

# **The Impact of E-Banking Services Quality on Customers Satisfaction Moderated by Customer Trust: Survey on Arab Bank in Amman, Jordan \***

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أثر جودة الخدمات البنكية الإلكترونية على رضى العملاء من خلال دراسة أثر العامل الوسيط "ثقة العملاء": دراسة تطبيقية على البنك العربي - الأردن.

### ملخص:

هدف هذه الدراسة هو قياس جودة الخدمات المصرفية الإلكترونية واثرها على رضى العملاء بشكل مباشر وبشكل غير مباشر من خلال دراسة التأثير الوسيط لثقة العملاء. ومن أجل تحقيق هدف الدراسة، تم الاستعانة بالعديد من الدراسات السابقة لتوضيح طبيعة العوامل التي تؤثر على رضا العملاء. وقد تم استخدام طريقة البحث الكمية بما في ذلك تصميم وتوزيع استمارة خاصة لقياس متغيرات الدراسة، حيث تم توزيع 500 استمارة لعملاء البنك بطريقة عشوائية، وتم استعادة 300 استمارة قابلة للتحليل بمعدل استعادة 60%. اظهرت نتائج الدراسة إلى أن جودة الخدمات الإلكترونية لها تأثير ايجابي قوي على رضا العملاء. حيث تبين إن أربعة من عوامل جودة الخدمة الخمسة وهي (الملموسية، الموثوقية، التعاطف والتوكيد) ترتبط ارتباطاً ايجابياً بمستوى رضا العملاء وإن البعد الخامس والذي يمثل (الاستجابة) لم تربطه أي علاقة ايجابية بمستوى رضا العملاء عن جودة الخدمات المصرفية الإلكترونية التي تسمح للبنوك بالحصول على بعض النتائج الإيجابية وإنشاء خدمة مفيدة لأعمالهم الإلكترونية مع المستوى المطلوب من الجودة.

الكلمات المفتاحية: الخدمات المصرفية الإلكترونية، ايصال الخدمة، جودة الخدمة، رضى العملاء، ثقة العملاء.

### Abstract:

This study aimed to investigate E-banking service quality effects over customer satisfaction, by concerning the moderating role of these customers' trust. Moreover, this research aims to measure the level of overall customer satisfaction and to know which one of the five SERVQUAL dimensions has the greatest impact on customer satisfaction.

Quantitative research method was used to attain research goals. 500 questionnaires distributed randomly for E-banking customers in all Arab Bank branches in Amman City with the aim of collecting at least the needed number of respondents. 300 questionnaires have been received and analyzed using SPSS software.

Research result shows a strong positive relationship between E-banking services and customer satisfaction. Moreover, the results indicated that costumers are satisfied with insurance, empathy, reliability, tangibles and responsiveness in Arab bank. Finally, research findings admitted that customer trust mediates the relationship between E-banking Services Quality and customer satisfactoon.

**Key Words:** E-banking, Service delivery, Service quality, Customers Satisfaction, Customers trust.

## 1.1 Introduction

These days, telecommunications have achieved a very huge difference in peoples' life. The world today is showing a huge revolution in the field of telecommunications which made it a small village, and increased the spread of globalization and international trading system, that breaks down all barriers between nations and becomes an open marketplace to all investors in the world. This has led to a stiff competition between the trading companies and the banking sector.

This research aims to investigate the impact of E-banking service quality on customer satisfaction, at the same time, to measure the moderating role of customer trust on the main relationship. This research depends on a questionnaire as the main instrument to measure research variables; a sample of 300 respondents will be distributed for Arab Bank clients in Amman city. In fact, the researcher depended on Parasuraman, Berry, & Zeithaml (1991) questionnaire which called SERVQUAL in order to measure E-banking service quality; minor modifications were made on this questionnaire to make it more able to assess E-banking service quality instead of service quality in general. The researcher will use regression analysis techniques in order to find out the impact of E-banking service quality on customer satisfaction.

According to Jordanian Monetary Authority, Arab Bank has been started in 1930 and became the largest bank in Jordan in terms of assets and profits. It has 50 branches around Amman the capital with a huge number of clients and a large exterior network with over 600 branches spanning

five continents. However, to compete well, this bank needs to provide the best services such as electronic and online services which are reflected positively on his competitive position against other banks.

## 1.2 Research Problem

However, the trend these days is to reduce human capital numbers to attain more efficiency and maximize profit, this urged us to focus on E-banking services which lead to a remarkable reduction in bank cost and the time needed to complete customers' transactions (AL-Adwan & AL-Tarawneh, 2017). In spite of the positive impact for depending on such services, some customers may receive negative perceptions because of the small amount of human communication to perform their needs (Al-Hawari & Ward, 2006).

