

# Conceptualization of new model of factors affecting on learning process of NSD in Iranian Banks

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## Abstract

In times of intensive competition, reducing development cycles of new products, and more demanding customer expectations, organization are in increasing need of new approaches to service design and delivery. As a result, NSD has not only become an important competitive factor in many industries, but also has raised the interest of researchers in the fields of service innovation, and innovation management. Learning process has a critical role for optimizing NSD process in service organizations. Recent research suggests that organizational learning can contribute greatly to the success of new service development process. In this paper new conceptual model of learning process for New Service Development process in Iranian Banks has been introduced. The qualitative data was gathered through interviews. The methodology is adapted from in-depth interviews with academic experts and managers of banking system until theoretical saturation state achieved. The gathered data was analyzed using axial and open coding methods. The results show that the learning process of new service development in Iranian banking system involves seven axial factors consist of Individual, Technology, Organization, Institutions, external Environment, internal factors plus a new factor that is Training methods. By applying the above mentioned factors the banks can either facilitate learning NSD process among their employees, departments and whole organization to continue innovation and creativity in bank services, or can deliver customer oriented services to their customers. The research results are applicable for all banking systems in the world.

**Keywords:** New Service Development, Learning Process, banking system

**Paper Type:** Research Paper

## **Introduction**

Throughout the two last decades, because of the deregulation and making worldwide of markets, as well as the internationalization of service organizations, there has been a harsh competition among service companies. These tendency place new service development at the core activity of the organization's competitiveness, as continuous adjustment in an agitated environment requires a constant stream of new offers. Therefore, many researches has induced that new service development (NSD) is a major competitive factor for the service organizations (Johnson et al., 2000; Fitzsimmons and Fitzsimmons, 2001).

Todays, banks more than ever need to adapt their products and services to meet customers' needs. This adaptation requires flexibility, efficiency and more innovation in offering new services. A recent survey conducted on the banking system (Robert & Amit, 2003) has shown, those banks that pay attention to learning ability, continuous development and innovation in their services, are more profitable than competitors. Because services innovation and development of them have become vital factors to grasp an important share of the market, then the learning process of NSD to meet customers' need must be learnt by the employees and middle managers of the banks continuously (Menor et al., 2002). In fact, in several studies, researchers have attempted to identify factors contributing to the success or failure of the new financial services (Barras, 1990; Brentani, 1993; Cooper et al., 1994; Easingwood and Storey, 1995; Edgett, 1996; Edgett and Parkinson, 1994; Lopez and Roberts, 2002; Easingwood and Storey, 1999), but there have been done low activity in the internal management of NSD (VON Raesfeld Meijer et al., 1996; Hart and Service, 1993) and related to this, new done researches stressed on necessity of efficient concentration on importance of learning process during developing new services. Between learning, efficiency of new service projects and banks performance there is a positive relation, so it was emphasized that the managers must pay a particular attention to learning in the organizations (Lievens and Moenaert, 2000b; Stevens and Dimitriadis, 2002, 2004).

## **Literature Review:**

### **New service development**

Statistical reports reveals, innovation as a critical key to obtain competitive advantage in national level of Iran, is in an improper situation. Based on GCI reports on 2013, the share of services, agriculture, production industries, and non-production industries from GNP, in sequence are 45%, 10%, 11%, and 34%. In addition, in this report innovation index is 65 and innovation potential is 59. Although. Service innovation share in service organizations is at a high level, but it is not in a proper situation (GCI, 2013). In Iran, banking system is one of the most important segment among service organization, so paying attention to innovation development in this section to obtain competitive advantage is essential. On the other hand, because NSD is a new subject, learning NSD process in banking section is more evident. Earlier research in NSD concentrated upon the concept of New Product Development (NPD) rather than the NSD (Dolfsma, 2004). Based on Johnne and Storey (1998), NPD causes radical innovation in characteristic of services and products. Anyway, NSD cannot be the same as the development of a physical product (Kelly & Storey, 2000), and it could get more extensive and

