

E-BANKING IMPLEMENTATION AND TECHNOLOGY
ACCEPTANCE IN THE RAFIDAIN AND RASHEED BANKS
IN IRAQ: AN EMPLOYEE PERSPECTIVE

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Abstract:

In the third millennium, e-banking system has been adopted globally in the banking industry. On the other hand, Iraq as a nation with less developed IT adoption has not integrated this system in its banking services, instead of its current acknowledgement on the advantages of e-banking technology in competition among banking service providers. In contrast, Iraqi banks still keep on adopting traditional banking system to deliver the majority of their services which in this case are paper-based work system. This is greatly resulted from the hesitation of bank employees to adopt new banking technologies. This study aims to identify the impact of hypothesis between e-banking system and Iraqi banks employee perspective. This study was conducted by taking sample of employee from two biggest public banks in Iraq which are AL-RAFIDAIN and AL-RASHEED. A survey through questionnaires on the website was used as the instrument to collect the data were analyzed using PLS software. Technology Acceptance model(TAM) as a basic foundation with independent variables Perceived Usefulness, Perceived Ease of Use, Perceived IT Beliefs and Task-Technology Fit, Attitude as Intervening and Intention to Use as dependent variable. The result of hypothesis analysis reveals that there is a significant impact among all variables to attitude, but Perceived Ease of Use, it does not apply variable from those analysis it is depicted that Perceived Ease of Use does not impact to the perception of the implementation of e-banking system in Iraqi banks. Keywords: E-banking System, Acceptance Theory model (TAM), Perceived IT Beliefs, Task-Technology Fit, Attitude, and Intention to Use.

Table 7. Testing Result of Hypothesis 1

INTRODUCTION

One of the noticeable characteristics of the third millennium is seen in the form of hastening advances on information and technology (IT). This has led to nearly a silent revolution in every aspect of life. The predictable possibility is the next generations to witness a further increase in the achievement of high technology and knowledge. The impacts of IT development are spreading in a significant way. Due to profit orientation, banking industries and commercial activities have initiated electronic invention implemented on their activities. As a result, E-commerce and E-banking are used on purpose to boost benefits by making use of the tremendous advances in technology. Moreover, as it is necessary to achieve the competitive advantages of banking, the focus has been put on the accounting professionals implementing e-banking system. The e-banking is relatively new, nevertheless, most of the banking technology researchers and practitioners hold the concept of e-banking as the system enabling banks to provide their customers access to their accounts for business transaction and information access via electronic communication channels. The channels may involve automated teller machines (ATMs), e-banking, home banking and internet banking by Afrouz (2007).

E-banking is better implemented than traditional banking methods. i.e. back office processes such as paper filling, paper work processing, sorting checks and cash handling which are seen by both the customers and banks to be the most costly way to bank. Bill payments, cash withdrawals, loan applications and checks clearings as bank customer requests had been a huge task for traditional banks. Therefore, the need for innovative invention to ease the back office tasks became clear. Thus, banking computer system is invented to fulfill the need. The use of banking computer systems helps banks to transfer record and store financial information as the less expensive way. Therefore, the overall result will help to reduce banking costs. The main reasons to adopt e-banking are reduction of transaction processing cost and time savings by Nehmzow (1997). Studies in the implementation of e-banking among countries discovered the variation in the e-banking usage growth rate due to many factors. The variations have given rise to the consideration of the fundamental determinants of staff acceptance and ability in internet banking system. In fact, the way to increase the acceptance is very much related to the ability in the information technology which concerns with the capability to electronically input, process, store, transmit, and receive data to enhance productivity, communication, easy use system, new system usefulness perception, attitude to use e-banking system and intention to use e-banking system. Therefore, this study was aimed to identify factors which included perceived ease of use, perceived usefulness, perceived IT beliefs, task technology fit, and attitude and intention towards e-banking system of the Iraqi employees of banks implementing e-banking system. The study was conducted to analyze many hypotheses stating e-banking

Table 7. Testing Result of Hypothesis 1

implementation in Iraqi banks by using the acceptance theory model (TAM) and task technology fit, according to the existing studies on the same variables such as perceived usefulness, perceived ease of use, perceived IT beliefs, and task-technology fit (TTF) between attitude of using e-banking system and intention to use it to test the impact among the hypotheses.

In the past, the need for banking services was mainly to keep the monies safe and to obtain such interest from the savings in banks. In contrast, recently the demand for bank services has changed to how banks can deliver their services. This is due to the present day customer who requires effective, fast and convenient banking transactions. The main problem appears when the traditional banking systems are still applied in Iraqi banks. There are huge numbers of documents to deal with in every transaction. Therefore, to make their services and products more efficient, there is a need to implement new e-system in banking. However, some bank staff are still reluctant to apply new banking technologies. Moreover, clear understanding and empirical evidence of staff intention to adopt e-banking in Iraq are still lack. Thus, the objective of this study was to figure out the banking employee perspective toward the implementation of e-banking. The research questions are stated as follows:

1. Is there any impact of Perceived Usefulness (PU) on employee Attitude of E-banking system?
2. Is there any impact of Perceived of Ease Of use (POEU) on employee Attitude to use of E-banking system?
3. Is there any impact of Perceived IT Beliefs (PITB) on employee Attitude to use of E-banking system?
4. Is there any impact of Task technology Fit (TTF) on employee Attitude to use of E-banking system?
5. Is there any impact of employee Attitude on Intention (INT) to use of E-banking system?

This study provides profound contribution to the existing theory. Theoretically, it serves as empirical evidence of the perception of the employee toward the implementation of e-banking system in Iraqi banks. In addition, this study used two most vital IT adoption related models including Theory of Accepted Model (TAM) and Task Technology Fit (TTF), were combined with dependent variable, perceived IT beliefs.

