

## Current Practices and Actual Barriers of Adopting Internet Banking: A Survey Study

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### Abstract:

Information and Communication Technology have brought about many changes in almost all facets of life. In the Banking Industry, it has been in the form of online banking, which is now replacing the traditional banking practice. Online banking has a lot of benefits which add value to customers' satisfaction in terms of better quality of service offerings and at the same time enable the banks to gain more competitive advantage over other competitors.

Despite the benefits to the customer of online banking, its use has not reached a satisfactory level in the State of Qatar. So this study to highlights the obstacles and to attempts to identify the barriers that are preventing customers from using Internet Banking (IB) and the reasons behind this. By doing so, this will help banks to break-down the barrier and reach out to its customers.

A self – administered questionnaire was developed and distributed to a sample size of 600 students from Qatar University using Stratified random sampling modes. Data analysis was then based on 423 valid responses. The researcher has found that a significant number of respondents are not aware of the IB services. Hence, this paper therefore, examines potential factors identified to be barriers for internet banking adoption, and to examine the perceptions of respondents towards the reasons for not currently using Internet Banking. The data analysis reveals that 'the risk and security', 'no human interaction', and 'not interested' were identified as the major barriers preventing the respondents from using internet banking in Qatar. Four other factors such as 'difficult to use', 'no Benefits', and 'no necessity', and 'time consuming' were considered as miniature barriers which did not have a strong influence.

The findings of this paper can be useful reference for the banking industry to improve their business and for further future research. The study contributes to the literature on the internet banking services in domestic area.

Keywords: Internet, IB services, IB in Qatar, Security, Human Interaction, Risk, Qatar.



## الممارسات الحالية والمعوقات الفعلية لاعتماد الخدمات المصرفية عبر الإنترنت: دراسة مسحية

ملخص: ظهور تكنولوجيا المعلومات والاتصالات أدى الى العديد من التغييرات في جميع مجالات الحياة. والقطاع المصرفي أحد هذه المجالات التي تطورت بشكل كبير نحو توفير الخدمات المصرفية عبر الإنترنت، والتي يتم الآن استبدال الممارسات المصرفية التقليدية بها. ان الخدمات المصرفية عبر الإنترنت تقدم الكثير من المزايا التي تضيف قيمة إلى إرضاء العملاء من حيث تحسين نوعية الخدمات التي تقدمها، وفي الوقت نفسه تمكن البنوك من الحصول على ميزة تنافسية أكبر. وعلى الرغم من الفوائد التي تعود على العملاء من الخدمات المصرفية عبر الإنترنت، لم يصل استخدامها إلى المستوى المطلوب في دولة قطر. لذلك هدفت هذه الدراسة إلى تسليط الضوء على العقبات، وإلى تحديد العوائق التي تمنع العملاء من استخدام الخدمات المصرفية عبر الإنترنت والأسباب الكامنة وراء ذلك. هذا سيساعد البنوك على تبديد مخاوف العملاء وتقديم التسهيلات اللازمة لاستخدام هذه التقنية.

وقد تم تطوير استبيان وتوزيعه على عينة عشوائية حجمها ٦٠٠ طالب من جامعة قطر، وقد بني تحليل البيانات على ٤٢٢ إجابة صالحة. وقد وجد الباحث أن عددا من المشاركين ليسوا على دراية بالخدمات المصرفية المقدمة عبر الإنترنت. وبالتالي، فإن هذه الدراسة تتطرق إلى العوامل المحتملة التي تم تحديدها لكشف العوائق حول اعتماد الخدمات المصرفية عبر الإنترنت، ودراسة تصورات المستجيبين حول أسباب عدم استخدام هذه الخدمات. ويكشف تحليل البيانات أن الخطورة والأمان، والتفاعل البشري، وعدم الاهتمام، تشكل العوائق الرئيسية التي تحول دون استخدامها. وكشفت الدراسة عن وجود أربعة عوامل أخرى هي صعوبة الاستخدام، وعدم الفائدة، وهدر الوقت، وعدم الضرورة، تعتبر من المعوقات ذات تأثير ضعيف على اقبال عملاء المصارف لاستخدامهم هذه التقنيات.

وما توصل إليه هذا البحث من نتائج ممكن أن تكون ذات فائدة للقطاع المصرفي لتحسين جودة الخدمات المصرفية عبر شبكة الإنترنت، وكذلك باعتبارها مرجعا يساهم في إجراء المزيد من الدراسات في هذا المجال مستقبلا بما يعود بالفائدة للقطاع المصرفي في دولة قطر.

كلمات مفتاحية: الإنترنت، الخدمات المصرفية عبر الإنترنت، الأمان، التفاعل البشري، الخطورة، قطر.

## 1. Introduction

Banking is a highly information intensive activity that relies heavily on information technology (IT) to acquire, process, and deliver the information to all relevant customers. The emergence of the internet has had a significant impact on the diffusion of internet banking. The Bank industry in Qatar keep racing to provide the latest and state of the art technology that costs them a lot of money in an attempt to benefit from this competitive advantage and capture a larger market share and reduce operations costs. Hashim & Chaker (2008). Banks used the Internet technology as a strategic weapon to revolutionize the way they operate, deliver, and compete against each other. Internet banking has gained increasing popularity in recent years. Because of increased competition, banks are adopting this new technologies and tools to remain competitive and meet the up-and coming requirements of consumers.

Online Banking was introduced as a channel where bank customers could perform their financial transactions electronically via their banks' Web sites. An Online Banking user is expected to perform at least one of the following transactions online (Alsajjan and Dennis 2006):

- Checking account balance and transaction history
- Paying bills
- Transferring funds between accounts
- Requesting credit card advances
- Ordering checks
- Managing investments and stocks trading

Banks can become more efficient than they already are by providing Internet access for their customers. The Internet provides the bank with an almost paper less system. A person can search for information efficiently instead of waiting in line and asking a teller. With more better and faster options a bank will surely be able to create better customer relations and satisfaction. The internet banking removes the traditional geographical barriers as it could reach out to customers in different countries. It has added a new dimension to different kinds of risks traditionally associated with banking, heightening some of them and throwing new risk control challenges. Security of banking transactions, validity of an electronic contract, customers' privacy, etc., which have all along been concerns of both bankers and customers.

