AN EMPIRICAL STUDY ON SUCCESS FACTORS TO ENHANCE CUSTOMER TRUST FOR MOBILE COMMERCE IN SMALL AND MEDIUM-SIZED TOURISM ENTERPRISES (SMTES) IN JORDAN

[1]**SALEH ALQATAN,** [2]**NOOR MAIZURA MOHAMAD NOOR,** [3]**MUSTAFA MAN,**
[4]**ROSMAYATI MOHEMAD**

[1,2,3,4]School of Informatics and Applied Mathematics, Universiti Malaysia Terengganu

Kuala Terengganu, Malaysia

E-mail: [1]salehaffash@gmail.com , [2]maizura@umt.edu.my , [3]mustafaman@umt.edu.my,
[4]rosmayati@umt.edu.my

ABSTRACT

Even though mobile technologies and wireless communication are growing at a very rapid phase all over the world, still the development of mobile commerce is hindered by a lot of aspects. Researchers all over the world are actively studying on this domain to understand the factors that affect the acceptance of M-commerce. A lot of studies have recognized that 'trust' is an crucial factor that impacts the acceptance of M-commerce in a lot of domains, including the Small and Medium-sized Tourism Enterprises (SMTEs). Nevertheless it is not an easy task to make the customers to trust M-commerce for various reasons. Furthermore, trust has been identified as a major obstacle of mobile commerce applications. Drawn from previous literatures on trust in the information system and M-commerce, this study proposed a new model for investigating trust in M-commerce acceptance by SMTEs in developing countries, which focused on Jordan. The study distributed the questionnaire to 361 respondents employed in Jordanian SMTEs. The trust factors were investigated to assess their influence on user's trust in M-commerce applications for SMTEs via descriptive and inferential statistical analysis. Results of the analysis revealed that all factors, except for 'structural assurance' and 'calculative-based trust', affect the user's trust in such applications. The study provides a clear understanding of decision maker's perception about M-commerce acceptance in their businesses. This study is important in a global context, as SMTEs in Jordan are going for exporting their product in the global marketplace.

Keywords: *Customer Trust, M-Commerce, Smtes, Jordan, Trust Model*

1. INTRODUCTION

Generally trust or trustworthiness is a vital aspect in a lot of financial activities, which could engage unwanted partiality activities. Even though the idea of trust has been studied in fields, their viewpoints on it will vary; however some general prospects can be found. Trust includes two participants: trustor and trustee. The process of building trust might involve some risks, which are inevitable. The trustors believe that the trustee will not deceive their risk-assuming behavior [102]. In an earlier research, trust has been perceived or defined in different ways, therefore the literatures on trust are reasonably widespread; nevertheless, frequently there is a lack of accord and focus of effort, even within a specific field, but scholars from all the discipline have acknowledged the value of trust [97,141]. Based on cross-disciplinary collection of scholarly articles, [123] study has defined trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another."

Trust is one of the prominent and effectual complexity reduction methods, therefore it is a crucial aspect in relations [89], especially in the case of relations that are not completely controlled by rules and regulations [40]. Trust in the financial

system is a very significant element in the context of contemporary business, particularly in e-business, where value is created through impersonal, arms-length transactions [94]. The trust is a significant aspect affecting the behavior of consumer and it determines the accomplishment of technologies adoption such as E-commerce. [135] study has defined trust in electronic commerce as the prejudiced prospect with which the customers consider that an online transaction with a web retailer will fulfill their needs and desires. Researchers have found that the lack of trust as one of the fundamental reasons for consumers' skepticism in terms of electronic commerce [11].

It is noteworthy that E-commerce seems to be remote ad more automated as against the brick and mortar business. Furthermore the E-commerce offers less direct sensory indications, gives little instant indulgence, involves additional legal qualms and more vulnerable. Consequently is harder to build trust in online environment. As E-commerce is associated with apparent risk therefore trust of public is the most significant concern on line transactions [108].Nevertheless, trust of the accessible services and ease of use are the obstacles to comprehensive use of E-commerce by tourists. The trust of vendors and transactions is a very imperative subject in E-commerce and e-service backgrounds [161].

In E-commerce and M-commerce, Trust has been an important factor in affecting consumers' behavior to accept and adopt a specific technology, especially when it comes to situation of uncertain environments. A lot of studies have pragmatically trust investigated as important motivating factor for the adoption of E-commerce [121]. The purpose of trust in Internet and mobile commerce is more complicated than brick and mortar, as the relationships of trust is present among: the clients, the sellers and Internet provider. As the clients, the sellers will not have personal interactions they only will interact only through the Internet or mobile site. Good and well organized sites can offer valid credit about the seller. Therefore, the triumph of mobile commerce pivots on the readiness of customers to accept a novel technology and involve in activities using systems and devices that are different from what they were using before [20]. Therefore trust is considered as significant aspect in the adoption of M-commerce technology in SMTEs.

2. TRUST IN M-COMMERCE

In an implicit background, it is very hard to build trust in E-commerce and as well as M-commerce even though it is a crucial factor for the adoption. There are strong recommendations to examine a trust as driving factor in the area of mobile commerce [103,159]. According to [114], trust minimizes behavioral ambiguity associated with the activities of the Web vendor. Trust also makes the consumers to perceive some control over the probable vague operations; this perception makes them to engage in on-line transactions. Compared with E-commerce, M-commerce is more exposed to risk of insecurity. So, the factor of trust is relatively more important in M-commerce. The growth of mobile commerce technology in generally and particularly, in Small and Medium-sized Tourism Enterprises (SMTEs) is related with understanding how trust can be built on a mobile commerce [81].

As the mobile commerce is still in the budding stage only very limited choice of products is available. As discussed earlier Trust is a significant factor that affects the proposed use of mobile commerce more than e-commerce [20]. Despite the potentiality of mobile commerce technology in SMTEs, trust is considered as a major obstacle in the adoption of this technology and its development. For tourists, the devices of mobile phone are more convenient and efficient for "anytime online shopping", it has other properties and characteristics that prevent the improvement of trust. In the near future the M-commerce is expected to be an alternative technology for the desktop computers such as laptop and Personal computer (PC). Moreover, the development of mobile technologies and innovative mobile phones make new kinds of M-commerce service possible. Nevertheless, the adoption of these services is not happening in a greater pace, rather it is sluggish; the lack of trust in M-commerce might be a significant factor for this slowness [63].

In order to be viable, the M-commerce should overcome the problem of lack of trust among users. A deep understanding of the determinants that constitute and can bring about user trust in M-commerce is a necessity [130]. On the other hand, the association among the design philosophies of mobile website development and buyer's trust in M-commerce has been seldom

studied. It is very much evident that trust is major factor to accept and adopt the M-commerce. The importance of trust and its vital role of technology adoption are continuously increasing. In spite of a lot of the existing studies that have explained the impact of trust in the adoption of Mobile commerce (M-commerce) [20,102,104,165,83,133,141,155,37-47] the studies that have investigated the impact of trust in the adoption of M-commerce in tourism enterprises are still very few. Furthermore, the number of studies investigating the impact of mobile commerce on the performance of SMTEs is very limited, particularly in developing countries [35,117]. Consequently, trust is also at the heart of the growth of M-commerce in SMTEs [103]. This study aims to help fill this gap.

2.1 Factors Analysis That Influence Of Trust In Mobile Commerce

The trust as a concept is taken from various fields, it is considered as a phenomenon associated with a particular understanding of risks areas on individual level. In spite of that the process of building the trust of the individual is a dynamic where it involves various and multiple steps, some scientists believe that trust is a concept of multi-level variables and influenced by some factors as well as the kind of relationships between these factors whether some of internal relationships that are static and some of external relationships that will change over the time [1]. So, trust is complex phenomenon in adoption of M-commerce in small and medium-sized tourism enterprises. Due to researches on trust in mobile commerce is relatively a new topic, especially SMTEs.

Trust has been positively recognized to influence the behavioral intentions of individuals to purchase the services and products as well as do their business by using mobile devices. Consequently, understanding the factors that influence the trusting beliefs in an M-commerce environment in SMTEs is of considerable necessary and important to researchers. A lot of factors have effect on trust [43, 20,131] divide antecedent trust factors into the following categories:

- Knowledge-based trust is the confidence that acquire the individuals through experience and expertise over time.

- Institutional-based trust indicates to relationships with formal societal structures, based on standards and rules of enterprises that

surrounding individual's behavior and trusting beliefs.

- The calculative –based trust assumes that individuals build their trust based on rational Evaluation of the results of the actions of other parties.

- Cognitive-based trust examines how information collected through interaction is used to adjust an individual's trusting beliefs.

- Personality-based trust relates to personal attributes and the trust that develops during infancy when individual seeks and receives assistance from one's Organizers.

This study focused on main four factors which affect customers' trust in M-commerce in SMTEs:

A. *Familiarity with M-commerce*

The link between Familiarity and trust is a well-accepted topic in psychology, sociology and computer science [82]. Familiarity is an understanding, which is often based on previous interactions, experiences, and learning of what, why, where and when others do what they do [89]. It is noteworthy that trust is significant factor, which induces customers involve in commercial transactions [48]. Increased Familiarity means a better understanding of the transaction process with the M-commerce; this augments the trust of clients. In case of tourism industries the mobile commerce applications enable users to buy and sell products on the move. The familiarity of using mobile devices also acts as a catalyst to induce trust for using mobile commerce [20].

It is significant to understand the factors that motivate the customers to employ mobile commerce, especially in case of developing countries, because the increasing demand of mobile devices has created potential market for mobile commerce. As mentioned above, the familiarity of using mobile phones has created a positive ambience for mobile commerce [134]. Nonetheless, not much focus has been given in the literature in terms of studying how familiarity influences trust in M-commerce in specific industry such as tourism of developing countries in technological and hypothetical perspectives [88]. However, the customers who are not familiar with mobile devices pose a threat to restrict the expansion of mobile commerce market. In contrast the familiarity of

using mobile devices gives green light for mobile commerce. Therefore, familiarity of tourists with mobile commerce services will influence tourists trust in the adoption of this technology in SMTEs of Developing countries.

B. *Calculative-based trust*

According to [10], the calculative-based trust is the basic motivation for the participation of online transaction, where two strangers meet randomly. Calculative-based trust is a phase, where all the prospective interactions between two individuals are evaluated as an autonomous value-based transaction. If the communication is assessed as advantageous to the trustors, they will involve in the interaction with the trustee. All the interactions are calculated to establish its prospective value and if a constructive result is forecasted, the trust level incrementally raises depending on the on the apparent enormity of the transaction. However if the interaction is negative, the trust relationship proportionally weakens with the level of infringement.

Comprehending the calculative-based trust can help instituting and upholding trust relationship among buyers and sellers in the commercial process. The concept of calculative-based is getting very popular due to its impact [78]. However, the theoretical foundation has received little attention. In M-commerce shopping, especially in developing countries, customers can be made to trust enterprises such as tourism sectors, by making them to believe that, these enterprises will never breach their promises, the services and products offered will be in line with the expectations of customers, the enterprises will never give any misleading or false information, the information provided are authentic and up-to-date and the services are more reliable [138]. Therefore, Calculative-based trust will influence tourist's trust in the adoption of this technology in SMTEs of Developing countries.

C. *Structural assurance*

Structural assurance means consumer projections of success, due to safety nets as legal recourse, guarantees, and regulations that exist in the context. It indicates that structures such as guarantees and regulations are intact to encourage success in M-commerce in SMTEs of developing countries. An effectual means to enhance institution-based trust is providing structural assurance. The measures play a very significant role in influencing the trust of an individual, when information about the counterpart

is not whole [61, 47].Structural assurances might also improve trust viewpoints and readiness to trust. Providing systems, more than the needs and promoting security and guarantees will advocate reliability and goodwill [109].

