Factors Affecting Customer’s Initial Trust in Electronic Banking Services in Jordan

Tamara Adel Al-maaitah, Lu’ay Al-Mu’ani, Tha’er Majali, Dirar Abdelaziz Al-Maaitah

Abstract
In marketing literature, trust has been deemed to be a significant variable in the context of two entities. On a similar line of statement, IS studies view the trust of customers in E-services to be a crucial element in the services acceptance. Specifically, E-banking or internet banking services, in the case of Jordan, highlights the need for bank patrons to avail from such services, and in this context, this study investigated the early stage of trust. The study primarily aims to determine and define the categories of factors that affect initial trust in E-banking in Jordan. Accordingly, the study made use of a systematic qualitative review of literature and quantitative approach.

Keywords:
Initial trust, E-banking services, Intention to Use, Jordan

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Introduction
E-banking is referred to as electronically facilitated service of the bank with a delivery alternative, which has been conducted in different contexts in the market (Salloum, 2017). It is the use of retail and wholesale banking through the web, involving individual and corporate clients (Abuhashesh & Khasawneh, 2019). In some studies, E-banking has been defined as internet banking or online banking that stems from PC banking. In internet banking, the internet is used as a channel to deliver services through the web to enable banking activities such as funds transfer, bills payment, checking and viewing savings account balances, mortgages payment, and financial instruments purchasing as well as depositing certificates (Dao & Thanh, 2020). In other words, E-banking can be described as an E-service delivery allowing the customers of banks to access their accounts to avail of the 24/7 services throughout the year.

According to (Alalwan, 2020), mitigating the costs of operations in banks can enhance their overall income when it comes to their E-banking operations, while (Alalwan et al., 2017) contended that banks launched internet banking to patrons in the hopes of leveraging new customers and sustaining them. Furthermore, internet banking in the current times is deemed to be a sophisticated channel that delivers commercial banking services, used as a strategic tool among the banks to obtain new customers and retain current ones. Moreover, internet banking is adopted by banks to enhance their business positions in view of innovation (Aldaihani, 2018) through such a strategy; it becomes easier for banks to launch their products/services via which new customers are attracted. In relation to this, banking products innovation can be easily mimicked by rivals and thus, sustaining competitive or leading advantage is quite difficult (AlDmour et al., 2020). Majority of the corporate entities and consumers in some developing nations have no trust or have no access towards the required infrastructure (ICT) to be able to conduct payments online as (Al-dweeri et al., 2020) mentioned in his study.

In the same line of study, E-service quality (E-SQ) is described as the overall evaluation and perception of the consumers about the e-service offering in terms of its excellence and quality (Alalwan et al., 2020). It is the level to which a website is able to facilitate shopping, purchasing, and delivery of products services in an efficient and effective manner, while other studies generally regarded it as functionality and service quality (Alhakimi & Esmail, 2020). Added to the above, (Al-Khayyal et al., 2020) stated that consumer innovation types influence the perception of e-banking operations adoption, whereas (Almaiah & Nasereddin, 2020) indicated that measuring service quality in E-banking services is a crucial area to be examined by researcher and management circles. Moreover, based on Importance Performance Matrix Analysis (IPMA), innovativeness and perceived technology security are the top significant factors for user’s intention towards internet banking adoption (Al-
Sharafi et al., 2018) evidently, adoption of E-banking needs more research in terms of its relationship with innovation and E-SQ specifically in the case of consumer banking.

E-banking services was introduced in Jordan in 2000 (Awamleh et al., 2003) and in the current year (2020), there are 20 banks in Jordan offering E-banking services and based on the Ministry of Information and Communications Technology (2020) and the Telecommunications Regulatory Commission (2020) reports, 55.9% of Jordanians have internet connection and such diffusion is expected to enable considerable adoption and use E-services. However, such usage, particularly when it comes to E-banking services remain low, with the latest report from the Department of Statistics (2020) indicating that only 3.6% of Jordanians avail of the banking services offered online. Therefore, the present study examines and identifies the factors that influence E-banking users’ trust in Jordan.

