

## An investigation of the relationship between agility and quality of e-banking services: Saderat Bank of Isfahan in focus

Hosseyh Saneie, Salman Abbasian-Naghnah \*

*Department of Management, Dehaghan Branch, Islamic Azad University, Dehaghan, Iran*

---

**Abstract:** This descriptive survey study aimed to study the relationship between agility and the quality of E-banking services in Saderat Banks of Isfahan. Statistical population of this study was all the managers and employees of Saderat Bank branches in Isfahan from which a number of 329 people were selected as statistical sample. The instruments used in this research were two questionnaires of agility features E- banking. In order to measure the validity and reliability of questionnaires, conceptual method and alpha cronbach, whose value was 0.86 were used. Data normalization was done through Kolmogorov – Smirnov test and for data analysis was carried out by Pearson test and path analysis. The results showed that there was a relationship between agility dimensions and E-banking services of Saderat Banks. In addition, there was a relationship between responsibility, competence, flexibility and speed and quality of E-banking services in Saderat Banks.

**Key words:** *Agility sapability; E- Services quality; Isfahan Saderat Bank*

---

### 1. Introduction

Today's competition to improve service quality is regarded as a strategic issue for service-providing organizations. Organizations that reach to upper level of service quality have higher levels of customer satisfactions as a tool to reach a stable competitive advantage. Banking system in market economy is one of the important component of economic in every country and has heavy responsibility. Nowadays, banks have special attention to service quality in hesitating environment. This leads to more lasting customers, attracting new customers and improving financial performance and profitability. During last decades, intense competition among enterprise diverted attention to closer and deeper recognition of customers' demands, created satisfied customers and even passion for the quality of services in first step need to recognition of demands and their willing and them transferring of these wants to a situation that products and services are produced.

It is not accidental for a system to become an increasingly complex economic, social and cultural system, but it requires systematic methods and approaches that convert these concepts to organizational process. In one hand, changing the desires, needs and expectations of customer is an undeniable fact, therefore, at first, we should determine what customers want and then we should try to realize them. Banking and financial institutes constitute a lion share of service service-providing industry. Financial services perspective is changing rapidly and it leads to mitigating, structural and

technological changes along with moving to global banking environment in world banking industry. Offering diverse benefits and competitive services and restructuring of services to use technology and in order to meet customers' needs, banks are escaping across the borders. Due to these actions, the nature of banking services and their relationships with customers have been changed. The competitive and rapid-changing environment in which banks are forced to work, make them to shift their views about customers' satisfaction and optimization of service quality. Many of organization come to this point that offering consistent services with higher quality compared to their rivals can bring them considerable competitive advantage. All of the affairs that are named as virtual banking are done in order to achieve better service quality. Therefore, we can call service quality as the core of banking operation.

### 2. Theoretical and literature

#### 2.1. The concept of service quality

Service quality attracted much attention among operational managers and visitors, and in management literature, quality has a different meaning and service quality is different from goods quality. Peters and Waterman (1982) defined quality as "sublimation". Fegenbaun (1983) defined it as "value", Grynal and Jurdan (1988) as "applicability" and Gronroos as "customer satisfaction". These definitions show different aspects of quality. Some scholars such as Deming Peters claimed that quality is footstone of sublimation. During last decades, quality has some meaning beyond meeting

---

\* Corresponding Author.

customers' expectations and environmental dimension, security, financial and even social aspects of company performance were involved in this concept. This change of meaning led to a revolution of actions and research of in quality management and instead of concentrating on foreign customers, the focus shifted towards company's internal health and overall performance. Services are as work, process and performance works are activities that lead to problem solving that customers cannot solve lonely. Service process is used for doing necessary works and its performance is related to know how to do works and whether service process has essential efficacy or not. Service quality is considered to be a main factor in achieving to competitive advantage and financial success of service organizations. Quality is a key word for survival of organization in global economic and organization has pursued a customer-centric approach.