Even though, structural assurance is considered as the most imperative feature in the acceptance of mobile technology, the trust of individuals is believed to be the foremost feature for enhancing mobile commerce in developing countries [87]. However, there is a lack of literature in terms of investigating the relationship between the psychological process of structural assurance and the purchasing intentions of consumers [116]. There are proofs for the existence of association between the positive awareness of privacy and security in Internet and the trust of customers in purchasing the services and products provided by SMEs via Internet. Therefore, structural assurance will influence tourists trust in the adoption of M-commerce in SMTEs of Developing countries.

D. *Compatibility*

Compatibility is defined as "the degree to which an innovation is perceived as consistent with the existing values, past experiences and needs of potential adopters" [120]. The perceived compatibility of an innovation has an encouraging impact on the adoption of the innovation [142]. High compatibility will lead to preferable adoption. Furthermore, Internet users, who believe that using Mobile commerce is well-matched with their principles and jobs, tend to adopt these kinds of services.

The apparent affinity of mobile commerce service might augment the trust of customers and thus, improve their intent in using M-commerce, particularly in developing countries [61]. The compatibility comprises the extent, to which the novelty influences the reliability of consumer behavior [22]. However, in terms of tourism sector the mobile commerce is more probably compatible with the precedent mind-set of customers, especially when they have some experience in using Internet through their mobile devices. Therefore, customers with pessimistic thoughts towards the mobile technology might feel intricate to trust and use the mobile commerce services provided by SMEs. Therefore, compatibility will influence tourists trust in the adoption of M-commerce in SMTEs of Developing countries.

E.   Propensity to trust

An individual's propensity to trust influences the impact of the trust antecedents: "the propensity to trust is a personality trait that moderates the effect of trustworthiness attributes on the formation of trust" [77]. The individuals who have a high propensity to trust, they will be less likely to fear and anxiety in the exchange of personal information because they believe that others are inherently trustworthy and good intentions [73]. Propensity to trust represents the willingness of individuals to grant their trust to specific firm [96]. It is one of the important factors that directly influence on consumers trust and thus their behavior to purchase [2]. However, when a consumer has had experience, propensity to trust will not be an important factor [150].

The propensity of individuals to use their mobile phones and then to use them for mobile commerce gives some basic evidences, which could be produced as part of society profiles to which service venders could respond. However, it is crucial to gain the customers trust for making them to adopt mobile commerce in developing countries [47]. Nevertheless, people diverge in their inclination towards trust [61]. A lot studies have identified that inclination towards trust has direct influence on the formation of trust on M-commerce as shown in table 1. In SMEs, the customer's with strong inclination towards trust more probably trust a service after evaluating that service. Therefore, inclination to trust will influence tourists trust in the adoption of M-commerce in SMTEs in Developing countries.

Table 1: Explains The Most Important Factors That Played A Vital Role Of Trust In The Customer Intention And That Supported In Previous Studies In The Mobile Context.

	No	Categories	factor	Previous Studies in the mobile context
Trust Factors	1	Knowledge-based trust	Familiarity	[20, 36]
	2	Institution-based trust	Structural assurance	[104, 23, 69, 87, 31, 47, 85, 164]
			Security	[61]
	3	Cognition-based trust	Compatibility	[23, 61, 85]
			Relative advantage	[69]
			Information quality	[61]
	4	Personality-based trust	Propensity to trust	[61, 69, 47]
	5	Calculation-based trust	Calculative-based trust	[20, 36, 47]

The table above shows the factors that have a significant impact on the trust and had been supported in a lot of previous studies in the mobile environment such as: Familiarity with M-commerce, Calculation-based, Structural assurance, Compatibility and Propensity to trust. However, no study has been conducted to investigate the impact of these factors in the adoption of M-commerce technology in Small and medium-sized Tourism Enterprises (SMTEs), especially in developing countries. Nevertheless this study aims to full this gap.

Security is a crucial factor that affects individuals to buy online. Generally most of the

consumers are reluctant to involve in online financial operations such as selling and buying as they fear that their personal and financial details might be stolen by hackers and other cyber criminals [128]. From a consumer's perspective, the perceived security may be defined as "the subjective probability with which consumers believe that their personal information (private and monetary) will not be viewed, stored and manipulated during transit and storage by inappropriate parties in a manner consistent with their confident expectations" [113].

Trust is the basis of most of the financial transactions, which includes the operations of

selling and buying products and services and is built on the basis of a multitude of factors such as, the individual's perception of the security of the payment system via mobile phones. Studies show that users' perception of control is an important element of gaining trust in the transaction [28]. In spite of the security concerns, the trust factor very much influences the adoption of technology in various fields such as, E-commerce. However, there is a lack of studies that have examined the impact of security in the adoption of M-commerce, particularly in SMTEs [7].

A lot of previous researches highlighted trust to be an important and vital factor in the acceptance and usage of E- commerce. However, insofar this factor has not been addressed as a key issue in the development and success of M-commerce in generally, particularly SMTEs [133]. Previous studies have identified many factors that have influenced trust in online transaction. Most of them have focused on the perceived security [74, 54, 68, 153,32]. It is worth mentioning that the security is seemingly important in mobile commerce rather than the E-commerce environment, because due to the weak links it becomes easy for the intruders to snoop into financial information in mobile commerce environment. Of late most of the portable devices such as note books, PDAs do not have the similar facilities as the mobile phones such as: smart cards to enhance security, roaming to stay connected on the move, therefore the mobile devices are limited in their use in wireless environments. The possibility of merging these technologies for a specific setting depends on the security protocols. It is very imperative that the lack of security is one of the biggest obstacles, which stops consumers from adopting mobile commerce. However a lot studies have focused on the security factor in 'wired' environments, but only few have dealt with wireless environment [48].

3. RESEARCH MODEL AND HYPOTHESES

A model refers to an estimation of, and a simple version of some real life feature [71]. In the present research, a trust model for acceptance of M-commerce in SMTEs of developing countries is developed in an attempt to get better insights of the factors that impact trust in M-commerce. This model can be deemed as an elemental framework for acceptance because SMTEs in developing countries first need to work on the variables if they are desirous of accepting M-commerce in their business operations.

The six variables included in the model are presented in Figure 1. They are familiarity with M-commerce, structural assurance, calculation-based trust, compatibility, propensity to trust, and perceived security. A simpler model is recommended for SMTEs in developing countries, to make it easy for them to employ in their businesses as opposed to complex models that are created based on the conditions present in the developed countries. The justification behind the choice of constructs is because based on the literature review, these constructs are significant in understanding and explaining the decisions of SMTEs in developing countries when it comes to M-commerce acceptance.
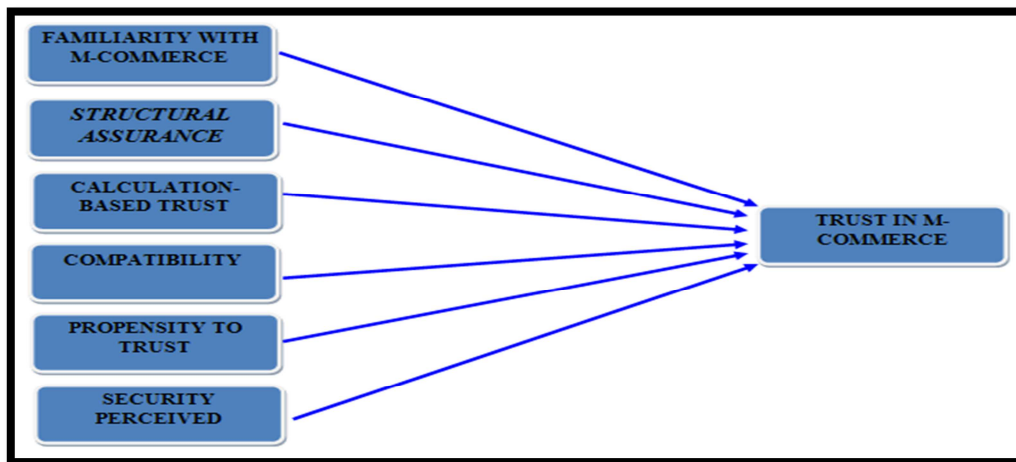

Figure 1: Trust Model For Tourism M-Commerce

The purpose of this study main focus is to examine the critical factors that influence on user trust for the acceptance of M-commerce by SMTEs in developing countries. The research hypotheses that are proposed to accomplish these research goals as described as the following:

3.1 Familiarity With M-Commerce

Trust is considered as a main element in the sustainable development of IS [152]. In the field of technology, sociology and computer science, researchers acknowledge the relation between familiarity and trust. Familiarity also has a hand in influencing trust by firstly, building trust when the vendor displays behavior worthy of trust or when the vendor does the opposite; secondly, familiarity creates a framework in which specific positive expectations from the trusted party exists [42]. When it comes to a novel and strange system, consumers care more about privacy and are hence slow to trust. On the contrary, increased familiarity with a system could mean a higher understanding of the transaction process with the e-service providers in SMEs and this translates to increase in consumer trust [149].

The growth of B2C electronic commerce is slowed down by factors and among the main ones is lack of trust. With insufficient rules and customs, consumers depend on the familiarity and the reputation of a system to minimize the uncertainty in their transactions [154]. M-commerce applications have showed significant evolvement in developing countries [51]. Many studies in the developing countries have noted that trust is a significant factor that affects the employment of M-commerce applications in various domains. Additionally, the role of familiarity in trust has been examined in the context of commerce [60]. In other words, familiarity is required to pursue and obtain trust [110, 9, 144] and trust only arises in a familiar situation. The situation may be modified to be conducive to trust and this may affect the potential of creating trust in human interactions [89].

In the context of SMEs, the impact of the change ability of familiarity upon trust is critical in understanding M-commerce trust as the environment in M-commerce provision of application is distinct from the conventional commerce environment. Hence, citizens are mostly unfamiliar with the environment particularly in its earlier stages where it is critical to reinforce citizen's trust. According to [156], trust is influenced by the familiarity of the consumer with the E-commerce experience. In developing countries, not much focus has been given in the literature in terms of studying how familiarity influences trust in M-commerce environment in specific industry such as tourism from technological and hypothetical perspectives [88, 7]. In E-commerce environment, trust was reported to significantly predict purchase intention of potential as well as repeat customers where familiarity and disposition to trust were significant for both [114]. In another study conducted about online firms, the trust impacted the willingness of the consumers to transact online and that familiarity influenced trust. In other words, familiarity was found to be significantly related to the transaction willingness of consumers. In Kuwait, [122] study found that the familiarity had a direct effect on customer's trust, which in turn affects behavioral intention to adopt online payment. Hence, M-commerce familiarity is considered an important factor affecting customer trust in M-commerce application use in SMTES of developing countries. So, this study hypothesizes that:

H1: Familiarity with M-commerce services will positively influence consumer trust to use M-commerce application for SMTEs.

3.2 Structural Assurance

The perceived structural assurance is viewed as an integral element of trust [93]. It is defined as the belief that it is probable to succeed due to the existence of appropriate contextual conditions such as: promises, contracts, regulations, and guarantees [87].The development of trust is categorized by [97] study into antecedents, trust and behavioral intentions. Trust antecedents are those elements determining its formation. In the context of developing countries, structural assurance indicates the important trust antecedent in the alternative evaluation phase and is important in the SMEs purchase state in Internet marketing [129]. Structures provide an appropriate environment, which gives users a sense of security. Additionally, previous empirical research reveals that structural assurance encourages the development of online trust [22, 108].

