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Structural - Cultural Factors of Private Banks Success in providing e-Banking Services

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Abstract
Development of information and communication technology, has revolutionized many industries. One of the key industries is the banking industry that with entering information technology had dramatic changes and with kinds of e-monetary- financial transactions, also developed other businesses. The field of electronic banking being considered by scholars and studies in this field mast have significant quantity - quality progress alongside the development of electronic banking. One of the key issues in the development of e-banking services is Structural-Cultural factors that this study directly is dealt with. The issue is intended for private banks and the case study are accomplished with help of 113 top and middle managers available in Ghavamin banks in the country. To achieve the main goal of the study, at first previous published studies have been reviewed and all of key success factors of Private Banks in offering electronic banking services derived and the main variables of model with approach of exploratory factor analysis defined and a model in order to identify the key success factors of private banks in offering electronic banking services, explorated and depicted. This model, set the key factors in the 2 major categories of technical- structural and cultural- cognitive factors. Also, within each category, the most important items in terms of correlation with the success of electronic banking services has determined and finally a comprehensive framework is presented.
Keywords: Technical-Structural Factors, Cultural-Cognitive Factors, Services, E-Banking, Exploratory Factor Analysis.

1. Introduction

In today's world, the growing of information technology and Internet-based electronic systems and their connection with the main body of the banking business is visible. Today, electronic banking and their unique services is non-removable in the community. The role of scientific and applied research seems more urgent than ever in modern electronic banking services, According to importance of their growing trend. Because the electronic banking is one of the key to implement, develop and facilitate the electronic commerce in the country. In this field, authoritative studies was conducted such as research by Nikghadam (2013), Basias & Themistocleous, (2013), Sohrabi et al. (2013) and Cabanillas et al. (2013) which is represents

the growing importance of problem solving in electronic banking. The main issue of this research is identifying and evaluating the Structural-Cultural factors of the country's private banks success in proving the electronic banking services. In this research, factors are correctly identified with a heuristic approach and their importance will be evaluated and an overview of the key factors in the success of private banks will be obtained. It must be stated that private banks in provision of electronic banking services need some key factors such as technical, technological and human infrastructures. If they are not properly identified and reviewed, banks will not be successful in the being electronic process and providing superior service and attracting the customer satisfaction and will be faced with a notable decline in the market.

2. Theoretical Literature and Previous Research

2.1. The History of Electronic Banking

Impressive development of information and communication technologies and its expansion of money markets facilitate the affairs for bank customers and transform the current banking approaches. Technology belonging to banks and their exchanges were changed with customers, with the advance of information and communication technology (ICT) (Amadeh & Jafarpour, 2009). Amadeh & Jafarpour divided these developments into four periods by the Ministry of Commerce (2005). In every period, new technology and electronic banking provides the possibility of increasing speed, quality, accuracy, cost, and the diversity of services.

Table 1: Periods of Development and Evolution of Electronic Banking
(Source: Amadeh & Jafarpour, 2009)

Period	Periods of development and evolution of electronic banking	Period characteristics
First	Automation of behind the counter	Prevalent in the 1960s, removing the card from the branch offices, sending daily circulation of accounts at the end of each day to central computer, the starting point for computer applications in banking, Usage: recording documents and converting paper documents into computer files.
Second	Automation of front the counter	Starting in the 1970s, branch employees access to current accounts, continuous information transferring through the use of telecommunication lines and mainframe computers, Banks' usage of telecommunication networks in the public company's existing.
Third	Customers connecting to the Accounts	Starting in the middle of 1980s, customer access to personal accounts, by phone, (ATM), a smart card or personal computer, electronic funds transfers, development of customer communication system with their accounts

Forth	System integration and linking customers to all banking operations	Real savings in manpower, creating a fully electronic and intangible money, all banking services are with electronic

2.2. Definition and Nature of Electronic Banking

e-banking phenomenon has been considered as one of the achievements of e-commerce. It plays a major role in e-commerce with the growing of e-commerce in the world and regarding the needs of business to easy, fast and accurate banking operations to transfer financial resources, electronic banking. Electronic banking is defined providing customers with access to banking services by using securely intermediaries (Daniela & Octavian, 2004), or a direct provision of banking services to customers through communication channels (Bauer & Hein, 2006).