In recent years, it is clear that banks are trying to encourage their clients to use E-banking services more by offering some additional benefits such as better exchange rates or reductions in some fees. In spite of these benefits, a noticeable number of clients still stuck in the middle between these benefits and worry about the lack of personal connection with banks employees. By relying on this debate, an important questions still needs an answer, is it possible to improve clients' satisfaction by offering the appropriate level of E-banking services? Can banks increase customer uses for this type of services by enhancing their trust of such services?

## 1.3 Study Objectives

The aim of this research is to investigate E-banking service quality effects over customer satisfaction, by concerning the moderating role of those customers' trust. Moreover, this research aims to measure the level of overall customer satisfaction and to know which one of the five SERVIQUAL dimensions has the greatest impact on customer satisfaction.

## 1.4 Reseach Importance

Globalization, current unstable economic and political conditions in the world and the Middle East in particular, made banks having

no choice other than being alert and realize the importance of E-banking services and its role that is reflected directly on customer satisfaction. In this context, the researcher aimed to discuss these issues based on those favorable results that can't be obtained in the absence of distinctive well E-banking services. Moreover, debating customer satisfaction as a unique practical concept that is directly attached with institutions goals, points out how to accomplish targets which revolve around earning higher profits and maximizenumber of customers. Moreover, this research will give a suitable guideline for banks man-agement to follow aiming to achieve better cus-tomer satisfaction through maintaining and en-hancing the quality of their E-banking services.

## 1.5 Research Hypothesis

### • Hypothesis (1):

H1: There is a significant impact between E-banking services quality and customer satisfaction.

Sub-Hypotheses according to hypothesis one

Hypothesis (1.1)

- H1: There is a significant impact of service tangibles on customer satisfaction.

Hypothesis (1.2)

- H1: There is a significant impact of service reliability on customer satisfaction.

Hypothesis (1.3)

- H1: There is a significant impact of service responsiveness on customer satisfaction.

Hypothesis (1.4)

- H1: There is a significant impact of service assurance on customer satisfaction.

Hypothesis (1.5)

- H1: There is a significant impact of service empathy on customer satisfaction.

### • Hypothesis (2):

H1: There is a significant impact of customer trust, moderates the relationship between E-banking service quality and customer satisfaction.

## Conceptual Model

Study conceptual model is designed depending on several literature studies and by reviewing related researchers that are mentioned in the previous section. This framework is displayed in Figure 1, which proposes that research formation is implemented by four sets of variables. The independent variable is exemplified by E-banking services quality that includes five dimensions which are; assurance, empathy, reliability, tangibles, and responsiveness. The dependent variable is customer satisfaction while customer trust represents the moderating variable.

As a result, those variables had been chosen depending on several of previous studies that suggested researchers include the independent and the dependent variables and to introduce a mediator such as a customer trust between them to gain better understanding for research relationships (Liu & Wang, 2017).

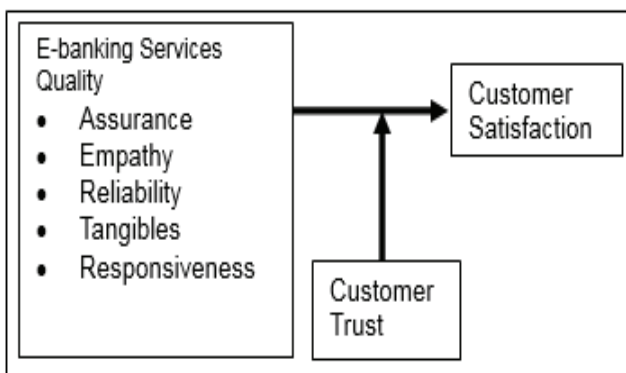


Figure (1):  
 Conceptual model

## 2. Theoretical Framework

### 2.1 E-banking

The concept of E-banking was defined in many ways; this part classifies some of these definitions. For instance, it could be defined as “the delivery of banks’ information and services by banks to customers via different delivery platforms that can be used with different terminal devices such as a personal computer and a mobile phone with browser or desktop software, telephone or digital television” Daniel (1999). Pikkarainen et al (2004) defined E-banking like “internet portal, through which customers can use

different kinds of banking services ranging from bill payment to making investments”. According to this definition, E-banking allows customers to perform most of bank services and transactions excluding cash. Shemi (2002) defined electronic banking (E-banking) is nothing but e-business in banking industry. There are different ways to deliver E-banking services; the most common way is smart phones or personal computers. Those depend on internet access. In fact, this type of services is still improving over time and is so important for individuals and organizations at the same time. For instance, it has the ability to improve monetary transactions and delivering them quickly (Alshurideh, Al-Hawary, Mohammad, Al-Hawary, & Al Kurdi, 2017). According to Hoehle et al, (2012) in spite to availability of different types of E-banking services, there are four common services such as: automated teller machine (ATM), smart phones applications, touch-dial telephone banking, internet banking, and the last service is a special channel that allow customers to complete their transaction by using bank’s webpage. Stanford Federal Credit Union (SFCU) in 1990s used E-banking for the first time, after that this type of services showed a greater expanding around all around the world. As a result, E-banking after more than twenty years is showing more efficient way to deal with monetary transactions, reduction in costs and time needed to complete such services, enhancing banks’ client satisfaction and increase their loyalty and finally improve banks productivity, and overall profit (Yoon, 2010).