Despite the fact that the effect of a mobile website's structural assurance upon trust was supported by prior studies, the way the relationship developed on the basis of the mobile website user's affective reactions to the system is still left largely unexamined. Several SMEs that employs their information systems provide structural assurance

that actual knowledge transfer is occurring [105]. [101, 55] studies contended that structural assurance impacts the trust belief of users and their trust intention. This in turn, results in affecting their behavioral intention towards system use. Hence, SMEs in developing countries are confident in the institutional structures role in encouraging taking the opportunity to employ M-commerce applications. However, this does not mean SMEs will always be ready to employ M-commerce as they may reject its adoption even with structural assurance owing to their values and internal process or their analysis of the relative strengths and weaknesses [64].

SMEs use of information systems has been addressed in many studies. Several studies of SMEs adoption in developing countries were done in light of E-commerce [119, 65, 21,124-95]. Nevertheless, there is a gap in literature concerning the relationship between psychological process of structural assurance and the purchasing intentions of consumers [127]. In E-commerce relationship trust, [98] revealed that institution-based structural assurance is a factor that influences trust related Internet behavior. Even though, structural assurance is considered as the most imperative feature in the acceptance of mobile technology, the trust of individuals is believed to be the foremost feature for enhancing mobile commerce applications [87]. However, there is a lack of literature in terms of investigating the relationship between the psychological process of structural assurance and the purchasing intentions of consumers in developing countries [7]. [151] reported that one of the most significant factors that affect mobile payment trust was the structural assurance of mobile technology. In mobile businesses, [165] reported that structural assurance is considered as one of the primary factors that affect initial trust – a factor that eventually affects usage intention. Thus, structural assurance is considered as an important factor affecting customer trust to use M-commerce application in SMTES of developing countries. So, this study hypothesizes that:

H2: Structural assurance will positively influence consumer trust to use M-commerce application for SMTEs.

3.3 Calculation-Based Trust

The calculation based trust can be employed to forecast the level of trust between users in the network [62]. Comprehending the calculative-based trust can help institute and uphold trust relationship among buyers and sellers in the commercial process. The concept of calculative-based is getting very popular due to its impact [78]. However, the theoretical foundation has received little attention [7]. In SMEs, calculative-based notion stemming from cost-benefit analysis is considered as a salient antecedent of customer's trust on the vendor in the stage of purchasing stage [18, 129]. It represents the most general type of trust that exists in the beginning of the business interaction. The parties to the interaction analysis the level of their dependency on the other, the expected profit and the potential risks to decide if they are ready to develop trust with one another. In other words, this kind of trust stems from an accurate calculation on the basis of financial criteria [136].

Consumers using the calculation-based trust will try their hand at predicting the intention of the seller through the latter's trustworthiness and by confirming his history of fulfilling orders at the right time and his reputation. The benefits and the potential disadvantages of trusting such a seller is then considered and a decision is made whether to trust him on the basis of gains and losses. This type of trust commonly resides in most relationships among unfamiliar parties and is violated in an instant with a minor breach of expectations [12]. This cost-benefit analysis of opportunities consequently results in calculation-based trust where it is ill-advised for the other party to exhibit opportunistic behavior [43]. In the context of M-commerce shopping in developing countries, such as Jordan, customers trust are obtained by enterprises like tourism sector by convincing them that the enterprises will hold their part of the bargain, offer services and products that are aligned with the customers' expectations, and refrain from providing misleading information; the information provided are accurate, up-to-date with reliable services [138, 7]. In this context, the customer can be expected to lay his trust on an e-vendor more if the former is convinced that the e-vendor has more to lose by misleading him or by breaking customer trust. In mobile environment, Calculative-based trust will positively affect trust [46]. There are various external determinants that may shed a light on trust formation in a more complex, organizational IS, and offer SMEs with the desired levers to modify individual trust in technology. According to [82], trusting beliefs are positively impacted by the calculation of cost/benefit, whereas in Taiwan, [166] revealed a positive association between calculated-based cognition and trust, which in turn positively impacts attitude towards purchase in the context of B2C website. Hence, calculation-based trust is an important factor affecting customer

trust to use M-commerce application in SMTES of developing countries. So, this study hypothesizes that:

H3: Calculation-based trust will positively influence consumer trust to use M-commerce application for SMTEs.

3.4 Compatibility

Compatibility is described as an important innovation characteristic of the innovation diffusion theory [120]. Compatibility is considered as the level to which innovation is believed to be aligned with the prior performance and the needs of potential adoption with the current working environment, working processes, values, and beliefs of the SMEs [17]. The innovation's perceived compatibility impacts the innovation adoption [142] and high compatibility will result in preferable adoption. Moreover, Internet users who are convinced of the mobile commerce alignment with their principles and jobs are more susceptible to adopting this type of services [7]. According to [56], the issues concerning compatibility with trust in IT systems should be kept in mind. Also, compatibility predicts the adoption of various mobile services [61]. It is revealed to develop trust in information system like E-commerce and may be an important factor in developing or destroying trust of both potential and current customers [16].

Moreover, [57] revealed a positive association between innovation adoption and compatibility. This is also evidenced in [86] who noted that a considerable correlation exists between the degree of trust and partners' compatibility with one another. Parties to the contract were more inclined to trust each other when they have common values in light of normative, cultural, procedural and technological orientation. Higher compatibility would therefore result in stronger bonds in the parties' relationship [125] which improves trust. As for the mobile communication system, according to [29], the innovation attributes including compatibility significantly impacts customer's trust.

In the developing countries' SMEs, such as Jordan, a sector that is experienced in mobile internet or E-commerce, they must already be aligned with M-commerce application. In other words, a business having strong positive inclinations towards M-commerce may easier to put their trust on M-commerce applications and use it [23] indicating that great levels of technology compatibility has a high probability of resulting in

the enterprise acquisition of a deeper understanding of a system, which in turn, enhances its trust in the technology and encourages its acceptance. On the other hand, a business that does not feel compatible with E-commerce applications will refuse to trust it, has less intentions of using it and will not facilitate its diffusion [52]. However, in terms of tourism sector the mobile commerce is more probably compatible with the precedent mind-set of customers, especially when they have some experience in using Internet through their mobile devices. However, customers with pessimistic thoughts towards the mobile technology might feel intricate to trust and use the mobile commerce applications provided by SMEs developing countries, such as Jordan [7]. As for technology acceptance (where the Internet facilitates online betting), [70] reported compatibility to be the top significant factor. Hence, it is crucial for marketers to create their marketing literature on the basis of this factor and for online betting services to continue offering a compatible service. Therefore, calculation-based trust is an important factor affecting customer trust to use M-commerce application in SMTEs of developing countries. So, this study hypothesizes that:

H4: Compatibility will positively influence consumer trust to use M-commerce application for SMTEs.

3.5 Propensity To Trust

An individual's propensity to trust is also critical in the trust relationship [67]. Propensity to trust or "disposition to trust" is defined as the general inclination of the individual on the basis of socialization to depend on others [97]. According to [96], the propensity to trust directly impacts the trust formation. Propensity is evaluated as attitude on the basis of the disposition of the individual to let someone enter into his confidence. People coming from varying cultural backgrounds, having varying personality types and developmental experiences differ in their trust propensity [90, 156]. The differences can be enormous that some people may even trust blindly in situations that do not call for trusting while others are wary to show any willingness to trust even in environments conducive to trust. In other words, while some individuals exhibit a good inclination to trust people or things, others are not and they need more information to develop any trust beliefs. The impact of propensity to trust upon the individual's trust in a novel institution or system is particularly significant [41].

In online environment, individuals who easily trust have a higher probability to purchase in comparison to those who are reluctant to trust. In other words, the lack of clear acknowledgement to specific online transactions, a person characterized by a high trust propensity or innovators easily ascribe trust intention to the transactions despite other contexts [162]. Despite of the importance of trust propensity in trust building in E-business [132], little research has been done to examine the query whether an individual's propensity to trust other people significantly impacts his/her trust in system [45].

Along the same line, [79] discovered that the individual's trust propensity significantly impacts his/her trust indicating that an organization should consider it their long-term commitment to develop and enhance the level of system trust among their employees. In order to obtain consumer trust in developing countries like Jordan, SMEs need to use various security methods. Currently, there are several unresolved issues concerning the various modes efficacy in increasing consumer confidence. According to [13], a trust disposition influences online vendor trust as well as individual's intention to commit in trust-related behaviors through inference, intentions to interact in online purchase behavior. Furthermore, In SMEs in Jordan as developing country, the customer's with strong inclination towards trust more probably trust a service after evaluating that service [7]. In Kuwait as developing country, [122] found that the propensity to trust has a direct effect on customer's trust beliefs which in turn affects behavioral intention to adopt online payment. Propensity to trust was revealed to influence perceived site quality as individuals with low propensity to trust have a tendency to be more critical of an object in terms of trust whereas those having high levels have a more positive tendency [99, 76]. They found that consumer trust is positively affected by propensity to trust in the web business. Hence, trust propensity is an important factor affecting customer trust to use M-commerce application in SMTEs of developing countries. So, this study hypothesizes that:

H5: Propensity to trust will positively influence consumer trust to use M-commerce application for SMTEs.

3.6 Perceived Security
The increasing technological developments have made considerable contributions in the security of the Internet for e-business. Nevertheless, the challenges are still rampant in this area, and security is still the top issue in the development of e-businesses [157]. Perceived security is described as the subjective probability with which the consumers are convinced that their personal information will remain private and secure during its transit and storage by parties in a manner that is aligned with the expectations [39].

Transacting through the internet while disregarding the security risks involved could translate into a grievous mistake. Prior study has addressed the security control in E-commerce environment and found in invaluable in trust development processes. Perceived security control is described as the perception of security related to the transactions with a web site [74]. When carrying out business transactions online, it is important to keep in mind that consumers should be made to feel secure upon providing their personal information including address and credit card details. Security, an element mandatory for trust, is prevalent in more advanced E-commerce economies and is therefore assumed by many consumers while conducting online transactions with SMEs [25]. In addition, security is considered among the main barriers to developing E-commerce applications in SMEs in majority of developing countries [84, 91, 58, 158]. In other words, information safety is critical for the company for the integrity of the entire application when it comes to E-commerce applications implementation.

Studies in psychology reveals that individuals who perceive themselves to be in control are more inclined to feel and behave in a positive manner and those who feel that they are more in control over the purchase process perceive great level of trust in interacting with online environment [153]. In the context of developing countries, the perceived security is found to positively impact customer trust in various SMEs. With secure technology, the customer is more likely to lay their trust. In other words consumer trust positively relates to the his/her behavioral intention to adopt a technology – when he/she trust the technology, he/she will likely use it [145]. In spite of the security concerns, the trust factor very much influences the adoption of application in various fields such as, E-commerce. However, there is a lack of studies that have examined the impact of security on customer trust in the adoption of M-commerce applications for enterprises in developing countries like Jordan [7]. [115] showed that transaction security in online stock trading was significantly relates to cognitive trust and affective

trust (Website Trust) indicating that transaction security may be the top most significant factor that influences consumer trust in websites. Moreover security is positively associated with trust in online shopping as it influences the willingness of the people to voluntarily provide their personal information including their address, credit card number etc. when transacting [26]. [15] Showed that web site security directly and significantly impacts consumer trust in financial service web site. In a developing country like China, perceived security was shown to positively relate to initial trust in mobile brokerage service [61]. Hence, perceived security is an important factor affecting customer trust to use M-commerce application in SMTES of developing countries. So, this study hypothesizes that:

H6: perceived Security will positively influence consumer trust to use M-commerce application for SMTEs.

4. RESEARCH METHODOLOGY

An empirical study was designed to test the research framework and the above mentioned hypotheses. We will briefly address here some methodological issues related to the subject (section 4.1) data collection (section 4.2) and the measurement of variables (sections 4.3).