## 2.2. Agility

According to previous researches, different definitions were offered for agility which are summarized as follows:

Definition of Yakoka institution is:

Productive system with extraordinary capabilities (internal abilities, soft and hard innovation, human resource, educated management, information) is for meeting the immediate needs of market (speed, flexibility, customers, rivals, suppliers, infrastructure, and responsibility). Agility is a comprehensible response to new competitive environment that is formed by forces that reduce the power of mastered production system. Agility rivals accelerate the change and create markets and new customers that is out of their recognition from the path that markets and customer's needs to be leveraged. However, agility allows the company to show faster reaction than before and the strength of agile rivals is permanent by prediction the customers' needs and leadership in creating new markets. Agility is successful research in competitive basis (speed, flexibility, creativity, quality, profitability) by integration of renewable resources and is the best practical path in an specialized environment for supplying services and products according to customer desires in environment and a market that it is changing rapidly. Agility is considered as a productivity philosophy to firms that compete in all of the economic sections. Agility is obtained by integration of hierarchy of customers' needs in a framework from internal and external environment of organization. This is because of holistic perspective to advance productive technology along with internal capabilities for their processing and is gained by using technology and information systems. Agility involves wide business of structural organization, information systems, logistic processes and special vision.

Agility capabilities: they are those capabilities that should be run in organization to create enough power to responsibility for changes:

Responsibility: the ability to recognize quick response to changes and enjoying them.

Competence: wide collection of abilities that guarantee productivity of activities for achieving organization goals.

Flexibility: productive capability and offering different products and achieving to goals with similar resource and equipment.

Speed: the ability of doing an action in the shortest possible time.

## 3. Develop hypotheses and conceptual model

This study has one main hypothesis and three sub-hypotheses as follows:

- Main hypotheses: There is a relation between agility capabilities and E-banking services in Saderat banks.
- The first sub- hypothesis: There is a relation between responsibility and E-services quality of Saderat banks.
- The second sub – hypothesis: There is a relation between competence and E- services quality of Saderat banks.
- The Third, sub – hypothesis: There is a relation between flexibility and E- services quality of Saderat banks.
- The Fourth sub – hypothesis: There is a relation between speed and E-services quality of Saderat banks.

According to theatrical basis of this study, the conceptual model of study shows the relation of agility capabilities with E- services quality of bank. According to this model, these hypotheses are formed.

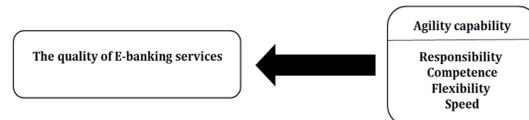


Fig. 1: Theoretical framework

## 4. Methodology

This study is practical; because its results can be used for Saderat Banks managers in Chahar Mahal Bakhteyari province in order to gain some invaluable information in solve their problems. Regarding the issue that the aim was identification of existing relations among agility capabilities and banking services quality, this study is correlation and descriptive in data collection and hypotheses testing. Statistical population of the study was Saderat Banks' employees in Isfahan. Total number of them was 2580 people, and according to Cochran formula, 334 volume of sample was obtained and the questionnaire was distributed among them.

According to study aims, the best way for collecting data was using questionnaire. For measuring of services quality, servqual standard questionnaire was used which was offered by Parasuraman et al. It had enough validity, and for

measuring agility, Spiders Standard questionnaire was used that has enough validity. For investigating the normality of collected data, Kolmogorov test was used and normality of data was approved. Hypothesis testing was conducted through test parametric methods such as Pearson correlation method.

**5. Data analysis**

**5.1. Normality of operating result (Kolmogorov test)**

The obtained results showed that there was a significant level of agility capabilities, services quality and its dimension which was bigger than 0.05. Therefore, agility capabilities, services quality and its dimensions had normal distribution. In order to test the normality of data, distribution parametric test with higher accuracy was used.

**Table 1:** Findings of kolmogorove test

Variable	Significance	Normality results
Speed	0.628	Normal
Responsibility		Normal
Competence		Normal
Flexibility		Normal
Agility Capability		Normal
E-banking quality		Normal

**Main hypothesis:** There is a relation between agility and E- services quality in Saderat banks.

For investigating of correlation among agility capabilities and E- services quality, Pearson correlation coefficient was used. In this study, this relation was approved, and correlation was equal to  $r=0.877$ . As shown in table 2, there was a positive and significant relationship between agility capabilities and E- services quality.

**Table 2:** The result of pearson correlation test for main hypothesis

E-banking quality		Agility capability
0.877	Pearson test	
0.000	Sig.	
334	Frequency	

**The first sub-hypothesis:** There is a relationship between responsibility and E- services quality in Saderat banks.

In order to investigate the correlation between responsibility and E- services quality, Pearson

correlation test was used. In this study the correlation was approved, and it was equal to  $r=0.860$ . Therefore, as illustrated in table 3, there was a positive and significant relation between responsibility and E- services quality.

