

Identifying Effective Determinants of New Service Design and Development Process in Service Organizations

Abbass Dinarvandi

M.A Student, Faculty of Entrepreneurship, University of Tehran

Email: Dinarvandy@ut.ac.ir

Mohammad Reza Meigounpoory

Corresponding author: Assistant Professor, University of Tehran, Tehran, Iran.

Email: meigounpoory@ut.ac.ir

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Abstract

Fierce competition and more demanding needs for customer oriented services have been instigated service organizations to apply new approaches for service design and delivery. Private banking systems are one of the most important parts of service organizations. The efforts in grasping more financial resources by private banks versus governmental banks as well as growth in customers' needs for effective services have enforced private banking managers for using new service design and development process in Iranian private bank systems. New Service design and Development (NSD) process providing the lower cost and higher benefit methods for creation of competitive advantage in global banking systems. In this paper the effective determinants in new service development process of Iranian private Banks has been identified. The qualitative data was collected through interviews. The methodology is adapted from in-depth interviews with academic experts and managers of private banking systems until theoretical saturation state achieved. The gathered data was analyzed using axial and open coding methods. The results shows that the NSD process Iranian private banking systems is consist of four main stages and 28 axial factors and 52 secondary factors. The main factors are includes of analysis& new concept development, design, pilot and launch, development stages. Eventually, the results of this paper can be used for the new services development process in the private banking systems of a competitive environment at the other countries.

Keywords: Banking services, New Service Development, private banking systems, Innovation,

Paper Type: Research Paper

1. Introduction

Recently there has been many academic interest of new service development. NSD involves developing offerings such as financial and banking services; health care; communications and information services; leisure and hospitality services; travel services; facilities management and

educational services; legal and consulting services. Offerings can be sold either to consumers or to businesses, and sometimes to both, (Johne, et al.,1997). A large share of innovative efforts in business is related to the development of new services (OECD, 2000; Howells, 2000). Despite its significance, many service firms still struggle with their innovative efforts. Authors like Cook et al. (1999), Den Hertog (2000), Avlonitis et al. (2001), Gadrey et al.(1995) and Chase et al. (1998) have stressed that innovation in services can be related to changes in various dimensions. Some examples include innovation in the service concept, the client interface, the delivery system and technological options. Innovation in the service concept includes changes in the characteristics of the service itself. This dimension is most widely recognized. In financial services, for instance, new service development (NSD) is usually organized in a sequential manner (Vermeulen, 2001; Vermeulen & Dankbaar, 2002). NSD is one of the best systematic approaches for innovation development in service organization specially in banking systems. The main goal of this paper is the finding the effective determinants in new service development process of Iranian private Banks.

2. Literature Review:

Nowadays, since the service sectors in developing and developed countries have the highest growth in GDP and employment, the significance of service sectors is increasing remarkably. Since 1970 portion of services in GDP of developing countries has increased from 20% to 70%. Service sector is the greatest part of economy in all of world countries,(World Bank, 2008), for example, service sectors in Iran has 40% proportion of national GDP(OECD,2013). Services are key factors for economy and industry development. for example service industries of U.S.A in 2007, has contained of 75% GDP, (Linberg & Monaldo, 2008). Moreover, ventures' tendency toward offering new services to customers has converted new service development (NSD) management to one of the main concerns of businesses (Johnson et al., 2000; Menor et al., 2002). However, NSD remains among the least studied and understood topics in the service management literature despite the existence of many research and models on product development, especially in recent years (Menor et al., 2002). As a result, considering the importance of NSD process in rapid changing environment, it seems critical for much more in-depth research to be done in the field.