4.1 Subjects
When we conducted our research in developing country, we chose to target SMEs in tourism sector, because, tourism industry is one of the largest industries in the world and its association with the Internet has made it the largest online industry [30]. Moreover, majority of the tourism enterprises all over world comprise of small and medium-sized tourism enterprise [66]. Due to economic diversification, the tourism industry suffers more in developing countries than the developed countries [143]. SMEs play a more important role in the economic development than the large-sized enterprises. However, in the context of developing countries, the contribution of SMEs in employment and GDP is relatively low (30% and 17%, respectively) compared to developed countries where it significantly contributes to employment (60%) and GDP (50%). Even though the SMEs need to employ the role of IT effectively and with more efficiency, their role in competitiveness has been primarily focused on large-sized enterprises. This in turn leads to the very slow adoption of IT [3]. In Jordan as example of developing counties,

the Jordanian Ministry of Industry and Trade has classified the SMEs depending on the number of staff and money invested for accomplishing their business objectives. In the context of Jordanian economy, unemployment rate is quite high at 12.5% and SMEs evidently have a significant role in economic development as it reflects 98% of total employer and 52% of the workforce. On top of this, they provide all the new jobs and 51% private sector output along with 96% of total exports. Thus, Jordan is highly dependent on SMEs to be the force behind its economy [59, 8]. Approximately 98% of all Jordanian businesses employing less than 50 workers are categorized as SMEs – this depends on the number of workers for every establishment, as two third of these establishments have no more than 19 employees [106].

Jordan has relatively limited natural resources to support its economic development, leading it to search for other sources of income, of which tourism has become an essential player. Jordan has managed to capitalize on its strategic central location in the area, its relative stability and security, along with pleasant climate, to establish a reputation for being tourist destination [6]. In addition to the above, the Jordanian government has confirmed its commitment to construct the country's information and communication technology infrastructure as contended by [137, 4]. According to [3], both public and private sector, including tourism must launch a comprehensive information systems strategy toward expanding Jordanian business to reach the international market; in order to exploit its opportunities [38] such as M-commerce. Nevertheless, various significant factors are expected to impact these innovations acceptance and adoption. To focus our research, we selected Small and Medium-sized Tourism enterprises (SMTEs) in Jordan.

4.2 Data Collection
As mentioned earlier, the focus of the field survey was SMTEs in the South, Central and North of Jordan. Prior to the actual field survey, the sampling frame is drawn from a list of 637 tourism enterprise registered with the Jordanian Ministry of Tourism website. This register represents the most adequate sampling frame as almost all tourism enterprises that are registered with the Jordanian Ministry of Tourism. The sampling frame error arises if specific sample elements are not strictly shown in the frame [126]. However, the frame utilized in the present study is accurate as the Jordanian Ministry of Tourism ensures that it is updated after every six months to guarantee accuracy of data.

The sampling frame of this study comprises of updated lists of employees from the selected SMEs in the tourism industry. Data were collected based on stratified sampling only from the SMEs in the tourism industry. The stratified random sampling of tourism industry might efficiently demonstrate the differences in willingness of the SMEs in terms of adopting M-commerce applications. Furthermore stratified random sampling is suitable for selecting samples from different groups. In this study, we use stratified sampling based on locations. Hence the survey was carried out in 2012 with a random sample of SMTEs selected from the South, Central and North of Jordan. In this study, stratified sampling by geographic area is used

Sampling entails selecting a specific subset of individuals from a given statistical population in order to study its characteristics [146]. Selection of SMEs in the tourism industry that participated in the present study is based on the information on the population obtained from Ministry of Tourism. The sample size of the present study is drawn from a total population of 4601 employees. Therefore, the sample size of this research is 357 [75]. However, the researcher decided to collect 397 data. The reasons behind the collection of extra 40 data lie in the preference to achieve high of response rate. Secondly, the researcher follows the central limit theorem which states that the large sample size, the more probable the sample mean is close to normal distribution. The achievement of larger sample size indicates closer to normal distribution. If just target exactly 357 sample sizes, it is risky facing insufficient sample size in data collection process. Out of 600 questionnaires distributed to tourism SMEs, 397 questionnaires were returned. Out of these 397 questionnaires, 36 were returned incomplete. Thus, 361 questionnaires or 60.2 percent were coded in data key in process and used for further analyses.

4.3 Measuring Instrument
The measurement methods used in this study were drawn from literature on IS and M-commerce. For all concepts, we asked respondents to rate their level of agreement with statements using 6-point scales (1 = strongly agree and 6 = strongly disagree). Familiarity with M-commerce was measured using four-items adapted from [9], structural assurance was measured using five-item scale developed by [100, 31], calculation-based

trust was constructed using three-items of [43] as well as one-item of [34, 31]. Moreover, compatibility with mobile commerce was measured using three-items adapted from [107, 23] as well as two-items from [92]. Propensity to trust was measured using five-items adapted from the study of [97, 148] in addition to two-items of the study of [42] while perceived security was measured using four-items adapted from [19, 74].

4.4 Test Of Reliability, Validity And Identification Of Factors
Once the data collection had been completed. In order to ensure that the measures improved in the instrument were reasonable and suitable, its reliability and validity must be examined. Reliability refers to the stability of indicators available to measure the concepts that help in assessing the quality of the measurements and leading to consistent results [126]. Reliability tests items used in the questionnaire as instrument to collect data. It finds the consistency of respondents' answers to all the questions in the study. It tests the degree to which the questions independently measures the same concept in the sense of their correlation with one another. The Cronbach's alpha was used to measure the reliability of questions for each variable. The Cronbach's alpha above or equal to 0.70 is considered reliable as suggested by [111] and to measure the strength of reliability [70]. Rule of Thumb for Cronbach's Alpha is followed as depicted in Table 2 below:

Table 2: The Cronbach's Alpha Value

Alpha	Strength
<0.6	Weak (Not Acceptable)
0.6 - <0.7	Moderate
0.7 - <0.8	Good
0.8 - <0.9	Very Good
0.9	Excellent

In table 3, the result indicates that the reliability coefficient for variables is acceptable without any deleted items. All variables are acceptable as they are over 0.70 [111].

Table 3: Cronbach's Alpha (A) Reliability Coefficients For The Main Constructs

Variable	No.of item	Cronbach's Alpha	Strength
Trust in M-commerce	6	0.797	Good
Familiarity With M-commerce	4	0.892	Very Good
Calculative Based Trust	4	0.763	Good
Structural Assurance	5	0.772	Good
Compatibility with mobile commerce	5	0.748	Good
Propensity to trust	7	0.820	Very Good
Perceived Security	4	0.812	Very Good

In this study, researcher conducted Pearson Correlation analysis with the correlation coefficient used to explore the strength of relationship for each variable. Correlation analysis is a statistical method used to describe the strength and direction of the linear relationship between two variables [112]. The degree of correlation is concerned with measuring the strength and importance of a relationship between the variables. To achieve this, the bivariate association was conducted. The procedure computes Pearson's correlation coefficient with significant levels. Pearson correlation coefficients can only take one value which ranges from - 1 to +1. The magnitude of the absolute value, while ignoring the sign provides an indication of the strength of the relationship between two variables. The perfect correlation of 1 or -1 indicates that the value of one variable can be determined exactly by knowing the value of other variable. [24] method explored such relationship and gave the following guideline as shown in table 4:

Table 4: The Strength of Relationship

No.	Correlation Coefficient	Type of Strength
1.	0.1 to 0.29 OR -0.1 to -0.29	Weak
2.	0.30 to 0.49 OR -0.30 to -0.49	Moderate
3.	0.50 to 1.0 OR -0.50 to -1.0	Strong

The summarized results for correlation analysis between independent and dependent variable for this research are as shown in table 5:

Table 5: Pearson Correlation Result For Relationship Between Independent And Dependent Variables

Relationships	Pearson Correlation	Significant/Not Significant	Strength
Familiarity-Trust in M-commerce	0.790*	Significant	Strong
Structural Assurance-Trust in M-commerce	0.480*	Significant	Moderate
Calculative Based Trust-Trust in M-commerce	-0.016	Not Significant	-
Compatibility-Trust in M-commerce	0.607*	Significant	Strong
Propensity Trust-Trust in M-commerce	0.706*	Significant	Strong
Security Perceived-Trust in M-commerce	0.735*	Significant	Strong

Factor analysis method confirms the items or dimensions used accurate in each variable as measurements. Basically, factor analysis is a multivariate analysis procedure that attempts to identify any underlying "factors" that are responsible for the covariant among a group independent variables. The goals of a factor analysis are typically to reduce the number of variables used to explain a relationship or to determine which variables show a relationship. The factor analysis method is utilized to determine the nature of the construct influencing a set of responses and to achieve the validity of questionnaires purposes. According to [118], the simplest method to explore the constructs for

examining the validity is through the EFA and there are several guidelines established:

1) Correlation matrix – most pairs between constructs are significance.
2) The Kaiser-Meyer- Olkin Measure should be equal or more than 0.50.
3) Bartlett test of Sphericity (Approximate Chi-Square) – Large and Sig. (p-value) – should be less than 0.05.

The purpose of the factor analysis rule above is to achieve data reduction or retain the nature and character of the original items, and to delete those items which had lower factor loadings and cross loading [49]. Table 6 reports the summary of factor analysis for all variables.

Table 6: The Exploratory Factor Analysis Result

Construct/Variable	KMO	BTS	P-value (Sig.)
Familiarity With M-commerce	0.700	176.276	0.0000
Calculative Based Trust	0.566	30.334	0.0000
Structural Assurance	0.686	249.504	0.0000
Compatibility with mobile commerce	0.737	390.995	0.0000
Propensity to trust	0.718	450.879	0.0000
Perceived Security	0.602	146.944	0.0000

On the basis of the overall factor analysis result, the researcher found that all variables met the rules and all items in the variables were retained for the next analysis.

5. RESULTS

5.1 Data Analysis

[139] described regression analysis as a statistical tool that investigates the variables relationship. It also used to as a predictive analysis method where one or more variables are utilized to predict the degree of another through the straight line formula including two way regressions. Multiple Regression analysis is an appropriate analytical technique for the research question of this study that seeks to find out the relationship between trust in M-commerce (dependent variable) and a set of factors such as familiarity with M-commerce, structural assurance, calculation-based trust, compatibility, propensity to trust, perceived security (independent variables).

Normality test and multicollinearity test were first tested. A normality test was run in order to confirm the suitability of empirical data for statistical analysis. The normality assumption of data was assessed by Skewness and Kurtosis values. [49] advocated the use of Skewness and Kurtosis values as this analyses provide more accurate measurement of normality. The Skewness and Kurtosis values between ± 2 are usually acceptable [44] which means that the Skewness and Kurtosis value and critical ratio should be less than or equal to -2 and not more than or equal to 2. The result revealed that the highest Skewness and Kurtosis for each items in the variables are below or equal to ± 2. Therefore, the data is declared as normally distributed.

Table 7: Skewness and Kurtosis Result for Trust Perceived

Descriptive Statistics		
Variable(s)	Skewness	Kurtosis
Trust Perceived	-0.071	-0.934

The result of normality data as presented in Table 7 proved that normality distribution for dependent variables; Trust Perceived is acceptable.