Changes in banks' external environment, including globalization and deregulation, have made the banking sector highly competitive. Banks find it hard to compete on price, and need to look at other ways to retain customers. As customers become more sophisticated, it becomes imperative for banks to consider the use of technology to



respond to their continuously changing requirements. But current scenario in Qatar shows that pace at which technology in Internet banking proceeds doesn't march with the customers' usage rate. Even though banks are more interested in adopting new technology to differentiate themselves in competitive market. This research investigate the awareness of Internet Banking amongst banking customers; focusing on internet users. So that a better understanding of the factors why consumers do not use Internet Banking, which will enable bank managers to identify those factors. Moreover, helping them adopt the right solutions to improve their IB services as well as to increase the rate of IB usage, also to suggest some recommendations on how to provide better acceptance of Internet banking service among customers.

The study also provide Qatari Banks with information to help them to introduce new products, and innovative ideas to target new markets. All this should be accompanied by promotional activities to create awareness that inevitably aids the adoption of new product / services.

In this study, all the objectives will be investigated through the data, which has been obtained from Qatar University students during the survey of Internet Banking. The following section will show some of the earlier studies that were conducted on the subject of the Internet Banking, which are relevant to this study. Section 3 presents the importance of the research, research objectives are presented in section 4. Research methodology, research instrument and data collection are discussed in section 5. Data analysis and discussions are discussed in section 6. Finally conclusion and recommendation are presented in Section 7.

## **2. Literature Review**

The literature shows that consumers are aware of Internet Banking, but they do not feel the need for it. Some consumers feel Internet Banking has less features and benefits compared to the traditional method. However, the younger generation can be attracted to this service as they are less resistant to change than the older generation. Reviewing the literature has helped to recognize and identify many factors or barriers why customers may or may not use Internet Banking services. Although the literature reviewed is of different countries with different level of literacy, infrastructure, developed level, a certain set of common factors have been identified by many of the studies. Therefore, using the aid of previous literature, this study hopes to check if these factors are amongst the reason for preventing internet users to use Internet Banking in Qatar along with other factors.

Asif and Numan (2010) research on online Banking. This study examines the customer perception, preferences, problems and suggestions about online banking in

Pakistan. The study reveals that mostly customers prefer internet banking (IB) services over branch banking due to reliability, convenience, speed, safety and security, cost effectiveness, user-friendly, and error free system. In contrast the parallel finding shows that security problems, lack of trust and knowledge. Therefore, online banking helps banks to retain and enhance the loyalty of their existing customers, increase customer satisfaction, provide opportunity to the banks to increase market share, reduce administrative and operational cost and to improve banks' competitive positions against their rivals.

Malhotra and Singh (2010) conduct an exploratory study and make effort to present the status of Internet banking in India. In addition, it seeks to examine the factors affecting the extent of Internet banking services. The results reveals that the private and foreign Internet banks have performed well in offering a wider range and more advanced services of Internet banking. The study reveal the affecting and the extent of Internet banking services, size of the bank, experience of the bank in offering Internet banking, financing pattern and ownership of the bank are found to be significant.

Chong, et al. (2010) empirically examines the factors that affect the adoption decision of online banking in Vietnam. Perceived usefulness, perceived ease of use, trust and government support was examined to determine if these factors are affecting online banking adoption. The results showed that perceived usefulness, trust and government support all positively associated with the intention to use online banking in Vietnam.

Azouzi (2009) pointed out that the current and prompt technological revolution altering the whole world has crucial impacts on the Tunisian banking sector. Particularly, this study seeks some clues on which we can rely in order to understand the customers' behavior regarding the adoption of electronic banking. An empirical research is carried out in Tunisia and it reveals factors are affecting the customers-attitude toward e-banking. For instance; age, gender and educational qualifications seem to be important and they have significant influence on the customers' adoption of e-banking.

Rani (2012), study the measurement of customer perception towards E-Banking in Pakistan . In this paper consumer perception toward the usefulness and willingness to use e- banking are identified and measured. The results showed that about 60% people have positive perception about E-Banking. In spite of having positive perception about E-banking services only 52.9% respondents are using it frequently. Varaprasad et al. (2013) identify the prominent factors that influence the public sector bank consumers in India to adopt internet banking services. Factors such as perceived usefulness, perceived ease of use, perceived risk, relative advantage and to be the determinants of internet banking.



Al-Ajam, A. S. et al. (2015) investigated the factors that influence individuals' intention to adopt Internet banking in the Republic of Yemen. The study found that a lack of empirical studies have been conducted in this field in Arab countries, in general, and in Yemen, in particular. The results indicate that the model provides a good understanding of factors that influence the intention to use Internet banking service. The model explained 63.8% of the variance in the behavioral intention. The findings are of great use to banks already offering Internet Banking but of even greater use for those banks which are planning to offer Internet banking services. The results of the study could serve as a guideline for bank managers in understanding the factors and strategic market planning that needs to be initiated to increase Internet banking adoption among current and potential customers.

Poon (2008) examined the factors affecting the adoption of e-banking services in Malaysia in light of the ten determinants namely convenience, accessibility, feature availability, bank management and image, security, privacy, design, content, speed, and fees and charges revealed that security, privacy and convenience are important factors contribute to users acceptance of e-banking.

Asgharian (2015) conducted a research to examine the the driving affecting factors on internet banking utilization in Saderat bank (one of the Iranian one) was surveyed. For measuring driving affecting factors on internet banking utilization, six main dimensions include technology, security, human and cultural factors, supporting, internet access quality and telecommunication substructures" quality were applied. The results of applying statistical tests illustrated that all mentioned dimensions affect significantly on internet banking. Meanwhile "internet access quality" was selected as the most important one.

Muzividzi, D.K. et al. (2013) identify the factors that affect the adoption of internet banking. The research focused on intellectuals who better understand technology than the general public. Data was collected using questionnaires and interviews from the population of 5000 students and academic staff at Chinhoyi University of Technology in Zimbabwe. A sample of 450 students and staff were selected from the population. The research identified various factors that impose barriers and enhance adoption of internet banking. It also unearthed the impact of demographic on internet banking adoption. Two hypotheses were tested, the first one which was meant to determine if there exist any relationship between age and internet banking adoption. It was concluded that there is a negative relationship between age and internet banking adoption. The second hypothesis assumed an association between internet banking and level of education. Education was deemed a prerequisite in enhancing the smooth adoption of

internet banking and hence one should have a significant level of education to take up the technology.