### 2.2 Service Quality

In recent years, service quality has shown a greater attention in business research due to its role as one of the most pivotal factor that can increase organizations competitive position. The term service quality means how organization customers’ expectations are conforming with delivered service, so according to this definition, the main base for determining service quality is customer expectations (Al-Hawary, Al-Smeran, & others, 2017).

Service quality is so important for organization long-run success. First of all, service quality represents a special competitive advantage

for organizations against other competitors (Ayo, Oni, Adewoye, & Eweoya, 2016), taking service quality as one of the most important priorities enhance organization capabilities to produce services with superior quality levels (Amin, 2016). Attaining this goal in fact can help the organizations to stabilize their long-term profitability and it enhances their opportunities to still survive in the future (AL-Adwan & AL-Tarawneh, 2017).

Moreover, there are other important benefits for service quality. Depends on business management researches about this subject, there are several facts related to this subject. For instance, service quality can lead or direct customer repurchases intentions. Bad customer perception can lead to expand this perception to at least three other customers in his closed circle while good customer perception can make an attractive tool to attract another customers (Horovitz, 1990). Depends on Lewis (1989) argument, it will be costly more than 400% to attract new customer comparing to keeping existence one. This is not all, it is necessary for organizations to maintain their service quality and improve it over the time, this is because customer perceptions are usually rising by time (AlSudairi, 2016).

### 2.3 E-Services Quality

There are many literatures that showed interest in studying the e-service quality and its definitions, and measurements. E-service quality defined as the webpage includes services able to facilitate and deliver a specific service for people in an effective and efficient manner (Malhotra et al., 2005). Another definition was developed by Wolfinbarger & Gilly (2003) as the whole process from A to Z which started from data searching and ending with delivering services that satisfy customers' needs. Ojosalo (2010) in his study defined four different dimensions related to e-service quality as follow: webpage design, clients' service, clients' trust and secrecy and clients' fulfillment.

### 2.4 SERVIQUAL Tool

SERVQUAL is a special tool that developed by Parasuraman et al., in 1991 that aims at

measuring the perception of individuals toward a specific product or service quality. This tool is widely used and highly accepted as a suitable measure for customer perception about service quality. Moreover, this tool showed an acceptable level of validity and reliability (Brensinger & Lambert, 1990). This tool contains twenty-two items, classified into five dimensions.

The first dimension is tangible, obviously that it is clear from the name. This dimension concerns in the physical materials and the overall tangible facilities, and how they are compatible with the services of the organization. This is an important point according to Parasuraman et al., (2005) because it reflects an important side of human physiology. It could give humans a special comfortable feeling about what they receive as a service

The second dimension is reliability, this dimension assesses services, accuracy and the dependability of services that are provided by organizations for their customers. It is so important because it reflects organizations' ability to serve their customers in an accurate way (Brensinger & Lambert, 1990). Consequently, the third dimension is responsiveness; this dimension reflects how organizations' workers are able to serve customers in a fast and appropriate manner (van Iwaarden, van der Wiele, Ball, & Millen, 2003).

Assurance is the fourth dimension, its concerns revolve around the ability of workers to answer customer questions and solve any related problems, in another word it assesses workers knowledge about their responsibilities. The last one is Empathy; this dimension is about the level of worrying about customers and the amount of taking care about them (Parasuraman et al., 1991).

In spite of the widely acceptance for this model, there are several criticisms for this model which was developed by several researchers. For instance, one of the main criticism against this model is because this model focuses on how organizations deliver their services as a process (Richard & Allaway, 1993). So, depending on quality characteristic to predict customers' behavior isn't sufficient, organizations need more to predict customer behavior (Gronroos, 2007).



Furthermore, Bagozzi (1981) asserted that depending on discrimination rule in statistical analysis, SERVQUAL five dimensions must show high level of correlation separately between each dimension questions and less level between each one of these dimension with the rest of dimensions. According to this rules, SERVQUAL tool has a problem that may affect the researches results.

## 2.5 Customer Satisfaction

Job satisfaction has been studied for decades, in spite of finding wide variety of definitions which describe it. Hoppock set one of the first definitions about this term when he defined it as “a several psychosomatic conditions which leads individuals to express satisfaction toward specific service or product” (Hoppock, 1935). On the other hand, another definition has been widely accepted was defined by Locke in 1969 when he express satisfaction as “a positive and enjoyable response related to some variables such as job products or services” (Locke, 1969). According to Mathis & Jackson (2011) customer satisfaction is “a positive emotional state resulting from evaluating one’s experiences and it has several dimensions which include quality, services and warranty”.