Trust, based on a study by Alsmadi et al. (2019) is a must in online transactions and this premise was supported by several recent studies, highlighting the role of trust as a determinant of online transactions (e.g., Allobish et al., 2018; Anouze&Alamro, 2019; Baabdullah et al., 2019; Echchabi et al., 2019; Gharibeh et al., 2019). In other words, trust has a key role in boosting usage of E-banking among bank customers. Initial trust marks the initial step of trust and as such, the focus of this study is on trust and the factors influencing the variable.

Logically speaking, initial trust is different from developing to developed nations, with most of the studies of initial trust dedicated in the latter context (Anouze&Alamro, 2019). Such studies were conducted by 10 studies in the U.S. context, 4 in the Chinese context, 2 in the UK, 1 in Australia, 1 in Korea and 1 in Taiwan. Only four studies were found in literature to be conducted in the developing nations of Malaysia (2), Indonesia (1) and Saudi Arabia (1). This underlines the lack of studies done in the developing nations, and the requirement for further in-depth studies in the topic.

In the present study, the research question is, what are the factors influencing customer’s initial trust on E-banking services in Jordan? and this question is answered by conducting a critical review of extant studies on factors that influence initial trust of customers after which, future studies can extend the study by examining customer’s initial trust of E-banking services in the case of Jordan. Accordingly, the rest of the study is organized as follows; the next section contains the path taken to conduct the research, after which, the theoretical background of E-banking services and trust is discussed. The researcher then places the factors into categories following studies dedicated to initial trust in literature.

1. Research Method.

Theoretical Background. An introduction to Jordan is warranted in light of the chosen context of the study. Jordan can be described as a country occupying a strategic location surrounded by Iraq, Syria, Palestine, Egypt and Saudi Arabia, with a population of 6,675,000, and it is blessed with limited natural resources. The government of Jordan exerts continuous efforts to furnish entertainment for the population using regional cooperation, with foreign resources fulfilling majority of the country’s needs, particularly, energy. The International Monetary Bank classified Jordan as a middle-income country, with GDP per capital at $5749.

Jordan is a country that is deemed to be a pioneer in technology and communications, and its ICT sector has been hailed as the top contributing sector to the economy, with 50% per annum of contributions (Dos, 2019). The ratio of using computers for 5 years constituted 50.2% of the total number of the country’s population. Technology was introduced early to the Jordanian markets to support public and private sectors with modern technologies and e-services. By the middle of the 1990s, the government of Jordan introduced the Internet into the market with limited number of users at a time, after which DSL was launched in 2001 with 4000 users. From the years spanning 2006 until 2019, greater changes was experienced in terms of the internet at the market, companies and technology level and the turnout of users to changing their needs by fulfilling them through technology usage. Several new wireless technologies were introduced into the market extending the use base through Y Max and 3rd generation service, which was the largest contributor to the number of users, while providing internet services through mobile hand phones (MOICT, 2020).

Around the same time, the number of Jordanian internet users, particularly home users increased from 206,000 (2006) to 105 million (2019), with most using 3rd generation service. In 2017, the internet users in Jordan reached 5,700,000 (Internet World States, 2018). Based on obtained statistics, smart phones were used extensively for internet in addition to the use of PCs, laptops and tablets. The usage of phones exceeded 60% of the number of people using cell phones for general services (MOICT, 2020). In the current times, internet services in the local market is offered through several wired and wireless technologies by relevant providers,
making the market competitive and increasing the demand for the service among Jordanians, making it one of the fundamental daily requirements for work and social communication.

