



**USING THE TECHNOLOGY ACCEPTANCE MODEL (TAM)
IN EXAMINING ABSHER SYSTEM ACCPETANCE
IN THE KINGDOM SAUDI ARABIA**

Hanaa Ali Zafer Algarniⁱ

Faculty of Economics and Administration,
Department of Business Administration,
King Abdul-Aziz University,
Jeddah, Kingdom of Saudi Arabia

Abstract:

In this era of technological disruption, people are much oriented to offer and experience new technological interventions in their daily activities. Information and communication technology (ICT) hold a pivotal designation in allowing the integration of technological interventions with daily life activities. Technology Acceptance Model (TAM) proved as the helping hand for making this situation much more sophisticated so that global technological determinism that is at the threshold of revitalization can go through a realistic situation. Absher information system that is primarily adopted by the Saudi Arabia government for facilitating their e-government initiatives demonstrated in this study. TAM used as the theoretical background for justifying the holistic applicability of Absher services. Absher is a strategic move by the Saudi government for accommodating betterment in e-governance. Thus, different aspects of global e-government principles are appropriately demonstrated in this study so that a proper justification for Absher usefulness can be displayed. Also, in this study, several theoretical persuasions are augmented, followed by taking into account variables such as perceived usefulness (PU), perceived ease of use (PEOU), behavioral intentions (BI), attitude towards use (ATU), and user satisfaction (US). The survey was conducted by the researcher, taking into account a sample of 300 Absher users from KSA. Data analysis has been conducted by the researcher using a linear regression model in which the T-test, ANOVA test, and Cronbach's' alpha test. The study results revealed that most users provide positive and high attitudes towards the use of the Absher System. Also, there is a positive correlation between ease of use and the user's attitudes towards using Absher System. Furthermore, the study found that the majority of participants thinks that using Absher System is useful for them.

JEL: H10; H70

ⁱ Correspondence: email mis200822@hotmail.com

Keywords: Technology Acceptance Model (TAM), Absher System

1. Introduction

1.1 Background of the Study and Problem Statement

Recently, progress in information and communication technology (ICT) has dramatically determined the ways people live as well as the methods of dealing with their businesses in the professional business spheres and the completion of their government transactions.

In the Information Systems scope, a significant field of research focused on technology acceptance (TAM). Researchers have developed many theories and models. One of the most famous models/theories was the Technology Acceptance Model (TAM) (Davis, 1989).

TAM was based on the method of reasoned action (TRA) and used to explain an individual's acceptable behavior. Davis (1989) first proposed TAM. Technologies that facilitate collaboration through electronics have become an essential ingredient of day to day life. Thus, several studies have tested the adoption of communion technologies. Given that the adoption of communion technologies has not developed as quickly or as in general as prepared, it seems several approaches are needed. New systems or new technologies acceptances require input at both the departmental organizational level and the personal level. It is vitally important to know not only the end-user beliefs, attitudes, and intentions, but also the management strategies, policies, and actions which have a significant effect on the successful acceptance of a technology (Bhattacharjee, 1998).

Furthermore, for the operator of an invention or technology provider, the acceptance of technology is only prosperous when both the person and the organization accept the invention, and targeted adopters show the involvement by using the technology over time (Rogers, 2010). By having accurate assessments, the framework can, in turn, help a professional develop effective strategies or policies to maximize the possibility of success in implementing information systems, such as "Absher" and minimize problems if any occur in the results of this study.

This study aims to investigate the individual acceptance behavior of the information system "Absher" using the technology acceptance model (TAM). Although the reputation and usefulness are evident for all to see, still, many researchers are interested in investigating whether this theory/model should be reviewed, extended, or modified to account for the rapid change in both technologies and their environments. To explain and predict the user's behavior of the techniques. Therefore, in the current study, I would like to assess this model's suitability to evaluate the Absher System to check its effectiveness in Saudi Arabia. One crucial requirement is that a well-motivated user who has a positive attitude towards technology in general-mainly, the Absher system must be available as quickly as possible to utilize said method effectively when it is needed.

During times of transition, from a manual system to technology organizations, it may be difficult to replace their users because potential successors may lack specific

technological skills. Thus, these technical aspects must be developed amongst people to accomplish their roles efficiently. Many people in Saudi Arabia face difficulties and a more extended period of completed transactions. So, this study investigates the effectiveness of the Absher system using the Technology Acceptance Model (TAM) (Davis, 1989) to identify how this system is active, also to identify the problems that might hinder its efficiency. Hence, the assumption that if they enjoy a positive attitude towards technology, they can use the system effectively. Moreover, this system is characterized by features such as ease of use and user usefulness. Thus, these two factors are assisting in the efficiency of the system.

1.2 Research Hypothesis

The study deals with the prediction of the behavior of the Saudi intention to use the Absher system. This study attempts to ascertain whether the Absher system is an effect on a TAM basis. Therefore, the researcher hypothesizes the following scenarios:

According to Teo et al. (2008). when the perceived use (PU) is very high, the consequence is a more positive attitude towards use (ATU). Perceived usefulness (PU) has been regularly found as a direct determinant of intention to use (ATU), and it also influences the user system indirectly as a direct determinant of ATU (Liu et al., 2005).