LITERATURE REVIEW

This part covers any related theories to the study. Initially, Theory of Acceptance Model (TAM) is used as an underpinning theory of this study. Following that, the definition and the conceptualization of variables are explained. Moreover, the overview of the relationship between dependent and independent variables additional to extended with Perceived IT beliefs and Task-Technology fit.

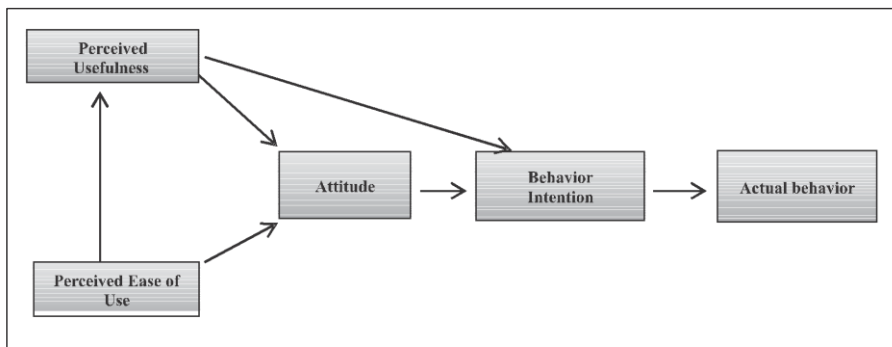
Table 7. Testing Result of Hypothesis 1

Technology Acceptance Model

Technology Acceptance Model (TAM) is of the most important theories used to study user intention to adopt Internet banking. This was originally proposed by Davis (1989). TAM was considered as a robust instrument to examine the adoption and usage of Internet Banking, by analyzing at the demand issues of IT/IS usage, rather than the supply, or developer’s perspective. According to Kazi & Mannan (2013), TAM can successfully guide technology implementation, developments and innovations within the area of e-banking. Moreover, the primary objective of TAM is to discover factors influencing computer applications acceptance in common. In addition, this model helps to identify the reason of unacceptable system in society by Davis(1989).

TAM dependent variable is actual usage. It provides a self-reported measure of time or frequency of the application. TAM postulates that external variables intervene indirectly by influencing PEU and PU. There is not any clear pattern related to the choice of the considered external variables. include situational involvement, intrinsic involvement, prior use, argument of change, internal computing support, internal computing training, management support, external computing, external computing training, role with regard to technology, tenure in workforce, level of education, prior similar experiences, participation in training, tool functionality, tool experience, task technology fit, and task characteristics by Legris (2003). Figure 1 describes the original TAM model based on Davis et al., (1989).

Figure 1. TAM model



Source: Technology Acceptances Model by Davis (1989)

Perceived IT Beliefs (PITB)

Studies in Management Information System(MIS) found that perceived beliefs in compatibility, image, and trial ability of an innovation are the key factors in the technology adoption of the behavior (Davis et al, 1989;Agarwal & Prasad, 1997; and Liao, 2000). Compatibility is seen as the capability of an innovation to be consistentwith the individual values, needs, and past experiences of potential adopters. Agarwal & Prasad

Table 7. Testing Result of Hypothesis 1

(1997) found that perception of compatibility appears as the main predictor of an innovation use. This can refer to how an innovation is perceived to enhance one's status in a social system. People often respond to social normative influences to establish or to maintain a favorable image within a reference group. This means the degree to which the use of innovation is perceived to enhance image or bring result in social system. Finally, the perceived belief of trial ability connotes a risk-free exploration of the technology. This refers to the perceived opportunity to experiment with the innovation prior to the usage. Agrawal & Prasad (1997) stated that the more the adopters do experiment with a new technology and explore its usages, the greater the likelihood that the innovation will be used during early stages of adoption.

Task-Technology Fit (TTF)

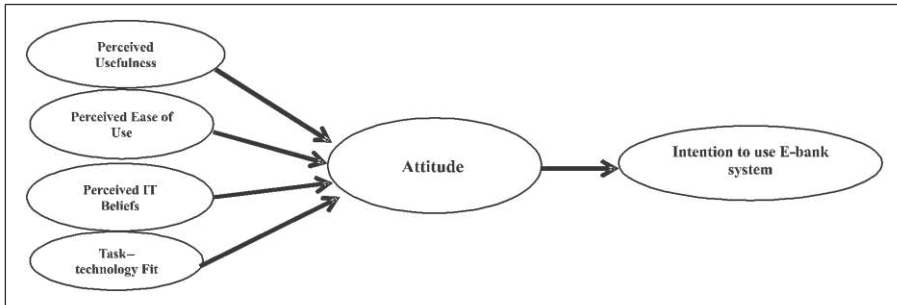
Goodhue and Thompson (1995) proposed the TTF model that extends the TAM by considering how the task affects uses. More specifically, the TTF model describes that a technology will provide an advantage to individual performance if it is well utilized, and technology adoption depends partly on how well the new technology fits with the supported task. Goodhue and Thompson (1995) further stated that technology is perceived as a tool with which people do. Tasks are the actions of turning inputs into outputs done by individuals. Task characteristics such as variety, difficulty, and interdependence are related to an individual's dependence on using technologies. Thus, if the individuals think that the technology can help to perform well, they will perceive it as useful and important to them. In the context of e-banking, task-technology fit refers to the ability of technology to assist employees in performing their tasks on the job. The higher the fit degree, the better performance may result. Specifically, TTF corresponds to the relationship of matching among task characteristics and employee abilities. Moreover, Goodhue (1995) focused on the "user domain of IT-supported decision making". Based on this task domain, the TTF model discovered three main subtasks of workers who are using quantitative information to perform their tasks. The subtasks include: 1) identifying needed data, 2) accessing identified data, and 3) integrating and interpreting accessed data. Furthermore, Goodhue (1995) identified several dimensions for every subtask which is measured by questionnaire items in the development of TTF. Obviously, Task-Technology Fit, in turn, affects the outcome either Performance or Utilization. TTF models state that IT will be implemented if the available functions support or fit the user activities. Logically, experienced users will choose devices and methods that enable them to complete the task with the most net benefit. On the other hand, Information Technology which does not offer sufficient benefits will not be used. A common addition to a TTF model is Individual Abilities by Goodhue & Thompson (1995). The inclusion of Individual Abilities is basically supported by Work Adjustment Theory and recent MIS studies in which Experience with particular IT is generally associated with higher Utilization of that IT.