## 2.6 Previous related researches

1. Al-Hawary et al., (2017) study entitled: Impact of Electronic Service Quality on Customers Satisfaction of Islamic Banks in Jordan.

This study aimed to study the impact of Electronic Service Quality on customers satisfaction at Islamic Banks in Jordan. The study examined Electronic Service Quality represented by six dimensions which are; Reliability, Ease of use, Effectiveness, Web Site Design, privacy, and Responsiveness. The population of the study comprised customers of Islamic banks in the North territory of Jordan (Jordanian Islamic Bank, International Arab Islamic Bank), a random sample was taken amounted (300) participants, SPSS was used to examine the study hypotheses and achieve its objectives.

The researcher found that there is a statistical significant impact of the Electronic Service

Quality (Ease of use, Web Site Design, privacy, and Responsiveness) on customers satisfaction at Islamic Banks in Jordan. Regarding the dimensions of reliability and effectiveness, the study indicated that they had an insignificant impact on customers satisfaction. The researcher recommended the use of specialists in the field of electronic sites design in particular, because the site attractiveness needs experience sufficient experience in this area to support its attractiveness for customers, and to benefit from the experiences of the developed countries in the field of software technology control and protection of customer information, in order to strengthen current Software application to those banks.

2. Amin, (2016) study entitled: Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty.

The purpose of this paper was to examine the internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. A total of 1,000 questionnaires were distributed for internet banking customers in Kingdom of Saudi Arabia and 520 were returned (resulting 52% of response rate).

The results confirmed that the all four dimensions (personal need, site organization, user friendliness, and efficiency of website) are distinct constructs. The results also indicated that internet banking service quality consisting of four dimensions has appropriate reliability and each dimension has a positive significant relationship with internet banking service quality. The efficiency of banking website is the important aspect of internet banking service quality. The finding found that the relationship between internet banking service quality, e-customer satisfaction and e-customer loyalty are significant.

This study proposes a model to understand the effect of internet banking service quality on e-customer satisfaction and e-customer loyalty in developing country. The constructs truly reflect the dynamism of customers’ banking relationship and a better understanding the attitude on internet banking will help the bankers in implementing more effective marketing strategies.

3. Alshurideh et al., (2017) study entitled: The Impact of Islamic Banks' Service Quality Perception on Jordanian Customers Loyalty.

Studying the effect of perceived service quality on customer loyalty in the Islamic banks' services setting has not been receiving much attention from scholars. A set of service quality dimensions have been investigated: tangible, reliability, empathy, assurance and responsiveness. To attain research objectives, this study relied on a self-generated survey to collect the primary data from 293 Islamic banks services users in the Jordanian market. To test research hypotheses SPSS software was used to measure Factor Analysis and Multiple Regression Analysis testes.

Finally, research results and findings asserted that customers expressed high levels of loyalty towards all service quality dimensions. Practitioners and academics alike are keen on accurately measuring service quality in order to better understand its essential antecedents and consequences, and ultimately, establish methods for improving such quality to exert better care for loyal customers especially those who are more profitable than others and to minimize customers switching to competitors.

4. Firdous & Farooqi, (2017) entitled: Impact of Internet Banking Service Quality on Customer Satisfaction.

To add to the existing knowledge in the electronic banking field of study, to help the banks and policy makers, it is important to have better understanding of the internet banking dimensions and their contributions towards customer satisfaction. Especially because there are not so many researches that have been done in this regard in India which has become the hub of E-banking development after the recent demonetization by the present government, enabling people to go cashless and enhance a digital economy. An exploratory survey with the help of a Likert based questionnaire was conducted to investigate the impact of Internet Banking service quality on customer satisfaction in New Delhi. Judgmental and convenience sampling was used

and various kinds of internet banking customers were approached in New Delhi. Data were collected from a sample of 194 internet banking customers.

The result implicated that the internet banking service quality dimensions have a significant impact on the customer satisfaction of internet banking customers. Each of the dimension namely efficiency, system availability, fulfillment, privacy, contact, responsiveness and contact individually contribute 70% to the overall customer satisfaction in internet banking.

The paper provides empirical evidence to show that the internet banking service quality dimensions' area is an important factor to satisfy the customers since each of them is positively related to customer satisfaction. The research will help the managers of the banks and the policy makers to focus on these factors that tend to have a dominating impact on satisfying the customers.

5. Ismail Hussien & Abd El Aziz, (2013) entitled: Investigating E-banking service quality in one of Egypt's banks: a stakeholder analysis.

The main aim of the study is to investigate the E-banking quality dimensions that affect satisfaction of banks' customers. This study investigated how do users perceive E-banking quality dimensions in terms of their importance; how do decision makers in banks perceive and provide E-banking quality dimensions; whether each quality dimension directly affect users' satisfaction of the service.

Structured questionnaires were randomly distributed over 300 bank clients; 133 valid questionnaires were returned. Data were statistically analyzed using SPSS. Two key decision makers were interviewed to get the broader picture, where data were interpretively analyzed.