Perceived Usefulness is seen by Pantano and Di Pietro (2012: 2) and Teo (2013:81) as a subjective prospect that specific application systems will increase job performance within a particular organization, which is also known as “performance expectancy.”

H1: Perceived ease of use of the Absher system (PEOU) has a significant positive relationship with (US) user satisfaction.

H2: Perceived usefulness (PU) has a significant positive relationship with (US) user’s satisfaction.

H3: Perceived usefulness (PU) has a significant positive relationship with (BI) behavioral intention to use the Absher system.

H4: Perceived usefulness (PU) has a significant positive relationship with (ATU) attitude toward the use of the Absher system.

Park, (2009) stated perceived ease of use (PEOU) theorized as a direct determinant of attitude towards use (ATU). Improvements in ease of use may be beneficial to influence intentions and lead to a positive attitude. Moreover, Lee et al. (2011) mentioned that PEOU found to indirectly impact the plan to use (ATU) through increased perceived usefulness (PU). Teo, (2009, p108) claims that perceived usefulness (PU) facilitates the consequence of perceived ease to use (PEOU) on attitude towards use (ATU).

Wu and K (201: 255) observed that Perceived Ease of Use is anchored in the belief that it would be effortless and hassle-free to acquire a particular skill, also known as “effort expectancy.” Moreover, Zhu, et al., (2012: 968) add that Perceived Ease of Use signifies the degree to which an individual accepts that using specific technology would be effortless and hassle-free.

H5: Perceived ease of use (PEOU) has a significant positive relationship with (ATU) attitude towards using the Absher system.

H6: Perceived ease of use (PEOU) has a significant positive relationship with (PU) of the Absher system.

Lastly, according to Ajzen and Fishbein, (2005), attitude toward use (ATU) originates behavior and refers to how an individual responds to or ignores an object. More importantly, any efforts applied to heavily use information systems (IS) rely on user attitudes.

According to Walker and Pearson (2012:2), a behavioral intention to use and apply new skills is the willingness or extent to which an individual is consciously prepared to execute a particular action.

H7: Attitude towards using (ATU) the Absher system has a significant positive relationship with (BI) Saudi behavior intention towards the Absher system.

1.3 Objectives of the Study

This study aims at achieving the following objectives:

- 1) To investigate the relationship between ease of use and attitudes towards using the Absher system in KSA.
- 2) To investigate the relationship between usefulness and attitudes towards using the Absher system in KSA.
- 3) To investigate the relationship between ease to use and positive user satisfaction of the Absher system in KSA.
- 4) To investigate the relationship between usefulness and user satisfaction of the Absher system in KSA.

2. Literature Reviews

2.1 Historical Background of TAM

Davis introduced TAM, presented in Figure 1, for reshaping user acceptance of information systems in 1986. TAM suggests external variables as the groundwork for planning out the influence of exterior factors depending on two critical internal factors regarding the usefulness and comprehended ease of usage, while Perceived ease-of-use also affects usability besides exterior variables (Taylor and Todd, 1995). These factors attract users using IS. The approach of using it affects the trend of using it, which is an essential reason for identifying the overall condition of system use. Comprehended usefulness also affects a user's intention to use. TAM model designed to enhance the experience and ease of using technology. The theoretical basis built upon the steps that when users come across modern technology, a few reasons affect their usage. One of the factors is the comprehension of usefulness; another is regarding ease of use, while the last element is about how users react after using the technology (Segars and Grover 1993, p. 525). The user finds out that using the technology would improve the work or not by understanding its usefulness.

2.2 Definition of TAM

According to Vankatesh and Davis (2000), technology acceptance model shows how a user receives a new technology and uses it. The model deals with the acceptability of the new system and the impression after using it because of it. The model created to predict how easily technology can be applied and point the required modification to improve the ease of using it. The technology model created to develop the relationship between humans and technologies (William, King and, Jun, 2006, p10). TAM suggests that when a user comes in touch with technology, various reasons regulate the decision to use the new technology.

2.3 Effective Use of Technology

In the words of Lai (2017), proper use of technology entails appropriate incorporation to enhance it and to create and foster educational growth, which also requires adequate exploitation for information resources and the technology that encourages its usage (Den System Development Life Cycle (SDLC) identifies how IS can bear with information crisis, system designing, evaluation of the system, and error in the related process. It is a necessary process that is maintained by all organizations to improve their use and avoid technical issues in the recently implied system (Kay, 2002). There are some essential steps to process that whole cycle for the best possible use of the technology; these are an analysis of the new system, implication, uniting, and testing. TAM discovered for the ease of doing work with equally maintained accuracy and quality. In the modern era of advancement, we are observing more and more innovations and new technological advancements. Some of them solve the most common hurdles in every aspect of our life. The technology needs to use as a smart tool for growth in various sectors such as Educational, Organisational, and others. If used correctly, technology can provide every kind of information needs. To obtain a total advantage of technology, a study of the whole system design and analysis is essential. Implementation of the system, along with the proper maintenance, can optimize the uses of technology.

