

Relationship Between Electronic Banking Services and Customer Satisfactions in the Iraqi Banking Sector: A Sample of Private Banks in the Duhok City

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ABSTRACT

The study aims to discover the relationship between E-banking services and satisfactions of three bank clients in Duhok such as: KI B, RT bank and Cihan Bank. Recently, as a result of rapid developments in an international economy there has been a substantial growth in the use of electronic banking services in the world, however, the use of E-banking services is still issue and in an early stage in the Duhok city. This paper used Questionnaire to obtain the data and descriptive statistics with Chi-square formula tested for analyzing data by using SPSS 26 statistics program. Moreover, it can be concluded that there is a relationship between e-banking and customer satisfactions especially in crisis times like Corona virus. It is highly suggested that these banks should add other E-banking services behind current services like internet banking, mobile banking, and ATM that provides their services during all 24 hours to satisfy their customers. Finally, these banks should also ensure that their staffs acquire basic information communication technologies skills to use e-banking services correctly.

Keywords: Electronic Banking, Customer Satisfaction, Mobile banking, Internet Banking. Banking services.

1. Introduction

Each country has many banks because they are very crucial for economic growth and they use new innovations of technology in providing their services. However, banking system in Iraq is not obvious, and they cannot support development in Iraqi economics, as well as the number of banks are increasing dramatically every year in Iraq and Kurdistan region (Ibrahim, 2017) and (Ibrahim, 2019). One of the main reason of this as Ibrahim and Olarewaju (2019) mentioned in their research which have been taken about unbanked rate by higher institution students in Duhok city was high percentage of these students have not bank accounts because of lack of trust on these banks. Recently, banking system in Iraq and Kurdistan region now are in early stage of conducting new electronic technologies to provide their products and services. Moreover, the process of replacing traditional services with electronic services in Iraqi banks may take time because of instability in financial conditions of this country. It is important to bear in mind electronic banking have many benefits for

society and economic improvement. A good example of this Beheshtifar and Nezhad (2015) found that electronic banking can be used as an important tools to attract more customers and individuals to use bank accounts in the study about influence of electronic banking on client reliability. Moreover, not only customer satisfaction may rise by electronic banking, but also the bank shares could be increased. In another study which is not surprising John and Rotimi (2014) has found that electronic banking can lead to an increase in the market shares of the banks. They found that also bank profits could be increased by using electronic banking. There are several different kinds of electronic banking services including: home banking, PC banking, internet banking and mobile banking. It is not exaggeration to say that electronic banking services can be provided for both Domestic and International customers by banks.

The number of bank clients or customers could be increased when a bank offer services with high quality. It can be noted that a considerable number of electronic

banking users or customers are young generation. For instance, in their recent study Worku and others (2016) found that the significant number of E-banking users of banks in Ethiopia are educated, salaried and young. It is important to say that various results have shown by different authors who investigated and compared their country with foreign countries in terms of using E-banking services. However, in general the influence of electronic banking services is still not clear on customer's satisfaction in Iraq and Duhok city in particular. Moreover, as today also a greater proportion of Duhok bank users don't desire public banks and even private ones because of unsafety and security.

1.1 Research Question

In order to create a link concerning E-banking system and banking services in general the next question is vital:

Does E-banking services have relationship with customer satisfaction in Duhok banks or not?

1.2 Research Objectives

The core objectives of this research is to examine the relationship of E-banking services and customers' satisfactions for three bank customers in Duhok.

The secondary objectives of the research are as follows:

- a) To examine the effect of E-banking services on customers' satisfactions for three bank customers in Duhok.
- b) To identify concepts of Customer satisfaction and E-banking services clearly.

1.3 Relevant Research Hypothesis

To obtain the objectives of the research, the following hypotheses have been constructed:

- Ho: The level of satisfactions of customers in three banks in Duhok have not relationship with electronic banking services.
- H1: The level of satisfactions of customers in three banks in Duhok have relationship with electronic banking services.