The inception of the Ministry of Communication in the country in 2002 marked the IT and communication sector’s establishments and in the past five years, remarkable changes have been wrought by the government in terms of developing and modernizing the means of communication among distinct authorities and such developments have paved the way for several opportunities towards creating competitive public and private sector fields via government strategy in a span of a decade (2007-19). The strategy was used to realize to primary objectives, the first of which is to set up ICT sector to provide and facilitate an environment paved with growth opportunities in various fields and sectors. The second objective is to provide a definition of the government’s role in the development and modernization of fundamental programs working towards the creation of a communicative environment in Jordan (MOICT, 2020) based on the strategic application. The government of Jordan underwent procedures that boost the e-commerce transactions via cooperation among governmental entities including the Ministry of Public Works, Ministry of Justice, Ministry of Finance and the Central Bank. The primary aim is to develop an infrastructure and set up a legal legislative framework that protects e-commerce transactions and procedures in all fields (MOICT, 2020).

ICT development all over the globe has led to the proliferation of mobile phone usage increase to 147% around the world and 75% of internet usage in 2017 alone. Statistical findings showed that Jordan is one of the leading nations when it comes to cellular phones usage, amounting to 60% of the total population. Additionally, the amount of IT returns showed an increase from $2,000,000,000 (2000) to $637,940,326 (2019), while the foreign investments increased in volume from 1,384,181 (2001) to 4,175,000 (2019) according to the MOICT (2019) recent report. The ICT in Jordan holds high prominence as a sector and receives ample budget from the government, as it reduces the level of unemployment and paves the way for several other opportunities for investment. This enables the public and private sectors to obtain competitive advantages that bring about the technological development means to improve the services offered and provided to end users.

Moreover, Internet banking services (E-banking) in Jordan was introduced in 2000 and according to Awamleh et al. (2003) two banks namely Arab bank and Jordan Kuwait Bank began providing services online in the same year. By 2018, the Jordanian banks websites existed and offering E-banking services, specifically only three out of 16 Jordanian commercial banks, and two out of 9 foreign banks in the country did not offer E-banking. On the whole, 20 out of 25 banks offered E-banking services in Jordan.

Studies in MIS highlighted the lack of user’s trust as a preventing factor towards successful IS (e.g., Echchabi et al., 2019; Ghararbeh et al., 2018; Hamakhan, 2020; Ismail &Alawamleh, 2017). Also, trust prevents the adoption of other e-services like E-government (Jamous et al., 2019). In the present work, the initial stage of customer’s trust is focused on in E-banking services among Jordanian banks.

Initial Trust. Trust is a term that has been extensively used and examined in many science fields and in essence, it can be divided into initial trust and ongoing trust. Prior knowledge need and a period of time are the primary differences between the two trust types in that initial trust is developed on a temporary basis and does not depend on any prior knowledge (Jouda, 2020), unlike ongoing trust that develops over time and is based on prior experience and knowledge. The latter develops following the ignition of the former. The focus of this study is on the initial trust of customers and the factors affecting it. The study sample comprises of Jordanians who have no experience in E-banking and thus, this study defines initial trust as the level of the customer’s trust on the trustee, which is E-banking, without depending on prior knowledge or experience on its use.

Trust. Several definitions of trust have been proposed in literature from different disciplines, indicating that the trust concept is one of a complex nature. Nevertheless, a general definition that has been cited in many studies (e.g., Kaabachi et al, 2019; Kesharwani, 2020; Ketema, 2020), is the one brought forward by Khatoon (2020), which states that trust is the willingness of the party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustee, regardless of the latter’s ability to oversee or control the former. Based on this definition, something valuable can be at stake because of the relationship of trust, depending on the inclination of the trustee to be vulnerable to the trustee. In the adoption of mobile banking, conducting banking transactions through a mobile phone involves the customer’s trust in the banking medium. It is assumed that the mobile phone will function as expected (Malik, 2020).

