

Research Article

The Effect of Customization, Price, Geographical Accessibility, Professional Knowledge and Interaction on Intent of Customers for Using Internet Banking Services in Iran

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Abstract: Not all organizations and institutions are equally successful in employing electronic commerce. Thus it is necessary to conduct required studies so that we can create a favorable policy in relation to implementation and employment of electronic commerce and identify factors which facilitate its growth. Thus, the purpose of this study is to investigate the effects of customization, price, geographical accessibility, professional knowledge and interaction on intent of customers for using internet banking services in Iran. Totally, 400 questionnaires were distributed to university students, that 382 questionnaires were used for the final analysis, which the results from analysis of them based on simple linear regression show that customization, price, professional knowledge and interaction have a positive influence on Customers' Purchase Intent in Iran, except for geographical accessibility which was not confirmed in the case of our intended population.

Keywords: Customers' purchase intent, customization, geographical accessibility, interaction, internet banking services, price, professional knowledge

INTRODUCTION

Electronic commerce consists of every type of business and/or economic activity being conducted through electronic communications. Business means all activities which lead to value creation in relationship with customers and suppliers (Wigand, 1977). Emergence of Information Technology (IT) has influenced many industries e.g. banking one. Electronic services are provided to customers via electronic channels such as ATMs, telephones, PCs, internet and recently mobile phones. Today IT provides many services online and many customers have access to online services (Lee and Park, 2009). Internet banking also means to provide banking services through internet and facilities of this network (Wan *et al.*, 2005). Internet offers many advantages both for banks and its customers. Using this technology, customers not only can perform their banking jobs in any time and place, but also it has the advantage of cost reduction and increased productivity for banks (Wan *et al.*, 2005). Despite of this, not all organizations and institutions are equally successful in employing electronic commerce. Thus it is necessary to conduct required studies so that we can create a favorable policy in relation to implementation and employment of electronic commerce and identify factors which facilitate its growth (Lee *et al.*, 2007).

Given the increasing expansion of internet networks in Iran and the ground prepared for organizations in order to use this achievement in

providing services to customers, thus it is necessary to examine key factors leading to supply of more favorable electronic services. Thus, the purpose of this study is to investigate the effects of customization, price, geographical accessibility, professional knowledge and interaction on intent of customers for using internet banking services in Iran.

LITERATURE REVIEW

Electronic services: Electronic services emerged along with internet growth. Initially, providing online services led to cost reduction and development of active institutions in this area. Though firms gained some profit by on line selling, but because of weaknesses in providing these type of services and meeting customers' needs, some challenges were emerged. Thus it became necessary to refocus on customer requirements and demands and quality of online services in order to enhance relationship with customers and service providers. During recent years, online service providers gained significant profits through increased relationship with their customers. Thus researchers realized that providing superior electronic services is possible through increased relationship between customers and firm and product development. Despite of electronic service growth, little research has been conducted on critical factors in providing desired services and research on quality of electronic services is also in its empirical phase. Thus study of the quality of electronic services and judgment about priority and

quality of provided electronic services from customer viewpoint should be considered more than before (Loonam and O'Loughlin, 2008).

In general, electronic service is an interactional and customer-oriented process based on internet being led by customer, is integrated with organizational customer-related processes and supports ICT with the aim of enhancing service provider-customer relationship (De Ruyter *et al.*, 2001).

Internet banking: Internet banking is a channel for distribution of banking services remotely and at a virtual level (Bradley and Stewart, 2002) and customers can access to their banks and accounts information and conduct their bank transactions. At basic level, internet banking means to create a web page by a bank in order to provide information about product and services being offered by it and at enhanced level, it consists of access to accounts, cash transfer and online purchase of products or financial services (Sathye, 1999).

Internet banking service is offered through internet at three levels consisting of (Okhiria, 2007):

- **Basic level of services:** Basic level of services including establishment of relationship with customers via email and spread of information on services and products being offered to customers.
- **Simple transactional websites:** Simple transactional websites which allow customers to receive guidelines and applications for obtaining various services.
- **Perfect transactional websites:** Perfect transactional websites which prepares required facilities for customers in order to access their account for cash transfer, payment of different invoices and bills, subscription to other bank products, securities trading transactions, etc.

Internet prepares the ground for banks so that they can provide their customers with such banking services as invoice payment and money management 24/7 at home. For instance, customers can receive information on their loans and saving accounts, cash transfer between accounts and relationship with other banks via email (Mols, 1999). Even it is possible to trade shares and debts, receive facilities schemes, provide electronic invoices, do international payments and offer electronic salary and compensation via internet (Mattila *et al.*, 2003). Internet banking is an instrument which makes it possible to reduce costs, improve bank productivity and create added-value for customers (Laukkanen *et al.*, 2008). Though many common activities of businesses can be substituted by online ones, but still there are certain limitations for providing these type of services because customers do not like to use services through online channels (Lee *et al.*, 2007). Research has shown that in order to accept online banking risks it is necessary to study banking services characteristics (Aldas-Manzano *et al.*, 2009) and customers are deeply subject to risk level of purchase while purchasing via

intern and to the great extent, they purchase services based on their perceived ease of use (Lee *et al.*, 2007).