Several issues remain to be addressed in investigation of NSD process for service organizations. First, researchers have often used the words 'new service development' and 'new product development' interchangeably, highlighting the need for a working definition of NSD (Johne and Storey 1996). Second, the some published literature has been concerned with the development of new financial services and it is only in recent years that researchers have begun to address issues concerned with the wide span of services offered today (Johne and Storey 1996). Third, services differ from products in terms of a number of key characteristics, (Stevens, E. 2002). As the economies world over become more service oriented, firms recognize the need to compete on the basis of new service offerings (Bitnet, Brown, and Meuter, 2000). However, NSD cannot be the same as the development of a tangible product (Kelly & Storey, 2000), and it could get more comprehensive and complicated because of it being concerned with developing new service products (Johne and Storey, 1998). Cadwallader et al. (2010) stated that the success of NSD is defined by measures which refer to the NSD project itself, for example by measuring its duration or cost, as well as the success of

the developed and implemented service, expressed through financial or market factors. In fact, new service development relies on tasks that are difficult to understand or solve and anticipate a change in customer needs (Matthing et al., 2004). According to Johnson et al. (2000), new service development is defined as “ the process of offering a service not previously available to customer, and results from the addition of offerings, radical changes in the service delivery process, or incremental improvements to existing service package or delivery processes that customers perceive as being new”. According to Cooper and Edgett (1996), the rate of failure in businesses trying to offer new service is approximately 50%. Alinvi & Barbi, (2007), are of view that customers preferences change on a constant basis, and organizations adjust in order to meet these changes to remain competitive and profitable. Rao, (2008), attempted to understand how service firms actually innovate. He found that all the private life insurance companies have a formal New Service Development (NSD) unit and top executive and R&D department participate in creation of new services. Although all the companies 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, Johne and Storey, 1998, Storey and Kelly, 2001, Menor and Roth, 2007). Therefore, creation and development of service innovation thorough NSD process has the great significance in service organizations. In fact, using NSD process models has a vital role in meeting customer ‘needs and improving quality in service design process. Meigounpoory et al. (2011), 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. Consequently, huge expenses, and the customers’ displeasure at not gaining adequate value, reveal the importance of identifying effective determinants in NSD process of private banking systems. Table - 1 displays the results of some studies in this field.

Table - 1: The effecting factors of NSD process in the literature

Authors	Identified factor(s)
Drew, A., 1995 Johne &Harborne, 1985	Training and education in NSD process
Nijhof et al, 2002 Hellström & Hellström, 2002	focuses on some particular sectors & Financial services

Cook et al., 1999 Den Hertog, 2000 Avlonitis et al, 2001 Gadrey et al, 1995 and Chase et al, 1998	innovation in services
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
Bardhan et al., 2007	System and Process design
Van de Ven, 1986	The people-related characteristics the NSD process
Cadwallader et al.,2010	the success of NSD is defined by measures which refer to the NSD project itself, for example by measuring its duration or cost
Meigounpoory, et al.,2013	Effective factors in NSD process in nutrition counseling business
Shabankareh, N., Meigounpoory M.R.,, 2013	Conceptual model of new service development process in Iranian governmental banks

Johnson et al. (2000) suggested a model describing the new service development process that can present four main stages with twelve tasks having to be done to launch a new service. These four stages are design, analysis, development, and launch as the following:

