

# Reviewing E-business Models for Financial Services and Proposing an Appropriate E-business Model for Banking Industry of Iran

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#### ABSTRACT

This paper is aimed at examining e-business models for financial services and proposing an appropriate ebusiness model for banking industry of Iran using mixed research (qualitative -quantitative) methodology. For this purpose, we conducted interviews with 10 experts and managers in the banking industry of the country at various levels during the qualitative phase, meanwhile the obtained data was analyzed using qualitative content analysis and a questionnaire was prepared and used as the basis of quantitative phase of study. The quantitative data was collected and analyzed using SPSS 20 and then by means of descriptive and inferential statistics, the final model of the research was determined. The results of the research show that the proposed e-business model for banking industry is comprised of four main dimensions including: provided value, customers, suppliers and financial management. Generally speaking, the main components were classified as 10 main categories, i.e. product/service, target customers, distribution channels, customer loyalty, insurance, resources and competencies, cooperation network or partners, cost structure, revenue structure and electronic intermediaries. **KEYWORDS:** E-business model, Financial services, E-banking, Mixed research method.

#### 1. INTRODUCTION

Increasing use of the Internet has changed the business methods, and financial services industry is no exception to this rule. Customer satisfaction due to provision of Internet services has led to increasing number of banking customers (Folorunso, 2010). Meanwhile, among financial services, the e-banking business as one of the risky businesses has a more promising future than other different types of e-commerce businesses (Soteriou & Zenios, 2003). Therefore a new business models need to be proposed in accordance with these changes.

An e-business model is a set of elements and relationships among them that can express the revenuegenerating logic of a company (Weill & Vitale, 2001). Despite the advantages of using e-banking such as direct and indirect cost-savings (Taft, 2007), and while the researchers consider e-business models among the most important factors in creating economic value for organizations (Chesbrough, 2010) there is no deep understanding or limited perception of e-banking business models, especially in developing countries (Salehi & Alipour, 2010). In Iran, "Electronic Banking" was commenced when a related plan was approved by the Cabinet for creating necessary infrastructure in the year 2002 and all of the banks were committed to provide required electronic payment infrastructure and to join the plan called "SHETAB". However, the development of new technologies and creation of new banks in the country have intensified the need for differentiating revenue generation models for the banks. Therefore, this paper intends to employ a mixed research methodology to provide a typology of e-business models for the banking industry. Finally, an e-business model will be proposed which is appropriate for e-banking industry of Iran.

#### 2. THEORETICAL PRINCIPLES AND REVIEW OF LITERATURE

**2.1. E-business model**, an e-business model is description of the roles and relationships among consumers, customers, partners and suppliers of a company which determines production, information and financial mainstream as well as the main interests of the partners (Weill & Vitale, 2001). The e-business model is a framework for successful business practices ranging from business ideas to sources of revenue and the distribution structure for partners (Sandberg et al., 2011). Ontology of e-business models which determine the issues related to e-businesses also shows that what issues the companies should consider in the era of Internet (Chesbrough, 2010) so that they can produce values and transfer them to the customers (Afuah & Tucci, 2003).

A firm's business model is a reflection of its realized strategy. Essentially, strategy coincides with business model, so that an outside observer can know the firm's strategy by looking at its business model. The substantive difference between strategy and business model arises when the firm's plan of action calls for modifications to the business model (changes in policies and/or assets and/or governance) when particular contingencies take place (Masanell & Ricart, 2012).

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Critical issues in e-business models include:

- [Product innovation]: In which business the company is competing? What are the innovations of its product? What value(s) it create for its customers?
- [Customers relations]: Who are the company's customers of the target market? How services and products are transmitted to them? And how to create strong relationships with them?
- [Infrastructure management]: How the company does prepare its needed infrastructure and logistics? From whom? And which business will be permitted?
- And finally [finance]: revenue model (trades, membership, advertising, commissions, licensing and permits); cost model (cost of sold goods, operating expenses, research and development, selling and marketing, general expenses, administrative costs, and stability and maintaining of e-business model) (Osterwalder, Pigneur, 2003).