Intent of customers for using internet banking: According to Ajzen (1991), customers choose to employ internet banking because they are interested in using the systems provided for bank transactions. Many researchers have tried to identify behavioral factors influencing people decision on online purchase. Also various theories exist in this respect consisting of rational action theory, planned behavior theory and technology acceptance model which intend to predict a desirable behavior (Wang and Pho, 2009) and also based on decomposed planned behavior theory, attitude, subjective norms and perceived behavior control are among main factors influencing customers' intent to use internet banking services and some of electronic commerce studies show that intent of customers to employ online interactions is a strong predictor of real expectations of customers in electronic commerce (Kim *et al.*, 2008).

In reviewing literature on marketing and trade, it is found that degree of customization is considered as a factor influencing customers purchase intent. Customization, as one of the dimensions of service characteristics, means the extent to which customer specific demands are met in production and supply of goods and services. On the other hand, degree of customization means to adapt and match service process faced with customer personal need (Lee *et al.*, 2007). In electronic commerce, face to face contacts and human interactions have been minimized via using such technologies as email, chat and multi-media conversations. Overall, it is observed that interactions and customization are semantically different. In electronic commerce, necessity of online interactions and customization with the aim of facilitation of online transactions play similar roles in some areas (Cho and Park, 2002).

Degree of customers' concerns on awareness of and knowledge about selection of service provider, expected service quality and trust in services being provided, summed together under the title of professional knowledge, had found to be effective in customer' intent to use internet services (Cho and Park, 2002).

Interactions among bank staff and customers are of significant importance in financial transactions. During last twenty years, banking sector has been under great revolution along with understanding of customer needs associated with technology and software and also technology progress and change in structure of financial services. In response to these revolutions, banks reduced number of physical branches and expanded electronic channels in order to increase effectiveness and reduce transaction costs (Loonam and O'Loughlin, 2008).

Degree of transactions shows the frequency of transactions between service providers and customer in

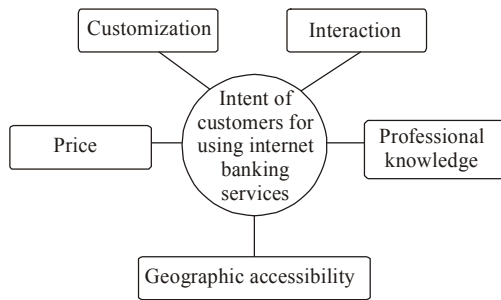


Fig. 1: The conceptual model for research

the whole transaction process. The important factor in repeated interactions with customer is that customers are allowed to present their recommendations and critiques on received services and obtain feedback from service providers (Lee *et al.*, 2007).

Despite of the fact that IT and internet applications have gradually reduced customers' need to geographical accessibility, but many experts (Cho and Park, 2002) believe that this need is still an important variable affecting electronic commerce operations and strategies. Degree of customers' need to geographical accessibility is fundamentally dependent upon product and service characteristics too.

In addition to the above, price charged for internet services compared to prices of those provided via other methods is considered as another factors influencing customers' intent to use internet banking (Lee *et al.*, 2007).

RESEARCH HYPOTHESIS

Based on the facts raised in research theoretical framework section, the following hypotheses are addressed:

- H1:** The customization has a positive influence on intent of customers for using internet banking services in Iran.
- H2:** The price has a positive influence on intent of customers for using internet banking services in Iran.
- H3:** The geographical accessibility has a positive influence on intent of customers for using internet banking services in Iran.
- H4:** The professional knowledge has a positive influence on intent of customers for using internet banking services in Iran.
- H5:** The interaction has a positive influence on intent of customers for using internet banking services in Iran.

Therefore, based on the hypothesis, Fig. 1 is a conceptual model to this study.

METHODOLOGY

Data collection and analysis:

Procedure and questionnaire design: Present research is of correlation type and is a survey one from implementation viewpoint. In present research both field and library method were used for data collection. In order to complete theoretical bases, library method was employed and in order to collect required data on potential customers of internet banking a questionnaire developed by researchers was used which consisted of 35 questions. Some of the questions were extracted from other similar questionnaires developed in other countries and the other ones were designed and put into questionnaire by the researchers according to specific conditions of Iran. Responses were organized based on Likert 5-point scale (very much, much, moderate, little, too little). In order to confirm validity of questionnaire, some experts were asked to review it and declare their correctional ideas. After required modifications, in pilot study, 40 copies of questionnaire were distributed to study population, Cronbach alpha was calculated as shown in Table 1 and after ensuring reliability of research instrument, final questionnaire administered to selected sample of statistical population.