Nature of Trust. Trust can take on various in different relationships as explained by (Masoud&AbuTaqa, 2017) Also; trust forms include calculus-based trust, relational trust and institutional trust (Nuyuyma, 2020). First, calculus-based trust stems from the individual based on rational choice and it arises when the actions undertaken
for the relationship benefits the trustor and trustee. On the other hand, relational trust stems from the repetitive interactions that support the trustor-trustee relationship by length, frequency, interaction depth and various challenges that the relationship successfully tackles. Finally, institutional-based trust stem from institutional factors that function as a support for the critical mass of trust sustaining risk-taking and trusting behavior. The development of the two former trusts can be made with ease through the institutional-based trust (Obaid, 2020).

**Literature Review.** This section is dedicated to reviewing literature concerning initial trust and highlighting the factors that influence it. Twenty-one studies were reviewed and categorized into four namely, trust-based category, information technology category, social category and diffusion of innovation theory category. There are a total of 8 sub-categories under which 26 dimensions are divided. This necessitated alignment between human and IT. Categories labeling were obtained from literature and may contain human error and mistakes which could lead to inconsistent results (Osman, 2020) and thus, two researchers were requested to check independently and concurrently the categories and the interconnections among them. Any required changes were made by the author to minimize potential omissions and errors.

**Trust-Based Factors.** This type of factors includes personality-based, cognition-based, institution-based, calculative-based and knowledge-based trust. In essence, the category was named based on the source, nature and effect of factors on the perception of customers. This sub-section explains the category in detail. To begin with, personality-based trust refers to the tendency of the individual to consider the positive attributes of other individuals (Rawwash, 2020) and is also referred to as trust propensity or trust disposition. Based on some studies, faith in humanity and trusting form the two dimensions represented by personality-based trust. Nevertheless, majority of studies show that personality-based trust has been extensively examined as a single construct devoid of dimensions. Moving on to cognition-based trust, it is a reflection of the way trust is developed from first impression as opposed to from a first-hand knowledge or prior interaction (Raza et al., 2019). Cognition-based trust comprises four dimensions, which are reputation, size, corporate image and willingness to customize. Meanwhile, institutional-based trust introduces two institutional predictors of initial trust namely situational normality (SN) and structural assurance (SA). Situational normality (SN) refers to the normality of a situation that convinces an individual that his order is in a success laden environment (Raza et al., 2020; Saravanan &Shenbagaraman, 2020). SA, on the other hand, promotes the presence of structures as guarantees, regulations, rules, policies, security, legal resources or other procedures that work towards enhancing success (Zalloum et al, 2019; Zhang et al., 2018).

Moving on to calculative-based trust, trust in this category stems from the analysis of a continuous relationship and is formed through rational assessments of the costs and benefits of the party to the relationship (Salem, 2019). This sub-category of trust is devoid of dimensions. Lastly, knowledge-based trust or familiarity originates from the gathered experience in dealing with the parties (Zhang et al., 2018), and in the context of this study, it is the experience of using E-banking services.

**Factors Affecting Initial Trust.** Many studies are of the consensus that initial trust in online environment is the milestone of a successful users-e-vendors relationship (Kaabachi et al, 2019; Kesharwani, 2020; Ketema, 2020). Initial trust refers to the trust level at the onset of a new relationship and prior to the development of the customers’ attitude towards the relationship, as defined by (Masoud&AbuTaqa, 2017). Literature reviewed found that initial trust in online environment in (Baabdullah et al., 2019), revealed that prior studies were conducted in developed nations, with developing nations overlooked. The reviewer brought forward conceptual models mainly dedicated to trust literature and technological theories (e.g., diffusion innovation theory). Additionally, a great portion of initial trust literature was dedicated to online retailers, while only limited studies examined internet and mobile banking (Echchabi et al., 2019; Gharaibeh et al., 2019).