2. Literature review

2.1 Customer satisfaction

It is well known that in the marketing literature customer satisfaction is examined comprehensively in several businesses (Tweneboah-Koduah and Farley, 2015). Moreover, Chen et al. (2012) stated that Cardozo (1965) was the first one who proposed customer satisfaction concept. Aliyu et al. (2014), Nasri (2011), Sadeghi and Farokhian (2010) and Lawrence (2018) stated that electronic banking became a crucial passage in providing bank services and products to customers due to the dramatic development in technology of communication. More interestingly, one of the important factors of succeeding companies in providing good services is satisfying customers (Wang, and Lo, 2002) (Darvish et al., 2013). It is not exaggeration to say that there is an association between service quality and customer satisfaction so that when services are in a high quality there will be high level of satisfaction of customers (Mohan and John, 2016). Moreover, Nyoni et al. (2017) discovered that a strong predictor of customer satisfaction is quality of electronic services in the commercial banks in Botswana. Oliver (1997, cited in Tweneboah-Koduah and Farley, 2015) defined customer satisfaction as a situation when customers evaluate products and services after buying them which is different from their expectations. Sakhaei et al. (2014) defined customer satisfaction as the way when customers see their expectations are less than what they are receiving via some standards of comparison. It has commonly been assumed that an imperative for the survival of any companies over the world is customer satisfaction (Toor et al., 2016).

2.2 Electronic banking

The most crucial E-services in electronic trade is internet banking and there are other electronic banking that are not via internet such as ATM (Chen et al., 2012). John and Rotimi (2014) stated that flexibility and convince of e-banking has let them to be popular.

Moreover, Nasri (2011) and Chen et al. (2012) concluded that saving or reducing costs can be made by e-banking. Moreover, Uchechukwu and Stella (2019) revealed that channels of electronic banking consists of several types such as: ATM, POS, Mobile banking and internet banking. However, Afshan et al. (2018) believe that a new evolution in the banking sector is internet banking which has more effects than other electronic commerce. Hosseini et al. (2016) stated that the use of software and hard ware telecommunication networks in order to share financial information via electronic called Electronic banking. Moreover, the process of letting customers to have many transactions including financial and non-financial through website channel called electronic banking (Hamid et al., 2018). Ibrahim and Kumar (2018) defined e-banking as the process of conducting bank services via electronic and sometimes called online banking. Moreover, they stated that the remove process of papers in the banking operations. Mahmoud (2019) believes that banks should use new technologies to be able to compete other financial institutions when they do their operations. Ahmad and Al-Zu'bi (2011) believe that electronic banking is a channel which organizations use it to provide financial services and the process of adopting them will lead to a progressive effect on customer satisfaction.

2.3 Electronic Banking and Customer Satisfaction

In recent time an important development in the world is e-banking and different banking activities can be provided by e-banking via accessing internet (Varma et al., 2020). Ojokuku and Mukundan (2012) studied the impact of electronic banking on performance of HR for the First bank customers in Nigeria and they found that there is a positive impact of electronic banking on HR performance. Moreover, the relationship between customer satisfaction and electronic banking was also positive, however, they suggest that tariffs should be decreased on technology of information's by Nigerian government. Similarly, Hamid et al. (2018) studied that

influence of electronic banking on customer satisfaction at Sudanese bank clients and the result of the study proved that there is a positive impact of banking services over the internet on customer satisfaction. Furthermore, in another latest study Sleimi et al. (2018) investigated the impact of services of E-banking on satisfaction of clients and measured their levels. They have used five hundred questionnaires over all Arab bank branches in Jordan and used SPSS software to analyze their 300 received questioners. The result of their study showed that there is a strong positive relationship between two variables.

In another latest study, Ahmed (2020) analyzed 180 questioners to know the link between e-banking qualities of services in Tripoli City, Libya and customer satisfaction. More interestingly, he found that there is a positive impact of e-banking services on customer satisfactions. Likewise, Hadid et al. (2020) analyzed the influence of digital banking services on customer loyalty of 5 different banks in Malaysia by and they found a positive relationship between that variables. In the same way, Al-Hawary and Hussien (2017) examined that impact of e-banking services on customer loyalty of six commercial Jordanian banks and they found a positive impact between them. Moreover, the authors suggest that for attracting more customers there should be use of professionals in the field of electronic design of sites. Addai et al. (2015) examined the influence of delivery service of e-banking on customer satisfaction in a sample of Ghanaian bank customers and their outcomes presented that there is a positive link between them. AlHaliq and AlMuhirat (2016) tested the level of customer satisfaction with (e-banking) services in the banking sectors of Saudi and they showed that via improving electronic services banks in Saudi attained significant customer satisfaction and achieved effective communication with their customers. More interesting, the impact of e-banking products on