Ernovianti, et al. (2012) performed a study to examine factors that determine an individual's intention to use online banking by bank customers among higher learning students in Malaysia. The additional of TAM (Technology Acceptance Model) includes usefulness, ease of use, credibility, self-efficacy, compatibility and intention to use. By using simple random sampling, one hundred and seventy college students from university campuses in Tuanku Syed Sirajuddin Polytechnic will took part in the survey. The data were analyzed using Structural equation modeling (SEM) using AMOS 18. Understanding what influences users to accept internet banking can be beneficial to banks, system developers and marketing practitioners in developing and marketing internet banking services that will be acceptable by the target market. The research finding shows that there is significant relationship between self efficiency towards intention to use of internet banking.

Polatoglu & Ekin (2001) suggest from their findings that groups that are young educated and have a medium or high income may tend to accept change or resist less to change and accept Internet Banking compared to others. From their sample, 83 percent aged between 20 to 39, 82 percent university graduates and 73 percent in medium-high or high income group were ready to accept change and adopt Internet Banking. The researcher suggests that Internet Banking is a strategic importance in emerging country like Turkey. They say that Internet Banking will help a bank to reduce its operational costs but also have a high level of customer satisfaction which will lead to customer retention.

Sayar & Wolfe (2007) have mentioned the developments in technology are changing dramatically the way retail banks carry out their business, the pace of change has accelerated due to the introduction of the internet and the subsequent evolution of Internet Banking. Provision of financial services over the internet in particular, has helped banks since their products are intangible and thereby easier to deliver electronically. Ndubisi (2006) points out that Internet Banking services allow customers to access their banking accounts from anywhere and at any time of the day, it gives an advantage to customers to be able to manage their finances properly and in a convenient way.

Gerrard & Cunningham (2003), found a few characteristics which may influence the adoption of Internet Banking for Singapore consumers. The adopters of Internet Banking found it to be convenient, less complex and more compatible to them. The reason for no adoption was due to confidentiality, accessibility and economic benefits.



Grabner-Kräuter & Faullant (2008), also confirm that trust and risk perception on Internet Banking was a concern amongst Austrian consumers. Rotchanakitumnuai and Speece's (2003) study on corporate customers in Thailand also suggests that security is an inhibitor for Internet Banking adoption, but customers already using Internet Banking feel more confident in the reliability of the service.

Raed Awamleh, AND Cedwyn Fernandes (2005) this study evaluated websites of foreign and local banks in the United Arab Emirates and through a survey of users ascertained factors that influence customer satisfaction of internet banking service. These are convenience, independence, and security of internet banking transactions. Results suggest that although the banking sector in the United Arab Emirates is a regional leader, internet banking in the United Arab Emirates is yet to be properly utilized as a real added value tool to improve customer relationship and to attain cost advantages. The study identified the factors that are significant for internet banking customer satisfaction. Security of transactions and convenience contribute significantly to satisfaction of internet banking customers. Banks while advertising their internet services should emphasize these points in the case of new users of the internet banking service. Banks should also concentrate on the independence aspect of this service.

The study by (Khalfan et al. 2006; Al-Sabbagh and Molla 2004 ) conducted in the Omani banking industry, reported that security concerns have been one of the major issues in the e-banking adoption. From the viewpoint of the consumers, the decision to use internet banking is frequently motivated by convenience and efficiency. Online account holders do not have to make a trip to the local branch, queue, or be constrained by the bank's opening hours (Lassar et al., 2005).

Despite all the aforementioned merits of internet banking, certain barriers to adopting it exist (Black et al., 2002; Karjaluoto et al., 2002; Lee et al., 2005). Among the variety of factors impeding the diffusion of this innovation, the lack of computer or internet access appear to be the most prominent. Compared with the western countries individuals may also be averse to the idea of banking online due to their low educational attainment or unavailability of adequate information about this distribution channel (Nielsen, 2002; Im et al., 2003; Pikkarainen et al., 2004; Lassar et al., 2005; Lee et al., 2005; Gerrard et al., 2006). Finally, security concerns related to transacting on the internet can hamper the enthusiasm of many potential users (Sathye, 1999; White and Nteli, 2004; Gerrard et al., 2006). Salehi and Zhila, (2008), describes e-banking as an electronic connection between bank and customer in order to prepare, manage and control financial transactions.

A study conducted by Jasimuddin (2004) examined the role of e-banking in Saudi

Arabia. He indicated that the majority of Saudi banks had taken advantage of Internet technology to establish web sites but few offered e-banking services. He suggested that if the Saudi Arabian banking industry wished to be successful in the global economy it would need to integrate Internet technology into its banking strategy.

Eriksson et al. (2005) has studied the technology of internet banking in Estonia, an emerging east European economy. A quantitative study was selected to obtain data regarding the usage of and attitudes towards the internet as a banking channel. The results suggested that internet bank use increases, as customers perceive it as useful. Hence, a well-designed and easy to use internet bank may not be used if it is not perceived as useful. They concluded that the perceived usefulness of internet banking is, for banks, a key construct for promoting customer use. They also suggested that models of technology acceptance should be re-formulated to focus more on the key role of the perceived usefulness of the service embedded in the technology.

Rotchanakitumnuai and Speece (2003) investigated why corporate customers do not accept Internet banking, which can assist banks to implement this self-service technology more efficiently. Many Thai banks are currently implementing Internet banking. Banks that offer service via this channel claim that it reduces costs and makes them more competitive. However, many corporate customers are not highly enthusiastic about Internet banking. They used in-depth qualitative interviews methodology for collecting their data. The interviews with Thai firms suggested that security of the Internet is a major factor inhibiting wider adoption. Those already using Internet banking seem to have more confidence that the system is reliable, whereas non-users are much more service conscious, and do not trust financial transactions made via Internet channels. Non-Internet banking users tend to have more negative management attitudes toward adoption and are more likely to claim lack of resources. Legal support is also a major barrier to Internet banking adoption for corporate customers.

### **3. Importance of the Research Paper**

This research, identifies the current situation in Internet Banking in Qatar amongst university students as banking customers, and examines the main reason for not using this technology. The study is important because not a lot of study has been reported in this subject in Qatar. Moreover, the findings of this study can be important to the bank industry in Qatar to utilize the IB services facility and to reduce their operational costs, and reducing the number of customers tend to visit their branches. In addition this study importance to the university students to encourage them to use Internet banking, it allows customers to transact banking business over the Internet. It can be used as alternative to the traditional branch banking.