This section is dedicated to identifying the factors influencing initial trust in the context of Jordan, a developing nation. Antecedents of initial trust in prior studies are five in number and they are; personality-based trust (propensity to trust or trust disposition), cognition-based trust, institution-based trust, economic-based trust and knowledge-based trust (Altobishi et al., 2018) Initial trust is affected by personality, cognition and institution and it does not hinge on prior experience which is related to the economy and knowledge as illustrated by a study in Croatia. In the present study, disposition to trust is deemed as a concept of personality-based trust, and it is the propensity to believe in the positive attributes of other individuals, which results in laying trust on them (Zalloum et al, 2019). Empirical findings of this topic shows that trust disposition has a key role in the initial trust formation (e.g., Echchabi et al., 2019; Gharaibeh et al., 2018; Hamakhan, 2020) as it influences the individual’s perception to lay his/her trust on someone at the onset (Ismail&Alawamleh, 2017). Cognition-based trust is the second antecedent of initial trust and it depends on the first impression upon which trust is built on. Cognition-based trust is based on impression as opposed to prior experience for trust-building.
In literature, reputation is used to reflect cognition-based trust and it has a significant influence on the formation of initial trust (Gharaibeh et al., 2018). Another antecedent is institutional-based trust and according to (Hamakhan, 2020), it is the perception that dealing with the trustee is meeting a common standard and as such, it positively relates to the level of initial trust. Added to this, (Echchabi et al., 2019) contended that this antecedent is comprised of two predictors, the first of which is situational normality, where it is assumed that a normal situation would likely lead to success (Ismail & Alawamleh, 2017) Situational normality was examined by the authors and found to be significant. The second predictor is structural assurance and it was examined from two perspectives; organizational and technological.

Prior studies on technological structural assurance (Kaabachi et al., 2019; Kesharwani, 2020; Ketema, 2020) and organizational structural assurance (Zhang et al., 2018) found them to significantly influence initial trust formation. More specifically, technological structural assurance refers to the conviction that the web possesses a protective legal/technological structures ensuring that transactions can be carried out securely and safely through it (Zalloum et al., 2019) On the other hand, organizational structural assurance is the belief that safeguards of a place exist including promises, contract, regulations and guarantees (Echchabi et al., 2019).

Information Technology Factors. Under this category of factors, the factors that are linked with IT itself are included, and there are two primary sub-categories which are website factors and institutional-based factors. Website factors cover the factors that are website-related that are ten in number. Majority of studies laid emphasis on security and privacy which were deemed as the top concern of customers in online trust. Other authors focused on existing models and theories factors including perceived usefulness, perceived ease of use, enjoyment of technology and compatibility, along with website quality, information quality and website usability. Lastly, familiarity with the online environment, where the prior experience comes into play, was also considered. Moving on to the technological institutional-based trust, it has two dimensions namely technological situational normality (the user’s experience with dealing with a specific situation) and technological structural assurance (the presence of technological protections like encryption, certifications of third-party and mechanisms for feedback).

Social Category. Under the social category are culture factors and they are factors that are connected to daily social life and dealings with other people. This sub-category has two dimensions and they are interaction (availability of inter-consumer communication), word-of-mouth (recommendations to use or refrain from using stemming from tie strength or relational content). These dimensions have similar meanings based on different views. The word-of-mouth characteristics are present in societies that are collectivistic (e.g., the society in Jordan). Governmental support also falls under this sub-category and it refers to the support given by the government for E-banking adoption.

Diffusion of Innovation Theory. Two dimensions were found in literature under this theory and they are relative advantages/benefits (advantages reaped with the offering of value from the new service), and compatibility (the level to which innovation is considered to be as sustainable as values, past experiences and potential adopters’ needs).

