

The Investigating Methods of Applying Electronic Banking Centralized Management Services

Younos Vakilaroia¹, and Abbasali Dolati²

Abstract— The main aim of the current research is investigating methods of applying core banking electronic banking centralized management services based on Islamic banking with trade core banking in form of a case study in Melli bank of Iran. The population is Melli bank of Iran and sample size was 384 people using Krejcie and Morgan tables. Current research is descriptive from aspect of methodology and it is correlation one from aspect of research type. The research results demonstrate that the test statistic size is less than test error size (%5) for independent variables in significant level. Therefore, we can express the value is significant and main hypothesis of the research is approved. Independent variables had Sig relationship with dependent variables. Likewise, correlation coefficient for the variables among secondary hypotheses of the current research indicates values 055, 0660, 516, 0560, 0702, respectively. But according to the main hypothesis of the research, it shows 0777 which is correlation coefficient square (coefficient of determining flexibility level in dependent variable.). So, the value related to correlation coefficient indicates that there exists a meaningful relationship between methods of running (core banking) electronic banking centralized management services which are based on Islamic banking of common trade in the world and the way of imposing Islamic banking principles in trade core banking model and key factors in employing Islamic trade core banking of Melli bank of Iran.

Keywords—Electronic banking centralized management services, Islamic banking, trade core banking model, Melli Bank of Iran,

I. INTRODUCTION

DEVELOPMENT and growth of information and communicative technologies have had positive effect and consequences in scientific, social and economic fields of societies which own such technologies. Today, experts don't care about special cases in dealing with development indices. Mixing with other factors, they do assess direct and indirect effects of each influential factor. Increasing effect of applications and scientific tools in various activities of society especially economic structures can cause improvement and development in traditional attitude towards trading and market.

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Hence, what can make organizations competitive is speed in providing services, low fee of the services provided, in-time delivery of services to clients and quality of the services provided. In within-organization sector, every organization which is able to use technology as much as possible may also have the capacity of overtaking other opponents. Hence, the way of applying and using such tools can be considered infrastructure for establishing competitive advantage of such organization (Taqi Nataj, 2011).

Increasing development of internet in different countries and connectivity of many people of the world to the internet and expanding electronic communication among people and different organizations through virtual world of internet all have provided fine bed for establishing trade and economic exchanges where electronic banking was established as a desirable result for change and development (Atashak, Mahzadeh, 2008, pp.1-18)

Electronic banking can provide opportunities so that the services provided can improve and make them able to have access to data 24/7 which is a must in banking system of Iran. On the other hand, today electronic banking has established a new development in market and modern financial services. A development is called CB centralized banking system which became common today as another way of development in electronic banking domain.

CB system is a sort of banking where all the financial information and engagements in the banking network are registered and kept in one central information unit (Core). (Informing basis and training Post bank of Iran, May 21th, 2010)

Today, electronic banking has established a new development and modern financial services in the market. The development is called (CB) centralized banking system which today appeared as another way of development in the electronic banking domain.

Therefore, in this research we try to deal with methods of applying (core banking) electronic bank centralized management service which is based on Islamic banking and is common in the world and the way of imposing Islamic banking principles in trading core banking in form of a case study in Melli Bank of Iran.

II. LITERATURE AND THE RESEARCH BACKGROUND

A. Electronic banking centralized management services (Core banking)

Quick review of the most important banking centralized system produced in the world:

In this section, and based on table No. (1), we seek to investigate the most important banking centralized system produces in the world quickly.

TABLE I
QUICK REVIEW OF THE MOST IMPORTANT BANKING CENTRALIZED SYSTEM PRODUCED IN THE WORLD

Producer	Product
Misys	Bank Fusion Universal Banking
Infosis	Finacle
Center of Financial Technologies (CFT) exchanger / Alnova	CFT-Bank Alnova Financial Solutions
Automated Systems, Inc.	Insite Banking System
Fidelity National Information Services (FIS)	Profile (software) (formerly Sanchez Profile)
SAB	SAB / SAMIC
Fiserv	Signature (software)
Fidelity National Information Services (FIS) (formerly Systematic, Inc/ Alltel)	Systematic
Temenos Group	TEMENOS T24

Source: Wikipedia, Free Encyclopedia, 2013, (<http://fa.wikipedia.org/wiki>)

B. Technology

Information technology is formed of four key elements (human, solution, tools and structure), so that in this technology information are run through value chain which are created by joining these elements. Then they will choose excellence and organization completions as their method (Sepehry, 2004).