One of the most popular categorization of e-business model is proposed by Weill and Vitale which are called atomic e-business models. Understanding the characteristics of these atomic models allow managers to analyze the various things that are necessary for an innovative e-business (Weill & Vitale, 2001).

These models include:

- **1. Content Provider:** Provides content of a business (e.g. information, digital products & services) via intermediaries.
- 2. Direct to Customer: Provides goods or services directly to the customer often bypassing traditional channel players.
- **3.** Full Service Provider: Provides a full range of services in one domain (e.g. financial, health and petrochemical industries) from own products and best of breed, attempting to own the consumer relationship.
- 4. Intermediary: Brings together buyers and sellers by concentrating information.
- 5. Shared Infrastructure: Brings together multiple competitors to cooperate by sharing common IT infrastructure.
- 6. Value Net Integrator: Coordinates the value net by gathering, synthesizing, and distributing information.
- 7. Virtual Community: Facilitate and create loyalty to an online community of people with a common interest enabling interaction and service provision.
- **8.** Whole of Enterprise Government: Provides a firm-wide single point of contact consolidating all services provided by a large multi-business organization organized by customer events.

**2.2. Electronic banking**, e-banking is the newest distribution channel of banking services (Folorunso, 2010). The definitions proposed for e-banking are somewhat different in various studies since e-banking can refer to multiple kinds of services through which bank customers are able to request and receive information and retail banking services via PC, TV or cell phone (Folorunso, 2010). Therefore, electronic banking can be defined in the following contexts:

(a) ATM, (b) phone banking, (c) TV banking, (d) cell phone banking, (e) Internet banking (online banking) and (f) PC banking (offline banking) (Taft, 2007). Due to increasing market competition and other various conditions, offering banking products and services electronically has become a major issue (Folorunso, 2010). These are exactly what we mean by "value" in business models. Important initiatives to provide banking and electronic money (Wu et al, 2006). Fundamental changes in banks' internal systems, such as customer relations management (CRM) systems, business management technologies, central processing technologies, and various support and integration technologies also have a positive impact on performance and profitability, which can be categorized as customer relations and infrastructure management in e-business models respectively (Taft, 2007). Business of banks has evolved as a result of changes in financial needs of customers, but their core business, i.e. receiving deposits and providing money, has not changed (Lustsik, 2004). One of the important encouraging factors for banks to offer e-banking services is the low costs of such services in comparison with the services provided in the branches of the banks. Forrester (2003) concludes that the average cost of online transactions is 14 times less than the transactions that are carried out by branches.

#### 2.3. E-banking in Iran

In Iran, "Electronic Banking" was commenced when a related plan was approved by the Cabinet in June 2002 for creating necessary infrastructure; the permit for this plan was obtained in September of the same year from Supreme Council of Banks, based on which all of the banks were committed to provide required electronic payment infrastructure and to join the plan called "SHETAB" (Interbank Information Exchange Network). In the year 2002, the Central Bank of Islamic Republic of Iran established a department called "SHETAB" with the aim of creating an interbank information exchange network. Then, the first three banks, i.e. Saderat, Kehavarzi and Export Development Bank provided services to the customers of each other and exchanged their

information. Gradually other banks joined the network and now all banks are members of this network and offer e-banking services to the customers of banking network of the country (www.cbi.ir; 2011-04-22).

SHETAB transfers financial-monetary data via a computer-telecommunications network and carries out the settlement of them. This causes that the banking system to be seen as an integrated network by the customers and all customers are treated similarly by all member banks. The first ATM was launched in 1992 for Sepah Bank in Tehran.

The table below is a summary of the statistics and tools of some of Iranian banks.

Bank Name	Number of bankcards	ATM	POS
Saderat	24540994	3,606	376346
Melli	25857129	5,394	332420
Keshvarzi	14922921	1,996	136780
Sepah	14861553	2,065	46269
Tejarat	10534080	2,091	62406
Maskan	6850893	1,146	29160
Mellat	31916541	3,048	290821
Refah	3567918	951	8,878
Parsian	10380753	623	267403
Eghtesad-e-Novin	5500473	696	140380
Pasargad	4629470	513	101852
Post Bank of Iran	292075	385	6,329
Saman	2922117	592	85378
Sina	1498001	361	4,700
Sarmayeh	491682	201	4,042
Tat	15028	202	5,203
Karafarin	108658	112	3,596
Shahr	5,032	103	1,258
Day	3,512	68	1,026
Tourism	2,706	57	1,130

