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Research Article

Effect of Trust on E-Banking User's Satisfaction: A Review

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Abstract: The emergence of electronic banking (e-banking) provides excellent opportunity for efficient services and promotes competitiveness to meets consumer demands through the creation of improve banking transaction route that reduces overall banking costs. Resultant improved performance from the adoption of e-banking services has rapidly increased with the introduction of World Wide Web. However, lack of trust has constrained the adoption of e-banking services as users information are exposed unknown users. However, innovative changes in e-banking services have motivated most Jordanian banks to adopt e-banking in an attempt to enhance user's satisfaction although effort to achieve this objective has been influence by trust. The review process takes into consideration the resultant influences and the growing challenges in meeting user's satisfaction in e-banking ranging from changes associated with the recent technological innovative breakthrough in e-banking relationship through to trust and its determinants. This information is very important in overcoming problems with trust in that it provides an in-depth understanding of the importance of trust in e-banking transaction, the impact of innovative driven changes and the need for e-banking computer skill. Finding showed that trust is at the central pivot of an effective function e-banking system. Although e-banking transactions have improved over the years in Jordan, more effort is needed to alleviate influences associated with lack of trust in online transaction among Jordanian e-banking users.

Keywords: Banking interface, computer skill, e-banking, trust, user's satisfaction

INTRODUCTION

The fast growing convenience of e-banking services in Jordan has proven to be competitively profitable as user's satisfaction is now considered important among the banking industries (Ala`Eddin and Hasan, 2011). E-banking provides alternative transaction route for user's at a reduced costs and increased convenience. E-banking uses internet as its remote delivery channel for banking services such as opening deposit account, transferring funds to different account and electronic payment and bill presentation (Badi *et al*., 2012). E-banking has been reported as an efficient route for delivering banking service (Al-Smadi and Al-Wabel, 2011). However, most competitive advantages of e-banking services reduce transaction cost through convenient e-banking services.

The adoption of e-banking technology in Jordan facilitated economic growth of banking sectors and promoted financial stability within financial system through technological revolution that motivates banking institutions to invest more on the attractive customers services via convenient banking route (Al-Smadi and Al-Wabel, 2011). Recent technological innovative growth in e-banking boosted banking efficiencies in Jordan and lead to wider acceptance of the technology making it currently the most used banking route in Jordan (Ala`Eddin and Hasan, 2011; Al-Smadi and Al-Wabel, 2011). In contrary, counter influences such as lack of trust resulting from lack of basic e-banking computer skill remains a major obstacle that constrains e-banking adoption and negatively influences user's satisfaction. In the present study, effect of trust on e-banking user's satisfaction is discussed. Previous implemented measures to enhance e-banking functionalities were highlighted as strategic measures for effective e-banking services in Jordan (Amman Stock Exchange, 2006). In an attempt to tackle the problems associated with lack of trust in e-banking services in Jordan, this study reviewed factors that complement to effective functioning of e-banking systems in Jordan such as the innovative changes in e-banking sectors, users satisfaction, trust and its determinants in relation to basic e-banking computer skills.

The structure of the present review focuses on the resultant influences and the growing challenges in meeting user's satisfaction in e-banking arising from changes in technological innovation through to trust and its determinants. Attempt to resolve these growing challenges incorporates an in-depth review on the innovative changes in e-banking technology, user's

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satisfaction relationship with trust and its determinant as well as basic e-banking computer skills. This information were considered important in overcoming the effect of trust in e-banking services in that it provides an in-depth understanding about the relevance of trust in e-banking services in a technological driven innovative economy and the need for basic e-banking computer skill which are important complement to effective e-banking transactions services in most developing countries such as Jordan.

INNOVATIVE CHANGES IN E-BANKING TECHNOLOGY

The adoption of Information Technology (IT) practices into banking sectors provided enhancement opportunity for the banking institutions. IT infrastructure facilitates faster and convenient banking services and has led to increase in overall efficiencies (Al-Smadi and Al-Wabel, 2011). The Innovative changes from IT infrastructure stimulated economic growth and has motivated banking sectors to invest on the technology in other to maximizing banking returns and attracts more customers through integration of efficient and convenient services. Computer-aided IT services have mark tremendous advances as its relevant extends to other economic sector (Qureshi *et al*., 2008; Feng-Hui and Wann-Yih, 2011). In addition, broad internet access complements e-banking through uninterrupted networks services to e-banking customers at various locations.