Table 7. Testing Result of Hypothesis 1

RESEARCH MODEL AND RESEARCH METHOD

The model starts with six variables and then is followed by the hypothesis development. This study applied Technology Acceptance Theory model which is added by two other variables, Perceived IT Beliefs and Task-Technology Fit to discover the possible implementation of e-banking in Iraq.

Figure 2. Research model



Variables and Hypotheses development

Based on the proposed model of this study, the following are the research hypotheses in the context of implementation of e-banking in Iraq. The independent variables involve Perceived usefulness, Perceived Ease of use, Perceived IT Beliefs, and Task-Technology Fit (TTF) through Attitude of using e-banking system and dependent variable Intention to use E-bank system).

Table 1. Summary of Hypotheses

Hypotheses	Statements
H1	Perceived usefulness has an impact on employee attitude towards E-banking system.
H2	Perceived ease of use has an impact on employee attitude towards E-banking system.
H3	Perceived IT beliefs has an impact on employee attitude towards E-banking system.
H4	Task-technology fit (TTF) has an impact on employee attitude towards E- banking system.
H5	Attitude of employee has an impact on intention towards E- banking system.

This study applies quantitative exploratory approach for data collection technique. The exploratory study explains the relationships among variables through hypothesis testing. The data were collected using a survey method with questionnaire in nature. The study aims to analyze the relationships among variables which include independents variables such as Perceived Ease of Use (PEOU), Perceived Usefulness(PU),

Table 7. Testing Result of Hypothesis 1

Perceived IT Beliefs(PB), Task-technology Fit(TTF) and intervening variable Attitude (ATT) and the dependent variable Intention to use (INT) to examine to e-banking system implementation from employee's perspective. The population was employees of RAFIDDAIN and RASHEED banks in Baghdad and Erbil, selected using non-probability sampling. Sekaran (2003) stated that the sample size greater than 30 and less than 500 is applicable to most studies. Therefore, the number of employees as the sample from two city banks is 250 employees. Based most non-probability sampling methods are convenience sampling which involves sample members who can provide required information and who are more available to participate in the study. Slovin formula is used to determine the representative samples with the error rate 5%.

$$\begin{aligned} \text{Slovin formula: } n &= N / (1 + N(e)^2) \\ \text{Where: } n &= \text{Number of samples} \\ N &= \text{Total population} \\ e &= \text{Error sampling.} \end{aligned}$$

Therefore, the total number of employee on RAFIDDAIN and RASHEED bank branches in Baghdad and Erbil is 250 employees. The population size is counted based on Slovin method as follow:

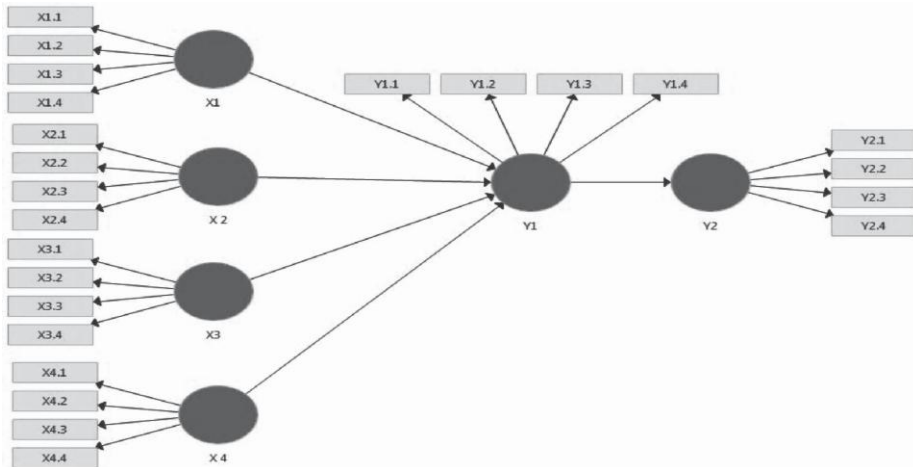
$$\begin{aligned} 250 / [1 + 250 (0.05)^2] &= 250 / [1 + 250 (0.0025)] = 250 / [1 + 1.25] \\ &= 250 / 2.25 = 111 \text{ employee.} \end{aligned}$$

The questionnaires which were adopted from some papers were sent through website survey (official Facebook groups of Rafidain and Rashid banks). In testing the formulated hypotheses, the Structural Equation Model (SEM) is used as the main statistical technique to test the hypothesized model developed in this study. PLS gives an analysis of both a measurement model and a structural model, and allows latent constructs to be modeled as reflective indicators. For the model test, all constructs modeled are as reflective and predictive. The equation is described below.

$$\begin{aligned} Y1 &= \beta1 X1 + \beta2 X2 + \beta3 X3 + \beta4 X4 + e \\ Y2 &= \beta5 Y1 + e \\ \text{Where :} \\ Y1 &= \text{Attitude (ATT)} \\ Y2 &= \text{Intention to Use (INT)} \\ X1 &= \text{Perceived Ease of Use (PEOU)} \\ X2 &= \text{Perceived Usefulness (PU)} \\ X3 &= \text{Perceived IT Beliefs (PITB)} \\ X4 &= \text{Task-Technology Fit (TTF)} \\ \beta &= \text{Coefficient} \\ e &= \text{error} \end{aligned}$$

Table 7. Testing Result of Hypothesis 1

Figure 3. Structural Model



FINDING AND DISCUSSION

Demographic Characteristics

The finding presented in Table 5.1 shows the results of characteristics of bank employees related to gender, level of education, position, experiences, age and experience on using e-banking system. Firstly, general analysis relating to demographic data such as frequency and percentage was conducted prior to the data analysis using descriptive statistics. The total respondents to the survey were 111 employees whose majority was Female (60), followed by Male (51).