Nigerian performance banks has been investigated by Hassan et al. (2013). They have used twenty one Deposit Money Banks quoted in NSX as a population and six banks of them have been chosen for a sample of their study. Furthermore, they have showed that adopting e-banking including e-mobile and ATM lead to high performance of that banks. In a latest study in Nigeria as well, Nwekpa et al. (2020) assessed the impact of both e-cash system and online credit card payment on customer satisfaction and they have used PPM correlation analysis for a sample of forty-one respondents of Fidelity Bank Plc. in Nigeria. Moreover, their results showed both variables have a significant impact on customer satisfaction. On the other hand, using e-banking services might not be easy as mentioned by Zahid et al. (2012) who investigated the influence of e-banking on customer satisfaction for the five top commercial banks in Pakistan by interviewing three hundred customers. Furthermore, participants have a strong argue to use technology information in banking operations and they argue that there are several problems while they are using electronic banking.

2.4 E-Banking and Customer Satisfaction in Iraq

Electronic banking in Iraq is in its early stages. There are more than 80 listed banks in the country controlled by central bank of Iraq (CBI). Recently, there is a limit of growth of mobile banking services in Iraqi banks, in order to improve these service more Iraqi government should support their banks (Makttoof and Khalid, 2018). Alabboodi (2019) examined the quality of services (assurance, reliability, tangibility, empathy, and responsiveness) on customer satisfactions in banks of Iraq and found a positive link between them. Moreover, he believes that serves quality in Iraqi banks is still not good as well as of Iraqi bank efforts. In the same way, Elias and Azhar (2019) examined the quality of services dimensions on customer satisfactions for banking sectors of Iraq and found a positive link between several variables including:

reliability, assurance, access, empathy, responsiveness, tangibility, employees and customers of Iraqi banks. Moreover, Hamad (2018) used seven banks of Erbil to focus on several issues of e-banking service quality, security, and customer loyalty that are relative to customer satisfaction and found that there is a positive impact of customer loyalty and security on customer satisfaction. On the other hand, he found that there is no impact of E-banking service quality on customer satisfaction.

3. Methodology

As previous stated, this paper attempts to conclude the relationship between e-banking services and customer satisfactions in three Duhok banks and the discussion will further emphasis on the population, sample size, methods of study and procedure of analyzing data. The sample of this paper consists of three bank customers of the banks that operate in Duhok urban such as: RT, Cihan and Kurdistan international bank and the main reason behind selecting these banks was because the offer E-banking services to their customers. Moreover, size of individuals or customers of these banks contain 100 trade and individual clients in that Urban who utilize their services. Statistics were collected through questionnaire and these data collected and analyzed by using the simple calculations, whereas the Chi-square is tested by using SPSS 26 statistics for hypotheses because it is more convinces for testing relationships between variables. Moreover, indicators of Likert format were used and hypothesis tested at level of 0.05 of significance. The paper used the same equation which have been used by John and Rotimi (2014) in of their papers which is written below.

Formula of Chi-square (χ^2) value is set below:

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

O = frequency Observation

E = frequency Expectation

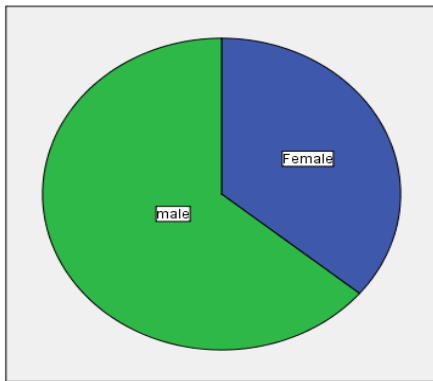
e = $\frac{\text{Row Total} \times \text{Column Total}}{\text{Grand Total}}$

χ^2 = Chi Square

Σ = Sum total.