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#### 2.4. Typology of E-business Models in Financial Services

The digital economy has provided firms with the potential to experiment with novel forms of value creation mechanisms, which are networked in the sense that value is created in concert by a firm and a plethora of partners, for multiple users (Zott, Amit & Massa, 2012). Based on the previous studies, e-banking models can be classified into three categories: (Yiu, et al, 2007) (1) Bank-focused model: in this model, most banking operations are done by the branches of the banks and this model was continued its life until traditional banks started using unusual and less expensive electronic channels. (2) Bank-led model: this banking model is based on other factors such as cell phone banking and Internet banking as alternatives to banking based on branches. This model basically improved the accomplishments of banks through use of different delivery channels, such as cell phone banking or phone banking. In this model the relations of customers' accounts is held by the banks. (3) Nonbank-led model: in this model bank is not obviously seen, the created alternative approach was pure ebanking without support of networks and physical branches. Given the above points, e-banking can be classified among those electronic commerce models such as Business-to-Business (B2B) and Business-to-Customer (B2C) models. Electronic banking models can be further classified according to online business models of banks and based on the services to be provided to the customers (Abdul., et al, 2007). Initially, banks provided services based on information and transactions, delivery of products and services, activities of accounts, transfer of money, etc. (Faber., et al, 2003). If business model innovation demands experimentation, which in turn requires investment, then firms will need to become comfortable with financial tools that make sense in an experimental world (Mcgrath, 2011). After growth of the Internet, banks started to learn about customer engagement models. Advisory services, services based on customer engagement and advanced financial services are among them (Kumar, 2011).

New models of customer engagement establish long-term relationships with customers. These relationships will not only create new revenue opportunities, but also wins new customers through support of previous customers and via social channels. The proposed objectives and aspects in customer engagement model include: interactive services (Web 2.0), consulting services and advanced financial services. Figure (1) shows the changes of e-banking business models and depicts the transition from customer service models to customer engagement models.



Due to some contradictions in the heart of e-business models and also the stability needed for electronic banking, a general conclusion cannot be obtained easily (Rappa, 2004). In other words if specific parts of the financial services will be focused on, greater convergence with electronic business models can be perceived. Sahut (2010) conducted a categorization in this filed which is shown in the table below:

Туре	Characteristics	<b>Revenue Created</b>	Value Model
Vertical Portal Financial Portal Portals	They mainly offer general or specialized information services in several fields. Some have created "personal finance spaces", like Yahoo with "Yahoo Finance".	Advertising, Affiliation, Commission, Sale of products and services.	Brokerage; Content; Search; Communication; Community; Affiliate, Transaction.
Aggregator Aggregators: - Brokers - Quoters	These are sites whose role is to act as online intermediary between different actors. "Quoters", contrary to brokers, do not carry out the transaction, they are infomediaries which bring business to virtual agencies, or compare offers for consumers.	Brokers: Sale of products and services. Quoters: Commission, Advertising, Affiliation.	Brokers: Content, Transaction. Quoters: Content, Brokerage.
Speciality manufacturer Suppliers	These are producers of financial services (like Visa, equity funds, traditional banks, etc) which distribute them through their own network, or external networks (resale or co-branding).	Commission, Sale of products and services.	Outsourcing, Transaction.
Company sites Company web sites Virtual agencies (banks, insurance, or broking on line)	These are online banking, investment or insurance services. The sites with the best performance offer, in addition to advanced information and transaction services, customer relations management services (tools to help in decision-making, online advice, development of personalized products, etc). The main difference with brokers/aggregators is that they are not satisfied to aggregate the existing offer. They mainly sell products in their brand.	Product sales and services, Commission, Advertising.	Outsourcing, Transaction, Content, Brokerage, Community.