Table 7. Testing Result of Hypothesis 1

Table 2. Demographic Characteristic

Demographic Factor	Classification	Frequency	Percentage
Gender	Male	51	45.95 %
	Female	60	54.05 %
Education Level	Diploma	28	25.2 %
	Bachelor	75	67.6 %
	Master	8	7.2 %
Position	CBD	12	10.8 %
	employee	99	89.2%
	CEO	0	0 %
	CFO	0	0 %
Experience	More Than 1 years	28	25.2 %
	More Than 5 years	53	47.7 %
	More Than 11 years	21	18.9%
	More Than 17 years	9	8.1 %
Age	More Than 20 years	7	6.3 %
	More Than 25 years	46	41.8 %
	More Than 30 years	52	46.8 %
	More Than 40 years	6	5.4 %
Experience using E-banking	More Than 1 years	73	65.8 %
	More Than 5 years	37	33.3 %
	More Than 10 years	1	0.9 %

Validity and Reliability of Pilot Study

The validity of items in the instrument is determined by comparing the correlation index of Pearson Product Moment with significance level of 5 % with a critical value, where r can be calculated with this formula :

$$r_{xy} = \frac{N\sum XY - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)^2)(N\sum Y^2 - (\sum Y)^2)}}$$

Where :

n = sample

X = item X scor

Y = item Y scor

If the probability of the correlation results is < 0.05, it is declared valid

Table 7. Testing Result of Hypothesis 1

Table 3. Validity Result

Variables	Item	R	Sig	Result
Perceived Ease of Use (X1)	X1.1	0.872	0.000	Valid
	X1.2	0.952	0.000	Valid
	X1.3	0.764	0.000	Valid
	X1.4	0.871	0.000	Valid
Perceived Usefulness (X2)	X2.1	0.871	0.000	Valid
	X2.2	0.767	0.000	Valid
	X2.3	0.933	0.000	Valid
	X2.4	0.863	0.000	Valid
Perceived IT Beliefs (X3)	X3.1	0.876	0.000	Valid
	X3.2	0.757	0.000	Valid
	X3.3	0.758	0.000	Valid
	X3.4	0.667	0.000	Valid
Task-Technology Fit (X4)	X4.1	0.968	0.000	Valid
	X4.2	0.989	0.000	Valid
	X4.3	0.948	0.000	Valid
	X4.4	0.950	0.000	Valid
Attitude (Y1)	Y1.1	0.867	0.000	Valid
	Y1.2	0.857	0.000	Valid
	Y1.3	0.711	0.000	Valid
	Y1.4	0.879	0.000	Valid
Intention to Use (Y2)	Y2.1	0.939	0.000	Valid
	Y2.2	0.912	0.000	Valid
	Y2.3	0.863	0.000	Valid
	Y2.4	0.888	0.000	Valid

Data Source: Primary data, processed at 2015.

Table 3 describes that the significance value of each item on each variable is equal to 0.000. The significance value is <0.05, then it can be said that all of the items in this study is valid. In PLS, such kind of test can be done by using method consisting of Cronbach’s alpha reliability. Cronbach’s alpha measures the lower limit of variable reliability and it is said reliable if the value is more than 0,6. To test the reliability, Cronbach Alpha formula is used:

$$r_{ii}^2 = \left[\frac{1}{k-1} \right] \left[1 - \frac{\sigma_i^2}{\sigma_t^2} \right]$$

Table 7. Testing Result of Hypothesis 1

Where :

- r_{11} = instrument reliability
- k = many of the questions or the amount of matter
- σ_b^2 = total varians item
- σ_t^2 = varians total

If alpha is < 0.6, it is declared unreliable and reliable on otherwise stated. Table 4. shows the results of reliability testing of all the variables.

Table 4. Reliability Result

Variable	Alpha Chronbach's	Information
Perceived Ease of Use (X1)	0,884	Reliable
Perceived Usefulness (X2)	0,882	Reliable
Perceived IT Beliefs (X3)	0,764	Reliable
Task-Technology Fit (X4)	0,968	Reliable
Attitude (Y1)	0,817	Reliable
Intention to Use (Y2)	0,903	Reliable

Based on the table 4, it can be concluded that the questionnaire items have Cronbach's alpha coefficient greater than 0.6. Therefore, the instrument questions used in this study are reliable.

Evaluations Model (Outer Model)

Convergent Validity

The convergent validity evaluation is done by looking at the value of loading factor (outer loading) on each indicator. If the value is >0.500, it can be said that the indicators are valid. Depicts the values of the loading factor in which each indicator has a value of >0.5. Therefore, all indicators of each construct have convergent validity

Discriminant Validity

Discriminant validity is done by using the average value of the square root of variance extracted (AVE). The measurement model evaluation of AVE is by comparing the value of AVE with a comparative value. If the value AVE is >0.500, it can be said that the discriminant validity is well achieved. That illustrates each value of the square root of AVE. The value on Perceived Ease of Use (X1) is 0.868, Perceived Usefulness (X2) accounts for 0.854, Perceived IT Beliefs value (X3) is 0.770, Task-Tech-

Table 7. Testing Result of Hypothesis 1

nology Fit (X4) value shows 0.961, Attitude (Y1) is 0.840, and Intention to Use (Y2) amounts to 0.903. The AVE value square root of all variables is > 0.500. Therefore, it can be concluded that the measurement model in the discriminant validity is good.