Results of this research showed that service quality has significant effect on customer satisfaction. Bank could be considered a success story that provides a guide line for decision makers in banks that are less fortunate in providing high service quality, thus help them better address their customers' needs. Moreover, his paper provides a

valuable stakeholder analysis regarding E-banking service quality dimensions as viewed and ranked by service providers and users.

### 3. Methodology

The study population is Arab Bank clients in Amman city branches, a sample of 300 respondents was selected to represent them in this study, and the researchers depended on the quantitative methods by distributing questionnaires in order to answer the research questions. To investigate the moderator, the researchers will use linear regression analysis in order to do the test first the researchers have to centralize all independent variables. Moreover, instant to do centralize the researchers do standardized variables by SPSS through descriptive analysis and then save as standardized all IDV's then after that compute variables then choose the multiplication equation in order to get moderator. The researcher will use SPSS software to analyze research data. A cross sectional time scale will be adopted for this study as the results should be founded within five to six months.

#### 3.1 Sources of Data

Primary sources: Questionnaires was distributed to E-banking customers as the main instrument to measure research variables and for gathering needed data, by these tools both Independent and dependent variables can be measured.

Secondary data: Its included literature reviews for previous studies, articles, references and specialized research related to transparency issue.

#### 3.2 Research Instrument

A questionnaire will be used as the main instrument to measure research variables, the researcher depends on Parasuraman et al., (1991) questionnaire which called SERVQUAL in order to measure E-banking service quality, a minor modification was made on this questionnaire to make it abler to assess E-banking service quality instead of service quality in general. A ready question about customer satisfaction and service

trust were added to the same questionnaire. The final form of research questionnaire includes (5) demographic questions in section one and (30) questions to measure research variables questions in section two.

#### 3.3 Research Validity and reliability

To be sure about the instrument validity, the questionnaire will be explored by group of specialists about its appropriateness. After receiving specialists' judgments, the researcher will modify the questionnaire according to these suggestions. Depending on (Saunders, 2011) assertions, it's so important for researchers to make pilot test, but for small surveys and due to time and money limits, researchers must determine a sufficient number of respondents to perform this step, 30 questionnaires are the sufficient number for this process.

Moreover, because the researcher depended on ready questions for each variable, there is no need to access each variable reliability because all of them have been examined. However, the researcher will examine Cronbach's alphas for the whole questionnaire to be sure about its reliability because he combines three sets of questions from three different studies.

#### 3.4 Research Population

The target population for this study consisted of all customers that have accounts in Arab bank in Amman city. There is no certain number for this population according to the bank website or in Population and housing Census data, so the researcher dealt with top management at this point. They supposed that the total population is around 350,000 clients in number.

#### 3.5 Sampling

Sekaran (2003) defined sampling determination as the way to choose from population of the study sufficient candidates in number instead of taking all population, this sample needs to be pointed out in a scientific way to make it able to generalize overall population.

One of the best things about simple random



sampling is the easeness of assembling the sample, especially when population number is large (Saunders, 2011). Another key feature of simple random sampling is its representativeness of the population. Due to the representativeness of a sample obtained by simple random sampling, it is reasonable to make generalizations from the results of the sample back to the population (De Vaus, 2013). For all previous reasons, the researcher depended on simple random technique for this study.

While research population of 350,000 persons according to Arab Bank top management, Thornhill, & Saunders (2007) asserted that for most business management studies, researchers can depend on 95% of confidence level and 5% as error margin, according to all of these assumptions; the representative sample size is 283 respondents (Saunders, 2011). So, the researcher distributed 500 questionnaires randomly for E-banking customers in all

Arab Bank branches in Amman City with the aim of collecting at least the needed number of respondents. 300 questionnaires have been received with a response rate of 60%. These 300 questionnaires have been analyzed using SPSS software; the following section describes all procedures and techniques for data analysis.

## 4. Data Analysis and Results

Table (1):

Demographic information

|            | Item          | Frequency | Percentage | Total |
|------------|---------------|-----------|------------|-------|
| Gender     | Female        | 102       | 34         | 300   |
|            | Male          | 198       | 64         |       |
| Income     | 200-400       | 33        | 11         | 300   |
|            | 401-600       | 115       | 38.3       |       |
|            | 601-800       | 120       | 40         |       |
| Experience | Above 800     | 32        | 10.7       | 300   |
|            | 1-3           | 88        | 29.3       |       |
|            | 4-7           | 130       | 43.3       |       |
| Age        | More than 7   | 82        | 27.3       | 300   |
|            | 18-30         | 172       | 57.3       |       |
|            | 31-40         | 99        | 33         |       |
| Education  | Above 40      | 29        | 9.7        | 300   |
|            | Diploma/less  | 20        | 6.7        |       |
|            | Bachelor      | 255       | 85         |       |
|            | Postgraduates | 25        | 8.3        |       |

Table 1 indicated the demographic variables of responders. For gender result, the percentage of male and female was 64% and 34% respectively. Moreover, the income variable has a category rate stating from 200 JOD up to above 800, while the descriptive analysis result shows that the most responders have chosen 601-800 with 40% as a highest rate. Furthermore, with respect to experience, the highest proportion came by 4-7 years with 43.3%. However, the majority of age category of participants was between 18-30 years old, with 57.3%. Finally, in terms of education 85% of respondents were bachelors. Hence, the reasonable ground to trust the survey is dealing with actual clients of the bank.