Table (2) Typology	of various e-b	ousiness models for	or financial se	rvices (Sahut, 2010)
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Finally, by examining the conducted research the impacts of technological changes on banking and business models in banking industry can be classified as evident in three categories: bank-focused, bank-led and nonbank-led models (Kumar, 2011). The aspects related to the change of technology include innovations that reduce the costs associated with collecting, storing, processing and transmitting information, or change the form of the tools, so that customers can have easy access to products and services of the banks. Important innovations for providing such services include: ATMs, card readers, phone banking, Internet banking and electronic money (Folorunso, 2010). Fundamental changes in banks' internal systems, such as customer relations management (CRM) systems, business management technologies, central processing technologies, and various support and integration technologies also have a positive impact on performance and profitability (Wu et al, 2006).

#### **Conceptual Model of the Research**

After reviewing theoretical principles and previous studies on e-business models and banking industry and by using them, the conceptual model of the research which is derived from the results of these studies was determined. The main dimensions of the model were adapted from e-business model of "Full-Service Financial Provider " proposed by Weil and Vitale (2001).



Figure (2) "Full-Service Financial Provider "model (Weil & Vitale, 2001)

#### **3. METHODOLOGY**

The research method in this paper is applied in terms of objective and this is a field study research in terms of classification of conducting method because it seeks to explore the relationships and interactions between the variables of the study. Also because the research is after describing the relationship between e-banking and e-business models, so it also can be considered a descriptive-survey research. Mixed researches use a combination of two research methods, i.e. qualitative and quantitative methods. This research is a mixed one in terms of method of data collection, in other words, first qualitative data has been collected and after analyzing them a questionnaire has been developed, then the quantitative data has been collected.

The research population includes academic experts in the field of e-business models and banking and also senior managers of banks, electronic banking experts, IT managers and deputies. With regard to the geographical scope of the research and due to existence of 29 public and private banks in the country, the research population for this study includes approximately 160 people. The shared characteristic of all such people is their (at least) 3 years experience at senior management levels of banks and IT- and e-banking related departments, or they are university lecturers knowledgeable in this field.

The reliability of data collection tool (the questionnaire) for collecting quantitative data and its reliability have been measured by Cronbach's alpha as follows:

	Case	Process	ing Summar	y –			
			Ν		%		
Cases	Valid		122	!	77.7		
	Exclud	ed <sup>a</sup>	35	i	22.3		
	Total		157	'	100.0		
a. Listwise deletion based on all variables in the procedure.							
Table (4) Reliability Statistics							
Cronbach's	Alpha	Cronb B Sta	ach's Alpha ased on ndardized Items		N of Items		
	.954		.954		55		
A DATA ANALVSIS							

#### Table (3) Cronbach's alpha of the questionnaire

#### 4.1. Qualitative Analysis

Coding is the basis for qualitative data analysis. At this stage, a code (from  $I_1$  to  $I_{10}$ ) was assigned to each set. In open coding, the key concepts are the utterances of managers and experts, and in axial coding a label is given to a set of common expressed concepts. Finally, some codes - including a number and a letter - are given to the common concepts across these tables which are derived from the interviews. After coding, data were classified, and at this stage, a comprehensive table of what have been compiled from each interview was obtained. The summary of all shared concepts in interview questions for each of the class of managers of

banking industry were presented in such tables. In-depth interviews with 10 experts and managers in e-banking were conducted and the data obtained from the interviews were collected according to the criteria discussed in theoretical principles and content analysis as grouped factors. Verbal statements of interviewed people were classified after review and analysis as 28 components of the open coding based on statistical relationships in the field operations between categories and propositions. Then, the components obtained from axial and selective coding also were derived based on their content. Some 10 components, i.e. product/service, target customers, distribution channels, customer loyalty, insurance, resources and competencies, cooperation network or partners, cost structure, revenue structure and electronic intermediaries, were identified in axial coding stage and finally four main dimensions of the model including: provided value, customers, suppliers and financial management were detected at selective coding stage. Each step of coding (or each column) has been set with regard to ebusiness models and standard issues of model arising from the base model and the comments by experts. Although some components of the model have been also present in previous studies and in the conceptual model, however, their structures and their sub-components are different. Furthermore, a number of components such as customer loyalty, insurance, resources and competencies, financial management and electronic intermediaries are new components, which can be considered as the innovation of this research to be added to the literature of e-business models in banking industry.