The TAM has confirmed to be valuable in reflecting exact social problems. Attitude towards using it was found more in young, well-educated, and economically advance society than old and illiterate users. The result shows that the usefulness and acceptance of TAM are driven by age, education, social and economic background.

2.4 Resistance to Technology

Despite all the positive results gained from using current technology, several types of research reveal that people have trouble accepting the use of technology when they need to find any information. Rejection in using the information system can push back the acceptance of the technology. The hindrance created while using new technology creates more significant trouble all around the world. As mentioned by Kim and Kankanhalli (2009: 567), the TAM was the gateway to understanding the acceptance of modern technology and a sudden blockage in the way of advanced technology, which caused a significant issue and needed to handle carefully to avoid organizational problems. Siegel

(2008:2) stated that TAM designed to expand excess behavior constructs to maintain a bridge that enables users to understand the new technology.

2.5 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) can help understand what governs user acceptance of the Absher system. Therefore, this model is highlighted above: Davis (1989) made the famous technology acceptance model (TAM). This model concerns technology acceptance and use. Ajzen and Fishbein (2010) state that TAM was introduced in 1986, and it is the most commonly implied model in the IS. The versatile branch of research on IS use has a few theoretical views. This theory is considered the most appropriate and widely suggested theory for developing a human-technology relationship. The TAM theory consists of two primary factors, Perceived Usefulness and Perceived Ease of Use. A significant add-on can describe the element involving the acceptance or rejection of information technology.

Using this model, the researcher has a basis with which the way external variables have an emotional impact on trust and their need for using the technology. This technological infusion has created innovation, and the main target of this are professionals and students commonly. TAM is widely used in healthcare services too. In the recently growing vast mobile applications, there is a prominent need for implementation and acceptance of TAM. The theory is based on a psychological paradigm that helps to measure differences between beliefs and speculations on how external responses are connected to knowledge. TAM is based on Theory of reasoned action. This model is about an individual's natural tendency to get attracted to that technology or not. The model focuses on users' trend of using technology, which affects the application's beneficial use. Two factors that are directly or passively affecting that are Perceived Usefulness (PU) and perceived ease of use. Much different research construction and in a different context, TAM has been confirmed as the widely famous and model (Rivard and Lapointe, 2012).

To conclude this point, the current study was forced only on five variables considered as the determiners of the study. The variables were identified in accordance with their appearance in the model of study. The variables are user satisfaction, perceived usefulness (PU), Perceived ease-of-use (PEOU), behavioral intention (BI), and attitude towards use (ATU), user satisfaction (US).

2.6 User Satisfaction (US)

According to DeLone and McLean (2003), the term user satisfaction (US) is a contemporary concept used in several researchers to assess any specified system's accomplishment. Udo and Bagchi (2011) stated high user satisfaction US as professed by users guides to satisfactory behavioral intentions while low user satisfaction in the US leads to opposed behavioral purposes. According to gathering data from final users of Business Intelligence (BI) systems in the Taiwanese electronics industry, in which Hou (2012) studies the relationships among the given variables below: end-user computing

satisfaction (EUCS), system usage, and individual performance. The researcher finds strong positive correlations between EUCS and system usage, and between system usage and own production.

2.7 Perceived Usefulness (PU)

As mentioned by Chen et al., (2015), TAM's postulation is that users need to continue using the system after experiencing this for first time, if they think that the system is useful. PU of a system is partially identified by those who have already gained help using that system. PU is a comprehended usefulness that a system can provide to users who complete their work as if the system is not used. PU is one of the two important factors of TAM Lee et al. (2011, p. 759). PU is important to define users' positive instinct to use the technology. Gefen et al., (2003) PU is an important reason to determine positive attitude and satisfaction of using the system. However, this type of connection is not found PU and internet connection. People in general deliver better performance by incentive, bonuses, increment but TAM has presented them to reach that mark at ease.

2.8 Perceived Ease-Of-Use (PEOU)

Wu & Chen (2017) define (PEOU as an extent to which a person thinks that new technology is user-friendly. PEOU is another crucial factor in TAM. In Words of Wu & Chen (2017), it can affect user satisfaction and urge to use the system. TAM postulates that both PU and PEOU are the two most crucial parts of the model. The adaptability or rejection of the model depends on the two. Later, studies have found which indicates PEOU may not be the only reason behind the tendency of using the technology. In the field of Internet shopping, the effect of PU and PEOU is significant. It is a clear reflection that PEOU influences satisfaction and eases the way of getting used to it. In the case of acquiring a specific skill, the use of PEOU is used. TAM anticipated that a positive attitude would have a strong influence on the mindset that encourages using technology. PU and PEOU indicate the adoption of the new system and provide suggestions to develop new skills. Extrinsic motivation is the occurrence of an activity because it has a different result. For intrinsic motivation, it refers to regular everyday operation without any extra reinforcement—information character resources, the experience of the job, technical tools, and support soon is essential contemporary elements that may affect the ease of use. Evaluation of PEOU comprises of conceptual exterior control, self-efficacy of computing, self-efficacy of the internet, computer anxiety, information anxiety, perceived amusement and usability of the subject, and the positive tendency of getting attracted to it. In the words of Williams et al. (2015), a general it's an extent to which a user believes that if they use a specific system, that would be easier.