Reliability

Reliability is evaluated using by using chronbach’s alpha measurement. It is used to determine whether or not the construct has a high reliability. The chronbach’s alpha values of greater than 0,600 reveals that the constructs are reliable. That illustrates that the value of the alpha chronbach’s on Perceived Ease of Use (X1) is 0.890. Moreover, the value of Perceived Usefulness (X2) reaches 0.875. Similarly, Attitude value (Y1) is 0.859. On the other hand, Perceived IT Beliefs value (X3) is only 0.773. Both Task - Technology Fit (X4) and Intention to Use (Y2) amount to 0.972 and 0.925, respectively. It is clear that the alpha chronbach’s value of all variables reach numbers of more than 0.600. Thus, it can be said that the measurement model is reliable.

Evaluation Structural Model (Inner Model)

If the measurement of the model has met required validation such as the convergent validity, discriminant validity, and reliability criteria, the structural model (inner model) needs to be tested. To measure the Inner model, the relationship between latent variables is analyzed to see the results of parameter estimation path coefficients and significance levels.

Table 5. R-square Result

Variable	R Square (R2)
Attitude (Y1)	0.914
Intention to Use (Y2)	0.821

The coefficient of determination (R -square) obtained from the model of Perceived Ease of Use (X1), Perceived Usefulness (X2), Perceived IT Beliefs (X3), Task-Technology Fit (X4) variables toward Attitude (Y1) variable shows 0.914. Therefore, it can be explained that Perceived Ease of Use (X1), Perceived Usefulness (X2), Perceived IT Beliefs (X3), Task-Technology Fit (X4) affect Attitude (Y1) by as many as 91.4 %, leaving the remaining 8.6% influenced by other variables outside the research. Moreover, the coefficient of determination (R-square) of Intention to Use (Y2) variable reaches 0.821. It was obtained from the model of Attitude (Y1) variable toward Intention to Use (Y2) variable. Therefore, it can be

Table 7. Testing Result of Hypothesis 1

said that Attitude (Y1) affects Intention to Use variable as many as 82.1%, while the remaining 27.9 % is influenced by other variables outside the research .

Testing Hypothesis

Figure 4. Conceptual Model The Impact Of Independent Variable To Intention To Use E-Banking System

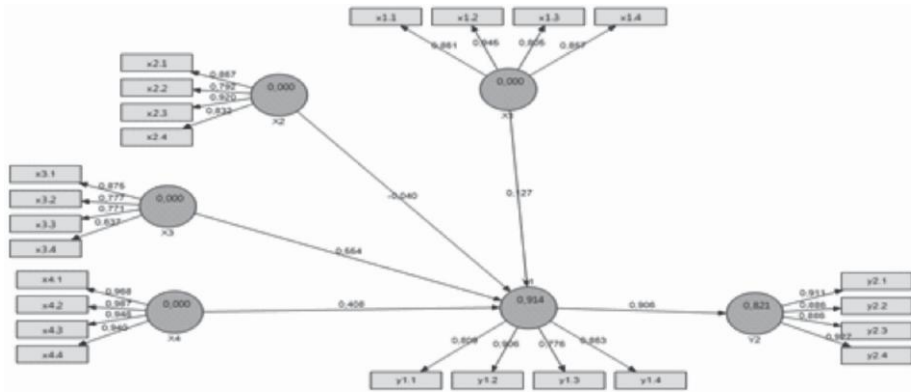


Table 6. Testing Result of Hypothesis and Summary

Hypothesis	Statement	Out come
H.1	Perceived usefulness has an impact on employee attitude towards E-banking system	Supported
H.2	Perceived ease of use has an impact on employee attitude towards E- banking system	Not Supported
H.3	Perceived IT beliefs has an impact on employee attitude towards E-banking system	Supported
H.4	Task-technology fit(TTF) has an impact on employee attitude towards E- banking system	Supported
H.5	Attitude of employee has an impact on intention towards E-banking system	Supported

Hypothesis 1 predicted an impact of relationship between Perceived Usefulness (X1) and intention to use E-Banking system (Y2) with Attitude (Y1) as a linkage. Table 6 show that T-Statistics > 1,96, that indicates the impact Perceived Usefulness (X1) to intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening has an impact. The structural path coefficient between the Perceived Usefulness (X1) construct and the intention to use E-Banking system (Y2) construct has an impact and statistically significant at $\alpha = 0.05$ (0,11523) means if Perceived Usefulness (X1) increases, then intention to use E -Banking system (Y2) will increase and vice versa.

Table 7. Testing Result of Hypothesis 1

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Outcome
X1 ->Y1- > Y2	0.11523	0.116716	0.043814	0.043814	2.629973	Supported

Hypothesis 2 predicted an impact of relationship between Perceived of Ease Of use (X2) and intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening. Table 5.7 show that T-Statistics < 1,96, that indicates the impact Perceived of Ease Of use (X2) to intention to use E-Banking system(Y2) with Attitude(Y1) as an intervening is not significant. The structural path coefficient between the Perceived of Ease Of use (X2) construct and the intention to use E-Banking system (Y2) construct doesn't impact and statistically not significant at $\alpha = 0.05$ (-0.036595) means if Perceived of Ease Of use (X2) increases will not affect intention to use E -Banking system (Y2).

Table 8. Testing Result of Hypothesis 2

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Outcome
X2 ->Y1- > Y2	-0.036595	-0.025996	0.077077	0.077077	0.474785	Not Supported

Hypothesis 3 predicted an impact of relationship between Perceived IT Beliefs (X3) and intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening. Table 5.8 show that T-Statistics > 1,96, that indicates the impact Perceived IT Beliefs(X3) to intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening is significant. The structural path coefficient between the Perceived IT Beliefs (X3) construct and the intention to use E-Banking system (Y2) construct has impact and statistically significant at $\alpha = 0.05$ (0.502059) means if Perceived IT Beliefs (X3) increases, then intention to use E -Banking system (Y2) will increase and vice versa.