#### **4. The Study Objectives**

Internet Banking brings many benefits to banks and customers who use the services. Banks can learn how to overcome the barriers in adopting Internet Banking. The main objective of this study is to identify the current practice and actual barriers of adapting Internet Banking. In addition there was four minor objectives of this study listed below:

To investigate the current situation Internet Banking amongst university students. As a banking customers in Qatar.

To inspect the awareness of Internet Banking amongst banking customers; focusing on internet users.

To identify the level of unpopularity of Internet Banking amongst the banking customers.

To have a better understanding of the factors why consumers do not use Internet Banking.

#### **5. Research Methodology**

In this research study, empirical data has to be collected from university students in Qatar. In conducting this study, the researcher has chosen university students as a sample of the study. The underlying reasons of choosing students to participate in this research based on students have the tendency to learn and adopt new technology. Moreover, the educational level the students have and most of them have accounts in different Qatari banks. The data will be used for analysing and finding the results to achieve the research objectives. A set of questionnaires was prepared for the survey. At the time when the questionnaires were distributed the population size were 11526 students. The sample size of respondents chosen to participate for the research is 600 students and the questionnaires are distributed randomly among the students. The questionnaire was distributed to the students at Qatar University Campus they were chosen through (Stratified random sampling: each unit in the population is identified, and each unit has a known, non-zero chance of being in the sample) with the intention of generalizing the population and giving equal chance for each students of being selected for the study. This ensured the accuracy and precision of the results. The purpose of these questionnaires is identifying feedback and response of the students regarding Internet Banking. A number of descriptive analysis are performed to extract relevant points. Moreover, the data are organised and presented in tables forms based on the researcher discretion.

## 5.1 Research Instrument

For this research study and based on the research objectives, a set of questionnaires was prepared for analysing to achieve the research objective. There were 16 items in this instrument, nine related with respondent gender, Internet usage, having a bank account, knowledge of Internet Banking, Bank used, used Internet banking, and how likely the respondent will open an Internet Banking account within the next 12 months. Seven items related to the student's attitude about the difficulties of the using Internet Banking on a series five-point likert-scale (5=Totally Agree) and (1=Totally disagree). Anonymity was also considered to insure high response rate, as there was no question asking respondents detailed personal information such as name or address.

### 5.1.1 Validity and reliability

When evaluating an instrument or conducting a research in general, attention need to be paid to two issues: validity and reliability.

#### Validity

According to Kenova and Jonnason, (2006), validity defined as: "The ability of a scale or measuring instrument to measure what is intended to be measured". In this regards, the following steps were taken to ensure the validity:

1. Data was collected from the reliable sources, from respondents who are more experienced to use online banking service;
2. Survey questions were made based on the literature where the validity was ensured.

#### Reliability

According to Sidat, (2008) reliability refers to the degree to which data collection method or methods will yield consistent findings, similar observations would be made or conclusions reached by other researchers or there is transparency in how sense was made from the raw data. There are two aspects of the reliability issue: external and internal reliability. According to Hardy and Bryman (2004), external reliability means that the studied variable does not fluctuate greatly over time which means that it is stable. This kind of reliability can be tested through test-retest reliability, which means measuring the same scale twice in different time frames and see to what extent the two sets of data have yielded the same replies of the respondents. This method of measuring the reliability is time-consuming and tedious and will not be applied in the underlying study. Furthermore, according to Hardy and Bryman (2004), internal reliability means that all the constituent indicators of a variable are measuring the same thing which means that the variable is coherent. One of the most popular methods



for estimating internal reliability, also applied in this study, is Cronbach's Alpha (R) Test of Reliability. Ideally, the Cronbach alpha coefficient of a scale should be 0.7 and above Pallent (2007). The Alpha value have been calculated for this study by using SPSS, the value found was 0.8 for the seven items related to the difficulties of the using Internet Banking. According to Pallent (2007) a scale has good internal consistency with a Cronbach Alpha Coefficient reported of 0.7. In current study, the Cronbach Alpha Coefficient is 0.8.

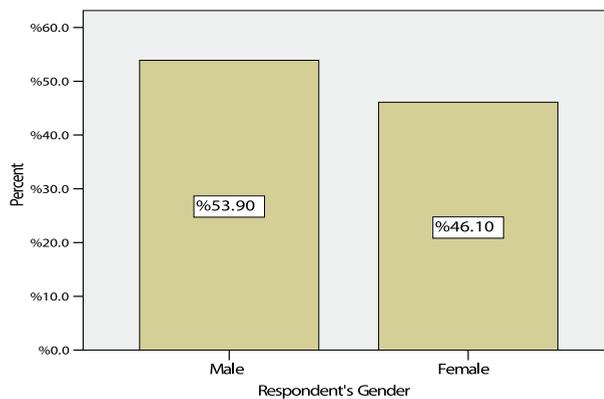
### 5.2 Data Collection

Data was collected from Qatar University students. Researcher aimed at a stratified sample with a proportionate number of respondents from each of Qatar University eight faculties. The questionnaires randomly distributed to a required number of students from each faculty. And to Administer and collect the questionnaires. The response rate was  $423/600 = 70\%$ . The distribution of respondents according to the university faculty is presented in (Table 1).

Table 1: Distribution of respondents by faculty

| Faculty                    | Frequency | Valid Percent | Cumulative Percent |
|----------------------------|-----------|---------------|--------------------|
| Art and sciences           | 69        | 16.3          | 16.3               |
| Business and Economics     | 85        | 20.1          | 36.4               |
| Education                  | 31        | 7.3           | 43.7               |
| Engineering                | 97        | 22.9          | 66.7               |
| Law                        | 30        | 7.1           | 73.8               |
| Pharmacy                   | 6         | 1.4           | 75.2               |
| Sharia and Islamic Studies | 30        | 7.1           | 82.3               |
| Foundation Program         | 75        | 17.7          | 100.0              |
| Total                      | 423       | 100.0         | -                  |

69 responses received from the faculty of Art and Sciences, 85 from the faculty of Business and Economics, which represent 20.1% of total responses. 31 responses from the faculty of Education, 97 from the faculty of Engineering, which represent 22.9% of total responses. 30 from the faculty of Law, 6 from the faculty of Pharmacy, 30 from the faculty of Sharia and Islamic Studies, and 75 from the students in Foundation program which represent 17.7% of total responses. The percentage of male respondent to female respondent is almost equal. 46.10% of respondents are females while 53.90% are males. Figure 1 shows respondent's Gender.