2.9 Behavioral Intentions (BI)

According to Harrison et al. (1997, p. 176), "*Behavioral Intentions is the strength of corresponding plans to execute the target behavior*". Rational behavior is an original and authentic practice resulted in a user's behavioral intention; this step accurately reflects

through a positive attitude. According to Davis (1986), the identifying behavioral tendency defines the actual sage of a given IS and indicates acceptance widely. The idea of this invention has been used in different ways. It is the user's subjective possibility to perform the behavior. The concept deviates from the idea that a person has a proper plan to execute or not achieve some specific action (Alotaibi et al., 2017). Characterizing this plan applies to both projects results from the behavioral intention as expected. The idea intended to check how near users have come close to a decision. Extreme behavioral intention means that they have finished deciding. A low behavioral plan means a decisive action against, and high behavioral intention means they are selected. A medium behavioral intention is a position when the user is in the middle of a situation to think to execute or not. The goal of behavioral intention is how much effort is implied by people to indicate they have decided on the behavior. A low intention means putting little effort, and high intention means high. In this sense, there will be different outcomes and different situations and possible resistances. If users fear that they will be confronted with hurdles, they will be reluctant to decide on this behavior. In most cases, there is a time gap between the asked question and behavior.

2.10 Attitude Towards Use (ATU)

In words of Arnold & Wade (2015), ATU originates behavior and refers to the route that an individual ignores or provide such response over an object. More importantly, any efforts applied to heavily use information systems (IS) rely on user attitudes.

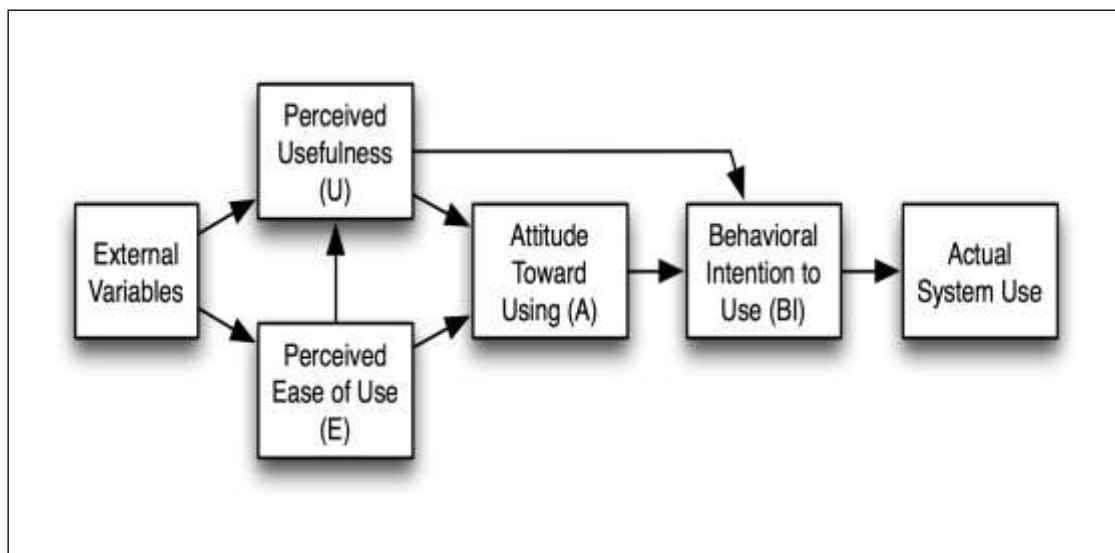


Figure 1: The Technology Acceptance Model, version 1 (Warshaw and Davis, 1985)

2.11 Previous studies

TAM is widely used nowadays for assessing the adaptability of a venture initiative in this specific discipline. In this relevance, ample studies have been conducted on the evolution of information system effectiveness concerning TAM acceptance in Saudi Arabia. However, there is merely any evidence on investigating TAM applicability concerning the enormous response being emerged due to the Absher system emergency.

Alotaibi et al. (2017) have recognized in this context that the application of m-government is still going through an early phase. Accordingly, a modified form of TAM is being used by the Saudi Government so that identification and measurement of different factors that are influential for assessing users' intentions towards embracing m-government applications can be managed. This study has primarily focused on building a strengthened relationship between various independent factors that are prevalently attached to TAM acceptance and BIU (Behavioural Intention to Use). These six factors can be segregated between two interlinked segments, namely TAM constructs and external factors. Three specific TAM constructs can be delivered as ATU (Attitude towards Use), PU (Perceived Usefulness), and PEOU (Perceived Ease of Use).

On the other hand, three external factors can be figured out as SEC (Perceived Security), Awareness (AWAR) and TRU (Perceived Trustworthiness). It is considered a fact in this concern that only PU, TRU, and ATU hold significant influences on BIU when it is coming to the fears of the m-government application. The researchers have also perceived that most participants hold a positive attitude, implying a good response towards m-government implementation. Overall, the results are demonstrating that TAM is explicitly suitable in the Saudi Arabian m-government context.