### 4.1 Regression Analysis

To investigate the aims of present research, multiple linear regressions were used to investigate the impact of the independent variable "E-banking Services Quality" on the dependent variables "customer satisfaction". The independent variable has five dimensions which are; Assurance, Empathy, Reliability, Tangibles and Responsiveness, those factors are moderated by customer trust. These variables are used in the multiple linear regression models:

Table (2):

Multiple regression results for impact of E-banking services quality practices on customer satisfaction

| Model     | R     | R Square | Adjusted R Square | Change Statistics |               |
|-----------|-------|----------|-------------------|-------------------|---------------|
|           |       |          |                   | F Change          | Sig. F Change |
| dimension | .937a | .878     | .875              | 299.677           | .000          |

Table 2 shows research model summary, in aim of showing the relationship strength between the independent variable and the dependent variable which is examined through the relation by (R) and in regards to the results of analysis, (R=.937) which is a positive relationship. Moreover, p-value is 0.00 which means assertion about the significant relationship, hypothesis 1 has been accepted. This result coincides with a study of (Firdous & Farooqi, 2017) that reached to the same finding of positive relationship between those two variables.

Consequently, from same model (R<sup>2</sup>= .878) this indicated independent variables E-banking

services quality explain 87.5% of the variance in adoption. It means E-banking services quality has the ability to describe 87.5% of customer satisfaction regarding assurance, empathy, reliability, tangibles and responsiveness. Moreover, the moderator impact can be represented as an interaction between a focal independent variable and a factor that appoints the convenient conditions for its operation.

Table (3):

Regression test equation for independent variable dimensions

| Model                    | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig.   |      |
|--------------------------|-----------------------------|------------|---------------------------|--------|--------|------|
|                          | B                           | Std. Error | Beta                      |        |        |      |
|                          |                             |            |                           |        |        |      |
| 1                        | Constant                    | -.161      | .096                      |        | -1.672 | .096 |
|                          | Responsiveness              | .008       | .006                      | .044   | 1.212  | .226 |
|                          | Empathy                     | .047       | .005                      | .231   | 8.742  | .000 |
|                          | Tangibles                   | .035       | .007                      | .187   | 5.100  | .000 |
|                          | Reliability                 | .030       | .003                      | .288   | 8.887  | .000 |
|                          | Assurance                   | .105       | .012                      | .243   | 8.685  | .000 |
| Costumer trust Moderator | -.143                       | .038       | -.139                     | -3.746 | .000   |      |

This model (coefficient model) usually used to reveal the independent variables with the most effective impact in parallel with hypotheses testing all five sub-hypotheses. As per table 3 of coefficients, Reliability recorded the greatest with the greatest t-statistic (8.887), and p-value was (0.000). It indicated that if one unit of reliability

standard deviation increase, this will lead to an increase by (0.288) of customer satisfaction standard deviation by provided that the responsiveness, empathy, tangible, and reliability moderator are left unchanged. Depending on this result, hypothesis 1.1 has been accepted. This result agreed with AL-Adwan & AL-Tarawneh, (2017) as it found a strong relationship between E-banking service quality and customer satisfaction in Jordanian commercial banks.

Therefore, the responsiveness recorded the lowest t-statistic (1.212) which p-value for (0.226) which means there is no significant relationship between responsiveness and customer satisfaction. So, the sub-hypothesis 1.3 was rejected. This indicates there is no significant relationship between responsiveness and customer satisfaction. This result in fact disagrees with some of previous studies such as Al-Hawary et al., (2017) and Alshurideh et al., (2017) researches, and by contrast agreed with Firdous & Farooqi, (2017) when they found there is no significant relationship between responsiveness and customer satisfaction.

By looking for the value of t-test for each one of E-banking Services Quality within table 3, it's clear that all of these remaining dimensions (Assurance, Empathy, and Tangibles) had significant statistical impact on customer satisfaction T values (8.685, 8.742, and 5.100) while p-values < 0.05 for all three dimensions. This result of t-test indicates that all coefficients of E-banking services quality dimension except responsiveness are statistically significantly which means all of these four dimensions (Reliability, Assurance, Empathy, and Tangibles) have a significant statistical impact on customer satisfaction. As a result, sub-hypotheses number 1.1, 1.4, and 1.5 have been accepted so there is a significant impact of each one of these dimensions assurance, empathy, and tangibles on customer satisfaction. This also corresponds to the results of some previous studies that have been found a strong relationships between these three dimensions and customer satisfaction (Alshurideh et al., 2017; Ayo et al., 2016).