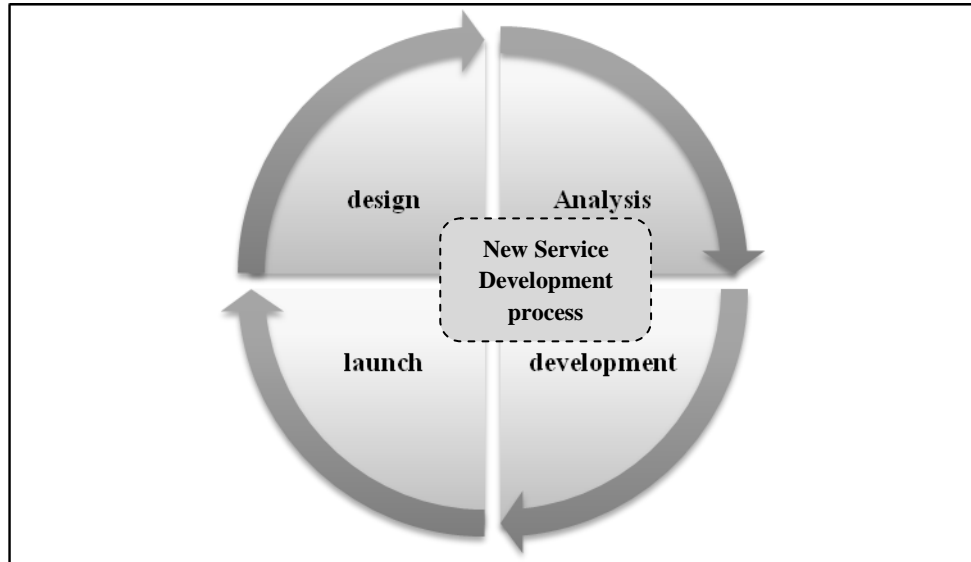
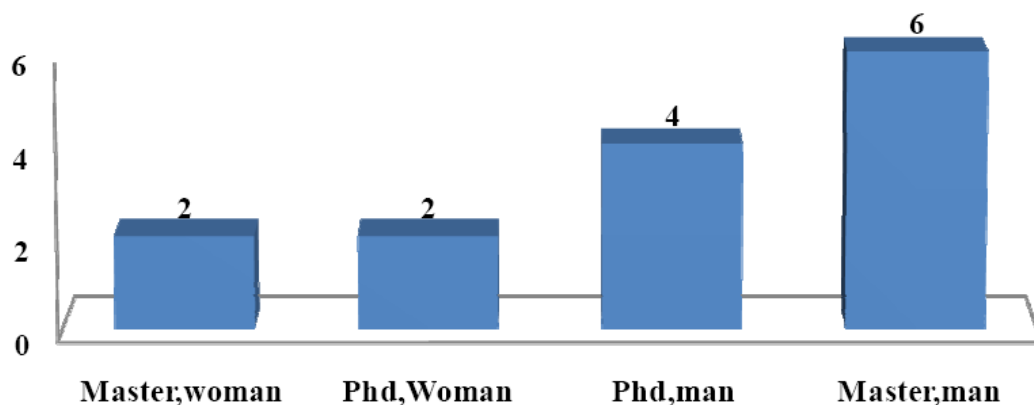


Figure1. New service development process based on Johnson et al.(2000)

Research Methodology

This research was implemented as a qualitative study, which involved the collection of data through 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 private Bank of Iran, like Pasargad, Saman, etc. 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 18 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 28.5% women and 71.5% men. Figure 1 shows the distribution of the respondents' demographics.

Figure – 2: distribution of the participants 'demographics based on academic degree and gender



Results

In order to finding the factor affecting on new service development process in Iranian private Banks, the coding results were compared, discussed, and modified for any probable discrepancies. The attained final factors are shown in Table (2)-(5).

Table - 2: Results of the qualitative study, Effective Determinants of New Service Development process in Iranian private Banks- *New Concept Development & Analysis stage*

Concept	Index	Category	Frequency
1. New Concept Development & Analysis	SWOT analysis	Weaknesses of bank	12
		Strengths of bank	11
		Identifying opportunities	14
		Evaluating of Threats	7
	New Concept Development	New service development strategies	12
		new service Interdisciplinary team	11
		Mission statement of new service	6
		Customer needs identification	12
		New Concept generation for service innovation	12
		Concept testing	7

		Evaluation of Concept (Technical, Market and financial analysis)	14
		Development of the concept	7
		Selecting of new concept	12
		Preparation of the final protocol	7
		Project Management Plan	12
		Project approval	11
	Business Analysis	Matching of business and new service development strategy	12
		Social and Cultural Analysis for new service delivery	7
		Economic Analysis	13
		Legal Analysis for new service development	14
		Political Propulsion Analysis	12
		Entrepreneurial environment analysis	11

Table - 3: Results of the qualitative study, Effective Determinants of New Service Development process in Iranian private Banks- *service design stage*

Concept	Index	Category	Frequency
Service design	Architecture design of services in private bank	Platform design	4
		Portfolio Design Service	11
	Modeling of service process	design of service Algorithm	12
		Design of service delivery	11
		Design of Process and	8

		players	
	Design for excellence	Design of testing and evaluation	11
		Design for standardize the rules	12
		Design for compliance with security rules	10
		Design for compliance with legal rules	9
		Design for flexibility of service	12
	Test and evaluation of design	Test and evaluation of design	10
	Confirmation of NSD team and R&D managers	Confirmation of NSD team and R&D managers	11
	Design of Training and learning NSD process	Learning NSDP in top management level of bank	7
		Training NSD between staff, employee and managers	6

