities: to communicate differently with their customers and to offer new services. The costs of integrating these new technologies are particularly high and the banks had to make tradeoffs in allocating both financial and human resources.

All of these regulatory changes, sociological and technological resulted eventually in a renewed conception of the banking profession and changing management practices. The banks had to think about how to create a sustainable competitive advantage. Two generic strategies are now used in a complementary way: the cost leadership and differentiation. Cost reduction is primarily concerned with "production" of the service or what is called the "back office. Thanks to computers, banks seek more and more to reduce the costs of current operations. Differentiation addresses several aspects. Thus, despite numerous regulatory hurdles facing the banks (including supervision by regulators, which severely limits the possibilities of creating new products), they regularly try to launch new offerings.

Then, as they can not play on the price issue (there are few references to money in commercial messages, the impact of this factor being somewhat important), or rates offered (very similar from one bank to another), they try to find other ways of differentiation, through the offering of a better quality of service, customization to suit the customer, implementation of new distribution channels (ex. Internet) that allow for greater customer intimacy or improved service availability and speed of transactions.

We can see here, implicitly, what are the challenges of innovation: whether to reduce their costs or to differentiate themselves, banks must innovate to remain competitive in the market (Reidenbach and Moak, 1986; Drew 1994, Storey and Easingwood, 1993). Available statistics illustrate this need. Gellatly and Peters (1999) note that financial services (comprising banking) innovate strongly, with a rate of introduction of new products or processes higher than those found in industrial enterprises (nearly 62% against 42% for chemistry or 54% for the oil industry). Similarly, the survey by Abi Saab and Gallouj (2003), finds that nearly 60% of banks claim to be engaged in innovative activities (36% permanently and 23% occasionally).

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However, despite the challenge and the reality of these practices, little research has been made about the topic of banking innovation (Reidenbach and MoaK, 1986, De Jong and Vermeulen, 2003; Athanassopoulou and Johnes, 2004; Menor and Roth, 2006). In addition, the latter, take a fragmented view of innovation and focus either on developing new services, either on the impact of technological change on business operations.

3 Limitations of current research regarding innovation in the services sector

Early research on innovation in banking has raised the question of whether or not such practices of innovation exist and their strategic impact. According to Reidenbach and MoaK (1986) and Reidenbach and Gruber (1987), banks do not always consider innovation as a mean of development. However, those who implement programs and encourage the development of new products are more successful than others and disregarding their size. Näslund (1986), in his comparison between financial innovations and those from traditional industry shows that banks innovate but these innovations are easier to imitate than in the industry setting(because they are easier to implement). A bank that does innovative is able to make use of her lead position in the market for a very short time since its competitors will quickly copy the new product, which can not be patented.

These initial researches, are only interested in NSD (New Services Development), meaning the development of new services (Sundbo, 1997). The additional research (eg, De Jong and Vermeulen, 2003; Athanassopoulou and Johnes, 2004; Menor and Roth, 2006) also ignore other types of innovation, such as those that may affect the service delivery process. However, technological progress has affected many facets of the operation of the bank, especially the back office. For example, the automation of many administrative tasks has enabled officers to spend more time with customers and evolve toward a more commercial and consulting missions. The banking business is also often regarded as one of the most vulnerable to computer mutations (Cooper and De Brentani, 1991).

It is on this influence of technological and computer that Barras (1986 and 1990) has constructed a theory of diffusion of technological innovation in services.

The adoption by a bank of new computer equipment causes in fact a succession of innovations that takes place in three stages (Fig. 1).

Learning the new software causes first incremental process innovations, designed to improve the efficiency of services (in the case of automating the back office of banks by the introduction of mainframe computers);

In a second stage, there is an improvement in service quality through more radical process innovations (automated teller machine which can cut costs and improve quality of service); Finally, at the third stage, product innovations may emerge (home banking).