4. Presentation of Data and Discussion

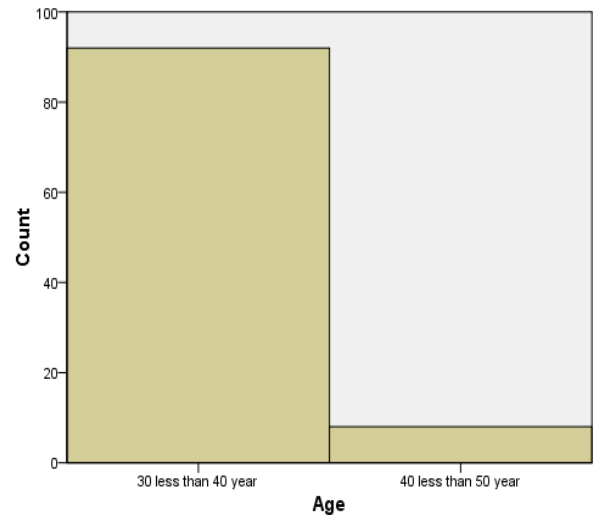
4.1 Section A



Source: Research Questionnaire 2020

Pie chart 1: Distribution by gender

It can be clearly seen from the above pie chart the sample of the paper consists of approximately (64%) of male and (36%) of female, and this shows that the rate of male respondents are more than female due to high proportion of men dealing with banks in Duhok city. It can be clearly seen also **from chart 2** below, the largest percentage of the sample (92%) are from the age group of (20-39 years) and this shows that almost all three bank users young generation. However, only (8%) percentage of these defendants are within the age group (40 - 59 years) of the sample. It is more interesting to note that there is no respondents with age below twenty and in the same way there is no defendants above 60 years old.



Source: Research Questionnaire 2020

Bar chart 2: Distribution of sample by age

4.2 Section B

From the (Appendix 1) the meaning of electronic banking is understandable for the most of respondents (80%) who strongly agreed and agreed with the first question, while (20%) of them remained undecided with this question. However, none of these respondents did not mention that he or she does not know the concept of E-banking. Therefore, it can be concluded that the meaning of e-banking is understandable for almost all of them. Moreover, question 4 above shows that (95%) of the participants strongly disagree with the question and 5% were undecided, while no percentage of them agree with the question. It is clear that these banks do not provide e-banking services during all 24 hours as the highest portion of defendants stayed that. Another interesting question was do e-banking offer everything as bank servant do and a significant number of respondents agreed and strongly agreed with this question and (12%) of them undecided.

However, simply (8%) percentage of them believe that e-banking not able to provide everything as employees do it. It is noted that Duhok bank clines believe on abilities of e-banking services. Furthermore, nearly (84) percentage of respondents believe that e-banking is a factor of increasing customer satisfaction in Duhok city banks and they also believe that banking services

may be expand by them. Nevertheless, the remaining of these respondents chosen undecided, and no one disagree or strongly disagree with this question. It can be shown that e-banking services and customer satisfaction may affect each other.

Two important questions have been asked in Table (1) and the first one is about paying money when customer use e-banking. Surprisingly, approximately (44) percentage of bank users stated that e-banking services are not free, while (25%) of them mentioned that e-banking services are free of charge. Furthermore, 31 percentage of respondents stated that I don't know about this question. It is also clear from the table 4 the largest number of users or respondents believe that via using e-banking services they are more satisfied with bank services. To conclude that customer satisfaction can be increased, when banks use e-banking services.

Table 1: Satisfaction of E- banking services

Questions	Yes	No	I don't know
Does E-banking services are free	25	44	31
I am more satisfied after using E-banking services	56	16	28

Source: Research Questionnaire 2020

Table 2: Descriptive Statistics

The below table shows the descriptive statistics results from the study.