#### 4.2. Quantitative Analysis

For analysis of the collected data in this study, after data entry into SPSS software, descriptive and inferential statistics methods were used. Such tests are used to analyze the data from questionnaires in order to confirm or reject the dimensions of the model. In this research, two different tests, i.e. binomial test and T-Test were used. Then Friedman test was used for ranking the factors.

	Statistics		Value	СТQ	ന്നേ	СГД	Customer	SIQ	scq	SNQ	Supplier	FCQ	FIQ	FBQ	Financial
		Valid	138	138	138	138	138	138	138	138	138	138	138	138	138
	Z	Missing	0	0	0	0	0	0	0	0	0	0	0	0	0
	Mean		3.9200	3.7246	3.9543	3.7486	3.8066	3.0072	3.7507	3.7330	3.4970	4.0052	3.3522	3.5304	3.6288
atistical tests	Std. Error of Mean		.05117	.05205	.03301	.04266	.03500	.06560	.07199	.08268	.06152	.04058	.04107	.04978	.03499
(5) Results of st	Mode		4.50	3.40	$3.80^{a}$	3.30	3.32 <sup>a</sup>	3.25	4.60	4.00	3.72	4.00	3.43	3.60	3.90
	Std. Deviation		.60116	.61143	.38779	.50113	.41114	.77067	.84571	.97131	.72269	.47670	.48247	.58480	.41110
Table	Variance		.361	.374	.150	.251	.169	.594	.715	.943	.522	.227	.233	.342	.169
	Minimum		2.00	1.80	3.00	2.70	2.86	.75	.80	00.	.58	1.67	1.14	1.80	1.54
	Maximum		4.83	5.00	4.80	5.00	4.83	4.50	4.80	5.00	4.66	5.00	4.29	4.60	4.45
	Sum		540.96	514.00	545.70	517.30	525.31	415.00	517.60	515.16	482.58	552.72	462.60	487.20	500.78

In what follows, in order to provide the final classification, the prioritization of the main components and dimensions of e-business model along with the related tests are provided.

Table (6) shows Friedman's ANOVA test. This technique tests the hypothesis of equal average rank of components of e-business model.

$H_{0}$	Margin of Error	Significance level	Degree of freedom	Calculated Chi- square	Result
Average rank of components of e-business model is equal.	0.05	0.000	9	87.98	Rejection of ${H}_0$

<b>Γable (6) Friedman's ANOVA</b>	test for components of e-business
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According to the above table, since the significance level of the test (0.000) is smaller than margin of error (0.05), so the hypothesis is rejected. Therefore, it can be stated at the confidence level of 95 percent, that the average ranks of some components of e-business model are not equal. In other words, some components are more important than others.

#### 5. CONCLUSION AND RESEARCH FINDINGS

According to the results of analyzing qualitative data, there have been selected 55 cases as the most important components of the model among 115 identified concepts and they have been classified as categories of the theoretical model (which has been derived from theoretical principles). Accordingly, similar concepts have been classified in equal categories and the main components have been totally classified into 10 main categories, i.e. product/service, target customers, distribution channels, customer loyalty, insurance, resources and competencies, cooperation network or partners, cost structure, revenue structure and electronic intermediaries.

Table (7) shows the average rank and prioritization of these components of e-business model.

	Table (7) Thornzation of components of c-busiless model											
Row	Components of e-business model	Average	SD	Average rank	Priorities							
1	Provided value (product/service)	4.00	0.47	7.26	1 <sup>st</sup>							
2	Cost structure	3.92	0.60	7.06	2 <sup>nd</sup>							
3	Distribution channels	3.95	0.38	6.91	3 <sup>rd</sup>							
4	Cooperation network and partners	3.73	0.97	6.47	4 <sup>th</sup>							
5	Resources and competencies	3.75	0.84	6.34	5 <sup>th</sup>							
6	Customer loyalty	3.74	0.50	5.53	6 <sup>th</sup>							
7	Target customers	3.72	0.61	5.51	$7^{\text{th}}$							
8	Electronic intermediaries	3.53	0.58	4.38	8 <sup>th</sup>							
9	Revenue structure	3.35	0.48	3.27	9 <sup>th</sup>							
10	Insurance	3.00	0.77	2.27	10 <sup>th</sup>							

 Table (7) Prioritization of components of e-business model

Finally, after analyzing the explored data and classifying and coding them as well as reviewing the theoretical foundations of the research, the proposed model of e-business in Iran's banking industry has been prepared which benefits form an innovatively approach in comparison with current system. The research model has been provided schematically in the next page and its details have been elaborated in the following section.