Table - 4: Results of the qualitative study, Effective Determinants of New Service Development process in Iranian private Banks -*Pilot & Launch stage*

Concept	Index	Category	Frequency
Pilot & Launch	Select Location of piloting	space	9
		Local infrastructure	10
	Resources estimation	Proportion of new service development team	11
		Funds	11
		Where to buy supplies (space)	11

	Pre-Pilot of services	Test system (by outside experts team)	9
		Feedback analysis	8
		Fixing system defects	11
	Launch a pilot of service	Piloting new service in a sample branch of bank	9
	Design of marketing and sales process	Customer participation	12
		Competitor Analysis	11
	Market testing and evaluation	Quality of information received from a customer perspective	11
		Received price information from the customer perspective	11
		Providing valuable information received from the customer perspective	12
	Focus on Customers	Existing Customers	8
		Potential customers	9
	Pilot revised before launch	Cost and profit analysis	12
		Market Analysis	9

Table - 5: Results of the qualitative study, Effective Determinants of New Service Development process in Iranian private Banks - *Development stage*

Concept	Index	Category	Frequency
Development of new	Launched in national large-scale	Development in other areas of the country	12
		Increase Specialist Staff	10

		Developing new markets	9
		Complementary services development	12
Service implementation in other branches of bank		Creation of new units in other places	10
		Locate a special branch for new service delivery	11
Development of new strategies		Customer Loyalty Strategy	14
		Franchise	6
		Partnership with international bank	12
Branding business services		Creation of national and international brand in service delivery	10
Creation of international scope of service delivery		Development services in international markets	9
		Finding International partners	12
Coordination between, new services development processes and organizational processes		Reanalysis organization's capabilities and Technology Trends	10
The new definition of service		The exact functionality of services	4
Project Time Management		Provide timely market	5
Test, evaluations and Corrections			8
Market and sale of new services		Service(product), promotion, pricing, positioning	10