2.3. Services and Benefits of Electronic Banking

e-banking has many benefits such as increasing the customers and decreasing the bank dealings costs. In addition, banks can provide services with greater performance and fewer costs and pay attention to maintain and increase the unlimited market share in terms of location, focus on new distribution channels (Harris, 2002). Compete brands, improve the relations management, provide broad and diverse services, focus on revenue growth and cost, reduce transaction costs are other advantages of electronic banking. Many national and international studies were conducted in the field of e-Banking which are shown in Table 2

Table 2: Some Recent Studies about the Electronic Banking

Row	Field of study	Reference
1	e-banking acceptance	Santouridis & kyritsi (2014)
2	e-banking acceptance: a unified theory of acceptance and use of technology and perceived risk application	Martins et al. (2014)
3	A systematic review of internet banking adoption	Hanafizadeh et al. (2014)
4	The impacts of service quality and customer satisfaction on Success of e-banking	Ariff et al. (2013)
5	Development of a quantitative model of the impact of customers' personality and perceptions on Internet banking use	Shik yoon & Barker Steege (2013)
6	The investigating of barriers of development of e-banking in Iran	Alinezhad sarokolaei, m. et al. (2012)
7	e-banking acceptance	Hoehle, H., & et al. (2012)
8	The impact of e-readiness on e-banking development in Iran	Haghighi et al. (2010)

3. Research Objectives

- Identifying and examining the Structural - cultural factors of the country's private banks in provision of electronic banking services
- Determining the extent to which each of Structural - cultural factors has effects in the success of country's private banks in proving the electronic banking services
- Identifying and assessing the significant correlation between known factors

4. Research Methodology

This research applied research and cross-sectional in terms of objective and in terms of performance, its approach is descriptive and exploratory. This research, first with a review of the theoretical literature, studied previous and valid and internal and external studies in the field of electronic banking and effective factors on their success and then it identified the Structural - cultural factors of country's private banks in proving electronic banking services in a method and it extracted from previous studies. Then the questionnaire has been designed based on identified factors. The questionnaire was distributed among the available specialists of banking affaires related to electronic banking and aims to explore and identify key success factors in country's private banks in provision of electronic banking services. The questionnaire was consisted of 69 items (questions) which are designed by using the theoretical literature and previous research in the field of the key success factors in provision of electronic services. The reliability of the questionnaire was determined 0.975 by using Cronbach's alpha, which is an appropriate amount and Content validity was also confirmed by some experts in the field of banking. After collecting the questionnaires, a conceptual model is provided by using the exploratory factor analysis and with considering the research objectives.

5. Research Population, Sample Size and Sampling Method

Population of the study is included 150 people which they were all managers and assistants of Ghavamin Bank who is making decision for the ATM. Morgan table was used to calculate the sample size and according to the number of population, 108 people were selected by available non-probability sampling. In order to ensure the return of the questionnaires, 130 questionnaires were distributed among them and finally, 113 questionnaires were correctly returned and completed.

6. Research findings

In this section Structural-cultural factors are analyzed by using factor analysis. First, Table adequacy model is given which consists of KMO index, Bartlett index value and the probability value of this index.

Table 5. KMO and Bartlett test results of the correlation matrix

Item	Value
KMO index	.898
Bartlett's Test	7049.909
Sig.	.000

Based on the results of KMO test, which is equal to 0.898, research data are reducible to number of infrastructure factors. Also result of Bartlett test equals to 7049.909 which is significant in error smaller than 0.01, it shows that the correlation matrix between the items is not the unit and the identity matrix. This means that on the one hand there is a high correlation between items within each factor and other hand there is no correlation between the items of one factor and other items. Furthermore, the rotation matrix of factors determines which item is related to Structural factors and which one is related to Cultural factors. Based on the review of the Background research, the conceptual model of research was formed which can be seen in Figure 1.