**Figure 1: Respondent Gender**

## 6. Data Analysis and Discussion

The distributing questionnaire was calculated and statistically analyzed by the researcher using Statistical package for social sciences (SPSS). Descriptive research is also called statistical research. The main goal of this type of research is to describe the data and characteristics about what is being studied. The idea behind this type of research is to study frequencies and other statistical calculations. Descriptive research is used to obtain information concerning the current status of the phenomena to describe “what exists with respect to variables or conditions in a situation. Here, this research tried to measure the objectives according to data collected from respondents for analyzing and finding the results. The results will be discussed according to the questions posed in the questionnaire.

### 6.1. Using the Internet

The results show in (Table 2) almost all 98.1% of respondents access the Internet regularly on a daily basis. Only 1.9% do not use the Internet regularly, this indicates that almost all respondents were regular users of the Internet.

Table 2 Using the Internet

|       | Frequency | Valid Percent | Cumulative Percent |
|-------|-----------|---------------|--------------------|
| Yes   | 415       | 98.1          | 98.1               |
| No    | 8         | 1.9           | 100.0              |
| Total | 423       | 100.0         |                    |

### 6.2. Having a Bank Account

The results show that the majority of respondents have a bank account representing (81.6%). While (18.4%) they did not open a bank account yet. As shown in the (Figure 2)

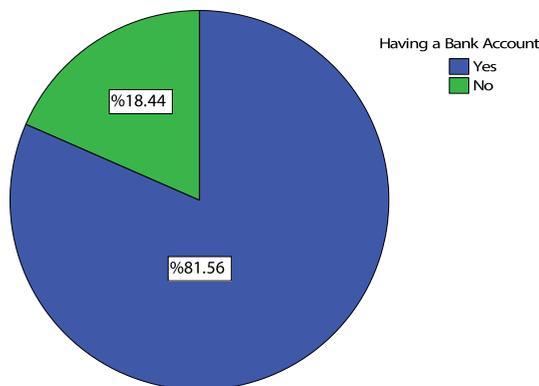


Figure 2: Having a Bank Account

### 6.3. Respondent Knowledge on Internet Banking

A large number of the respondents (86.76%) have heard of Internet Banking and they know such services exist. While (13.24%) of respondents haven't heard about Internet Banking services as shown in the (Figure 3).

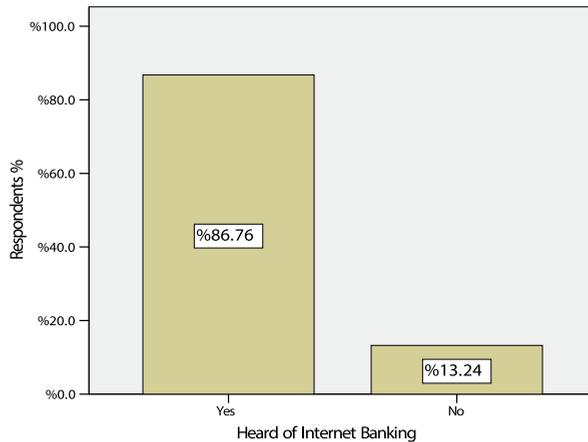


Figure 3 Respondents Knowledge on Internet Banking

### 6.4. Internet Banking Knowledge Source

The (Figure 4) below will help identify how respondents have heard of Internet Banking services. The three main sources of how a respondent has heard of Internet Banking are either from their bank, advertisements or from their colleagues. As the figure shows, the most popular source is from their bank (34.33%) and from their colleague (34.06%).

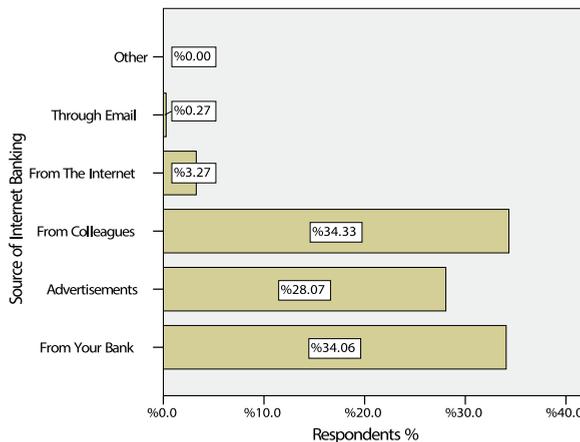


Figure 4 Internet Banking Knowledge Source



## 6.5. Banks Used

The researcher has inquired through the questionnaire for banks that are currently being used by the students. And the purpose for that is to show which Banks used more than others. The data indicate that (26.1%) of the total respondents hold a (QNB) Qatar National Bank account. In addition (22.1%) of the respondents hold (QIB) Qatar Islamic Bank account, (20.05%) hold a Al-Rayyan Bank account, (10.7%) of the respondents hold Qatar International Islamic Bank, (6.00%) hold Doha Bank, and (3.5%) hold the Commercial bank. Figure 5 shows the frequency of Bank usage of the respondents.

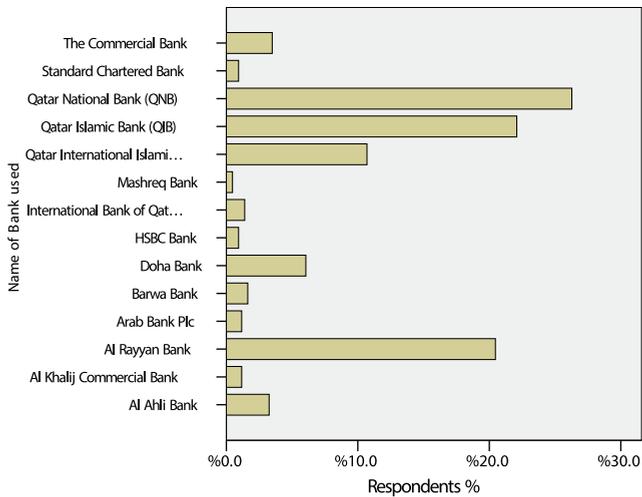


Figure 5 shows the frequency of Bank usage of the respondents

## 6.6. Using Internet Banking

The Figure 6 below shows that (61.23%) of the respondents using Internet Banking and (38.77%) do not use Internet Banking, which is a large number especially when considering most of the respondents are Internet users.