Finally, the moderator impacts of a variable are represented by the interaction term. If the interaction term is statistically significant, that means null

hypothesis must be rejected while the alternative one must be supported. Depending on the analysis results, hypothesis number two has been supported; this means customer trust mediates the relationship between E-banking Services Quality and customer satisfaction. It can be described as independent variables exactly in the same manner. Thus,  $p$  samples could be used for estimation goal. This result matches with Arifin, (2016) when it found a moderating effect of customer trust on the relationship between E-banking service quality and customer satisfaction.

## 5. Research Contributions

This study has several valuable contributions that enrich the existing literature about the same subject. firstly, this study investigated the relationships between research variables as the first study that converted all Amman governorate area with this large number of samplings depending on Sekaran's, (2006) suitable sample determination table. Moreover, this research introduced the mediating rule of customer trust on the main relationship between the independent and the dependent variable according to some of the previous researches that suggested this variable due to its importance on such variables. Nevertheless, study findings showed that reliability recorded the greatest with the greatest  $t$ -statistic while the responsiveness recorded the lowest  $t$ -statistic, this means there is a noticeable shortage on banks responsiveness practices towards their customers. Moreover, data findings reveal that the majority of the respondents indicated that there is equality among empathy or costumers of bank.

Finally, research results give a suitable guideline for banks management to follow in order to achieve better customer satisfaction through maintaining and enhancing the quality of their E-banking services which may lead to gain perceived competitive advantages for each bank that adopts research result for the future.

## 6. Findings and Discussion

The main objective of this study is to measure the impact of Quality E-banking Services on customers satisfaction, it can be summarized that

the level of costumers or visitors' satisfaction in Arab Bank was very high relying on ( $R^2=0.878$ ). Research result shows a strong positive relationship between E-banking services and customer satisfaction, consist of (AL-Adwan & AL-Tarawneh, 2017; Amin, 2016).

Moreover, the study indicated that there is a strong effect between the study dimensions. In fact, this is based on (Al-Hawary et al., 2017; Alshurideh et al., 2017) as these researches admitted that E-banking dimensions lead to better customer satisfaction.

The results indicated that costumers are satisfied with Assurance, empathy, reliability, tangibles and responsiveness in Arab bank. Moreover, top level managers at Arab banks should concentrate on the Responsiveness factor in order to put all bank potential into costumers' satisfaction they should focus on employees' behavioral, employees' motivation. This could be reasonable results for employees to work effectively and efficiently.

Therefore, this could be useful informations for academic and managerial people, as per results, the survey finds that banking services quality through assurance, empathy, reliability, tangibles and responsiveness affect costumers' satisfaction to a very great extent (AlSudairi, 2016; Amin, 2016; Ayo et al., 2016; Liu & Wang, 2017). Moreover, the participants indicated that the human resource management at the bank are not perfect in dealing with employees behavioral. The participants shows that due to mismanagement at the bank, the employees should be granted more responsibilities even outside the bank to transfer the right information to the right costumers. Here it can be explained as the power of word-of-mouth. The data findings revealed that majority of the respondents indicated that there is equality in salaries among costumers of bank. The survey findings revealed that nature of work demands causes a lot of stress as per majority to participants.

## References

1. Al-Adwan, A. S. A., & AL-Tarawneh, S. S. (2017). The Impact of Electronic Banking Service Quality in Enhancing Performance