complex because of its being involved with developing new service offers (John and Storey, 1998). Cadwallader et al. (2010) said that the prosperity of NSD is explained by the means which refer to the NSD process itself, for example by measuring its period of time or cost, and also the prosperity of the developed and implemented service, expressed through financial or market factors. At the same time, because the service sectors in developed countries have the highest growth in GDP and employment, the importance of service sectors is increasing notably. In addition, bank's inclination toward offering new services to customers has changed new service development (NSD) management to one of the main subjects of businesses (Johnson et al., 2000; Menor et al., 2002). In any event, NSD remains among the lowest in important studied and understood subjects in the service management literature in spite of the existence of many research and models on product development, particularly in recent years (Menor et al., 2002). Due to that, taking into account the significance of NSD process in fast altering environment, it seems crucial for much more in-depth research to be done in the subject. As a matter of fact, new service development counted on assign tasks that are hard to understand or explain and predict a change in customer needs (Matthing et al., 2004). In accord with Johnson et al. (2000), new service development is the process of offering a new service not before available to customer, and results from the addition of services, fundamental changes in the offering delivery process, or incremental improvements to existing offering package or delivery processes that customers perceive as being new. In accord with Cooper and Edgett (1996), the failure ratio in banking sectors and businesses that trying to offer new service to their customers is approximately 50%. As a result, the high failure ratio, enormous expenses, and the customers' displeasure at not gaining adequate value, reveal the importance of identifying effective factors in NSD process of banking systems. Hard competition systems banking in Iran, changed development cycles of new services, and more needs and customer expectations, the banks are in constant need of new approaches to services. Alinvi & Barbi, (2007), believed that customers' expectations change constantly, and organizations particularly banks try to adjust their tasks and offerings to meet these changes to remain competitive and profitable. Although all the companies, especially the banks are aware of the importance of customer involvement, the results shows that there is potential for increasing customer involvement in NSD process. NSD has not only become an important competitive factor in many industries (Menor et al., 2002), but has also raised the interest of researchers in the fields of innovation, marketing and operations management (De Brentani, 1989, Thwaites , 1992, Cooper et al., 1994, John and Storey, 1998, Storey and Kelly, 2001, Menor and Roth, 2007). Meigounpoory et al. (2013), study the high prevalence of chronic diseases in Iran and the high expenses resulting from inadequate health services such as nutrition counseling. Results of this paper identified the effective factors in NSD process in nutrition counseling field for creating value and competitive advantage. Meigounpoory et al. (2013), present a new conceptual model of new service development process in Iranian governmental banks. This conceptual model is consist of four main stages that are includes of analysis & new concept development, design, pilot and launch, development stages. The creation and development of new services thorough NSD process has the great importance in banking sector and has the main role in meeting customer 'needs and improving quality in service design process.

### **Learning and its role in NSD**

Having achieved success in development of new services is not succeed through chance but it is the result of well- suited activities (de Brentani, 1993). Learning in banks must be motivated by an organizational model that not only promotes learning feasibility but somewhat support active learning behavior. As learning must help to cause success in a bank. In order to stay competitive it is an essential needed for banks to create a fast, graceful and border less organizational setting (Tucker et al., 1996). To make strong a bank's qualifications, financial service firms such as banks comforting an internal atmosphere that invigorate learning necessity support from top management (Lei, Slocum and Pitts, 1999; Drew, 1994; Bartlett and Ghoshal, 1998) and should engage in jointly run attempts (Drew, 1994; Bartlett and Ghoshal, 1998; McGill, Slocum and Lei, 1992). Furthermore, individuals and worker must be permitted to take part in making decisions (Drew, 1994; Bouwen and Fry, 1991) experts and professionals from distinctive works must be brought together in the project teams (Bouwen and Fry, 1991; McGill, Slocum and Lei, 1992).