Table 7. Testing Result of Hypothesis 1

Table 9. Testing Result of Hypothesis 3

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Outcome
X3 ->Y1-> Y2	0.502059	0.490283	0.06203	0.06203	8.09376	Supported

Hypothesis 4 predicted an impact of relationship between Task technology Fit (X4) and intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening. Table 5.9 show that T-Statistics > 1,96, that indicates the impact Task technology Fit (X4) to intention to use E-Banking system (Y2) with Attitude (Y1) as an intervening is significant. The structural path coefficient between the Task technology Fit (X4) construct and the intention to use E-Banking system (Y2) construct has impact and statistically significant at $\alpha = 0.05$ (0.369901) means if Task technology Fit (X4) increases, then intention to use E -Banking system (Y2) will increase and vice versa.

Table 10. Testing Result of Hypothesis 4

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Outcome
X4 ->Y1-> Y2	0.369901	0.370016	0.070569	0.070569	5.241676	Supported

Hypothesis 5 predicted an impact of relationship between Attitude E-banking system (Y1) and Intention to use E-Banking System (Y2). Table 5.10 show that T-Statistics > 1,96, that indicates the impact of Attitude E-banking system (Y1) to intention to use E-Banking system (Y2) is significant. The structural path coefficient between the Attitude E-banking system (Y1) construct and the Intention to use E-Banking system (Y2) construct has an impact and statistically significant at $\alpha = 0.05$ (0,9060104) means if Attitude E -banking system (Y1) increases , then intention to use E -Banking system (Y2) will increase and vice versa.

Table 11. Testing Result of Hypothesis 5

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Outcome
Y1 -> Y2	0.906014	0.90758	0.011895	0.011895	76.168355	Supported

Result Discussion of study

As this study aims to test and analyze the research questions, according to the tested hypothesis, the findings reveal that there is relationship among Perceived Usefulness, Perceived Ease of Use, Perceived IT Beliefs and Task-Technology Fit towards of e-banking system in Iraq. Moreover, to seek for an explanation of tested hypothesis, a finding validity was conducted. The validity was done by searching related journals to support the statement that has been disclosed previously.

Perceived Usefulness (PU) on employee Attitude of E- banking system.

According to Davis et al (1989), perceived usefulness is as a level of a person belief on the usefulness of a particular system to advance their performance. This belief can lead to the intention to use particular system by Singh(2012). Research suggests that there are two important determinants. Firstly, the tendency to or not to use an application depends on the extent of the belief that the application will help to better perform the job. This refers to perceived usefulness. Secondly, the potential users believe that a given application is both useful and too hard to use. Therefore, the effort of using the application outweighs the usage performance benefits. Based on Davis (1989), usage is also influenced by perceived ease of use, in addition to usefulness. The indicators used in this study to measure Perceived Usefulness variable include 1) e-Banking enables me to accomplish my task quickly, 2) it is easier to carry out my task using e-Banking, 3) e-Banking is useful, and 4) e-Banking is advantageous. Thus all indicators refer to employee perception of the e-Banking usefulness that could help them to improve their performance in delay transactions.

The analysis reveals that perceived usefulness affects intention to use e-banking system with attitude as a linkage. This is supported by broad research, Agarwal & Prasad (1999) & Davis (1989), which provides evidence of the significant impact of perceived usefulness on user acceptance of e-banking. Moreover, Van der Heijden (2004) reported that individual acceptance of e-banking systems is largely driven by perceived usefulness. In addition, it was previously found that perceived usefulness affected directly on internet banking usage. As witnessed by Singh (2012), people use online banking because e-banking system enhances their banking activity productivity. Besides, it is also useful for performing financial transactions. Similarly, Salavati (2004) & Seyed (2005), in their

Table 11. Testing Result of Hypothesis 5

study found that there is a significant relationship between the perceived usefulness and intention to use. Moreover, Eriksson (2005) discussed Technology acceptance of e-banking in Estonia, an emerging east European economy country and suggested that the use of e-banking could increase user perceive as long as useful. The perceived usefulness was important because it affected the possibility of perceived ease of internet bank use leading to the increase of the e-banking implementation. Moreover, Eriksson & Nilsson (2005) reported that for banks the degree of perceived usefulness of internet banking was a key factor to promote consumer use. According to Chau & Lai (2003), the determinants of e-banking acceptance included personalization, alliance services, task familiarity, and accessibility as those factors had significant effect on perceived usefulness and perceived ease of use. Thus, from the previous finding supports, this result it can be concluded that there is significant impact of Perceived Usefulness (PU) on employee Attitude of E-banking system.

Perceived Ease Of use (PEOU) on employee Attitude to use of E-banking system.

Perceived Ease of Use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Similarly, Zeithaml, & Malhotra (2002) stated that the level of easiness an innovation to understand or use is considered as perceived ease of use. Amin (2007) mentioned that perceived ease of use can refer to the extent to which a person believes that there is no significant effort to learn a special system to use it. This refers to the belief of easiness to work with a system. The indicators used in this study to measure the perceived ease of use variable involve 1) e-banking system is easy, 2) interaction e-banking system is clear and understandable, 3) it is easy to become skillful in using e-banking system, and 4) overall e-banking is easy. Those indicators were used to measure how employees perceived usage easiness of e-banking system. There are some studies which dealt with the relationship between perceived ease of use and intention to use e-banking system. Lin, & Tang (2003) found that perceived ease of use has a positive effect on intention to use e-banking. Also with less complexity in interacting with system, positive attitude could be developed subsequently towards intention. In addition, studied the relationship of perceived ease of use and intention to use e-banking in Malaysia. They found that perceived ease of use had a significant positive effect on intention to use e-banking. Several studies have concluded that an easy to use system will be more widely accepted than that which is not as easy to use. Similarly, the result of this study showed relationship between Perceived Ease of Use and Intention to use e-banking system with attitude as an intervening. On the other hand, the finding reveals that the relationship between Perceived of Ease of use and intention to use e-banking system with attitude as an intervening is not significant. Thus, Perceived of Ease of use does not affect intention to use