Discussion and Conclusion

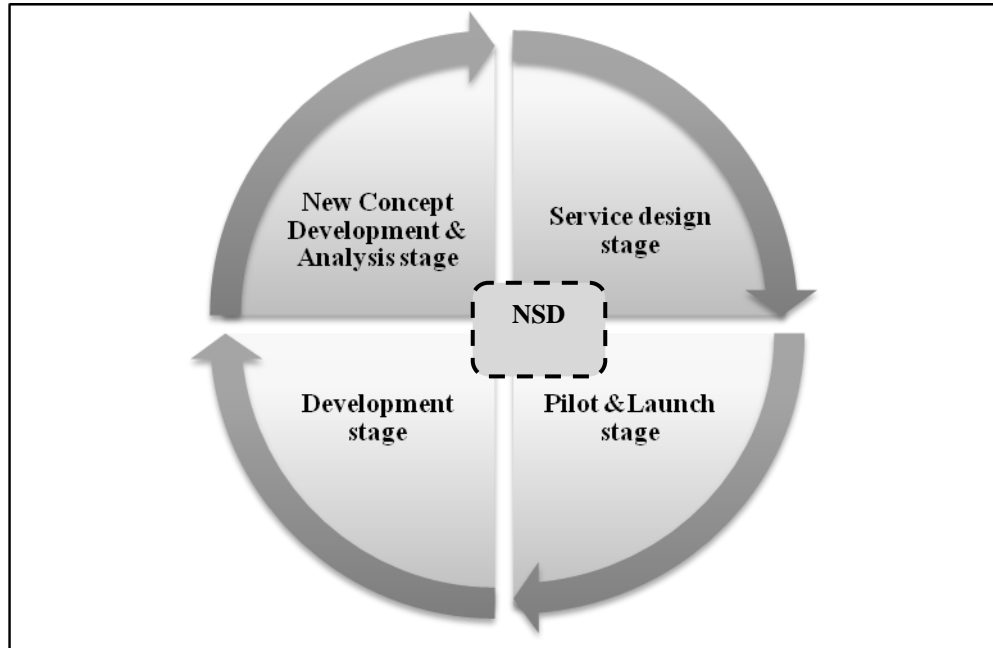
In this paper factors effecting on new service development process in Iranian Private Banks has been introduced. The qualitative data was collected through interviews. Results of this paper indicated that NSD Process in Iranian private banking systems is consist of four stages. The first stage of NSD process i.e. *New Concept Development & Analysis stage* is consists of 3 axial factors and 22 secondary factors. Axial factors are consist of SWOT analysis, new concept development and business analysis according to coding techniques. Although in NSD model of Johnson et al. (2000), the first stage is called design and the second is analysis, findings of this study illustrate that in order to reduce the expenses of NSD process, it is more appropriate to develop of new concept, analyze the business, and then design the system process. The next stage of NSD process is service design that is contained of 6 axial factors and 14 secondary factors. Axial factors of service design are Architecture design of services in private bank, modeling of service process, Design for excellence, Test and evaluation of design and Confirmation of designed service by NSD team and R&D managers and Design of Training and learning NSD process. Some secondary factors are Platform design, Portfolio Design Service, design of service Algorithm, , design of service delivery, design of process, design of training, , modular design, testing and evaluation, Design for standardize the rules, Design for compliance with security rules, Design for compliance with legal rules, and Designed for flexibility of service. According to data analysis, the third stage is pilot and launch having six main categories such as Select Location of piloting, Resources estimation, Pre-Pilot of services, Launch a pilot of service, Design of marketing and sales process, Market testing and evaluation, Focus on Customers and Pilot revised before launch. Additionally, findings of the interviews indicate that the last stage is development stage which is made up of Launched in national large-scale, Service implementation in other branches of bank, Development of new strategies, Branding business services, Creation of international scope of service delivery, Coordination between, new services development processes and organizational processes, The new definition of service Project Time Management, Test, evaluations and Corrections of services and Market and sale of new services. Table-6 also shows this comparison of this paper results with other researchers in detail.

Table - 6: The comparison of effective determinants of new Service Development process in Iranian private Banks with others

Effective Factors- Present Study	Effective Factors- other researchers Study
New Concept Development	Scheuing & Johnson, 1989 Edvardson & Olson, 1996 Meigounpoory& Hashemi& et al. 2013 Meigounpoory, et al, 2013
Business Analysis	Scheuing & Johnson, 1989 Meigounpoory& Hashemi& et al. 2013
SWOT	Bullinger & Schreiner, 2006 Meigounpoory, et al, 2013
Service design	Edvardsson & Johnson, 1996 Bardhan et al., 2007 Meigounpoory, et al, 2013
Employee training	Scheuing & Johnson, 1989
Pilot	Scheuing & Johnson, 1989 Meigounpoory, et al, 2013
Development of new service	Scheuing & Johnson, 1989 Scheuing & Johnson, 1989 Meigounpoory, et al, 2013

As the Table 6 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 private Banks is shown in figure-3.

Figure-3. Conceptual model of New Service Development process in Iranian private Banks



Furthermore, the comparison of the literature of NSD with the findings of present survey demonstrates that the results is confirmed by the studies of some previous authors such as Scheming and Johnson (1989), Edvardsson and Olson (1996), Bullinger and Schreiner (2006) and Bardhan et al. (2007). The results of this paper can be shows that the first stage of NSD process must starts with New Concept Development & Analysis stage. Banking system's R&D units must apply this stage when they are going to start new service development. This stage has low cost but high benefit for improvement of service delivery of banking systems. Table-2 can be used as outline for New Concept Development & Analysis stage of NSD process. The second stage is service design and table-3 is as a outline for design of new service in systematic approach. The other stages of NSD process are pilot& launch and development stages and their outlines can be extracted from table-3 and table-4. The results of this paper can be implemented by R&D centers of Iranian private banks. The new theoretical model of this paper can be used for the world private banking systems, especially for banking systems Middle East countries.

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