The second assumption is multicollinearity which, according to [49], is the degree to which other variables can explicate a variable in the analysis. [140] stated that the appearance of

multicollinearity occurs when a high degree of correlation is found between the variables. The challenge in clarifying the impact of any single variable owing to their relationship is explained by multicollinearity. There are several ways to measure collinerity existing between the independent variables and they include, Pearson correlations, Tolerance Value and Variance Inflation Factors (VIF). For the examination of the multicollinerity among the study variables, Pearson correlations, VIF and tolerance tests were conducted. Based on the previous research conducted by [50], the researcher stated that the multicollinearity appears when the variables occurring separately actually measure the same thing. The collinearity can be detected by correlation of variable used, tolerance and variance inflation factors (VIF) test. This research follows [112], multi-collinearity explanation that its appearance occurs when the dependent variable is highly correlated with others variables that have coefficient above 0.90. The correlation analysis of the variables exposed to Pearson Correlation analysis indicated that all significant relationships were less than 0.90 indicating no multicollinearity problem. With that, the researcher took support from VIF and Tolerance values to confirm absence of multicollinearity as referred to table 8.

Table 8: Tolerance and VIF result

Independent Variable	Dependent Variable	Collinearity Statistics	
		Tolerance	VIF
Familiarity with M-commerce -->	Trust in M-commerce	0.336	2.974
Calculative-based trust -->	Trust in M-commerce	0.978	1.023
Structural assurance -->	Trust in M-commerce	0.550	1.817
Compatibility with M-commerce -->	Trust in M-commerce	0.266	3.764
Propensity to trust -->	Trust in M-commerce	0.269	3.714
Security Perceived -->	Trust in M-commerce	0.383	2.612

The result in table 8 shows that the values of tolerance ranged from 0.266 to 0.978 and the VIF values ranged from 1.023 to 3.764. Tolerance result for each independent variable was below 1.0 and VIF value was below the threshold point which is 10 [112]. The multicollinearity test above indicates that all the variables in this research were correlated and no multicollinearity problem appeared.

In this study, there are six major hypotheses which cover; the direct effect of familiarity with M-commerce on perceived trust, the direct effect of calculative-based trust towards trust, the direct effect of structural assurance on trust, the direct effect of compatibility with M-commerce on trust, the direct effect of propensity to trust on trust and direct effect of perceived security on trust. To examine the direct effects, multiple regression analysis is used and based on t-values (critical ratio). In Table 9 the results of the hypotheses that were being tested are presented. Four hypotheses were accepted (H1, H4, H5, H6) and two hypotheses were rejected (H2, H3).

Table 9: Regression Analysis Results

Relationship	Beta	t-test	p-value (Sig.)	Accept/ Reject
Familiarity with M-commerce- trust	0.099	3.113	0.002	Accepted
Structural assurance- trust	0.021	0.842	0.400	Rejected
Calculation-based cognition- trust	-0.004	-0.304	0.763	Rejected
Compatibility- trust	0.675	18.171	0.000	Accepted
Propensities to trust- trust	0.150	3.901	0.000	Accepted
perceived Security - trust	0.091	2.684	0.008	Accepted

Level of significance of the t-value: *p = 0.05; **p =.001

6. DISCUSSION

The purpose of this study is to identify the major factors influencing trust in M-commerce acceptance by SMTEs in developing countries. As mentioned earlier, Familiarity with M-commerce, compatibility, Propensities to trust and perceived security were found to be significant. We discuss the results in this section with implications for practitioners with respect to what can be done to improve SMTEs perceptions to accept M-commerce.

I. FAMILIARITY WITH M-COMMERCE

Familiarity was one of those factors where we hypothesized the existence of a relationship of familiarity towards the user trust in M-commerce application in our model. This study focused on Jordan, as an example of developing country, to address the impact of familiarity towards the user trust in M-commerce in SMTEs. On the basis of the results (table 9), the hypothesis concerning this variable is accepted as t-test is 3.113 and p-value less than 0.05. Hypothesis was accepted and indicated that an increase of 1% in familiarity with M-commerce will result in a 9.9% increase in trust of SMTEs to use M-commerce.

The result was consistent with the results of other previous research. For example, [36] showed that user's familiarity positively contributes to the establishment of a communication IS by the end user. The research focused on the importance of trust in information systems adoption. Similarly, another researcher by [154] revealed that perceived familiarity is significant antecedent to online consumer trust. Moreover, with the use of statistical analysis, [160] revealed that the familiarity of consumers positively impacts consumer's trust in mobile commerce applications.

II. STRUCTURAL ASSURANCE

In this research, we hypothesized the existence of a relationship of structural assurance towards the user trust in M-commerce application in SMTEs of developing countries. This study focused on Jordan, as an example of developing country, to address the impact of structural assurance towards the user trust in M-commerce application in SMTEs. This relationship was not accepted in our model. The result of this research, Table 9 in section 5.1 presents the t-statistics of 0.842 with p-value of 0.400. This p-value of over 0.05 indicates no significant influences of structural assurance upon trust in M-commerce.

This result is confirmed by some prior research. For instance, [147] revealed that the linkage between structural assurance and trust is not significant in purchase tasks and future purchase tasks. In a similar research, structural assurance that is vendor-specific was revealed to be insignificant for trust in the context of new customers. A possible justification is that new customers often overlook the structural assurance of the vendor if they are not serious buyers [72]. In addition,[55], they hypothesized that structural assurance promises that the web transaction can be carried out in an environment that is secure and safe and provide consumer protection against losses or privacy exposure by creating protective and technological structures. Superior degrees of structural guarantee may ensure consumers in conquering their doubts of online shopping and maximize their level of trust in the website. [55] revealed insignificant association between structural assurance and trust. In this study, the link from institution-based trust (structural assurance) to trust in M-commerce was not significant. This is an unexpected result as the respondents had considerable experience when it comes to the Internet. This may be explained by the fact that such experience was obtained via simple-information-based and shopping sites, as opposed to advice-providing sites used in this study. Hence, the respondents may feel that the structural assurance context, upon which they built their experience, is dissimilar to the study's structural assurance context. The same argument was proposed by [98]. This result implies that in the context of M-commerce, structural assurance may be significant to trust, but the structural assurance context requires defining in specific terms to differentiate it from the general beliefs concerning mobile internet, specifically as mobile internet is increasingly being used for more particular application. The researcher calls for further research in this field.

III. CALCULATION-BASED TRUST

This relationship was not accepted in the tourism M-commerce model. The results of this research in table 9, indicated regression analysis between calculation-based trust and consumers trust to use M-commerce application. Based on the researcher, t-test obtained was low with p-value of 0.763. As p-value is not less than 0.05, the relationship is rejected and the researcher concludes that the calculation based cognition does not influence trust in using M-commerce in SMTEs. The present study examines this relationship in the context of SMTEs to address the impact of structural assurance upon trust in M-commerce.

This result conforms to the findings of some previous researches. For instance, in [20] study, the researchers hypothesized that calculation will positively affect trust in mobile commerce and Internet commerce applications. The results found that although the relationship between calculation and trust was supported in internet commerce application, it was not supported in the context of mobile commerce application. In another research, the positive association between calculative-based trust and trust in B2C E-commerce payment application was also rejected (i.e. [53]).

A possible explanation may be taken from the relationship length between managers and salespeople. According to [80, 14], opportunism/calculative trust has a tendency to be significant in the early parts of the relationships. In the context of Jordan, several companies have been supporting the use of E-commerce for over a year now. Such companies are attempting to develop their strategies by employing E-commerce through mobile. Specifically, [5] revealed a significant relationship between E-commerce adoption and business strategy at the Jordan's mobile telecommunication firms. E-commerce application adoption by SMEs including tourism is gradually increasing. In this regard, the Arab Advisors Group report showed a satisfactory adoption level of E-commerce applications by Jordanian enterprises. In the present study, majority of the respondents/staff employed in SMTEs in Jordan (99.7%) employed E-commerce by purchasing or paying services/products online. The findings indicate that there may be a significant relationship between Jordanian SMTEs and e-vendors. This contributed to the interpretation of the result of hypothesis.

IV. COMPATIBILITY

Unlike structural insurance and calculative-based trust, there is positive relationship between compatibility and users trust in M-commerce acceptance of developing countries. This study focused on Jordan, as an example of developing country, to address the impact of compatibility towards the user trust in M-commerce application in SMTEs. The results (table 9) support the relationship as t-test came out to be 18.171 with p-value of less than 0.05 indicating that 1% increase in compatibility results in an increase of 67.5% in trust of SMTEs to use M-commerce application. Compatibility was also shown to be positively related to trust in using M-commerce among SMTEs by the regression analysis results.

This result is supported from previous researches results, with strong positive tendency to M-commerce may easily trust M-commerce and make use of it [22] which indicates that high levels of technology compatibility have a high potential of leading the enterprise in obtaining a higher understanding of technology which in turn, improves its trust in technology and encourages acceptance of it. In a similar study, [61] investigated the factors influencing perceived compatibility on shaping initial trust in the adoption intention of mobile service. The authors revealed that initial trust is primarily affected by compatibility.

V. PROPENSITY TO TRUST

This research examined this relationship in a developing country. This study focused on Jordan, as an example of developing country, to address the impact of propensity to trust towards the user trust in M-commerce in SMTEs. Based on result presented in table 9, t-statistics of this factor is 3.901 with p-value of 0.000 and as the latter is less than 0.05, the results indicate that the relationship is accepted and it is concluded that propensity to turst significantly and positively influences trust to use M-commerce in SMTEs. In other words, an increae of 1% in propensity to trust will result in an increase of 15% in the behavior of SMTEs to use M-commerce application.

However, this result is expected as previous studies results are consistent with it; for instance, [61] study brought forward a model of initial customer's trust in mobile service which considered the impact of certain antecedent variables upon developing customer's initial trust and intention to employ mobile service. Among these variables is propensity to trust and the proposed model was tested through survey data gathered. A structural equation modeling method was used for data analysis and the results supported the postulation that propensity to trust impacts predicting consumer's initial trust and intention to use mobile service. Similarly, [41] argued the effect of propensity to trust upon customer' general trust in E-commerce and intention to use E-commerce. The results revealed a positive relation between propensity to trust and consumer's trust in E-commerce application and it supported the full potentials of doing business online.

VI. PERCEIVED SECURITY

This research demonstrated the relationship of perceived security towards users trust in the

acceptance of M-commerce application in SMTEs of developing countries, particularly Jordan, as an example of developing country, to address the impact of perceived security towards the user trust in M-commerce application in SMTEs. Table 9 displays the results of the regression analysis of perceived security towards trust to use M-commerce application in the context of SMTEs. The result shows t-test to be 2.684 with p-value of 0.008 and since the latter is less than 0.05, the relationship is accepted. There is therefore a positive association between perceived security upon trust to use M-commerce in SMTEs. An increase of 1% in perceived security will result in an increase of 9.1% on trust to use M-commerce in SMTEs.

[33] examined the impact of individual characteristics upon the decision of the consumer to purchase online and the factors predicting trust in online shopping. The results revealed that perceived security is a crucial predictor of consumer trust in Internet shopping. Similarly, [68] showed that Internet consumer's trust in significantly predicts impacts on purchasing decisions and indicated that several factors affecting Internet consumer's trust in E-commerce application includes perceived security. In addition, a positive and significant association was found between consumer's trust and security. In mobile payment, perceived security also significantly impacts initial trust which is a determinant of usage intention [163].

7. IMPLICATIONS FOR PRACTITIONERS

The implications for the practitioners can be distinguished as counsel to Small and Medium-sized Tourism Enterprises (SMTEs) in developing countries involved with exploring the M-commerce application idea targeted toward their enterprises performance and services provided to potential customers. The study's practical implications include the understanding of customer's need. This understanding enables SMTEs to offer this application for the strategizing and reengineering their business processes in order to satisfy customer need. Moreover, novel policies and procedures that may help customers in using the application in an effective manner may be established. The most important implication for the mobile service is the requirement to acknowledge that technology acceptance should be managed with the aim to create a useful service and to develop superior relationships with customers. The core essence of consumer's relationship is to obtain invaluable and

efficient service. Therefore, customer's trust and its antecedents are critical elements of this relationship that adds to its value. The providers should include trust-building mechanisms. Therefore, the implications are based on the empirical data, analysis and discussions conducted during this study.