# **Suppliers**

#### Insurance

Electronic portal of insurance services Concluding contracts and maintaining relationship with affiliated insurance companies Providing insurance services (life, investment,

responsibility insurance, etc) Marketing and advertising measures to keep working with policyholders

#### Resources and Competencies Updated banking services with higher quality

than competitors Competencies related to website (range, rank

in search engines, good interface, rich design website, numerous visitors) Competencies associated with innovation

(innovative human resources, unique services which would be impossible to be copied by competitors, etc)

Competencies associated with suppliers (diversity and abundance of suppliers, network security, foreign vendors, etc) Competencies associated with operating processes (valuable experiences about ebanking, diverse services etc)

# Cooperation Network partner or Partners

Contact with other banks and partners (corporate banking, card payment (SAHAB), inter-bank transfers (SATNA) etc) Subsidiary and affiliated partners and stakeholders (including IT support services companies, exchange companies, leasing, financing, etc) Cooperation with customer network (large scale corporations, contractors, institutes, universities etc)

## **Financial Management**

#### Cost Structure

Support and customer service costs The cost of providing, maintaining and updating software and hardware systems The costs imposed by government, legislature, monetary-financial packages

#### **Revenue Structure**

Providing financial services (credit services, check services, deposit services, card services, currency, etc) Revenues derived from affiliated firms (insurance companies, leasing companies, IT services, etc) Income from fees of online transactions, ATM, PS, WEB Kiosk, etc Revenue from financial advisory services, investment, business startup, etc Other income (Hajj system, reporting of public notary offices, subsidies, clubs, etc) Advertisement or the rights of third party suppliers' transactions Revenue from membership (club customers, newsletters, or specialized forums for discussing banking issues)

#### **Electronic Intermediaries**

Collaborate with currency exchange services and other financial intermediaries Use of the brokers and financial intermediaries Development of and financial products and services and investment in order to attract resources through brokers Tenders or venders by the bank and subsidiary companies Other intermediaries (third-party websites and advertising, etc)



# **Provided value**

## Products/Services: Social values (reducing traffic, reducing air pollution, providing services in the shortest time etc) Reducing the cost of access to banking services Quick and easy access to the website (no affiliation with certain and uncommon software, usability of content in the case of slow connections) Creating customer portal and 24-hours support Creating personal/customized banking Access to update services using ICT (including the possibility to compare different types of services, direct contact of customers with banks, etc) Benefiting from advanced, accessible and unlimited financial services

Increased number of choices for customers/users (financial services, diversity of professional and general services, usage approaches etc) Creating enthusiasm and excitement in customers (advertising, lotteries, etc) Information regarding how to use the new ebanking services Appropriate and effective use of multimedia (sound, still and moving images, videos etc) Providing advices to investors (by phone, Internet,

email, catalogue, etc)



# Customers

#### Target Customers:

Companies and Organizations People who tend to experience new ways of receiving banking services (such as cell phone banking, SMS banking, etc) Certain groups of people (students, women, children, etc) General population People who tend to do use virtual banking services (due to disability, employment, old age, etc)

#### **Distribution Channel**

Using POS, WEB Kiosks, PinPads etc Providing banking services through ATMs Core e-banking system Providing banking services through phone banking, Call Center etc Internet banking services Home banking services Face-to-face services The use of cell phone banking, SMS banking, mobile payments based on USSD etc

#### Customer Loyalty

Loyal and constant customers Procurement, manufacturing and installation of customer relationship management (CRM) software and receiving feedback Joining customer club (based on credit rate of customers, business customers, retail customers, etc)



# Figure (3): Final model of the research: E-business model of banking industry

#### **Description of Final Model**

#### • Strategic goals and the provided value

This model intends to meet the complete needs of its target customers through integrating its products and services and third party suppliers, integrality. In the model, bank is owner of its customers' relations; bank proposes a complete range of financial services including bank products, as well as a wide range of products of other companies such as insurance, stock trade, joint investment, financial consultation and investing management. Bank obtains customer information and history of transactions and stores them in a central database and uses the database in order to identify the products and services appropriate for the customer. After identifying customer's needs, bank provides a range of pre-identified products from certified suppliers by the bank operator or through web pages. Bank uses database of its customers for identifying opportunities to sell available bank products and services as well as adding new products and services to this range. Every customer selects a bank in each territory by considering to his/her necessary services. Here, bank bears lower transactional costs for searching, customizing, getting orders and meeting customers' needs.