Hsu (2016) conducted another related study, which is enlightening that smart manufacturing must come along the way of accommodating technological innovations. The researchers have taken into account the technological innovation adopted by the lean manufacturing industry of China. The transition requirement in the smartest manufacturing scenario of China is intense, arguing for manufacturing servitization through the passage of TAM acceptance. TAM model found to be a proven tool for the manufacturing industry of China to verify users' intentions and assessing the applicability of suggestions being forwarded by the TAM users.

As perceived in this research work, the prime reason TAM integration with manufacturing disciplines is exploring into the factors that are inherently affecting the users; acceptance towards a proposed product development framework within the existing organizational atmosphere. TAM model construction may also be reasonable for having a general explanation on whether the model can be fitted suitably within the proposed product development model instituted by respective firms.

Gangwar, Date & Ramaswamy (2015) have reviewed the acceptability of TAM concerning cloud computing adaptability. From this perspective, the researcher has perceived that TAM-TOE model is an integrated platform suitable for understanding the determinants of cloud computing adaptability. In this relevance, it has been inferred in this study, organizational and technological variables are incredibly influential for having a cognizance relative to the perceived use of usability. In this notion, cloud computing usefulness is a determinant of the adoption of cloud computing. Notwithstanding, environmental variables are also determining the degree of adoption of cloud computing that may include availability, reliability, and security concerns. In this context, the TOE framework is highly acceptable and integral with the TAM model

since perceived usefulness and ease of usability, are two useful features of this combined TAM-TOE framework.

3. Methodology and Materials

A quantitative method using a descriptive design was used in this study with a questionnaire to obtain the data from the participants of the study. The quantitative way originates from the belief that human phenomena and variables in human behavior can be studied objectively (Parahoo, 2006); hence this method was carefully selected as a suitable research approach. Quantitative research uses a stable design that organizes in advance the research question and a comprehensive plan for data collection and analysis.

3.1 The Population and Sampling

The population in this study consists of all Absher users in KSA. In quantitative research, the participants selected using convenience sampling for not knowing the sample of individuals used for the Absher system. The study tools applied only to (300) people in Saudi Arabia.

3.2 Research Tool

In the research methodology, the survey considered a measurement tool of specific variables. The participants of this study were surveyed through a combination of questionnaires. The survey was chosen because it is a precise instrument for producing results. It requires little effort in its design, distribution, and collection. It quickly reaches large numbers of the sample and is easily analyzed.

3.3 Statistical Methods of Data Analysis

The researcher used descriptive statistical methods to answer research questions. Also, the SPSS program applied by the researcher for conducting data analysis, coding, and data entering. The following analytical methods were used, such as frequencies, T-tests, percentages, and variance (ANOVA) test.

4. Data Analysis

This section mainly devoted to test the research underlined hypotheses, which are as follows:

Table 1: Pearson Product-moment Correlation
 Coefficients between PEOU and US of Absher System

Variables	US	
	Pearson's correlation coefficient	P-value (sig.)
PEOU	0.800**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

The results in Table 1 show that the value of the correlation coefficient between the two variables, Perceived Ease of Use of the Absher System and User Satisfaction, is equal to 0.800, which is statistically significant at the (0.01) level. Therefore, this result confirmed that perceived ease of use has a substantial and positive effect on user satisfaction.

Table 2: Pearson Product-moment Correlation
 Coefficients between (PU) and (US) of the Absher System

Variables	US	
	Person's correlation coefficient	P-value (sig.)
PU	0.756**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

The results in Table 2 revealed that the value of the correlation coefficient between the two variables, Perceived Usefulness of the Absher System and User Satisfaction is equal to 0.756, which is statistically significant at the (0.01) level. Therefore, this result shows that perceived usefulness is associated positively and significantly with user satisfaction.

Table 3: Pearson Product-moment Correlation Coefficients
 between Perceived Usefulness and Behavioral Intention to use the Absher System

Variables	Behavioral Intention to use the Absher System	
	Pearson's correlation coefficient	P-value (sig.)
Perceived Usefulness	0.803**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

Table 3 shows the correlation relationship between Perceived Usefulness (PU) and Behavioral Intention (BI) to use the Absher System.

The results in the table revealed that the value of the correlation coefficient between the two variables, Behavioral intention to use the Absher System (dependent variable) and Perceived Usefulness is reaching 0.803, which is statistically significant (0.01) level. This result confirmed a definite strength and statistically significant effect of perceived usefulness on the behavioral intention of the individual to use the Absher System. There, the results support the acceptance of H3.

Table 4: Pearson Product-moment Correlation Coefficients
 between Perceived usefulness and Attitudes towards using the Absher System

Variables	Attitudes towards using the Absher System	
	Pearson's correlation coefficient	P-value (sig.)
Perceived Usefulness	0.794**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

The results in Table 4 show that the value of the correlation coefficient between the two variables attitudes towards using the Absher System (dependent variable), and usefulness of use as an independent variable is reaching 0.794, which is statistically significant at the (0.01) level. These results proved a positive and robust relationship

between usefulness obtained from the Absher System and the user attitudes towards using the System.