8. LIMITATIONS FOR FUTURE RESEARCH

In an effort to promote a strong basis for future reference, it should be highlighted that this study has various limitations. The first one lies in the research methodology. The study sample was chosen from a limited number of SMTEs which may be insufficient as representatives of all Jordanian SMTEs. Therefore, future research should be cautious when generalizing the study findings to the country as a whole. Additionally, the sample study consisted of 361 respondents reflecting a 95.7% response rate which is a good rate for survey studies and the findings match with those of studies that involve higher number of samples. This indicates that the findings are not influenced by the sample size but it is better for future research to include a larger sample size and other SMTEs to increase the probability for generalization. The replication of the present study may help in examining the outcome of better results that predict factors affecting user's trust in the acceptance of M-commerce in SMTEs in the context of developing countries.

The second limitation lies in the study scope which is confined to SMTEs of developing countries, particularly Jordan. The survey was distributed among staff in Jordanian SMTEs and thus, future studies could extend the study and examine SMTEs in other developing nations as well. The third limitation is that the present research was carried out to examine the effect of antecedents of trust namely familiarity, structural assurance, calculative-based trust, compatibility, propensity to trust and perceived security, upon consumer's trust in accepting M-commerce application in developing nations on the basis of prior studies. Other variables not included in the study, may however impact the same. Therefore, the impact of these factors should be examined on their effect of user's trust in M-commerce application acceptance in different domains.

9. CONCLUSION

The purpose of this study is to investigate factors affecting users trust to accept M-commerce in the SMTEs in developing countries. This study also contributes to and extends our understanding of the mobile Internet as a medium for commercial use in the tourism arena, and identifies the rationales for accepting or rejecting the mobile Internet based M-commerce by the SMTEs. Viewed from a managerial perspective, the study findings offer support for decision-making regarding investments and development of mobile internet services that takes the needs of the enterprises under consideration. The present research was conducted through an empirical research to develop trust model in SMTEs. The multiple regression analysis shows that as familiarity with M-commerce, compatibility, propensity to trust, perceived security are significant elements influencing users trust in M-commerce acceptance.

REFERENCES:

[1] F. a.-A. Aghdaie, S. Fathi, A. Piraman, "Factors affecting the attitude of trust in Internet purchasing from the perspective of consumer," Interdisciplinary journal of contemporary research in business (IJCRB), vol. 3, 2011

[2] I. Ahmed, A. Shahzad, M. Umar, BA Khilji, "Information Technology and SMEs in Pakistan," International Business Research, Vol. 3, No. 4, p. 237, 2010.

[3] I. Akour, K. Alshare, D. Miller, M. Dwairi, "An exploratory analysis of culture, perceived ease of use, perceived usefulness, and internet acceptance: The case of Jordan," Journal of Internet Commerce, vol. 5, no. 3, pp.83-108, 2006.

[4] M. Al-Fawaeer, "Exploring the Relationship between E-Commerce Adoption and Business Strategy: An Applied Study on the Jordanian Telecommunication Companies," Journal of Management Research, vol. 6 no. 1, pp. 141-155, 2014.

[5] B. Al-louzi, "The effect of the demographic characteristics of tourists on tourism sector in Jordan", Merit Research Journal of Accounting, Auditing, Economics and Finance, vol. 1, no. 3, pp.33-42, 2013.

[6] S. Alqatan, D. Singh, K. Ahmad, "Study on success factors to enhance customer trust for mobile commerce in small and medium-sized tourism enterprises (SMTEs) - a conceptual model," Journal of Theoretical and Applied Information Technology," Vol. 46, No.2, 2013.

[7] AN. Al-Rfou, "Effectiveness the Laid-off Empowerment Program Case Study," Journal of Asian Business Strategy," vol. 3, no. 2, pp 33-38, 2013.

[8] H. Alsaghier, M. Ford, A. Nguyen, R. Hexel, "Conceptualising citizen's trust in e-government: Application of Q methodology," Electronic Journal of E-government, vol. 7, o. 4, pp. 295-310, 2009.

[9] M. Anandarajan and C. Simmers, "Personal web usage in the workplace: a guide to effective human resources management," Information Science Publishing. Doi. 10.4018/978-1-59904-895-6.

[10] C. Ayo, J. Adewoye, A.Oni, "Business-to-consumer e-commerce in Nigeria: Prospects and challenges African " Journal of Business Management, Vol. 5, no. 13, pp. 5109-5117, 4 July, 2011

[11] RL. Benedicktus and ML. Andrews, "Building trust with consensus information: The effects of valence and sequence direction," Journal of Interactive Advertising , vol. 6, no. 2, pp.15-25, 2006.

[12] C. Bianchi and L. Andrews L, "Risk, trust, and consumer online purchasing behaviour: a Chilean perspective," International Marketing Review, Vol. 29, no. 3, pp.253 – 275, 2012.

[13] TG. Brashear TG, JS. Boles, DN. Bellenger, CM. Brooks, "An empirical test of trust-building processes and outcomes in sales manager–salesperson relationships," Journal of the Academy of Marketing Science, vol. 31, no. 2, pp.189-200, 2003.

[14] LV. Casalo, C. Flavián, M. Guinalíu, "The role of security, privacy, usability and reputation in the development of online banking," Online Information Review, Vol. 31, no. 5, pp.583 – 603, 2007.

[15] J. Cazier, "The Role of Value Compatibility in Trust Production and E-Commerce," presented at Americas Conference on Information Systems (AMCIS), Tampa, FL, pp 3240-3246, 2003.

[16] P. Chanvarasuth "Adoption of E-Business by Thai SMEs," International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, vol. 4, no. 5, 2010.

[17] PY. Chau, PJ-H. Hu, BL. Lee, AK. Au, "Examining customers' trust in online vendors and their dropout decisions: An empirical study," Ninth Pacific Asia

Conference on Information Systems (PACIS 2005) — IT and Value Creation, vol. 6, no. 2, pp. 171-182, 2007.

[18] CM. Cheung and MK. Lee, "Trust in internet shopping: instrument development and validation through classical and modern approaches," Journal of Global Information Management (JGIM), p. 17, 2001.

[19] D-Y. Cho, HJ. Kwon, H-Y. Lee, "Analysis of trust in internet and mobile commerce adoption," Proceedings of the 40th Hawaii International Conference on System Sciences, IEEE, pp. 50-50, 2007.

[20] S. Chong and G. Pervan, "Factors Influencing the Extent of Deployment of Electronic Commerce for Small-and Medium Sized Enterprises," Journal of Electronic Commerce in Organizations (JECO), vol. 5, no. 1, pp. 1-29, 2007.

[21] S. Chu and L. Yao-bin, "Trust Transference in Mobile Banking: An Investigation of the Initial Trust," 2009 IITA International Conference on Services Science, IEEE, pp 204-208, 2009.

[22] S. Chu and L. Yao-bin, "Trust Transference in Mobile Banking: An Investigation of the Initial Trust," 2009 IITA International Conference on Services Science, IEEE, pp 204-208, 2009.

[23] AD. Cohen, "Strategies in Learning and Using a Second Language," 1998.

[24] B. Connolly, "On-Line Brand perception-Factors that influence and sustain trust, assisting consumer buying decisions," Manchester Metropolitan University, United Kingdom, 2011.

[25] CL. Corritore, B. Kracher, S. Wiedenbeck, "On-line trust: concepts, evolving themes, a model International Journal of Human-Computer Studies, vol. 58, no. 6, pp. 737-758, 2003.

[26] S. Cunningham, "Theoretical perspectives of corporate environmental disclosures in annual reports," Central Queensland university: Faculty of Business and Law, 2002.

[27] U. Cyril, GGGG. Eze, J. Ademu, SA. Tella, "Modelling User Trust and Mobile Payment Adoption: A Conceptual Framework," the International journal of Business Information Management Association, vol. 3, no. 29, pp. 224-231, 2008.

[28] M. Dachyar and Fatkhurrohman, "The Effect of Innovation Factors to Customer Loyalty by Structural Equation Model," University of Indonesia, Depok-16424 Indonesia, 2011.

[29] K. Davidson, EC. Roberts, AM. Wilson, E. Mitchell, "The role of prey nutritional status in governing protozoan nitrogen regeneration efficiency," Protist, vol. 156, no. 1, pp.45-62, 2005.

[30] R. Davis, L. Sajtos, AA. Chaudhri. "Do Consumers Trust Mobile Service Advertising?," Contemporary Management Research, vol. 7, no. 4, pp. 245-270, 2011.

[31] FS. Djahantighi and E. Fakar, "Factors Affecting Customer's Trends for Reservation Foreign Hotels via Internet in Iran," International Bulletin of Business Administration, no. 7, 2010.

[32] HR. Dolatabadi and H. Ebrahimi, "Factors influencing Iranian consumers' trust in Internet shopping," European Journal of Social Sciences, vol. 16, no. 2, p. 315, 2010.

[33] PM. Doney and JP. Cannon, "An examination of the nature of trust in buyer-seller relationships," Journal of Marketing, vol. 61, No. 2, pp. 35-51, 1997.

[34] J. Donner and MX. Escobari, (2010) "A review of evidence on mobile use by micro and small enterprises in developing countries," Journal of International Development, vol. 22, no. 5, pp. 641–658, 2010.

[35] Y. Du and J. Zhao, "An empirical study of end-user trust in a web information system," 2009 International Conference on Information Management, Innovation Management and Industrial Engineering, IEEE, pp. 561-564, 2009.

[36] UC. Ez, MATbMY. Ten, Y-S. Poon, "Mobile Commerce Usage in Malaysia," Paper presented at the International Conference on Social Science and Humanity, 2011.

[37] Al-Madi. Faisal and RA. Sarayrah, "The Impact of Electronic-Commerce on Gaining Competitiveness in the Jordanian Telecommunication Sector: A Field Study," European Journal of Economics, Finance and Administrative Sciences, no. 57, pp.6-18, 2013.

[38] C. Flavián and M. Guinalíu, "Consumer trust, perceived security and privacy policy: three basic elements of loyalty to a web site," Industrial Management & Data Systems, Vol. 106, no: 5, pp.601 – 620, 2006.

[39] F. Fukuyama, "Trust: The social virtues and the creation of prosperity,". Free Pr, 1996.

[40] Y. Gao and X. Wu, "A cognitive model of trust in e-commerce: evidence from a field study in China," The Journal of Applied Business Research, vol. 26, no. 1, 2010.

[41] D. Gefen (2000) "E-commerce: the role of familiarity and trust," the international journal of management science, vol. 28, no. 6, pp.725-737, 2000.

[42] D. Gefen, E. Karahanna, DW. Straub, "Trust and TAM in online shopping: An integrated model,". MIS Quarterly, vol. 27, no. 1, pp. 51-90, 2003.

[43] D. George and P. Mallery, "SPSS for Windows Step-by-Step: A Simple Guide and Reference,". 6th Edition, edn: Allyn & Bacon, 2005.

[44] S, Grabner-Kräuter and R. Faullant, "Consumer acceptance of internet banking: the influence of internet trust," International Journal of Bank Marketing, vol. 26, no. 7, pp.483 – 504, 2008.

[45] J-C. Gu, S-C. Lee, Y-H. Suh, "Determinants of behavioral intention to mobile banking," An International Journal of Expert Systems With Applications, vol. 36, no. 9, pp.11605-11616, 2009.