	Descriptive Statistics						
	N	Mini mum	Maxi mum	Sum	Mea n	Std. Deviatio n	Varia nce
Gender	100	1	2	136	1.36	.482	.233
Age	100	2	3	208	2.08	.273	.074
X1	100	1	3	172	1.72	.780	.608
X2	100	1	4	204	2.04	.920	.847
X3	100	1	4	196	1.96	.777	.604
X4	100	3	4	395	3.95	.219	.048
X5	100	1	4	196	1.96	.875	.766
X6	100	1	4	204	2.04	.777	.604
X7	100	1	4	208	2.08	.800	.640
X8	100	1	3	192	1.92	.800	.640
X9	100	1	3	188	1.88	.656	.430

X10	100	1	3	188	1.88	.856	.733
X11	100	1	3	172	1.72	.877	.769
Valid N (listwise)	100						

Source: Research Questionnaire 2020

Table 3: Chi-Square Test results

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	22.360 ^a	2	.000
Likelihood Ratio	22.251	2	.000
Linear-by-Linear Association	15.664	1	.000
N of Valid Cases	100		

a. 3 cells (50.0%) have expected count less than 5. The minimum expected count is 1.28.

Source: Research Questionnaire 2020

Table 4: Chi-Square Tests

	Test Statistics												
	Gender	Age	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
Chi-Square	7.840 ^a	70.560 ^b	11.840 ^b	23.520 ^c	90.080 ^c	81.000 ^c	27.360 ^c	84.960 ^c	68.320 ^c	1.280 ^b	25.280 ^b	4.580 ^b	25.280 ^b
df	1	1	2	3	3	1	3	3	3	2	2	2	2
Asymp. Sig.	.005	.000	.003	.000	.000	.000	.000	.000	.000	.527	.000	.101	.000

a. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 50.0.

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 33.3.

c. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 25.0.

Source: Research Questionnaire 2020

From the above table the level of significance calculation is (0.000) which is less than the significance default level (0.05). Moreover, the value of Pearson Chi-Square is (22.360) which is greater than tabulated or critical value of Chi-Square (9.48877) with df. 4. Therefore, to test the null hypothesis (H₀) which is the level of satisfactions of customers in three banks in Duhok have not relationship with electronic banking services which means that the null hypothesis will be rejected at the above level of significance. It can be summarized that when E-banking services provide more there will be more customer satisfaction. So that alternative hypothesis (H₁) chosen and discard H₀, and it can be conclude that there is a major association between E-banking services and client satisfaction of

three Duhok banks.

5. Discussion

Earlier studies as well as this current work emphasized on the impact of electronic banking on customer satisfaction and their relationship almost all the related papers found a positive link and impact between that variables. It is not surprising to say that the result of this research is in line with several authors such as: Ojokuku and Mukundan (2012), Hamid et al. (2018), Sleimi et al. (2018), Hadid et al. (2020), Al-Hawary and Hussien (2017), Addai et al. (2015), AlHaliq and AlMuhirat (2016), Ahmed (2020), (Makttoof and Khalid, 2018), Alaboodi (2019), Elias and Azhar (2019), Hamad (2018), Addai et al. (2015) and Hassan et al. (2013). On the other hand, this paper is not support Zahid et al. (2012) who believe that using e-banking might not be easy.

6. Conclusions

This paper has analyzed the relationship between E-banking services and client satisfaction of a sample banks in Duhok such as: KIB, RTB and Cihan bank which are in the early stage of using e-banking services. Based on the result of this paper it is shown that there is a strong and positive impact of e-banking on customer satisfactions especially in crisis time like Corona virus. Moreover, the highest percentage of e-banking customers were young aged 20 to 39. It is also undeniable fact that in the immediate future e-banking will replace traditional banking in Duhok city and other cities in Kurdistan region. This paper used a small sample of three banks Customers only in Duhok city and this sample is too small for research. Moreover, the reason of using just three bank customers is only these banks use e-banking in this city. Possible direction for future studies is to use more samples.

7. Recommendations

- It is highly suggested that these banks should add other e-banking services behind current services like internet banking, mobile banking, and ATM.

- Moreover, these banks should also ensure that their staffs acquire basic information communication technologies skills to use e-banking services correctly.
- Finally, the findings from this paper suggest that these banks should provide e-banking services during all 24 hours and in all days to satisfy their customer.

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