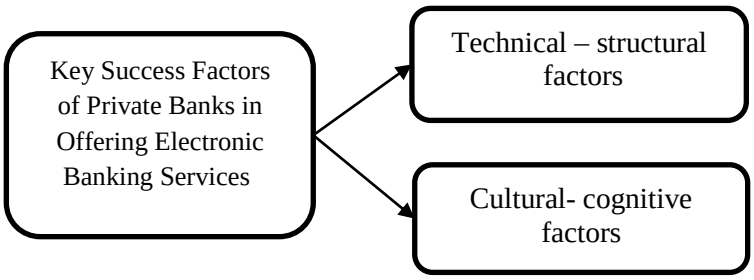

Figure 1. Conceptual Model

Items associated with each of the above factors, are given in the following table.

Table 6. Rotation matrix of Structural - cultural factors of private banks in Providing electronic services

Items	Factors		
	Cognitive - cultural factors	Technical - structural factors	
Software and hardware facilities at the disposal of the Bank	.682	.206	[1] [18]
Software and hardware facilities available in the Society	.622	.080	[1] [18]
Available Internet bandwidth in the society and available for the citizens	.786	.273	[1] [18]
Internet bandwidth and the quality of the bank's existing network	.748	.229	[1] [18]
IT infrastructure	.725	.140	[1] [18]
ICT infrastructure	.752	.171	[1] [18]
Integrated information systems	.571	.042	[1] [2] [19]
The number of domestic and Organizational Internet service providers	.451	.014	[1][18] [19]
The banks' access to the web	.517	.164	[1][18][19]
Expanding range of electronic payment systems (money, E-cards, …)	.599	.271	[17] [19]
Existence of Modern electronic communication systems with client	.516	.015	[1] [2] [19]
Development and diffusion lines and high speed internet in most areas	.413	.307	[1] [18]
Development the use of computer hardware and Modern software in the citizen	.370	.231	[1] [18]
Equipped the banks' 24-hour virtual branches	.489	.328	[17] [19]
Development and integration of the internal banking network in the country	.512	.281	[1][19]
market development and strategies of Electronic sales in market	.488	.243	[1][2][19]
The number of internal experts in the field of IT and electronic banking	.390	.273	[1] [18]
Development the Knowledge of local expertise in IT and Electronic Banking	.519	.150	[1] [18]
Developing awareness of Citizens and stakeholders of the benefits of e-banking	.216	.513	[19]

Developing and promoting the culture of use of IT and ICT at various levels of society.	.238	.516	[19]
Compatibility between existing technology and customer requirements	.315	.503	[1][19]
Culturing and effective informing	.328	.536	[1][19]

7. Discussions and Conclusions

This research aims to identify and evaluate the Structural - cultural factors of country's private banks success in proving the electronic banking services. Exploratory factor analysis was used to achieve this objective and to provide a model. At first, after a review of scientific research the most important factors were identified for the success of private banks in provision of e-banking services. Then, according to the theoretical literature and expert opinion and also by using of exploratory factor analysis, Factors were divided into Technical-structural factors and cognitive-cultural factors. The influence degree of the factors contributing to the success of private banks offering e-banking is different. So by using exploratory factor analysis, factor loadings (correlations between items and categories) of all items were also identified. In this section, the results of research were separately analyzed. The results of a survey of technical - structure factors by exploratory factor analysis shows that from opinion of experts, the Internet bandwidth factor with a factor loading of 0.786 has the maximum factor loading in the entire technical - structure factors. Information and communication technologies infrastructure factor is in second place with a factor loading of 0.752 and the Internet bandwidth and network quality in the bank is in third place with a factor loading of 0.748. The results of a survey of cognitive and cultural factors by exploratory factor analysis shows that from opinion of experts, the effective knowledge with a factor loading of 0.786 has the maximum factor loading. After that developing and promoting the use of IT and ICT at different levels of society (with a factor loading: 0.516), awareness development of Citizens and stakeholders of the benefits of electronic banking (with a factor loading: 0.513) and adaptation of existing technologies to meet customer needs (with a factor loading: 0.503) are placed in the next rankings. As these values are positive, it can be concluded that strengthening of every 2 factor can lead to the success of private banks in the provision of electronic services to customers. In this context and according to the results, Measure and overall fit of the proposed model by using structural equation techniques and AMOS software, assess the current situation Ghavamin Bank and other private banks with the help of this model and identify the current status are among of the topics that will be offered to future researchers.

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