[46] Y. Guangming and M. Yuzhong, "A research on the model of factors influencing consumer trust in mobile business," 2009 International Conference on Information Management, Innovation Management and Industrial Engineering, pp 1-5, 2009.

[47] R. Gururajan, "A discussion on security risks in mobile commerce," e-Business Review, vol. 7. No. 2, pp. 9-39, 2006.

[48] JF. Hair, B. Black, B. Babin, RE. Anderson, RL. Tatham, "Multivariate Data Analysis," 6 edition edn, Prentice Hall, 2006.

[49] JF. Hair, AH. Money, P. Samouel, M. Page, "Research methods for business," John Wiley & Sons Chichester, England, 2007.

[50] WS. Hamed, HS. Hamza, IA. Saroit, "Towards a Unified Trust Model for M-commerce Systems," 2011 Eighth International Conference on Information Technology: New Generations, IEEE, pp. 992-997, 2011

[51] B. Hernández-Ortega, "The role of post-use trust in the acceptance of a technology: Drivers and consequences," Technovation, vol. 31, no. 10, pp. 523-538, 2011.

[52] KK. Ho and EWK. See-To, "An Exploratory Study on the Impact of Trust on Different E-Payment Gateways: Octopus Card Vs. Credit Card," Pacific Asia Conference on Information Systems (PACIS), p. 42, 2010.

[53] CJ. Hsu, "Dominant factors for online trust," International Conference on Cyberworlds 2008, IEEE, pp. 165-172, 2008.

[54] L-T. Huang, K-L. Yin, C-K. Farn, "Revisiting the Effectiveness of Institutional Antecedents in Building On-line Initial Trust from the Perspective of Signal Theory," Journal of Global Business Management, vol. 2, no. 2, pp.85-96, 2006.

[55] M. Hubbard and L. Haines, "A national programme of neonatal audit: report of a feasibility study," London: Health Care Commission and Royal College of Paediatrics and Child Health, 2004.

[56] R. Hussein, "The adoption of web based marketing in the travel and tourism industry: an empirical investigation in Egypt," University of Nottingham, 2010.

[57] F. Iddris, "Adoption of E-Commerce Solutions in Small and Medium-Sized Enterprises in Ghana," European Journal of Business and Management, vol. 4, no. 10, pp. 48-57. 2012.

[58] JEDCO, "SME Development in Jordan. Jordan Enterprise Development Corporation,", Amman, Jordan, 2011.

[59] DF. Jennings, K. Artz, LM. Gillin, C. Christodouloy,"Determinants of trust in global strategic alliances: AMRAD and the Australian biomedical industry," Competitiveness Review: An International Business Journal incorporating Journal of Global Competitiveness, vol. 10, no. 1, pp. 25-44, 2000.

[59] L. Jia-bao and L. Yao-bin, "The factors impact consumers' initial trust in mobile service: An empirical study in China," 2009 International Conference on Management Science & Engineering (16th), IEEE, pp. 1262-1268, 2009.

[60] J. Jiang, J. Xiang, H. Zhou, X. Zheng, T. Dong, "Trust Calculation Model Based on Social Network and Evidence Theory," 2011 International Joint Conference on Service Sciences, IEEE, pp. 173-177, 2011.

[61] J. Joubert and JP. Van Belle, "The importance of trust and risk in M-commerce: A South African perspective," Pacific Asia Conference on Information Systems, pp. 10-12, 2009.

[62] S. Kabanda and I. Brown, "Paper presented at the In Trish Alexander, Marita Turpin, JP van Deventer(eds)," Proceedings of 18th European Conference on Information Systems (ECIS) 2010, Pretoria, , 12. Pretoria: Unviersity of Pretoria, 7-9 June, 2010.

[63] M. Kapurubandara and R. Lawson, "Barriers to Adopting ICT and e-commerce with SMEs in developing countries: an Exploratory study in Sri Lanka," University of Western Sydney, Australia, 2006.

[64] S. Karanasios and S. Burgess, "Exploring the Internet use of small tourism Enterprises: Evidence from a Developing Country," the electronic Journal on Information systems in developing countries, vol. 27, no. 3, pp. 1-21, 2006.

[65] HT. Kee and MK. Sun, "Consumers Trust in Online Shopping: The Case of Singapore," Paper presented at the Proceedings of the Fifth International Conference on Electronic Business, Hong Kong, 5-9 December, 2005.

[66] DJ. Kim, DL. Ferrin, HR. Rao, "A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents," Decision Support System, vol. 44, no. 2, pp. 544-564, 2008.

[67] G. Kim, BS. Shin, HG. Lee, "Understanding dynamics between initial trust and usage intentions of mobile banking," Information System Journal, vol. 19, no. 3, pp. 283-311, 2009.

[68] A. Kincaid, E. Ramsey, P. Ibbotson, "Consumer behaviour in an e-commerce context - the case of online betting," Paper presented at the Academy of Marketing Conference 2012 - Marketing: Catching the Technology Wave, University of Ulster, Coleraine, UK, 2012.

[69] G. King, RO. Keohane, S. Verba, "Designing social inquiry: Scientific inference in qualitative research," Princeton University Press, 1994.

[70] J. Koh and Y. Xu, "Trust Building in Internet Vendors: Comparison of New and Repeat Customers," International Conference of The Information Resources Management Association (IRMA), New Orleans, Louisiana, USA, May 23-26, Igi Global, p. 115, 2004.

[71] M. Korzaan, N. Brooks, T. Greer, "Demystifying Personality and Privacy: An Empirical Investigation into Antecedents of Concerns for Information Privacy," Journal of Behavioral Studies in Business, vol. 1, pp. 1-17, 2009.

[72] M. Koufaris and W. Hampton-Sosa, (2004) "The development of initial trust in an online company by new customers," Information & Management, vol. 41, no. 3, pp. 377-397, 2004.

[73] RV. Krejcie and DW. Morgan, "Determining sample size for research activities," Educational And Psychological Measurement, p. 4, 1970.

[74] P. Kumaraguru, "PhishGuru: a system for educating users about semantic attacks," ProQuest, 2009.

[75] MK. Lee and E. Turban, "A trust model for consumer internet shopping," International Journal of Electronic Commerce, Vol. 6, No. 1, pp. 75-91, 2001.

[76] SYT. Lee and Z. Meng, "Calculative-Based Trust And Social Welfare,".European Conference on Information Systems (ECIS), Turku, Finland, 14-16 June, pp. 1007-1016, 2004.

[77] A. Leppänen, "Technology trust antecedents: Building the platform for technology-enabled performance," Department of Business Technology, Helsinki School Of Economics, Aalto Universit, 2010.

[78] RJ. Lewicki and BB. Bunker, "Trust in relationships: A model of development and decline," Jossey-Bass, 1995.

[79] YM. Li and YS. Yeh, "Increasing trust in mobile commerce through design aesthetics," Compute Human Behavior, vol. 26, no. 4, pp. 673-684, 2010.

[80] Z. Li and M. Li, "Research on influencing factors of consumer initial trust based on mobile commerce," 2008 International Symposium on Electronic Commerce and Security, IEEE, pp. 263-267, 2008.

[81] T. Lie, W. Fang, PA. Pavlou, "The triangular relationship among vendor, user and technology on trust in mobile commerce: A cross cultural comparison," Available from: w ww ntpu edu tw/ads/doc/paper 20, 2010.

[82] P. Limthongchai and MW, Speece, "The effect of perceived characteristics of innovation on e-commerce adoption by SMEs in Thailand," Proceedings of the Seventh International Conference on Global Business and Economic Development, Bangkok, Thailand, p. 13, 2003..

[83] J. Lin, Y. Lu, B. Wang, S. Wu, "Initial trust and adoption of mobile brokerage service," International Journal of Mobile Communication, vol. 9, no. 2, pp124-143, 2011.

[84] FYY. Ling and HBT. Tran, "Ingredients to engender trust in construction project teams in Vietnam," Construction Innovation, vol. 12, no. 1, pp. 43-61, 2012.

[85] Z. Liu, Q. Min, S. Ji, "An empirical study on mobile banking adoption: The role of trust," Second International Symposium on Electronic Commerce and Security, IEEE, pp. 7-13, 2009.

[86] PB. Lowry, T. Roberts, BE. Caine, "The effect of familiar logos on trust of websites designed for small user interfaces," 11th International Conference on Human-Computer Interaction (HCII 2005), Las Vegas, Nevada, July, Citeseer, pp. 22-27, 2005.

[87] N. Luhmann, "Trust and Power Chichester," United Kingdom, John Wiley and Sons, Inc, 1979.

[88] HK. Lui and R. Jamieson, "Integrating trust and risk perceptions in business-to-consumer electronic commerce with the technology acceptance model," International European Conference on Information Systems (ECIS 2003), Naples, 2003.

[89] N. Mansor and A. Amri Abidin, "The application of e-commerce among Malaysian small medium enterprises," European Journal of Scientific Research, vol. 14, no. 4, pp.:591-605, 2010.

[90] S. Mansumitrchai and HA N AL-Malkawi, "Factors Underlying the Adoption of Online Banking by Mexican Consumers," International Journal of Business and Management, vol. 6, no. 9, p.155, 2011.

[91] M. Mäntymäki, "Exploring Customers' Post-Adoption Perceptions: a Study on Trust, Commitment and Related Constructs in B2C Online Service Context," Pacific Asia Conference on Information Systems (PACIS), 216 Suzhou, China, 2008.

[92] CA. Martinez and C. Williams, "National institutions, entrepreneurship and global ICT adoption: a cross-country test of competing theories," Journal of Electron Commerce Review, vol. 11, no. 1, pp.73-91, 2010.

[93] YY, Maryeni, R. Govindaraju, B. Prihartono, I. Sudirman, "Technological and organizational factors influencing the e-commerce adoption by Indonesian SMEs," 2012 IEEE International Conference on Management of Innovation and Technology (ICMIT), IEEE, pp. 436-441, 2012.

[94] RC. Mayer, JH. Davis, FD. Schoorman, (1995) "An integrative model of organizational trust," the Academy of Management Review, pp. 709-734, 1995.

[95] DH. McKnight and NL. Chervany, "What trust means in e-commerce customer relationships: an interdisciplinary conceptual typology," International Journal of Electronic Commerce, pp. 6:35-60, 2002.

[96] DH. McKnight and NL. Chervany, "Conceptualizing trust: A typology and e-commerce customer relationships model,"

Proceedings of the 34th Annual Hawaii International Conference on System Sciences, IEEE, p. 10, 2001.

[97] DH. McKnight, V. Choudhury, C. Kacmar, "Trust in e-commerce vendors: a two-stage model," International Conference on Information Systems (ICIS), pp. 532-536, 2000.

[98] DH. McKnight, LL. Cummings, NL. Chervany, "Initial trust formation in new organizational relationships,".the Academy of Management Review, pp.473-490, 1998.

[99] DH. McKnight, CJ. Kacmar, V. Choudhury, "Shifting Factors and the Ineffectiveness of Third Party Assurance Seals: A Two-Stage Model of Initial Trust in a Web Business," Electronic Markets, vol. 14, no. 3, pp. 252-266, 2004.

[100] D. Meng, Q. Min, Y. Li, "Study on Trust in Mobile Commerce Adoption-A Conceptual Model," 2008 International Symposium on Electronic Commerce and Security, IEEE, pp. 246-249, 2008.

[101] Q. Min, S. Ji, G. Qu, "Mobile commerce user acceptance study in China: a revised UTAUT model," Tsinghua Science & Technology, vol. 13, no. 3, pp. 257-264, 2008.

[102] Q. Min, D. Meng, Q, Zhong, "An empirical study on trust in mobile commerce adoption," IEEE International Conference on Service Operations and Logistics, and Informatics, IEEE/SOLI 2008, IEEE, pp. 659-664, 2008.