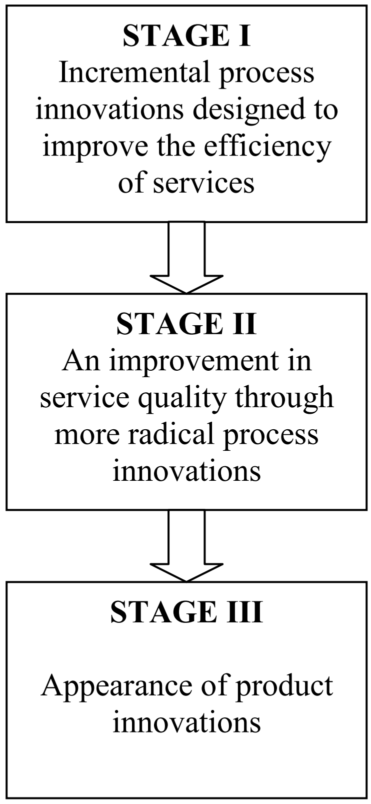

Fig. 1: A possible diffusion process of technological innovation in a service firm (Barras)

For Barras, innovation does not exist outside of technological possibilities. In line with its work, several authors have looked at the role of technology in the banking practices of innovation (Karmarkar, 2000; Ding, Verma and Iqbal, 2007). Ding et al. (2007) focused on the development of self-service activities (consultation of account balances, account statements printing, etc..) and consider that technology is an essential skill to master for all banks. However, if the impact of technology on innovation practices in banking is undeniable, it seems that the banks can develop innovations beyond technology (Gadrey, Gallouj and Weinstein, 1995; Sundbo, 1997; Djellal and Gallouj 2001; Flipo, 2001; Kandampully, 2002; Abi Saab and

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Gallouj, 2003). The technology is, in fact, just one component of the supply system. Other factors may be the cause of innovation: deregulation allowing the introduction of new services previously prohibited, changing in consumers behaviors producing new requirements, the increasing competitive intensity pushing banks to differentiate themselves and to develop the skills of their human resources (Gallouj and Gallouj, 1997). In addition, the banking innovations are not always very tangible. It is the case of qualified social innovations (Warrant, 2001) which relate to the behavior of individuals (the new roles you can assign bank employees, for example). But the human dimension is often forgotten by the researchers. Finally, Barras model indicates implicitly that banks tend to have reactive behaviors in relation to innovation. They seem content to adopt innovations developed by the industry. Like Gallouj (2002), this seems to be a simplistic view of reality. In sum, neither approaches focused on IT nor those based on the impact of technology appear to consider the heterogeneous set of innovations in banking sector.

Few authors have attempted to draw a typology of innovations in banking. In addition, existing research rather belongs to the current NSD area already mentioned and is thus incomplete. Thus Karmarkar (2000) focuses only on services associated with new information technology and communication (Internet, telephone, kiosks, etc..) and proposes a typology with two axes: the access mode service (centralized: the client must move, or decentralized: the client access to the service without movement) and the cost of technology access (from weak to strong).

Most of the literature on innovation in services is constructed unidimensionally:

• the element affected by the innovation (product, process or organization) Djellal and Gallouj 2001; Hamdouch and Samuelides, 2001)

• The degree of novelty of innovation, which can also be discussed along with the risk level of innovation (incremental innovation, radical or total for Arnaud, 1987 and Dumont, 2001)

• The method of production of innovation (with the participation or not of the client; Sundbo and Gallouj, 1998).

These criteria, although relevant, are used too isolated and did not seem to be able to fully understand the variety of innovations in banking. The combined use of two criteria would probably refine existing typologies. There are a few classifications apparently built on several criteria, but they are not always really clarified (Gallouj and Gallouj 1997; de Vries, 2006). Therefore, none of the existing typologies seems sufficiently effective to correctly identify different types of innovation that could appear in banking.

4 Conclusion

The analysis of innovation practice in banking services brings out three major issues.

First, banks do not innovate only incrementally. They tend to have leaps in innovation and bring out new products or improve processes on a whole basis.

Secondly, whereas the literature has often focused on technology as the only source of innovation (Ding, Verma and Iqbal, 2007), these sources can be quite numerous: reduced regulation, new customer needs and competitors' innovations.

Third, innovation in the banking sector often takes the form of process innovation which, unlike many product innovations (patenting is difficult in the banking sector and thus the innovations are easily copied), are indeed difficult (or no) visible to customers (and competitors), but helps instead the banks in obtaining a sustainable competitive advantage.

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