Sampling target: In this study, information was collected in July 2012, from 382 college students in 5 management faculties of Islamic Azad University in Tehran area. According to Shouli (2007), in every society college students and consumers belong to the middle and high class and their education, revenue, social status and social interactions make them more involved. Therefore, college students who are in different age ranges with varying income levels were selected as the sample of this research.

Sampling method and sample size: Selective university is comprised of five colleges and eighty majors are taught in that. Totally, 26420 students study there. According to Krejcie and Morgan's table (1970), sample size was defined 379. Proportional Stratified sampling and systematic random sampling were utilized. In the first place, based on Proportional Stratified sampling, sharing and distribution of questionnaires was done relative to the numbers of colleges. Afterwards, systematic random sampling was done in front of the college entrance gate to choose

Table 1: Cronbach alpha for pilot study

	Sample number (N)	%	Cronbach α	Questionnaire number
Acceptable sample	38	97.5	0.932	35
Non-acceptable sample	1	2.5		
total	40	100		

Table 2: Results of original regression analysis table

Hypothesis	Independent variable	Dependent variable	Unstandardized coefficients		Standardized coefficients		
			B	S.E.	β	t	Sig.
1	Customization	Intent of Customers for Using Internet Banking Services	0.194	0.211	0.723	0.919	0.360
			1.014	0.085		11.975	0.000
2	Price	Intent of Customers for Using Internet Banking Services	2.139	0.207	0.583	10.325	0.000
			0.431	0.052		8.217	0.000
3	Geographical Accessibility	Intent of Customers for Using Internet Banking Services	3.579	0.278	0.070	12.869	0.000
			0.080	0.099		0.809	0.420
4	Professional Knowledge	Intent of Customers for Using Internet Banking Services	2.034	0.286	0.510	7.102	0.000
			0.493	0.073		6.778	0.000
5	Interaction	Intent of Customers for Using Internet Banking Services	1.633	0.310	0.405	5.264	0.000
			0.408	0.081		5.072	0.000

the respondents. With regard to the size of sample, 400 questionnaires were distributed and in total 382 completed questionnaires were obtained.

Data analysis: In order to test 5 research hypotheses, considering to significance values and t-value in original regression analysis table (Table 2), it is judged that if sig. value is less than research error coefficient value, i.e. 0.05 and also t-value is more than 1.96 or less than -1.96, then the related hypothesis will be supported with a CI confidence intervals of 95%.

HYPOTHESIS TESTING AND RESULT

Hypothesis 1: Findings of original regression analysis table (t-value = 11.975; sig = 0.000) in relation to hypothesis 1 show that customization influences positively on intent of customers for using internet banking services; Thus hypothesis 1 is supported.

Hypothesis 2: Findings of original regression analysis table (t-value = 8.217; sig = 0.000) in relation to hypothesis 2 show that price influences positively on intent of customers for using internet banking services; Thus hypothesis 2 is supported.

Hypothesis 3: Findings of original regression analysis table (t-value = 0.809; sig = 0.420) in relation to hypothesis 3 show that geographical accessibility does not positively influence on intent of customers for using internet banking services; Thus hypothesis 3 is rejected.

Hypothesis 4: Findings of original regression analysis table (t-value = 6.778; sig = 0.000) in relation to hypothesis 4 show that professional knowledge influences positively on intent of customers for using internet banking services; Thus hypothesis 4 is supported.

Hypothesis 5: Findings of original regression analysis table (t-value = 5.072; sig = 0.000) in relation to hypothesis 5 show that interaction influences positively

on intent of customers for using internet banking services; Thus hypothesis 5 is supported.

DISCUSSION AND CONCLUSION

In present research it was tried to help identifying some characteristics and features of internet banking services encouraging customers to use internet banking. According to provided research literature, researchers e.g. Cho and Park (2002), Lee *et al.* (2007) and Loonam and O’Loughlin (2008) concluded that variables degree of customization, professional knowledge, degree of interactions, geographical accessibility and price are influential in acceptance of internet bank by customers. Results from present study confirm ones of above mentioned research works to a great extent except for geographical accessibility which was not confirmed in the case of our intended population. Thus this demonstrates high validity of present study.

Results of present research would help in predicting online success based on customers acceptance and obtaining more insight about how to facilitate future adoption of internet banking services. Also the results confirm those of Lee *et al.* (2007) from Korea. Thus it is recommended to organizations which provide or intend to provide services through internet to determine correct and appropriate conditions for adoption of electronic commerce and factors which facilitate their shifting from traditional physical channels toward internet channels and then they are recommended to use decision tree prediction model in order to predict their success or failure because this model is of less error compared to common methods.

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