Learning, because of its effect on a bank's capability to appeal old supposition of the market (Baker and Sinkula, 1999), is one of the most important resources for successful challenges in the worldwide markets. The importance of this expedient has been observed through the significance granted to knowledge in a bank environment conditioned by ever-growing globalization and economic unlikeness. The progression of learning in its different appearance of employees, project teams and organizational, has been known by many as of vital importance to our economic success (Sullivan, 2000). Senge (1994) gives reason that, as the global becomes more connected to each other and trade and business become more complicated and vigorous, works in banks and organizations must become more "meaningful".

### **Learning process during new service development in an organization**

Stevens and Dimitriads (2005) in their survey about the way of learning during developing and implementing new bank offering, show the way which learning take place when an organization wants to offer a new service. 1st step of NSD begins with identification of environmental changes. Interpretation of information from environment through data gathering, Interpretations of the environment from internal / external sources, inferences, testing process through informal exchanges, formal tests, and convergence in the interpretation frame will be done. Learning actions during this actions begins. In the 2nd step initials ideas emerge. Formulation of a strategic intent, Guiding visions and choice of vocabulary, clarifying the main threats and opportunities from the environment, competition as well as checking internal strengths and weaknesses occur and in this phase, the learning continues by creation of a broad frame of thinking, sharing of guiding vision, use of the vocabulary for extending interpretation frames, opening internal and external debates, facilitating formal and informal discussions on the general topic defined, checking the convergence of the interpretations, formulation of the first proposal/solutions to the problems. The 3rd step begins with Official birth of the development process that in which organization will be created to support the development, define the degree of priority on the project, create a common understanding throughout the organization, associate motivate middle management, and then start the development process. In the learning phase internal communication, exchange of different points of view,

convergence to a consensus on project between employees and experts of bank accomplish. In the 4th action development team composed and managed. Identification of expected difficulties, selection of the different competencies, cross-functional communication, and problem-solving process cause to take place learning. From the 5th step the appointed tea define the new offering and its content and process. Identification of customer expectations and demands, observation of competitors, progressive refinements of the attributes of the offer, tests, simulations, trial and error, design and tests of delivery scenario, procedures writing, prototyping, and mutual adjustments of the different components of the offer are the learning actions of this phase. In 6th phase the organization, by reviewing the organization chart and business processes is adapted. Then adaptation of job descriptions, creation of new departments, process reengineering, training sessions of the staff in charge of the delivery cause the employees and involved experts to get and learn a lot of new information. The last step is implementation of the new service through assuring acceptance by and uniformity across the distribution network, and then learning by Freezing specifications and behaviors, memorization of sequences, internal/external communication and promotion, and training ends.

Table - 1: The effecting factors on learning preprocess of NSD in the literature

<b>Author/ Authors</b>	<b>Year of Study</b>	<b>Identified factor(s)</b>
Eric Stevens and Sergios Dimitriadis	2004	Learning during developing and implementing new bank offerings
Bill Buckler	1996	A learning process model to achieve continuous improvement and innovation
Bill Buckler	1998	Practical steps towards a learning organization: applying academic knowledge to improvement and innovation in business processes
Eric Stevens and Sergios Dimitriadis	2004	New service development through the lens of organizational learning: evidence from longitudinal case studies
Vera Blazevic and Annouk Lievens	2004	Learning during the New Financial Service Innovation Process: Antecedents and Performance Effects
Drew, A.	1995	Training and education in NSD process
Johne & Harborne,	1985	
Larry J, Menor; Aleda V. Roth	2007	New service development competence in retail banking: Construct development and measurement validation
Annouk Lievens, Kodel Ruyter, Jos Lemmink	1999	Learning During New Banking Service Development