### Table 1. Trust Dimentions

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-Category</th>
<th>dimensions</th>
<th>Source</th>
</tr>
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<tbody>
<tr>
<td>Trust bases factors</td>
<td>Personality-based</td>
<td>Faith in humanity</td>
<td>(Dao &amp; Thanh, 2020), (Al-Sharafi et al., 2018), Salloum, A. (2017),</td>
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<tr>
<td></td>
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<td>No dimensions (this means that the researchers</td>
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<td>examined it as one construct)</td>
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<td></td>
<td>Cognition-based</td>
<td>Reputation.</td>
<td>(Al-dweeri et al., 2019), (Alhakimi &amp; Esmail, 2020)</td>
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<td>Corporate Image</td>
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<td></td>
<td>Size.</td>
<td>(Kaabachi et al., 2019; Kesharwani, 2020; Ketema, 2020)</td>
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<td></td>
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<td>Willingness to customize</td>
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<td></td>
<td>Institutional-based</td>
<td>Situational normality</td>
<td>Echchabi et al., 2019; Gharaibeh et al., 2018;</td>
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<td>Structural assurance</td>
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<tr>
<td>Category</td>
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<tr>
<td>Information Technology factors</td>
<td>Website factors</td>
<td>Privacy, Website usability, Perceived information quality, Perceived Web Site Quality, Perceived usefulness, Perceived ease-of-use, Enjoyment of technology, Familiarity with online environment</td>
<td>Altobishi et al., 2018; Anouze &amp; Alamro, 2019; Baabdullah et al., 2019; Echchabi et al., 2019; Gharabeh et al., 2019.</td>
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<tr>
<td>Social factors</td>
<td>Technological</td>
<td>Technical Situational normality</td>
<td>(Salem, 2019), Zalloum et al, 2019, (Zhang et al., 2018).</td>
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<td></td>
<td>Institutional-based</td>
<td>Technical Structural assurance</td>
<td>(Ismail &amp; Alawamleh, 2017), (Baabdullah et al., 2019), (Rawwash, 2020).</td>
</tr>
<tr>
<td></td>
<td>Diffusion of innovation factors</td>
<td>No sub-category. Relative benefits/advantages, Compatibility</td>
<td>Hamakhan, 2020; Ismail &amp; Alawamleh, 2017</td>
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Source: developed by the author.

2. Results and Discussion

The present work highlighted the present situation of E-banking use in Jordan primarily through a thorough review of literature. Majority of recent studies considered lack of trust as one of the barriers of E-banking use, acceptance or adoption and thus, the study identified the factors influencing trust in using E-banking services among Jordanians. Over 96% of Jordanians do not avail of the services provided by E-banking services as they have no experience in it. The study focused on the initial trust of end-users that is aligned with the study population characteristic. A thorough review of literature provided a general view of the initial trust of customers and the factors influencing such trust. On the basis of the review, there are several dimensions that are not aligned with the E-banking service adoption in Jordan as they consider customers to have prior experience and knowledge with the trustee (calculative-based and knowledge-based dimensions). Added to the above dimensions, some are similar in meaning like website usability and perceived usefulness and relative advantages, while others are more extensive than others (e.g., website quality more comprehensive compared to information quality).

Lastly, the social factors mentioned in literature are word-of-mouth and interaction, and this represents the issue examined, which is the Jordanian population and related culture. Based on recent studies, Jordanian culture has a significant effect on adopting new technologies and therefore, this should be considered as an influencing factor in this context. The dimensions reviewed from trust based categories include personality-based trust, cognition-based trust and institutional-based trust, those from social factors include national culture, and those from Diffusion of Innovation Theory include relative advantages and compatibility. Dimensions from the technological category include website factors of security, privacy, and online experience.

5. Conclusion
This paper aimed to determine the factors that affect the initial trust of customers on E-banking services in Jordan. Existing studies in literature were analyzed to identify the top suitable factors for the examined issue (adoption of E-banking services in Jordan). The factors emphasized are those that influence initial trust of customers without prior experiences and the thorough review of literature indicated several of which, only some are suitable for the study. Lack of experience of the Jordanian people when it comes to E-banking was taken into consideration, along with the country’s national culture. These were found to be suitable to tackle the E-banking adoption phenomenon in the Jordanian context. The factors were divided into four categories and the relationships among them and initial trust may be validated in the future work dedicated to E-banking services adoption in Jordan.

**Author Contributions:** Conceptualization, writing-original draft preparation; writing-review and editing.

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