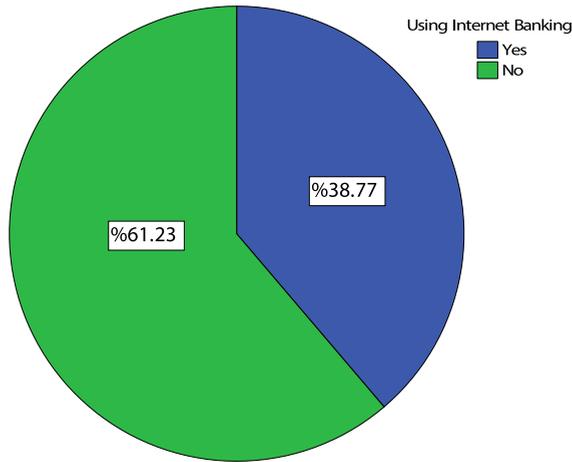


Figure 6 Using Internet Banking

## 6.7. How likely are you to open an Internet Bank Account within the next 12 months?

It would be interesting to know if the respondents were planning to use Internet Banking in the future. Respondents were asked “How likely are you to open an Internet bank account within the next 12 months?” 35% of the answered in the middle “Neither unlikely nor likely” about 29% of the respondents answered “Some what likely” open an Internet bank account in near future. However, 14% responded somewhat unlikely to open an Internet account within the next 12 months as shown in the Figure 7.

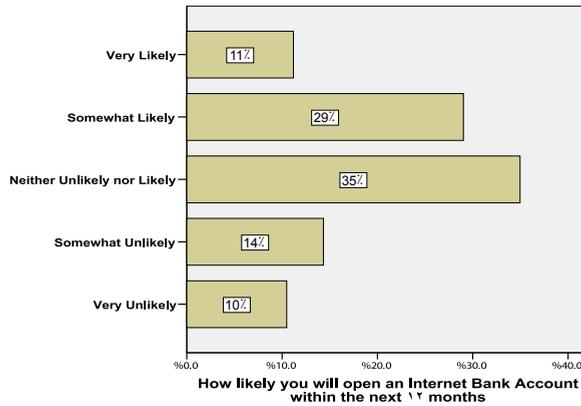


Figure 7 opening an Internet Bank Account

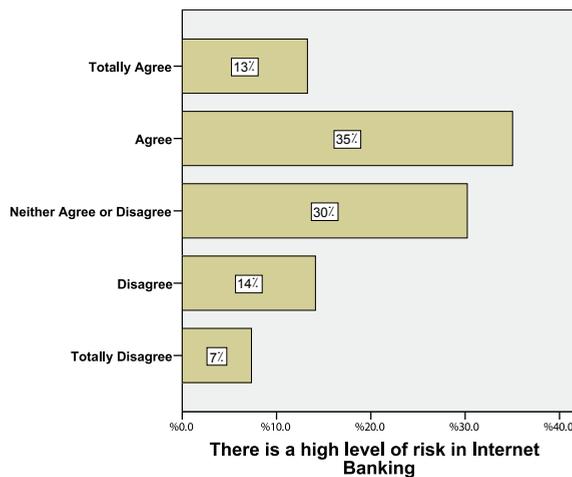
## 6.8. Internet Banking Barriers

The respondents were provided with a list of seven statements in the questionnaire. In relation to these statements, the respondents were asked to indicate the degree of agreement with each of the statements. A 5-point likert type-agreeing scale was provided ranging from totally disagree to totally agree. If the respondents totally agree or agree with a particular factor, then the factor is a distinct barrier preventing them from using Internet Banking. If the respondents totally disagree or disagree with for a particular factor, then the factor is distinctively not a barrier to them from using Internet Banking. If the respondents have replied they neither agree nor disagree, this mean they are unaware about this factor. This could be due the reason they are not Internet Banking users. All the findings according to the seven factors will be presented with following sections.

### 6.8.1. Risk and Security

Figure 8 below shows that 35% of the respondents do agree that Internet Banking holds a certain level of risk and 13% definitely think that Internet Banking is risky. However, there is considerable number, (14% and 7%) who think that Internet Banking is secure. But, 30% are not sure if either Internet Banking is secure or not, which is also a considerable number. Analysing these results, it can be understood that the two extremes; Internet Banking has definite security issues and Internet Banking does not definitely have security issues, have not been selected very popularly by the respondents. Thus, it gives the indication that some of the respondents believe Internet

Banking has some security issues and some believe Internet Banking has no security concerns. But the majority (48%) does feel that Internet Banking has security concerns compared to a lower (21%) Internet Banking does not have security concerns. Therefore, it can be concluded that the level of security in the service is one of the barriers for Internet Banking adoption.



**Figure 8 Risk and Security**

The literature review shows that there are many studies carried out in a similar dimension and found that security, risk, uncertainty or trust is a major unease when it comes to the use of Internet Banking. The literature review also shows that all results are similar to the results of this study. In Gerrard et al. (2006) has ranked risk as first in their investigation when using Internet Banking. Singh (2004) also identified that 47% of his respondents found internet unsafe to source their financial service online. Eriksen et al. (2008) findings also say that perceived risk has a negative influence on adoption decision, which means that risk can prevent a customer from adoption. Normalini M. K. and Ramayah, T. (2012) investigated the benefits of biometric authentication systems in online banking will secure the log in process to the system and removes password vulnerabilities; enhanced convenience such as employees quickly log in using their finger; reduced help desk costs by eliminating calls for password resets.

### 6.8.2. No Benefits in using Internet Banking

Figure 9 shows that 31% of the respondents disagree of the statement saying that there are no benefits for using an Internet Banking and 12% totally disagree that Internet Banking usage has no benefits. Only 7% think Internet Banking has no benefit at all and 34% were not sure of the benefits of Internet Banking, because they were unaware of the services features since they are not Internet Banking users. Most of the respondents (43%) knew the benefits Internet Banking holds and they responded that they disagree that Internet Banking does not have any benefits. It can be now confirmed without a doubt that consumers did not think Internet Banking does not have any benefits. These results contradict with many of the literature stating that customer perceive Internet Banking to have little or no benefit. Gerrard et al. (2006) results say that some considered themselves to be very active users of banking services and Internet Banking will be of little benefit to them.