e-banking system. The structural path coefficient between the Perceived of Ease of Use construct and the intention to use e-banking system construct are not significant statistically due to two reasons. The first reason says that using e-banking technology is relatively new for the employees as they don't have full awareness of the ease of the system. They have not been aware that using a particular system is free of effort and most of them do not have sufficient experience to use technology of e-banking system. They don't have training, short course, workshop and conferences to improve their knowledge about technology of e-banking system. Another reason is the belief that traditional banking system with papers and hand documents is still easier and very comfortable for them. The issue about ease of use of e-banking system might not appear. More specifically, most of responders have experience using traditional banking for more than five years (47.7%). However, the responses for e-banking indicates that they use it for more than one year (65.8%). This indicates that they still feel the traditional system is more comfortable to them. Similarly, Gilani(2009) studied perceived ease of use of e-banking and the result showed the impact of different factors on the tendency of user in using electronic banking. On the other hand, Delafrooz et al (2013) found that perceived ease of use of e-banking system by users does not affect the attitude of user toward acceptance of e-banking. Thus, this result of this study it can be concluded that there is not any impact of Perceived of Ease Of use(PE) on employee attitude to use of e-banking system.

Perceived IT Beliefs (PITB) on employee Attitude to use of e-banking system.

Davis (1989) mentions that Perceived IT Beliefs compatibility is how innovation is perceived as being consistent with the individual values, needs, and past experiences of potential adopters. Many studies have proved that perceived beliefs in compatibility, image, and trial ability of an innovation are the key factors that determine user behavior on technology adoption by Davis (1989). Agarwal & Prasad (1997) discovered that compatibility perception is the key determinant of the intention to use. In addition, the indicators used to measure the perceived IT beliefs variable cover 1) e-banking is a good experience, 2) adopting e-banking brings more prestige, 3) it is possible to try the e-banking out properly, and 4) e-banking system improves my task quality. All indicators are to measure how employees perceived IT beliefs of e-banking system.

The finding of this study is consistent with previous studies by Davis (1989). The result shows that perceived IT beliefs affects attitude significantly in which when employee perceive stronger beliefs of IT in compatibility, image, and trial ability, they would have a more positive perspective towards an intention to use it. Moreover, an employee's capability of using IT directly and indirectly will influence his/her attitude to adopt the system to the job. The result of the analysis reveals the relationship between Perceived IT Belief and intention to use e-banking

system with attitude as an intervening. This indicates Perceived IT Beliefs affects intention to use e-banking system. Perceived IT Beliefs (PITB) in e-banking system by users affects attitude of user toward acceptance of e-banking. Therefore, it can be concluded that there is significant impact of Perceived IT Beliefs(PITB) on employee attitude to use of e-banking system.

Task technology Fit(TTF) on Attitude to use of E-banking system.

Goodhue and Thompson (2000) mentioned that technology is seen as a tool with which tasks are carried out. Tasks refer to activities done by individuals to turn inputs into outputs. Task characteristics such as variety, difficulty, and interdependence link to an individual's dependence on using technologies. This means that if the individuals obtain benefits from technology to perform their tasks well, they will perceive it as useful and important to them. Goodhue (2000) supported the argument that TTF is desirable in both mandatory and voluntary use situations. In the context of E-banking task-technology fit can be defined as the ability of a technology to assist an employee in performing his/her tasks. The higher the degree of the fit, the better performance may result. Specifically, TTF corresponds to the suitable relationship between task characteristics and employee abilities. The indicators to measurement Task-Technology fit variable involve 1) e-banking technology is important to my job, 2) using e-banking helps to get the latest information of transaction easily, 3) e-banking software can provide me an accurate transaction with customers, and 4) the e-banking system improves my performance. Thus, all indicators are used to measure perception of employee Task-Technology fit toward e-banking system. TTF model illustrates that a technology has a positive effect on individual performance if it is well utilized. Moreover, partly, technology adoption relies on the degree of suitability of the new technology with the task that is supported. The results are in line with previous studies by Goodhue and Thompson (1995) which hypothesized the relationship of TTF and technology implementation. It says that a high task-technology fit would positively affect the utilization of information systems. Likewise, confirmed the positive relationships between TTF of specific technologies and utilization constructs. On the other hand, instead of using a utilization construct, Klopping et al (2004) analyzed the same topic to find out strong support for a positive correlation between TTF and intention to use. The analysis in this study showed relationship between Task technology Fit(TTF) and intention to use e-banking system with attitude as an intervening. The result indicates that Task technology Fit(TTF) has a significant impact on intention to use e-banking system with attitude as an intervening.

Attitude toward Intention (INT) to Use E-banking system.

Initially, attitude can be defined as a human feeling of their favorable or unfavorable performance of behavior. Fishbein & Ajzen (1975) stated that an attitude functions as behavioral beliefs and outcome evaluation. Behavioral belief refers to an individual's thought of performing a particular act which can lead to a specific result. Moreover, outcome evaluation is defined as an individual's assessment of the result. In addition, Ajzen, (1989) added that an attitude is an individual's disposition to respond favorably or unfavorably to an object, person, institution, or event. Furthermore, the indicators used in this study to measure Attitude variable include 1) e-banking is a good idea, 2) e-banking is pleasant, 3) e-banking would be desirable and 4) e-banking is a wise idea. All indicators refer to the way of thinking or feeling about e-banking system reflected in the employee behavior.