Table 5: Pearson Product-moment Correlation
 Coefficients between PEOU and ATU of the Absher System

Variables	ATU Absher system	
	Pearson's correlation coefficient	P-value (sig.)
PEOU	0.714**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

Table 5 shows the correlation relationship between Perceived usefulness (PEOU) and attitude toward using the Absher system (ATU).

The result in Table 5 showed that the value of the correlation coefficient between the two variables attitudes towards using the Absher System (dependent variable) and ease of use as an independent variable is reaching 0.714, which is statistically significant at the 0.01 level. This result indicated that there is a positive correlation relationship between ease of use and the user attitudes towards using the Absher System, which means that the ease of use is influencing positively and firmly on user attitudes towards using the Absher System.

Table 6: Pearson Product-moment Correlation
 Coefficients between PEOU and PU of the Absher System

Variables	PEOU	
	Pearson's correlation coefficient	P-value (sig.)
PU	0.725**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

The results of Table 6 revealed that the value of the correlation coefficient between the two variables, Perceived Ease of Use and Perceived Usefulness is equal to 0.725, which is statistically significant at the (0.01) level. These results proved that there is a positive, strong and statistically significant relationship between perceived ease of use and perceived usefulness. This means perceived ease of use has a positive effect on the perceived usefulness. This also indicated whenever users found themselves finding it easy to use the Absher System, they maximize the usefulness of using it. This result supports the acceptance of H6.

Table 7: Pearson Product-moment Correlation
 Coefficients between ATU and BI of the Absher System

Variables	ATU	
	Pearson's correlation coefficient	P-value (sig.)
BI	0.836**	0.00

** indicated that the correlation coefficient is significant at the (0.01) level.

The result in table 7 shows that the value of correlation coefficient between the two variables' attitudes towards using the Absher System and behavioral intention is equal to 0.836, which is statistically significant at the (0.01) level. These results support that attitudes towards using the Absher System have a positive significant relationship with behavioral intention. This means that when users have positive attitudes towards using the Absher System, this will influence their intentions positively, which indicated positive interaction with the system.

5. Findings

The present study is fundamentally aimed at correlating individual acceptance model towards a digitally enabled Absher system with the positive behavioral intention being coherent with such digitally integrated Absher services, which are rationally making the daily life easier for KSA people. In due course, the TAM framework is being used by the researcher for measuring the overall positive or negative behavioral intention of the Absher users towards its perceived usefulness. Notwithstanding, the statistical data being gathered by the researcher would be reliable for the information system (IS) professional to bring in suitable policies or strategies that would be further reliable for delivering accurate implementation planning for Absher services. Thus, these findings are predicted to be useful for gaining the attention of IT professionals so that they can go beyond their imagination regarding paving the success roadmap for Absher information system.

Regarding **H1** which states that Perceived ease of use of Absher system (PEOU) has a significant positive relationship with (US) user satisfaction and **H2**, which stated that Perceived usefulness (PU) has a significant positive relationship with (US) user's satisfaction, the analysis of the subjects of the study perceptions regarding users' satisfaction of using Absher System in KSA revealed that the majority of participants confirmed that they are well satisfied with their Absher System experience. This result has been supported by Chen et al., (2015) who also concluded that PU is a significant factor in determining user satisfaction and intentions to use the system. Furthermore, Kim and Kankanhalli. (2009) show that PEOU affects user satisfaction and intentions to use the system. Finally, we can say that the results of the study show that, there is a positive correlation relationship between ease of use, and the users' attitudes towards using Absher System, which means that the ease of use and perceived use is influencing positively and strongly on users' attitudes towards using Absher System.

Regarding **H3**, which stated that Perceived usefulness (PU) has a significant positive relationship with (BI) behavioral intention to use the Absher system, the results of the study show that overall users are very satisfied with the usage of Absher System, in particular, they were satisfied with their experience with the System. Thus, it is noticed that the majority of participants confirmed that they intended to use Absher System at a very high frequency, and they intended to recommend Absher System to other people. This finding has been supported by Bhattacharjee, (1998) who said that "*it is important to*

understand not only the end user beliefs, attitudes, and intentions, but the management strategies, policies and actions which have a significant effect on the successful acceptance of a technology Furthermore, for the driver of an innovation or technology supplier, the acceptance of technology is only successful when both the individuals and organizations accept the innovation and also targeted adopters show the commitment by continuing to use the technology overtimes" (Rogers, 2010).

Regarding **H4**, which stated that Perceived usefulness (PU) has a significant positive relationship with (ATU) attitude toward use of the Absher system, the study found that the majority of participants thinks that using Absher System is highly useful for them, in particular in the accomplishment of their transaction, besides that it enhances the quality of transactions. This result supported by to, Teo et al, (2008) who mentioned that when the perceived usefulness (PU) is very high the consequences is a more positive attitude towards use (ATU).