#### • Revenue Resources

In this model, bank obtains its resources from deposits, loan interests, providing financial and insurance services by itself or its suppliers, as well as by annual membership fees, management rights, transaction rights, third party commission, advertisement or classification rights of third party suppliers and sales of its customers database.

#### • Factors of Key Success

- It must be leader in its territory. The banks which use the provided model can prepare large number of issues needed by the customers. Small and medium suppliers may have problem with the model and may not be successful, because they cannot sell their products with sufficient margin of profit and as a result, they cannot be as leader of the model.
- Customers consider brand and reputation of and confidence in bank in order to select a bank as a resource of meeting all of their financial, insurance needs in a territory.

#### Main Competencies

In this model, main competencies for banks include:

- Managing the information of products and customers: when opportunities for creating and providing new products and services are identified, the bank is responsible for collecting, combining and analyzing information of customers and their needs and adjusting them to its best, within the shortest time and using available services.
- IT Infrastructure: banks must develop and organize the process of financial transactions, customer database, electronic relations with suppliers and security of interbank information exchange networks. IT infrastructure capabilities are vital for those banks that their models are larger and more complicated. In this model, infrastructure of the bank must be able to integrate banking relations nationally and perhaps globally with tens of thousands suppliers and third parties.
- Brand management and development: banks and financial institutes of the country need brand-making for success. These organizations are expected to increase their quality and capability in order to meet all needs of consumers in their territory.

#### Suggestions

- The Study shows that other suppliers such as insurances and electronic financial dealers are added from outside of the main field; they provide extra income and propose some options to the customers so that they can meet them by considering their strategies and abilities beside those of the bank. Also competencies related to operational processes (worthwhile experiences about e-banking, diversity of service providing to customers. etc.), building relation with other banks and insurance companies as well as cooperating with customers' network can be suggested.
- Considering the study results and importance of reducing costs depending on different channels, it is suggested to use electronic channels such as Internet Bank and advanced Interactive Voice Response Systems and SMS bank more.
- One of mechanisms for increasing productivity is cooperating with consultants of the organization, conducting sessions between consultants and executive managers with particular emphasis on the relation between organizational elites and experts with each other. Better relations with academic and research environments for carrying out banking projects and contracts may have positive impacts on improving organization processes. As it can be seen on the model, by considering the importance of and close relations between bank and insurance industries, it is suggested that mutual contracts would

be concluded and more cooperation would be created between these organizations, in addition to using electronic insurance services portal as well as developing financial product and services and investment for obtaining resources through active agents in stock exchange.

- According to table (2), in terms of the importance of electronic intermediaries in e-business models of banking industry and financial services, and since such electronic intermediaries such as exchange brokerage, stock exchange agents etc are not employed coherently, it is suggested that by using integrated e-business models, these intermediaries are used for finding resources and providing stronger financial services considering their effective role in this field.
- The banks need to continuously improve their abilities for forming and managing relations with customers and other main players in value chain. Also, the findings of the qualitative and quantitative sections of the research shows that building strong relations with customer primarily determines success of banks; therefore, the strength of the provided value includes the identified brand, range of provided services, value-price equation, creating customer's loyalty and the power of integrating banking services without physical attendance can be suggested.
- This research has been carried out by reviewing e-business models and in order to provide an ebusiness model for banking industry of Iran. It is suggested that future researches study e-banking issue in more details. For example, they may review the provided models in cell phone banking or TV banking and then provide an appropriate model for banking industry of Iran.
- Finally, it is suggested that the objectives of the study are investigated using other research methods and the results are evaluated comparatively.

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