The finding illustrates that according to employee perception, there is relationship between attitude toward e-banking system and intention to use e-banking system. It is supported by the research conducted by Davis (1989). Davis (1989) finds out that a user's overall attitude toward using a specific technology and application is a main factor determining whether an individual uses that system. In addition, or stated that attitude is a central concept to explain the human behavior intention. Moreover, many studies such as Ajzen (1991) & Davis (1989) have implemented Intention based models, i.e the Theory of Technology Acceptance Model (TAM) successfully to identify positive relationship between attitude and intention. The study suggests that the attitude determines the degree of intention to use the technology. This will positively affects the use of the system by individuals. Obviously, attitudes towards e-banking system have been extensively studied. Liao & Landry (2000) found out that employee's attitude to accept e-banking system would affect the intention to adopt e-banking system. Similarly, this study reveals the attitude of employee toward the intention to use e-banking system. Therefore, it is summarized concluded that there is significant impact of employee attitude on intention to use of e-banking system in Iraqi bank.

CONCLUSION AND RECOMMENDATION

Conclusion

To summarize the findings of the analysis, the conclusion needs to be drawn. To sum up, there is a clear need to positive perception and attitude from the Iraqi bank employees towards banking technologies, if successful implementation of e-banking system is to be gained. It was revealed that Iraqi bank employees are possible to adopt and implement e-banking system rather than keep on using traditional manual procedures only if they are sure that the new system are easy to use and help them accomplish their work tasks effectively.

The analyses of hypotheses are described as follows:

Result1: Perceived usefulness has an impact on employee attitude.

The result has shown that there is significant impact of Perceived Usefulness (PU) on employee Attitude of E- banking system. Perceived usefulness is as a level of a person belief on the usefulness of a particular system to advance their performance. It can provoke individuals to perceive the usefulness of the system. The perceived usefulness was important as it was the key determinant whether the perceived ease of e-banking use would bring to the increase of implementation of the e-banking system in Iraqi banks.

Result2: Perceived ease of use has an impact on employee attitude

Perceived Ease of Use refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989). Similarly, Zeithaml, & Malhotra (2002) stated that the level of easiness an innovation to understand or use is considered as perceived ease of use. Amin (2007) mentioned that perceived ease of use can refer to the extent to which a person believes that there is no significant effort to learn a special system to use it. This refers to the belief of easiness to work with a system.

The finding reveals that there is no significant impact between Perceived of Ease of use and intention to use e-banking system with attitude as an intervening is not significant. Thus, Perceived of Ease of use does not effect on intention to use e-banking system. This is because it has been relatively new for the employee to use e-banking technology and they don't have full awareness about believes that using a particular system would be free of effort. Moreover, most of them have not more than five years' experience in using technology of e-banking system as they don't have training or short course, workshop and conferences to improve their knowledge about technology of e-banking system. Similarly, Delafrooz et al (2013) found that perceived ease of use of e-banking system by users has negative relationship with attitude of user toward acceptance of e-banking.

Result3: Perceived IT beliefs has an impact on employee attitude.

The result of this hypothesis shows that there is significant impact of Perceived IT Beliefs on employee attitude to use of E-banking system. In details, an employee who has good perception of IT beliefs to use e-banking system will influence his/her attitude to adopt it to do his/her tasks on the job.

Result4 :Task-technology fit (TTF) has an impact on employee attitude

Tasks refer to activities done by individuals to turn inputs into outputs. The analysis in this study showed that there is significant impact relationship between Task technology Fit and inten-

tion to use e-banking system with attitude as an intervening. The result indicates a significant impact of Task technology Fit on the intention to use e-banking system with attitude as an intervening.

Result 5: Attitude of employee has an impact on intention to use e-banking system.

Attitude of employee has been proved to have an impact on their intention towards e-banking system. There is significant impact of employee attitude on intention to use of e-banking system in Iraq bank. Furthermore, employee attitude towards the acceptance of e-banking system would lead to their intention of e-banking system adoption.

To sum up, there is a possibility to implement e-banking system in Iraq banking as the results of this study has shown the possibility. To consider the impact, there were numerous variables analyzed and tested. The construct of variables include Technology Acceptance Model (TAM) as independent variables which cover Perceived usefulness, Perceived Ease of use, perceived IT beliefs, and task-technology fit (TTF) through Attitude of the use of e-banking system as an intervening variable and Intention to use E-banking system as dependent variable. Attitude (ATT) is an individual's feeling of the favorable or unfavorable news of his/her performance of the behavior. Moreover, perceived usefulness (PU) is defined as the degree to which a person believes that using a particular system would enhance his or her job performance, Perceived Ease of Use (PEOU) refers to the degree to which a person believes that using a particular system would be free of effort. In addition, Perceived IT Beliefs (PITB) is the level of an innovation consistency to the individual values, needs, and past experiences of potential adopters. Meanwhile, Task-technology fit (TTF) refers to the degree of suitability of IT to tasks. The higher the degree of the fit, the better performance may result. Specifically, TTF deals with the matching relationship between task characteristics and employee abilities.

Recommendation

According to the analysis results, there are five suggestions restrictedly being recommended as follows:

1. There is a need of boosting bank staff awareness of modern banking technologies through various communication channels (e.g. conferences and workshops).
2. There is a need for the provision of manuals about how to use the new technology for every department. It is important as staff felt that there was insufficient time available for them to attend every training session.
3. The existing telecommunications infrastructure has to be improved at both local and national level.
4. The level and process of IT training have to be increased (e.g. courses

on IT languages or training short course). It is a vital action because so far the experience and level of IT training programmers were too low to prepare staff for the more complex procedures that have to be managed with e-banking technologies.

5. The companies need to pick pioneers within the bank to be role models for others to follow. This is seen as a key support in the adoption of e-banking systems because social networking has a greater cultural base in Iraq than in western countries. In fact, the recommendation from one colleague to another related to the usefulness of a particular process or technology in Iraq is more powerful than that in other countries.

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