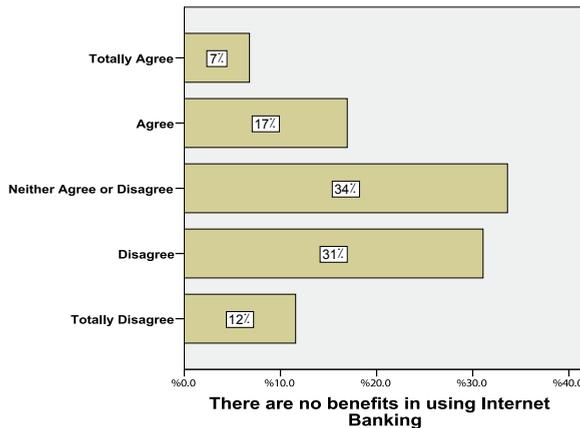


Figure 9 No Benefits in using Internet Banking

### 6.8.3. Difficult to Use

In Figure 10 below, 23% and 11% of the respondents think Internet Banking is Ease to use, 22% and 8% think it is difficult to use. Again 37% not sure if Internet Banking is difficult to use or not, those respondents did not know the use of Internet Banking; they are unaware of its usability. Thus, analyzing this data it is simple to conclude that the usability or user friendliness of internet bank is good and is not a barrier for the adoption of Internet Banking. However, it can be identified from the literature review that some authors such as Sathye (1999) have found that 40% have responded that Internet Banking is difficult to use and that is the reason they are not using the service. For users who do not regularly use the internet may find the functionality of the internet difficult to use. This may be the case in the investigation of Sathye (1999). But the responds for this research a regular users of internet, where almost all users use the internet daily, therefore the usability of internet will be easy to use and that could be the reason they do not find Internet Banking difficult to use as well.

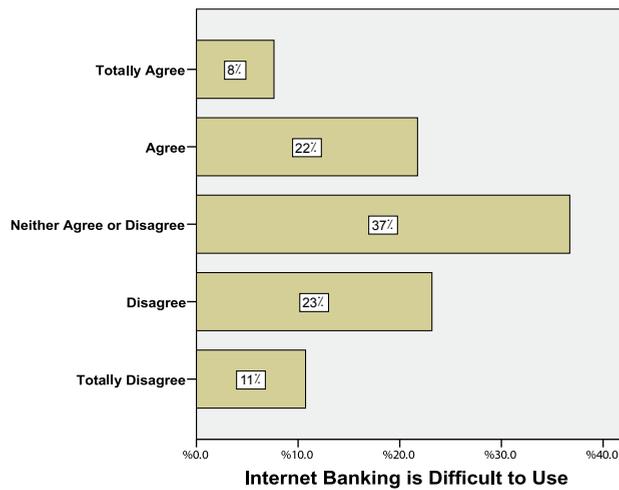


Figure 10 Difficult to Use





### 6.8.5. No Human Interaction

29% of the respondents do feel that they prefer to interact with a real person and 33% strongly feel they need a real person to interact with. The number of respondents (24%) who were not sure of this is substantial and quite a substantial number of respondents (8% and 5%) did not feel the need to interact with a real person as shown in figure 12. Thus, analysing this data a large number of respondents (62%) felt they prefer carrying out their banking services with a real person. It represents the majority. Hence, the lack of human touch when using Internet Banking is a barrier for adoption. As identified in the literature review there are some authors who have identified that lack of human interaction is barrier as well. Gerrard et al. (2006) have also found that customers felt the lack of human interaction when carrying out their financial services over the internet.

Customers may want to interact with a real person and their doubts or queries can be clarified from the banks staff. In addition, if a particular transaction has been carried out via the internet, there is always a hesitation if the transaction was completed successfully. If a similar transaction was carried out with a real person, there will be a confirmation from the staff along with a receipt as proof.

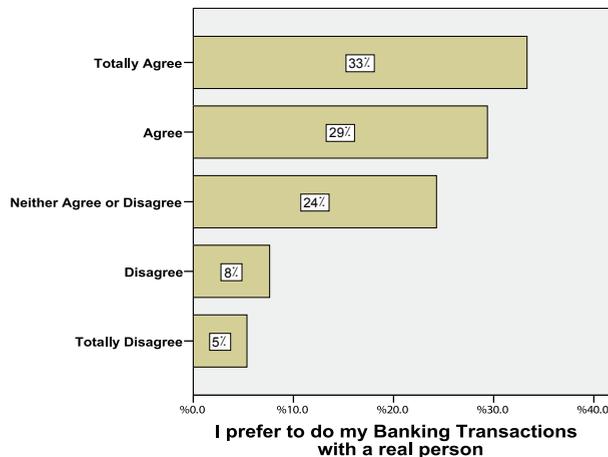


Figure 12 No Human Interaction



### 6.8.6. Not interested to use Internet Banking

Some of the respondents (29% and 10%) did feel not interested or bothered to use Internet Banking. But (19% and 11%) do deny the fact that they are not interested or bothered to use Internet Banking. 33% of the respondents (33%) were not sure of this as shown in Figure 13. When analyzing these numbers, (37%) of the respondent's state that they are not interest in using the service. Whereas, (29%) of respondents feel interest to use Internet Banking. Thus, the respondents are not interested and bothered to use Internet Banking and it is a barrier for adoption. Literature such of Gerrard et al. (2006) opposes the results of this investigation; no interest was a barrier to adoption amongst some of the customers. As stated in the literature review, Gerrard et al. (2006) say that the respondents had the skills to find out more about the service but they simply could not be bothered. The respondents in this research do imply that they do lack the interest in using Internet Banking.

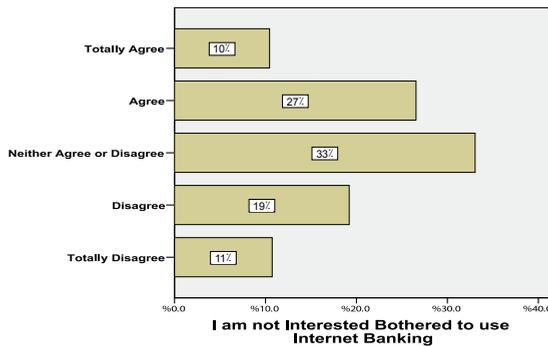
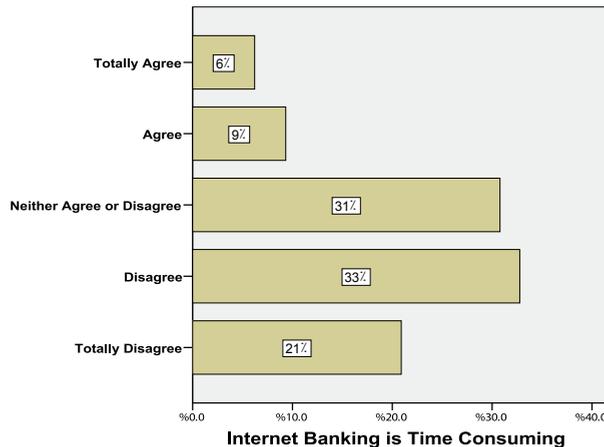