**Table 3:** The results of pearson correlation test in first hypothesis

E-banking quality		Responsibility
0.860	Pearson test	
0.000	Sig.	
334	Frequency	

**The second sub-hypothesis:** There is a relation between competence and E – services quality in Saderat Banks.

In order to test the relation between competence and E- services quality, Pearson test was used. In this study, the relationship was approved, and was equal to  $r=0.911$ . Table 4 shows the positive and significant relation between competence and E- service quality.

**Table 4:** The results of pearson correlation test for second sub – hypothesis

E-banking quality		Competence
0.911	Pearson test	
0.000	Sig.	
334	Frequency	

**The third sub-hypothesis:** There is a relation between flexibility and E- services quality.

To investigate the correlation between flexibility and E- services quality, Pearson test was used and the relation was approved (it was equal to  $r=0.877$ ). Table 5 demonstrates that there was a positive and significant relation between flexibility and E- services quality.

**Table 5:** the results of Pearson test for the third sub-hypothesis.

E-banking quality		Flexibility
0.892	Pearson test	
0.000	Sig.	
334	Frequency	

**The fourth sub-hypothesis:** There is a relation between speed and E- services quality.

In order to test the correlation between speed and E – services quality, Pearson test was used. In this study, the relation was approved and was equal to  $0.877$ . As shown in Table 5, there was a positive and significant relationship between speed and E- services quality.

**Table 6:** The results of Pearson test for third sub-hypothesis

E-banking quality		speed
0.851	Pearson test	
0.000	Sig.	
334	Frequency	

**5.2. Prioritizing aspects of agility capabilities**

As you can see in Table 6, in significant level of 0.05 between average levels of agility capabilities, there was a significant difference between the components of agility. According to the results of

freedman test, priority of agility capabilities was: speed, responsibility, flexibility and competence.

**Table 7:** Average results for agility capabilities according to Freedman test.

Priority	Agility capabilities' dimensions	Average rate	Freedman	df.	Sig.
1	Speed	2.5			
2	Responsibility	2.19	82.093	2	0
3	Competence	1.31			
4	Flexibility	2.15			

**Path analysis model of the study:** In order to have a path analysis of sub-hypotheses of the study, regression technique was used. Using standardized beta coefficient, this technique examines the direct effect of an independent variable on depended variable. According to regression test results, (Table 7) it can be claimed that, in significant level of 0.05, agility capabilities dimensions were: speed, responsibility, flexibility and competence that were 0.396, 0.315, 0.414, 0.367 respectively and there was a significant and positive effect on electronic services quality.

**Table 8:** Regression analysis test results

agility capabilities dimensions	Sig.	T	Beta-Standard
Speed	0	3.263	0.396
Responsibility	0	2.484	0.315
Flexibility	0	3.109	0.419
Competence	0	2.899	0.367

**6. Discussion and conclusion**

Nowadays, organizations are faced with many challenges that the ability to deal with these challenges are expected from organizations. From one hand, having strategic perspective to changes and opportunities derived from changes, and on the other hand, improving the organizations' capabilities and infrastructure can be appropriate mechanism for long-term success in organization. In other words, one can say claim that previous solutions and approaches have not longer the capability for facing with organizational challenges and external environment; therefore, new viewpoint should be substituted. Accordingly, one way to answer to these changing factors in organizations is agility. In reality, agility is regarded as a new paradigm for engineering organizations and competitive institutions and according to this issue, obtained results from statistical analysis represented positive and significant relationship between organizational agility and E-banking services quality in Saderat banks of Isfahan. The following recommendations

are proposed in order to improve agility capabilities in Saderat banks.

1. Regarding to the lack of relationship between responsibility and e-banking quality services of Saderat Bank, we can propose the following recommendations for creating and improving responsibility.