[103] A. Mindila, D. Mccormick, A. Rodrigues, RW. Mwangi, "The Role of ICT in Creation and Sustenance of Trust in SME Clusters and Inter-organizational Systems," Strengthening the Role of ICT in Development, p.194, 2008.

[104] MOIT MoIat, "Hashemite Kingdom of Jordan," http://www.mit.gov.jo/tabid/476/Realities%20of%20Industrial%20Sector%20in%20Jordan.aspx, 2012.

[105] GC. Moore GC and I. Benbasat, "Development of an instrument to measure the perceptions of adopting an information technology innovation," Information System Research, vol. 2, no. 3, pp.192-222, 1991.

[106] SV. Motlaq, M. Kazemi, NM. Yaghoubi, (2011) "An Empirical Study of Customer's Online Trust toward E-ticket in Iran Airline Industries," International Journal of Basic & Applied Sciences, Vol. 9, No. 10, pp. 77-78.

[107] GB. Murphy and AA. Blessinger, "Perceptions of no-name recognition business to consumer e-commerce trustworthiness: the effectiveness of potential influence tactics," The Journal of High Technology Management Research, vol. 14, no. 1, pp. 71-92, 2003.

[108] B. Nooteboom, "Trust, opportunism and governance: A process and control model," Organization Studies, vol.17, no. 6, pp. 985-1010, 1996.

[109] JC. Nunnally, "Psychometric Theory," Second Edition edn. McGraw-Hill, New York, 1978.

[110] J. Pallant J, "SPSS Survival Manual," 2 Edition edn, The McGraw-Hill Companies, 2005.

[111] P. Pavlou, "Integrating trust in electronic commerce with the technology acceptance model: model development and validation," Americas Conference on Information Systems (AMCIS), pp. 816-882, 2001

[112] PA. Pavlou, "Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model," International Journal of Electronic Commerce, vol. 7, no. 3, pp.101-134, 2003.

[113] S-M, Pi, H-L. Liao, H-M. Chen, "Factors that affect consumers' trust and continuous adoption of online financial services," International Journal of Business Management, vol. 7, no. 9, p108, 2012.

[114] WS. Pittsburg, "Examining mediators of structural assurance constructs in business-to-consumer E-commerce," Issues Informational System, no. 2, 2009.

[115] K. Rabayah and K. Qalalwi, (2011) "The Impact of Mobile Telephony on Developing Countries Enterprises: A Palestinian Case Study," Electronic Journal of information system developing countries, vol. 46, no. 0, 2011.

[116] SV. Ramani, "After the Green Revolution, Bt Cotton in India: Blessing or Regulatory Headache?," Ecole Polytechnique, F-91128 Palaiseau Cedex, France, Working Paper, 2008.

[117] M. Rashid and N. Al-Qirim, "E-commerce technology adoption framework by New Zealand small to medium size enterprises," Research Letters in the Information and Mathematical Sciences, vol. 2, no. 1, pp. 63-70, 2001.

[118] EM. Rogers, "Diffusion of innovations," Simon and Schuster, 1995.

[119] I. Roudsar and J. Malaysia, "Application of AHP and K-Means Clustering for Ranking and Classifying Customer Trust in M-commerce," Australian Journal of Basic & Applied Sciences, vol. 5, no. 12, pp. 1441-1457, 2011.

[120] K. Rouibah, "Trust Factors Influencing Intention to Adopt Online Payment in Kuwait," International Proceedings of the Southern Association for Information Systems Conference, pp. 23-24, 2012

[121] DM. Rousseau, SB. Sitkin, RS. Burt, C. Camerer, "Not so different after all: A cross-discipline view of trust," the Academy of Management Review, vol. 23, no. 3, pp. 393-404, 1998.

[122] A. Sarkar, (2009) "E-Commerce Adoption and Implementation in Automobile Industry: A Case Study," International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, Vol. 3, No. 10, 2009.

[123] M. Sarkar, B. Butler, C. Steinfield, "Cybermediaries in electronic marketspace: toward theory building," Journal of Business Research, vol. 41, no. 3, pp. 215-221, 1998.

[124] U. Sekaran, "Research methods for business: a skill-building approach," Wiley, 2000.

[125] W. Sha, "Examining Mediators of Structural Assurance Constructs in Business-To-Consumer E-Commerce," Americas Conference on Information Systems, p. 484, 2004.

[126] MS. Shahibi and APDZ. AB, "Security Factor and Trust in E-Commerce Transactions," Australian Journal of Basic & Applied Sciences, vol. 5, no. 12, pp. 2028-2033, 2011.

[127] MA. Sheikh, "Conversion Rate Problem of SMEs in Internet Marketing-a Developing Country Perspective," Blekinge Institute of Technology, Sweden, 2009.

[128] K. Siau and Z. Shen, "Building customer trust in mobile commerce," the Association for Computing Machinery (ACM, vol. 46, no. 4, pp. 91-94, 2003.

[129] JK. Sinclaire, JC. Simon, RB, Wilkes, "A Prediction Model for Initial Trust Formation in Electronic Commerce," international business research, vol. 3, no. 4, p. 17, 2010.

[130] F. Six, "Trust in responsive regulation theory: a critical appraisal from a trust perspective," ECPR Standing Group on Regulation & Governance Exeter, 2012.

[131] J. Sreenivasan and MNM. Noor, "A conceptual framework on mobile commerce acceptance and usage among Malaysian consumers: the influence of location, privacy, trust and purchasing power," WSEAS Transactions on Information Science and Applications, vol. 7, no. 5, pp. 661-670, 2010.

[132] C. Standing, P. Mcmanus, S. Standing, H. Karjaluoto, "Values and M-Services Adoption," Proceedings of the 17th Australiasian Conference on Information Systems, 2006.

[133] DW. Stewart, P. Pavlou, S. Ward, "Media influences on marketing communications," Media effects: Advances in theory and research, pp. 353-396, 2002.

[134] MJ. Stifel, "Acceptance of Digital Signatures: A Matter of Trust," 21st Computer Science Seminar Conference, 2005.

[135] AA. Sukkar and H. Hasan, "Toward a model for the acceptance of internet banking in developing countries," Information Technology for Development, vol. 11, no. 4, pp. 381-398, 2005.

[136] T. Sun and G. Wu, "Trait Predictors of Online Impulsive Buying Tendency: A Hierarchical Approach," The Journal of Marketing Theory and Practice, vol. 19, no. 3, pp. 337-346, 2011.

[137] AO. Sykes, (2000) "An Introduction to Regression Analysis. in Chicago Lectures in Law and Economics," Foundation Press, New York, 2000.

[138] BG. Tabachnick and LS. Fidell, "Using Multivariate Statistics," 5th edition edn, Pearson Education, 2007.

[139] L. Tan and L. Wu, "An Empirical Study on Factors Affecting Customer Intention in Mobile Commerce Contexts," 2010 Second International Conference on Multimedia and Information Technology (MMIT), IEEE, pp. 310-313, 2010

[140] M. Tan and TS. Teo, "Factors influencing the adoption of Internet banking," World Journal of Science, Technology and Sustainable Development, vol. 1, no. 1, p. 5, 2000.

[141] AS. Thompson, "Terrorism's Effect On Tourism: Developed Vs. Developing Countries," Auburn University Auburn, Alabama, 2008.

[142] E. Torres Moraga, AZ. Vásquez Parraga, C. Barra, "Antecedents of donor trust in an emerging charity sector: the role of reputation, familiarity, opportunism and communication," journal of Transylvanian Review of Administrative Sciences, no. 29, pp. 159-177, 2010.

[143] H. Tran and J. Wei, "Impact of privacy and security on users' trust in ubiquitous commerce," 2011 International Conference on Business Management and Electronic Information (BMEI), IEEE, pp. 7-10, 2011

[144] W. Trochim, "The Research Methods Knowledge Base," Cengage Learning, 2006.

[145] UKEssays, "Study On Structural Equation Modeling Psychology," http://www.ukessays.com/essays/psychology/study-on-structural-equation-modeling-psychology-essay.php, 2012.

[146] AO. Vance, "Trusting IT Artifacts: How Trust Affects our Use of Technology," Department of Computer Information Systems, Computer Information Systems Dissertations, p. 200, 2009.

[147] R. Walczuch and H. Lundgren, "Psychological antecedents of institution-based consumer trust in e-retailing," Information Management, vol. 42, no. 1, pp. 159-177, 2004.

[148] CC. Wang, CA. Chen, HC. Jiang, "The impact of knowledge and trust on e-consumers' online shopping activities: an empirical study," International Journal of Computer, vol. 4, no. 1, pp. 11-18, 2009.

[149] H. Xin, AA. Techatassanasoontorn, FB. Tan, "Exploring the influence of trust on mobile payment adoption," *PACIS 2013 Proceeding*, p.143, 2013

[150] X. Yang, Y. Zhu, L. Yu, "A study on the model of trust system in B2C m-Commerce," 2011 International Conference on E-Business and E-Government (ICEE), IEEE, pp. 1-4, 2011

[151] G. Yao and Q. Li, "Exploring the Effects of Interactivity on Consumer Trust in E-Retailing," 4th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM'08, IEEE, pp. 1-5, 2008.

[152] G. Yao and Q. Li, "The Impact of Familiarity and Reputation on Consumer Trust in E-Commerce," 4th International Conference on Wireless Communications, Networking and Mobile Computing, WiCOM'08, IEEE, pp. 1-5, 2008.

[153] SG. Yaseen and S. Zayed, (2010) "Exploring Critical Determinants in Deploying Mobile Commerce Technology," American Journal of Applied Sciences, vol. 7, no. 1, pp. 120-126, 2010.

[154] HS. Yoon, "Focusing on consumer-to-consumer trust in electronic commerce with age and gender factors, University of Missouri, Columbia, 2009.

[155] SY. Yousafzai, JG. Pallister, GR. Foxall, "A proposed model of e-trust for electronic banking," Technovation, vol. 23, no. 11, pp. 847-860, 2003.

[156] ANH. Zaied, "Barriers to E-Commerce Adoption in Egyptian SMEs," International Journal of Information Engineering and Electronic Business, vol. 4, no. 3, p. 9, 2012.

[157] T. Zarmpou, V. Saprikis, M. Vlachopoulou, G. Singh, "Investigating the Influential Factors towards Mobile Services Adoption in Greece," 2010.

[158] H. Zhang, "Research on Factors Affecting Mobile Commerce Consumer Trust," China, 2012.

[159] H. Zhang, Y. Wang, X. Zhang, "Transaction Similarity-Based Contextual Trust Evaluation in E-Commerce and E-Service Environments," 2011 IEEE International Conference on Web Services (ICWS), IEEE, pp. 500-507, 2011

[160] X. Zhang and Q. Zhang, "Online trust forming mechanism: approaches and an integrated model," Proceedings of the 7th international conference on Electronic commerce, ACM, pp. 201-209, 2005.

[161] T. Zhou, "Examining mobile banking user adoption from the perspectives of trust and flow experience," International Journal of Information Technology Managemenet, pp.1-11, 2011.

[162] T. Zhou, "The effect of initial trust on user adoption of mobile payment," Information Development, vol. 27, no. 4, pp. 290-300, 2011.

[163] T. Zhou, "The Impact of Perceived Value on User Acceptance of Mobile Commerce," 2008 International Symposium on Electronic Commerce and Security, IEEE, pp. 237-240, 2008.

[164] D-S, Zhu, GS. O'Neal, Z-C. Lee, Y-H. Chen, "The Effect of Trust and Perceived Risk on Consumers' Online Purchase Intention," International Conference on Computational Science and Engineering, CSE'09, IEEE, pp. 771-776, 2009.