Eric Stevens et al.	2004	Managing the new service development process: towards a systemic model
Johne & Harborne,	1985	focuses on some particular sectors & Financial services
Nijhof et al	2002	
Hellström ,Ellström,	2002	
De Brentani	2001-2000	Innovation process in firms
Kelly & Storey	2000	beneficial new service development
Johnson et al.	2000	Service nature Project synergy NSD process type Service market characteristics Innovation culture
Cooper & de Brentani	1991	Customer involvement Service delivery
E.G.Van de Ven	1986	The people-related characteristics the NSD process
Meigounpoory, M.R., et al	2013	Effective Factors In NSD Process Of Iranian Active Science-Based Business in The Field of Nutrition Counseling
Meigounpoory, M.R., Shabankareh N.	2013	New conceptual models of New Service Development Process in Iranian governmental banking system

### 3. Research methodology

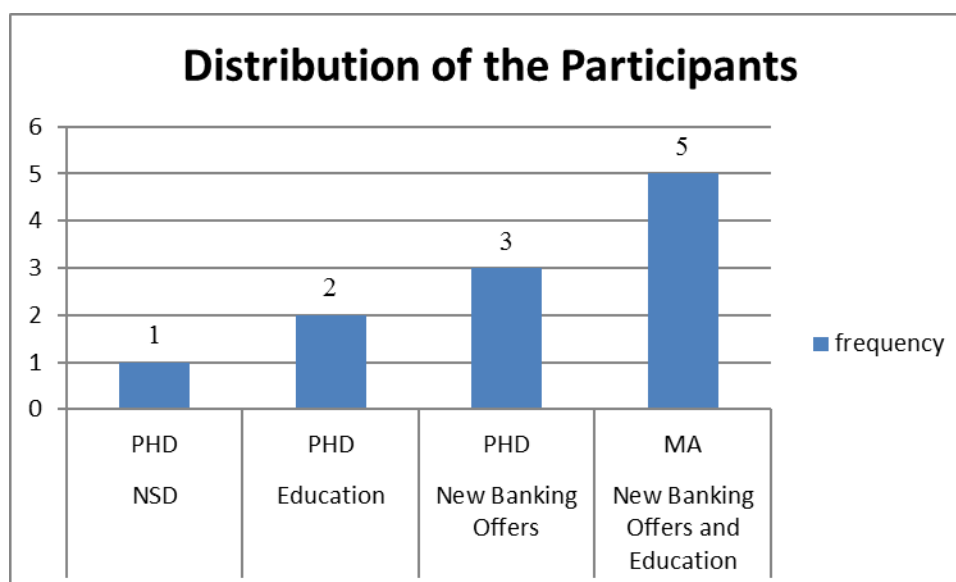
This research was implemented as a qualitative study, which involved the collection of data thorough face to face interviews. As a principle, the targeted sampling covered the academic experts and managers of private systems banking. Case of study has been focused on the Saderat, Parsian, Sarmaye, Tejarat, Shahr, Melat, Sepah, and Meli Banks in Iran. The sampling approach that was used is known as snowballing. Using this approach, the researchers first searched an adequate expert, and through his/her interview and recommendations obtained a list of experts as potential study participants. In the majority of qualitative studies, sample size should generally follow the concept of saturation (Glaser & Strauss, 1967). In the present study saturation was reached after 11 interviews. The whole interviews were recorded and converted to transcripts. According to the method of Strauss and Corbin (1999), the data were analyzed using open and axial coding. Codes form the basis for later aggregation into concepts, in open coding. The aim of open coding is to begin the unrestricted labeling of all data and assign conceptual codes to each outstanding incident within the data (Strauss, 1987). Axial coding always follows open coding, and identifies relationships between open codes for the purpose of developing core codes (Strauss and Corbin, 1990). Statistical analysis of the research indicates that the respondents 'demographics of the participants were consist of men. Figure 1 shows the distribution of the respondents 'demographics.