- Developing and delivering responsibility strategies to customers through headquarters of banks or provincial supervision.
- Preparing evaluation measures of the status of responsibility in banks and inserting it in the list of periodic evaluation measures of branches
- Continuous and cross-sectional evaluation from the view point of customers on the status of responsibility of bank
- Planning and applying the competitive mechanisms between the branches on the issue of responsibility and announcing responsibility award in individual (managers and employees) and organizational level (branches)

2. As regards the relationship between competence and e-banking quality services of Saderat Bank, the following suggestions are offered in order to improve this quality:

- Reorganization and improvement of supplying human resources
- Planning and evaluating of employees and managers' training
- Reinforcement of employees and managers' motivational system in order to attract competent people

3. Considering the relationship between the flexibility and e-banking quality services of governmental banks, we recommend the following suggestions:

- Revising and establishing the process of management system
- Defining the flexibility indexes in the procedures related to customers
- Planning the continuous evaluation process of the flexibility indexes
- Rewriting the rules related to offering and paying back of loans by customers
- Setting off the suggestion system and distributing it to all the branches

- Investigating the major customers' needs periodically and reporting it to the district supervision in order to make some flexibility in the bank's structure and behavior
4. With respect to the relationship between speed and e-banking quality services of governmental banks, the following suggestions are put forward:
- Revising and establishing the ergometer system particularly in the major processes and the processes which are related to the customers
  - Revising and establishing the timing system in in the processes related to the customers
  - Attempting to establishing the relationship between the speed of providing services by the employees/customers and their salaries regarding the application of IT and e-banking system.

## References

- Angur, M. G., Nataraajan, R. & Jaheera, J. S. (1999). Service Quality in the Banking Industry: An Assessment in a Developing Economy. *International Journal of Bank Marketing*, 13(3), 116-23.
- Arasli, H., Mehtap-Smadi, S. & Turan Katircioglu, S. (2005). Customer Service Quality in the Greek Cypriot Banking Industry. *Managing Service Quality*, 15(1), 41-56.
- Gronroos, C., (2001), "Service Management & Marketing, Willey.
- Guo, X., Duff, A., & Hair, M. (2008). Service Quality Measurement in the Chinese Corporate Banking Market. *International Journal of Bank Marketing*, 5(26), 305-327.
- Kotler, P. (1997). *Marketing Management: Analysis, Planning, Implementation, and Control*, Upper Saddle River, NJ: Prentice-Hall, Inc.
- Lundahl, N., Veghom, F., & Silver, L. (2009), Technical and Functional Determinants of Customer Satisfaction in the Bank-SME Relationship. *Managing Service Quality*, 19(5), 581-594.
- Mishkin, F. S. (2001), *The Economics of Money, Banking and Financial Markets*. MA: Addison-Wesley, Reading.
- Othman, A., & Owen, I. (2002). Adopting & Measuring Customer Service Quality (sq) in Islamic Banks. *International Journal of Islamic Financial Services*, 1-10.
- Guo, X., Duff, A., & Hair, M. (2008). Service Quality Measurement in the Chinese Corporate Banking Market. *International Journal of Bank Marketing*, 26(5), 305-327.
- Kumar, R. & Markeset, T. (2007). Development of performance-based service strategies for the oil and gas industry: A case study. *Journal of business and industrial marketing*, 22 (4), 272-280
- Rahaman, M., M., Abdullah, Md, Rahman, A. (2011). Measuring Service Quality using SERVQUAL Model: A Study on PCBs (Private Commercial Banks) in Bangladesh. *Business Management Dynamics*, 1(1), 1-11.
- Ravi S. Sharma, David W. Conrath. (2007). Evaluating expert systems: the socio-technical dimensions of quality, 9(3), 125-138 .
- Yusuf, Y., Sarhadi, M., Gunasekaran, A. (1999). Agile manufacturing: the drivers, concepts and attributes. *International Journal of Production Economics*, 62 (1-2), 33-43.
- Goldman, S.L., Nagel, R.N., Preiss, K., (1995). *Agile Competitors and Virtual Organizations: Strategies for Enriching the Customer*. Van Nostrand Reinhold: New York
- Sharifi, H. Zhang, Z. (1999) A methodology for achieving agility in manufacturing organizations: an introduction. *International Journal of Production Economics*, 62(1/2).
- Christopher G. Worley, Thomas D. Williams, Edward E. Lawler (2014). *The Agility Factor: Building Adaptable Organizations for Superior Performance*. London: Wiley.
- Hooper, M. J., Steeple, D., and Winters, C. N. (2001). Costing customer value: An approach for the agile enterprise. *International Journal of Operations and Production Management*, 21 (5), 630-644.
- Christopher, M. (1992). *Logistics & Supply Chain Management: Strategies for Reducing Cost and Improving Service*. London, UK: Pitman.