Figure 13 Not Interested to use Internet Banking

### 6.8.7. Time Consuming

Analysing the results if Internet Banking is time consuming, few of the respondents (15%) feel that using Internet Banking will take up their time. (33%) of the respondents are not sure if Internet Banking is time consuming due to the fact that they do not have any experience in using it. Again majority of the respondents (54%) disagree with the statement Internet Banking is time consuming as shown in Figure 14. It is

clear that respondents do not think Internet Banking takes up too much of their time, therefore time consumption is not a barrier. It can be seen from literature review, that Singh (2004) has found the opposite. In his research time consumption is a reason for not using Internet Banking amongst the non-internet users.



**Figure 14 Time Consuming**

Looking back at the objectives of this study, First objective was to investigate the current situation in Internet Banking in Qatar. This objective was achieved by the whole approach of the study, where respondents were asked if they knew about Internet Banking Services, the benefits of the services, if they were interested in using it, if the service is user-friendly, and does it consume time to use the services. Second objective was to inspect the awareness of Internet Banking amongst banking customers. From the results and analysis, it was identified that, the respondents are aware of Internet Banking and know they can use the service. In addition to that most of the respondents were planning to use Internet Banking in the future.

Third objective was to identify the level of unpopularity of Internet Banking amongst the banking customers. The study showed that Internet Banking level popularity is a bit low among university Students (as customers). Fourth objective was to have a better understanding of the factors why certain consumers do not use Internet Banking. As mentioned above, 7 factors were identified and out of these factors, the real barriers and non barriers were identified.

Fifth objective was to understand whether banks are encouraging its customers to use their Internet Banking services. From the results it was identified that. The highest



source a respondent heard about Internet Banking is from their bank and colleagues, and the third highest was from advertisements. This clearly implies that banks are reaching out to their customers and trying to encourage them.

Lastly, the paper presents methods and solutions for banks to encourage their customers to use Internet Banking. Using the results, analysis and discussion this objective is answered above.

## 7. Conclusion and Recommendations

The present study attempts to examine factors that prevent user acceptance of Internet Banking services in Qatar. To identify this, 7 potential barriers were used to identify which of these factors could be preventing customers from using Internet Banking. The results can be divided in two categories. First are the definite barriers which are still keeping the users of Internet Banking Services at a minimum. Security concern, no human interaction, and not interested were three barriers which this study found as a positive barrier for adoption. Respondents feel that there are certain level of uncertainties and risks when carrying out their financial activities over the internet. They also prefer to interact with a real person and feel that the internet removes human interaction and therefore they are not interested to use the service. And they feel not interested to use the services. The lack of human touch can be ranked as the first barrier to adoption, compared to security and not interested factors.

The second category is the non barriers which are not a barrier for Internet Banking, which are no benefit, difficult to use, no necessity and time consuming. Time consuming was found to be the least problematic as a barrier for adoption. The second least barrier was no benefits, third was difficult to use and fourth was no necessity. There were some who felt that these factors are also an obstacle to them personally. Since this study focuses on a particular set of customers these factors may not be a barrier but these could turn out to be a barrier if focused on a different group of customers.

The results of this study provide important information for banks in promoting Internet banking transaction among their customers and university students'. The findings indicated that, the university students' tend to change the way they do online banking in the future, more than 40% per cent of the respondents claimed to be willing to adopt mobile banking in the future. These results tend to be supported by Laforet and Li (2005), Howcroft et al. (2002) and Al-Ashban and Burney (2001) who found younger customers were more likely to adopt electronic banking. These university students' tend to be an active user for Internet banking in the future.

The findings in this paper can also be used to help banks better understand one group

of customer's behaviour in Qatar with respect to Internet banking. This could enable banks to formulate effective techniques to attract this group to use this service.

The results of this research show that out of 7 factors, 3 of them are definite barriers to Internet Banking adoption and 4 of them are miniature barriers. Using this data some constructive recommendation can be given.

Firstly, the respondents feel that Internet Banking lacks the human interaction and they prefer to carry out some transactions with a real person. To overcome this, banks can introduce welcome screens as soon as they log in. Banks can introduce online help chats for immediate and quick responses.

Secondly, security is seen here to be of concern to majority of the banking customers. It is also apparent that most almost all banks are now investing or have invested on security in Internet Banking. Going through the survey the main problem lies with the customer having a fear of hacking of accounts and thus do not go on for internet banking.

So this implies that customers are not aware of the level of security in Internet Banking services. Now banks in Qatar have to create a trust in mind of customers towards security of their accounts. Provide a platform from where the customers can access different accounts at the same time.

Finally, using the marketing tools, the banks should promote the benefits of Internet Banking and compare it with traditional ways which will create an interest and a need to use the system. In addition to this, if customers were educated on how much time they would save using Internet Banking, this would attract more users.

In order for the banks in Qatar to reduce their operation costs and increase the rate of usage of IB, it requires a joint effort from more than one party to work towards this objective. This means that banks in Qatar need to ensure their IB systems are well secured, reliable and user-friendly, and need to better promote and familiarize their customers about the IB. Banks could also include extra features on their websites to make the experience more memorable and fun. An example of an extra feature is having promotions that are only applicable to online transactions. And also feature for chatting with customers for immediate and quick responses.

In addition Qatari Banks should design the website to accommodate the ease of use and security and privacy issues. Furthermore, the website design should be user friendly and appropriate to all ages. The guideline should be included in the website for customers' convenience. Usually those who have positive attitude will use internet banking on an ongoing basis.

One of the limitations of this study was that the respondents were from only one loca-



tion and may not represent the average customer in Qatar. In addition, future research should consider the responses from a different group. This will enable a stronger and a more balanced perspective on the research issues. For example, how do bank attract the customer's trust. Regardless of the limitations, this study will add to the very limited knowledge presently available about Internet banking study in Qatar.

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