Table – 2: Participants' distribution based on academic degree

Expert in	Academic Degree	Frequency
NSD	PHD	1
Education	PHD	2
New Bank Offerings	PHD	3
New Bank Offerings And Education	MA	5
		11

Figure – 1: Participants' distribution graphs based on academic degree



Finally effecting factor of learning process on new service development in Iranian banking system was recognized. The effecting factors are consist of 7 axial factor consist on individual, technology, organizations, institutions, external environment, internal factors of learning and training methods. Each of them has their component which is shown in table-4.

Table 4- Identified elements effecting on learning process of NSD in Iranian banks and their Elements

No.	Factors	Elements
1	Individual	Experience
		Education
		Interest
		Learning ability
2	Technology	Technical infrastructure
		Physical infrastructure
		Information system management
3	Organization	Knowledge management
		Organizational culture
		Innovative structure
		Existing of R&D
4	Institutes	Universities
		Banking science institute of Iran
		Monetary and banking research center
5	External Environment	Perception of market policies
		Perception of International banking interactions
		Perception of Customers' needs
		Having information about competitors
6	Training Methods	Solving problem method
		In work Learning
		Test of new Idea
7	Internal factors	Existing of NSD Process
		Team formation
		Idea Creation

## Discussion and Conclusion

In this paper we looked for identifying factors that effecting on learning process of new service development in Iranian Banks. At the beginning, by reviewing the literature, we tried to find out the importance of NSD and learning during of the process. New service development (NSD) is the process of offering a new service not before available to customer, and results from the addition of services, fundamental changes in the offering delivery process. Using NSD process in service organization is low cost and high benefit systematic innovation development process. In this paper we found out that, learning is an important process for applying NSD in banking systems. If importance and usage NSD process and its stages were understood by every level of human resources in service organizations, new service design's output at downstream stages of NSD process will be increased. The paper results shows the factors that effecting on learning process of NSD in Iranian Banks has different steps that consist of seven axial factors and various steps and components. These axial factors were contain of Individual, Technology, Organization, Institutions, external Environment, internal factors plus a new factor that is



Training methods. The results showed that *individual factor* of manager and employees of banking system like experiences, education and interests and learning abilities plays a key role in learning of NSD. The second axial affecting factor is *technology factor* that is consist of technical infrastructures, physical infrastructure and Information system management. Other key factors and their components are consist of *organizational factors* like knowledge management, organizational culture, innovative structure and Existing of R&D and the factors related to *Institutes* are Universities specialized to learning banking sciences, Banking science institute of Iran and monetary and banking research center. The *external Environment* factors is other factor that is contains of component like perception of market policies, Perception of International banking interactions, perception of Customers' needs and competitors. One another important factor affecting on learning process is *Internal factors of learning and is consist* of existing of NSD Process adapted with system banking, formation of Proper team for teaching NSD. The new factor that could be found from this research is *Training Methods* that they are very important in learning process and it is contains of solving problem method, Learning Simultaneous with execution NSD process in work media, test of new Idea.