Technology is considered as capability of applying sciences in providing material and mental needs of men. With improvement of science, new potential stage will be provided for improving technology. Level of materials and services produced in societies which gained technological improvements increased their distance from traditional and undeveloped communities. In fact, power of countries or industrial & service institutions in the field of various economic, political, cultural and military competitions depend on their technological strength (Sepehry, 2004)

Only with the help of technology level in the society people can produce more products and services and this way efficiency and effectiveness of their organization will be provided. Meanwhile with fine systemization of cultural, political and social fields, the stage will be set for better life. In the stage of economic competitions, organization and institutions which gain top technology will have the possibility of growth and organizations and institutions which are left behind will get out of the stage (Scott, 1990)

C. Main elements of information technology:

Human: human source, notions and ideology, technology

- Solution: rules, regulations and methods, solutions for improvement and growth, valuing and financial solutions
- Tools: software, hardware, network and communication
- Structure: organizational, related beyond-organization, (source, Scott, 1990)

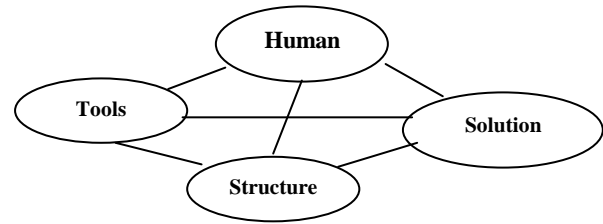


Fig 1 General Framework of IT

III. METHODOLOGY

Since we describe current condition in this research, it is called a descriptive research. The research deals with methods of applying (core banking) electronic bank centralized management service which are based on Islamic banking and are common in the world and the way of imposing Islamic banking principles in trading core banking in form of a case study in Melli Bank of Iran. Hence, we can claim it is correlation type. Likewise, current research has survey method.

A. Population:

The population of the research investigates methods of applying electronic bank centralized management service which are based on Islamic banking and are common in the world and the way of imposing Islamic banking principles in trading core banking and it is a case study which includes all the bank and financial and economic experts, capital market, clients and employee at Melli bank of Iran. They were around 45000 people.

B. Statistical sample:

To choose the sample after referring to tables of Korjesi and Morgan, the sample size of the statistical society is almost 45000 people. Also, sample size for 384 people was done following process of sampling method of Morgan Table.

C. Tools for gathering data:

In this research, both methods of gathering data were applied: library and field. Necessary studies and investigations on theoretical basis of the research, literature of the research, problem backgrounds and the research topic were conducted using library method, by studying resources, thesis and researches which are relate to topic and by applying internet basis. In order to perform main steps of the research and to gather information, field methods were used including questionnaire method. Questionnaire method has provided the possibility of gathering information among above statistical society in form of a case study. It includes all the bank, economic and financial experts, capital market, clients and employees of Melli Bank of Iran who are nearly 45000 people.

D. Technical, features of tools for measuring

a) Validity: to determine validity of the measuring tools, content validity was used. Therefore, to gain questionnaire validity which is related to applying opinions and guidance of supervisor, the questions of the questionnaire were investigated. Also, idea of some experts were asked who were master in the way of applying (core banking) electronic banking centralized management services based on Islamic banking which are common in the world and the way of imposing Islamic banking principles in the trading core banking model in Melli Bank of Iran. Ambiguities were then removed indicating content validity is acceptable.

b) Reliability: to measure reliability or for determining questionnaire reliability, Cronbach Alpha Coefficient was used as a tool for measuring and internal coordination.

E. The research hypothesis:

In other words, according to questions and the model suggested by the research, main hypothesis of the research has the same key factors in employing Islamic trade core banking in Melli Bank of Iran which are technological key factors and IT, key financial and economic factors, key legal infrastructure and banking competition models.

There is a significant relationship between the way of applying (core banking) electronic banking centralized management services based on Islamic banking which are common in the world and the way of imposing Islamic banking principles in the trading core banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli Bank of Iran.

IV. DATA ANALYSIS

In this section, the research hypotheses were tested based on data gained out of the questionnaire.

A. Data analysis and the research hypothesis test

In this research, variables of two-sided T-student tests were used for investigating the first hypothesis of the research. Tests of correlation level and ANOVA are used for investigating difference level in average of sample for the first research hypothesis and Pearson coefficient test for solidarity or level of relationship between the two variables. It is usually measured by (p) correlation coefficient which is applied for expressing degree correlation between the research variables. Next we will deal with the research hypotheses test.

The research hypothesis: there exists a significant relationship between methods of applying (core banking) electronic banking centralized management services based on trade Islamic banking which are common in the world and the way of imposing Islamic banking principles in trade core banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli bank of Iran.

H₀: there does not exist a relationship between methods of applying (core banking) electronic banking centralized management services based on trade Islamic banking which

are common in the world and the way of imposing Islamic banking principles in trade core banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli bank of Iran.

H₁: there exists a relationship between methods of applying (core banking) electronic banking centralized management services based on trade Islamic banking which are common in the world and the way of imposing Islamic banking principles in trade core banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli bank of Iran.

Table 8 indicates results gained out of regression test related to the main hypothesis of the research. It says there exists a significant relationship between methods of applying (core banking) electronic banking centralized management services based on trade Islamic banking which are common in the world and the way of imposing Islamic banking principles in trade core banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli Bank of Iran. Determination coefficient achieved from regression test which is in table No. 8 indicates variables related to key factors of the way of applying (core banking) electronic banking centralized management services based on Islamic banking with trade core banking which is common in the world and the way of imposing Islamic banking principles in trade core banking model in Melli Bank of Iran (as an independent variable) all can explain 77.70 percent of variable level of employing Islamic trading core banking in Melli bank of Iran.