- (A study on Jordanian Commercial Banks). *International Journal of Human Resource Studies*, 7(3), 148–163.
2. Al-Hawari, M., & Ward, T. (2006). The effect of automated service quality on Australian banks' financial performance and the mediating role of customer satisfaction. *Marketing Intelligence & Planning*, 24(2), 127–147.
  3. Al-Hawary, S. I. S., Al-Smeran, W. F., & others. (2017). Impact of Electronic Service Quality on Customers Satisfaction of Islamic Banks in Jordan. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 7(1), 170–188.
  4. Alshurideh, M. T., Al-Hawary, S. I. S., Mohammad, A. M. E., Al-Hawary, A. A., & Al Kurdi, B. H. (2017). The Impact of Islamic Banks' Service Quality Perception on Jordanian Customers Loyalty. *Journal of Management Research*, 9(2), 139–159.
  5. AlSudairi, M. A. T. (2016). E-service quality strategy: Achieving customer satisfaction in online banking. *Journal of Theoretical and Applied Information Technology*, 38(1), 6–24.
  6. Amin, M. (2016). Internet banking service quality and its implication on e-customer satisfaction and e-customer loyalty. *International Journal of Bank Marketing*, 34(3), 280–306.
  7. Arifin, M. (2016). Impact of E-banking User Behavior to Loyalty. *International Journal of Business and Management Invention*, 5(1), 2319 – 8028.
  8. Ayo, C. K., Oni, A. A., Adewoye, O. J., & Eweoya, I. O. (2016). E-banking users behaviour: E-service quality, attitude, and customer satisfaction. *International Journal of Bank Marketing*, 34(3), 347–367.
  9. Bagozzi, R. P. (1981). Attitudes, intentions, and behavior: A test of some key hypotheses. *Journal of Personality and Social Psychology*, 41(4), 607.
  10. Brensinger, R. P., & Lambert, D. M. (1990). Can the SERVQUAL scale be generalized to business-to-business services? *Knowledge Development in Marketing*, 289.
  11. Daniel, E. (1999). Provision of electronic banking in the UK and the Republic of Ireland. *International Journal of bank marketing*, 17(2), 72-83.
  12. DE VAUS, D. (2004). Diversity and change in Australian families: Statistical profiles. Melbourne, Australia: Australian Institute of Family Studies.
  13. Firdous, S., & Farooqi, R. (2017). Impact of Internet Banking Service Quality on Customer Satisfaction. *The Journal of Internet Banking and Commerce*, 22(1), 1–17.
  14. Grönroos, C. (2007). Service management and marketing: customer management in service competition. John Wiley & Sons.
  15. Hoehle, H., Scornavacca, E., & Huff, S. (2012). Three decades of research on consumer adoption and utilization of electronic banking channels: A literature analysis. *Decision Support Systems*, 54(1), 122-132.
  16. Hoppock, R. (1935). Job satisfaction.
  17. Horovitz, J. (1990). How to win customers: Using customer service for a competitive edge. Pitman London.
  18. Ismail Hussien, M., & Abd El Aziz, R. (2013). Investigating E-banking service quality in one of Egypt's banks: a stakeholder analysis. *The TQM Journal*, 25(5), 557–576.
  19. Lewis, B. R. (1989a). Customer care in service organisations. *Marketing Intelligence & Planning*, 7(5/6), 18–22.
  20. Liu Chia-Ming and Tsung-Yuan Wang (2017). A study on the effect of service quality on customer loyalty and corporate performance in financial industry. *Problems and Perspectives in Management*, 15(2), 355-363.
  21. locke, Edwin A. "What is job satisfaction?." *Organizational behavior and human performance* 4.4 (1969): 309-336



22. Mathis, R. (2011). Human resource management: Essential perspectives. Cengage Learning.
23. Ojasalo, J. (2010). E-service quality: a conceptual model. *International Journal of Arts and Sciences*, 7(3), 127–143.
24. Parasuraman, A., Berry, L. L., & Zeithaml, V. A. (1991). Refinement and reassessment of the SERVQUAL scale. *Journal of Retailing*, 67(4), 420.
25. Parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL a multiple-item scale for assessing electronic service quality. *Journal of Service Research*, 7(3), 213–233.
26. parasuraman, A., Zeithaml, V. A., & Malhotra, A. (2005). ES-QUAL: A multiple-item scale for assessing electronic service quality. *Journal of service research*, 7(3), 213-233.
27. Pikkarainen, T., Pikkarainen, K., Karjaluoto, H., & Pahnla, S. (2004). Consumer acceptance of online banking: an extension of the technology acceptance model. *Internet research*, 14(3), 224-235.
28. Richard, M. D., & Allaway, A. W. (1993). Service quality attributes and choice behaviour. *Journal of Services Marketing*, 7(1), 59–68.
29. Saunders, M. N. K. (2011). *Research methods for business students*, 5/e. Pearson Education India.
30. Sekaran, U. (2003). *Research methods for business: a skill building approach*. *Journal of Education for Business*, 68(5), 316–317.
31. Sekaran, U. (2006). *Research methods for business: A skill building approach*. John Wiley & Sons.
32. Shemi, A. P., & Magembe, B. A. S. (2002). Challenges and opportunities for adopting Electronic commerce in a developing country: The Botswana Perspective. In *Proceedings of International Conference*, Port Elizabeth, South Africa, April 3 (Vol. 6, No. 2002, pp. 174-180).
33. Thronhill, N. F., & Horch, A. (2007). Advances and new directions in plant-wide disturbance detection and diagnosis. *Control Engineering Practice*, 15(10), 1196-1206.
34. van Iwaarden, J., van der Wiele, T., Ball, L., & Millen, R. (2003). Applying SERVQUAL to web sites: An exploratory study. *International Journal of Quality & Reliability Management*, 20(8), 919–935.
35. Wolfinbarger, M., & Gilly, M. C. (2003). eTailQ: dimensionalizing, measuring and predicting etail quality. *Journal of Retailing*, 79(3), 183–198.
36. Yoon, C. (2010). Antecedents of Customer Satisfaction with Online Banking in China: The effects of experience. *Computers in Human Behavior*, 26(6), 1296-1304.