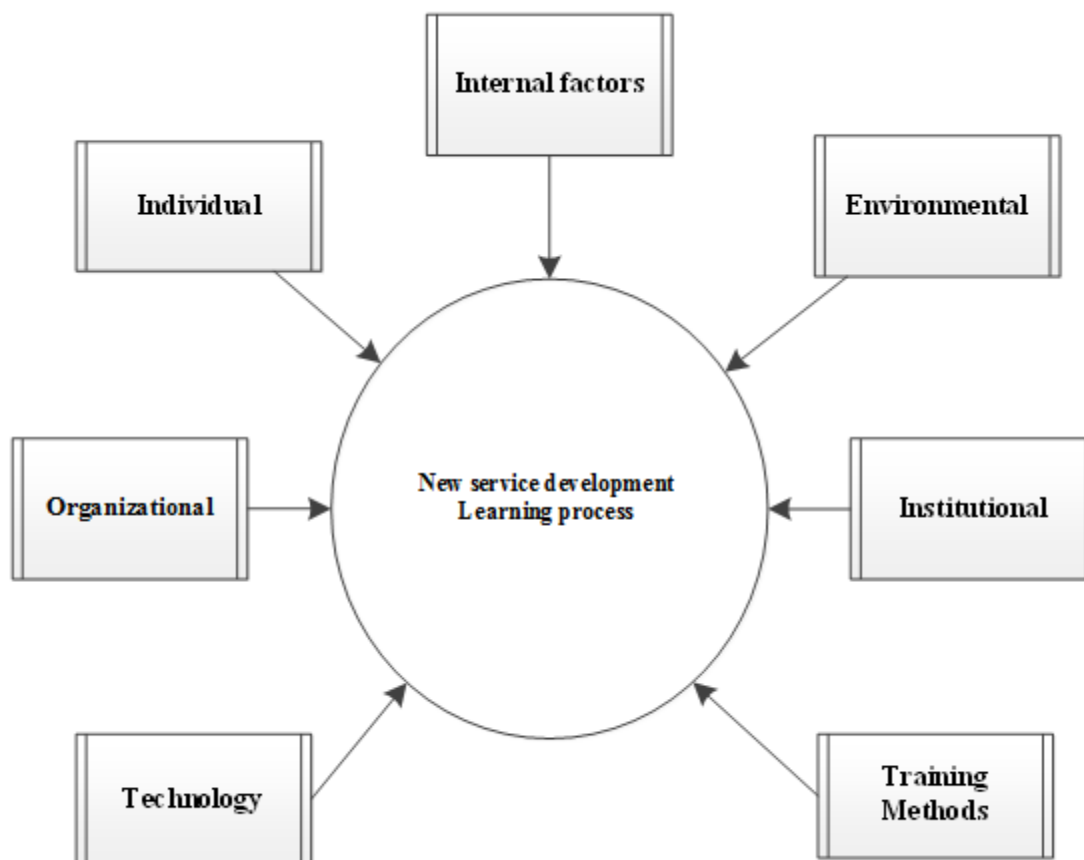
The comparison between factors effecting on Learning Process of new service development in Iranian Banks and other researchers studies is shown in table-3. As it is shown in table-3, the results of this paper have been confirmed by other researchers.

Moreover, the comparison of the literature of learning process of NSD with the findings of present survey, reveals that the results are confirmed by the studies of some previous authors such as Lievens and Moenaert(2000); Drew(1995); Ennew and Wright (1990); Wolf(1994); Easing wood(1986); Jepperson(1991); Scott(1995); Drew (1995); Ennew and Wright(1990); Drew (1995); Ennew and Wright(1990) and Stevens and Dimitriadis (2005).

Table -3: Identified factors effecting on Learning Process of new service development in Iranian Banks and confirmed by other researchers studies

Effective Factors - Present Study	Effective Factors - other researchers' Study
Individual	Lievens and Moenaert(2000);Schneider and Brown(1993); Rogers(1995)
Technology	Drew(1995); Ennew and Wright (1990); Stevens and Dimitriadis(2004)
Organization	Wolf(1994); Easingwood(1986); Edgett(1993) Martin and Horne(1993) Sscheuing and Johnson(1989)
Institutional	Jepperson(1991); Scott(1995)
Environmental	Drew (1995); Ennew and Wright(1990) Hodgson(1986); Schilling and Hill(1998)
Learning Methods	Horovitz(1998); Schneider and Schecher 1991)
Internal factors	Stevens and Dimitriadis(2005); Buckler(1996)

As the Table 3 is shown, the results of this paper have been confirmed by other researchers. Finally the New conceptual model of New Service Development process in Iranian Banks is shown in figure-2.



Hence, the banking systems, in order to surviving and increasing their competitive advantages through innovation and creation, should pay a particular attention to physical and technical infrastructure and devote financial resources to support the above mentioned factors. The results of this paper can be implemented by training and R&D centers of Iranian banks. The new theoretical model of this paper can be used for the banking systems of the world.

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