TABLE VIII
RESULTS GAINED OUT OF REGRESSION TEST RELATED TO THE RESEARCH HYPOTHESIS

Variables Entered/Removed ^b			
Model	Variables Entered	Variables Removed	Method
1	Human Resource and Internal Process Factors...Xit, General Management of Organization Factor...Xit, Finance and Economic Factors...Xit, Infrastructure legal and banking competition model Factors...Xit, Information and Technology Factors...Xit	.	Enter

a. All requested variables entered.
b. Dependent Variable: Establishment of an Islamic Core Banking Commercial Bank Melli Iran.Yit

Source: research findings.

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777 ^a	.603	.598	3.94543

a. Predictors: (Constant), Human Resource and Internal Process Factors...Xit, General Management of Organization Factor...Xit, Finance and Economic Factors...Xit, Infrastructure legal and banking competition model Factors...Xit, Information and Technology Factors...Xit

Source: research findings

Coefficients						
Model	Non-standardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error				
1	(Constant)	-38.260	3.037		-12.596	.000
	General Management of Organization Factor...Xit	2.287	.192	.559	11.900	.000
	Information and Technology Factors...Xit	-.270	.215	-.091	-1.256	.000
	Finance and Economic Factors...Xit	.154	.054	.147	2.853	.005
	Infrastructure legal and banking competition model Factors...Xit	1.058	.225	.316	4.695	.000
	Human Resource and Internal Process Factors...Xit	.289	.244	.083	1.185	.007

a. Dependent Variable: Establishment of an Islamic Core Banking Commercial Bank Melli Iran.Yit

Source: research findings

TABLE IX
RESULTS OF SPEARMAN COEFFICIENT CORRELATION COEFFICIENT IN THE MODEL OF THE SAMPLE RELATED TO THE RESEARCH HYPOTHESIS

Correlations								
		Establishment of an Islamic Core Banking Commercial Bank Melli Iran.Yit	General Management of Organization Factor...Xit	Information and Technology Factors...Xit	Finance and Economic Factors...Xit	Infrastructure legal and banking competition model Factors...Xit	Human Resource and Internal Process Factors...Xit	
Spearman's rho	Establishment of an Islamic Core Banking Commercial Bank Melli Iran.Yit	Correlation Coefficient	1.000	.560*	.698*	.668*	.708*	.682*
		Sig. (2-tailed)	.	.000	.000	.000	.000	.000
		N	384	384	384	384	384	384
	General Management of Organization Factor...Xit	Correlation Coefficient	.560*	1.000	.590*	.599*	.574*	.545*
		Sig. (2-tailed)	.000	.	.000	.000	.000	.000
		N	384	384	384	384	384	384

Information and Technology Factors...Xit	Correlation Coefficient	.698*	.590*	1.000	.903*	.915*	.921*
	Sig. (2-tailed)	.000	.000	.	.000	.000	.000
	N	384	384	384	384	384	384
Finance and Economic Factors...Xit	Correlation Coefficient	.668*	.599*	.903*	1.000	.885*	.887*
	Sig. (2-tailed)	.000	.000	.000	.	.000	.000
	N	384	384	384	384	384	384
Infrastructure legal and banking competition model Factors...Xit	Correlation Coefficient	.708*	.574*	.915*	.885*	1.000	.943*
	Sig. (2-tailed)	.000	.000	.000	.000	.	.000
	N	384	384	384	384	384	384
Human Resource and Internal Process Factors...Xit	Correlation Coefficient	.682*	.545*	.921*	.887*	.943*	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.
	N	384	384	384	384	384	384

** . Correlation is significant at the 0.01 level (2-tailed).

Source: research findings

Table 10 indicates results gained out of test ANOVA in the sample related to the research hypothesis. It shows results of regression test in confidence level of 95 percent, and error level of 5 percent are significant by comparing with meaningful level (Sig, 0.000).

V. DISCUSSION AND CONCLUSION

Main aim of the current research is investigating methods of applying core banking electronic banking centralized management services based on Islamic banking with trade core banking and the way of imposing Islamic banking principles in trade core banking model in form of a case study in Melli Bank of Iran. Statistical society of the research includes all the bank, economic and financial experts, capital market, clients and employees of Melli Bank of Iran who are 45000 people. Therefore, in this chapter first we dealt with statistical description of data and in the second chapter we investigated research hypothesis test. So, according to the tests done on the research variables we can argue that in confidence level of 95 percent and also in error level of 5 percent the research hypothesis is approved and independent variables have significant effect on the dependent variable. In other words, we can express there is a substantial relationship between the way of applying (core banking) electronic banking centralized management services based on Islamic banking which are common in the world and the way of imposing Islamic banking principles in the trading core

banking model in Melli Bank of Iran and key factors in employing Islamic trading core banking of Melli Bank of Iran, since it shows correlation coefficient (.601a). Moreover, estimation criterion error measures level of distribution of points around regression line in two-dimensional space. The more the value is the index, the more distribution around regression line. Likewise, the results achieved out of the test were generalized with confidence of 95 percent to total statistical society of the research; all the branch management of Melli Bank of Iran.

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