Concerning **H5**, which stated that Perceived ease of use (PEOU) has a significant positive relationship with (ATU) attitude towards using the Absher system, the findings show that most of the users assured that Absher system is secure and easy for them to use. Thus, the majority of users have a positive attitude towards using the Absher system, and they felt it is straightforward for them to use and learn the system. Furthermore, their interaction with the system is clear and understandable for them. In addition to that, they feel that it is effortless for them to use the Absher system to do what they want; besides, users can quickly obtain the skills of using the system. This result is supported by Wen and Kwon (2010: 255), who observed that Perceived Ease of Use is secure. Also, it is effortless and hassle-free to acquire a particular skill.

Moreover, Bagozzi (2007:2) stated that the TAM anticipated that attitudes would positively influence the mindset that would gear human efforts towards the use of technology. The majority of the participants confirmed that it is not difficult for them to learn about Absher System.

It was found that the value of the correlation coefficient between the two variables attitudes towards using of Absher System (dependent variable), and ease of use as an independent variable is reaching (0.714), which is statistically significant at the (0.01) level. In conclusion, these results show a positive correlation between ease of use and the user's attitudes towards using the Absher System. Thus, the ease of use positively influenced by users' attitudes towards using the Absher System. Relevantly, ease of use reflected in the increasing demand for Absher services.

Concerning **H6**, which stated that, Perceived ease of use (PEOU) has a significant positive relationship with (PU) of the Absher system, arguably, perceived ease of use is a specific phenomenon that can vary from system to system or person to person. In this agreement, it is evident that perceived ease of use is directly related to perceived usefulness. Rationally speaking, if a system is a much attribute to technological determinism that is further integrate with a digital platform, these two factors may influence the perceived applicability of that system. In this context, the Absher information system is holding a personalized digitized interface that creates congruence

over users' positive experience. Reasonably, affiliation to TAM has enabled the MOI to gain an accumulation of positive user experience that, in effect, has envisaged in accelerating the perceived usefulness for Absher (saudi-expatriates.com, 2015).

Regarding **H7**, which stated that, Attitude towards using (ATU) the Absher system has a significant positive relationship with (BI) Saudi behavior intention towards the Absher system, the study results revealed that most users provide positive and high attitudes towards the use of the Absher System. That means most of the participants of the study have positive behavioral intentions towards the Absher system. The literature review strongly supports this finding. According to Harrison et al. (1997, p. 176), the behavioral purpose is "*the strength of conscious plans to perform the target behavior.*" Moreover, Fishbein, Ajzen (1975) stated that rational behavior is an actual behavior determined by a person's behavioral intention. In the sense that attitudes accurately reflect beliefs, plans correctly reflect views, and practices accurately reflect intentions. Furthermore, Warsaw and Davis (1985) define behavioral purpose as "*the degree to which a person has formulated conscious plans to perform, or not perform, some specified future behavior*" (p.214). From the concepts mentioned above of behavioral intention and the result of the data analysis, we realized that the majority of the participants have a positive attitude towards the use of the Absher system.

Absher may recall the unique features of allowing Saudi people to afford e-renewal regarding driving licenses or requesting a government document online (saudi-expatriates.com, 2015). Users are increasingly accustomed to the Absher portal for completing day-to-day tasks. Likewise, checking daily emails or registering vehicles as well as e-booking for government appointments are enabled through this platform with minimum inconvenience. Apart from that, applying for visas is now much easier for Saudi people.

6. Conclusion

Modern technologies have changed the course of the advancement of all countries regarding the use of technology and its implication on day-to-day tasks and overall lifestyle. Kingdom of Saudi Arabia has introduced a productivity tool named Absher system to its citizen and expatriates. The primary target of the system was to target people from all classes and backgrounds to avail of the hazard-free information portal that provides online documentation as for requirements, renewal of the driving license, applying for the passport, and so on. Absher is KSA's first step towards e-government, and thus the analysis of customer satisfaction was needed. Understanding the critical factors of implementing new technology for ordinary people involves two key elements, Perceived usefulness (PU) and Perceived Ease of Use (PEOU). The government has achieved success as per the survey conducted. There are a few loopholes in the system that can be resolved. But, indeed, the KSA citizen has changed their way of living with the implementation of the system. The usefulness of the system and ease of use have attracted people to use it as a productivity tool to minimize their workload and help the

government to provide a transparent system. The study of sample responses taken from different kind of users show that behavioral intention in acceptance of new-age technology is increasing, which encourages the invention and implication of modern technology. The study also represents the relationship between productivity and usefulness obtained from the Absher system and the new-age user's Behavioral intention towards using the system.

6.1 Recommendations for Future studies

- Conducting future studies investigating the effectiveness of the Technology Acceptance Model in Online Learning in KSA universities.
- Conducting future studies analyzing the problem encounter Absher system users.
- Conducting future studies Examining a Technology Acceptance Model of Internet Usage by staff members at KSA universities.

References

- Ajzen, I., & Fishbein, M. (2010). Attitudes and the attitude–behavior relation: Reasoned and automatic processes.
- Bhattacharjee, A. (1998). Managerial Influences on Intra-organizational Information Technology Use: A Principal-Agent Model, *Decision Sciences*, 29, 1, 139-162.
- Alotaibi, R., Houghton, L., & Sandhu, K. (2017). Factors Influencing Users' Intentions to Use Mobile Government Applications in Saudi Arabia: TAM Applicability. *International Journal of Advanced Computer Science and Applications*, 8, 200-211.
- Arnold, R. D., & Wade, J. P. (2015). A definition of systems thinking: a systems approach. *Procedia Computer Science*, 44, 669-678.
- Bagozzi, R. 2007. The legacy of the technology acceptance model and a proposal for a paradigm shift. *Journal of the Association for Information Systems*, Vol. 8 (4), 244-254.
- Bhattacharjee, A. (1998). Managerial Influences on Intra-organizational Information Technology Use: A Principal-Agent Model, *Decision Sciences*, 29, 1, 139-162
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1985). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), pp. 982–1003.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology, *MIS Quarterly*, Vol. 13 No. 3, pp. 319-40.
- Delone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of management information systems*, 19(4), 9-30.

- Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107-130.
- Hsu, M. W. (2016). An Analysis of Intention to Use in Innovative Product Development Model through TAM Model. *Eurasia Journal of Mathematics, Science & Technology Education*, 12(3).
- Kay, R. (2002). System Development Life Cycle. World computer. Accessed from <https://www.computerworld.com/article/2576450/app-development/app-development-system-development-life-cycle.html>.
- Kim, H., and Kankanhalli, A. (2009). Investigating User Resistance to Information Systems Implementation: A Status Quo Bias Perspective. *MIS Quarterly*, 33(3), 567-582.
- Lai, P. C. (2017). The literature review of technology adoption models and theories for the novelty technology. *JISTEM-Journal of Information Systems and Technology Management*, 14(1), 21-38. Retrieved on 8 February Retrieved from: http://www.scielo.br/scielo.php?pid=S180717752017000100021&script=sci_arttext
- Lee, K. O., Cheung, M. K., & Chen, Z. H. (2011). Acceptance of internet-based learning medium: The role of extrinsic and intrinsic motivation. *Information & Management*, 42 (8), 1095-1104.
- Liu, S., Liao, H. & Peng, C. (2005). Applying the Technology Acceptance Model and Flow Theory to Online E-learning. *Issues in Information Systems*, VI (2), pp. 175-18.
- Parahoo K. (2006) *Nursing Research: Principles, Process and Issues*, 2nd edn. Palgrave Macmillan, Houndsmil.
- Park, Y. (2009). Acceptance and adoption of the innovative use of smartphone. *Industrial Management & Data Systems*, 107(9), 1349–1365.
- Rogers, E. M. (2010). *Communication: The new media in society*. New York: The Free Press.
- Taylor, S., and Todd, P. (1995). Understanding Information Technology Usage: A Test of Competing Models. *Information Systems Research* 6(2): 144 – 176.
- Teo, T., Luan, W. S., & Sing, C. C. (2008). A cross-cultural examination of the intention to use technology between Singaporean and Malaysian pre-service teachers: An application of the Technology Acceptance Model (TAM). *Educational Technology & Society*, 11 (4), 265-280.
- Vankatesh, V. Davis, F. D. (2000). A Theoretical Extension of Technology Acceptance Model. *Management Science*, pp. 186-204.
- Walker, S. C. and Pearson, J. (2012). Intent to Use Technology: Facilitation Effect of Group Presence. *International Journal of Business Information and Technology*. Vol. 1 No. 1, pp. 1-15.
- Warshaw P. R., Davis F. D. (1985). Disentangling behavioral intention and behavioral expectation. *J. Exp. Soc. Psychol.* 21:213-28.
- Wu, I. L., & Wu, K. W. (2010). A hybrid technology acceptance approach for exploring e-CRM adoption in organizations. *Behavior & Information Technology*, 24, 303–316

- William R. King, Jun He (2006). A meta-Analysis of the Technology Acceptance Model. *Information and Management*, 740-755.
- Williams, M. D., Rana, N. P., & Dwivedi, Y. K. (2015). The unified theory of acceptance and use of technology (UTAUT): a literature review. *Journal of Enterprise Information Management*, 28(3), 443-488.
- Wu, B., & Chen, X. (2017). Continuance intention to use MOOCs: Integrating the technology acceptance model (TAM) and task technology fit (TTF) model. *Computers in Human Behavior*, 67, 221-232.

Creative Commons licensing terms

Authors will retain copyright to their published articles agreeing that a Creative Commons Attribution 4.0 International License (CC BY 4.0) terms will be applied to their work. Under the terms of this license, no permission is required from the author(s) or publisher for members of the community to copy, distribute, transmit or adapt the article content, providing a proper, prominent and unambiguous attribution to the authors in a manner that makes clear that the materials are being reused under permission of a Creative Commons License. Views, opinions and conclusions expressed in this research article are views, opinions and conclusions of the author(s). Open Access Publishing Group and European Journal of Economic and Financial Research shall not be responsible or answerable for any loss, damage or liability caused in relation to/arising out of conflict of interests, copyright violations and inappropriate or inaccurate use of any kind content related or integrated on the research work. All the published works are meeting the Open Access Publishing requirements and can be freely accessed, shared, modified, distributed and used in educational, commercial and non-commercial purposes under a [Creative Commons Attribution 4.0 International License \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/).