IT technological advances rapidly changes as more discoveries are made on its compatibility and convenience in conducting e-banking transaction however; competencies on e-banking computer skill are not meeting with the fast innovative advances on electronic-base services of e-banking. E-banking services vary among banks and depend on the provision of banking products and services as well as electronic payment and other wholesale banking services that are delivered through the electronic channel (Al-Smadi and Al-Wabel, 2011; Qureshi *et al*., 2008). Innovations advances in IT offer significant benefits for both e-banking customers at reduce cost (Al-Smadi and Al-Wabel, 2011) and provide customers with suitable and faster transactions medium consequently, provision of alternative banking channels opens banking services to additional risks (Ala`Eddin and Hasan, 2011; Badi *et al*., 2012).

Innovation in e-banking services has improved banking operation and management practices and aided banking transaction at remote location in Jordan (Siam, 2006). The innovation changes has increases banks profits through the adoption of efficient banking services (Alrawahdeh, 2010) and provides additional convenient banking transaction channel among commercial banking sectors in Jordan (Ala`Eddin and Hasan, 2011). Study showed that Jordanian banking sector have been enhanced through e-banking services. In 2010, study reported ratio of banks total assets to GDP of 176% which was the highest compared to other service sectors (Annual Report of Central Bank of Jordan, 2010). This improvement showed that the adoption of e-banking increases e-banking operational strategies to cope with customer's satisfaction at low-cost. Positive improvement of e-banking practices in Jordan is visible from the increase of credit facilities to different economic sector as shown in Fig. 1.

Changes with e-banking adoption: The revolution changes in information technology have significantly

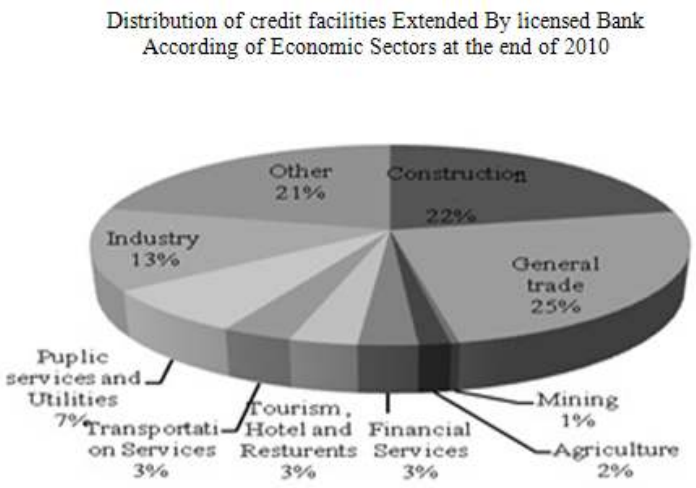

Fig. 1: Credit facilities to economic sector at the end of 2010 in Jordan (Annual Report of Central Bank of Jordan, 2010)

enhanced banking services in Jordan. The changes provided a shift from manually operated system to electronic-base system (Al-Smadi and Al-Wabel, 2011; Siam, 2006). E-banking adoption in Jordan offer wide range of applications in providing banking services and is the key factor for improved performance and growth. However, innovative changes in e-banking performance among Jordanian banks from 2000 to 2010 revealed its negative impact arising from lack of trust in the use of e-banking infrastructure (Al-Smadi and Al-Wabel, 2011) which can potentially expose users to fraud, discourage the adoption of e-banking technology and is capable of reducing banking profitability (Ponemon, 2005; Chien-Ta and Desheng, 2009).

USER'S SATISFACTION

Satisfaction e-banking users derives from the adoption of the technology has been considered important theoretical and practical issues by researchers (Jamal, 2004). Satisfaction has been found to be a cognitive phenomenon (Westbrook, 1987) and entails the states of expectations that originated from the customer's beliefs on the performance level of e-banking service (Oliver and Richard, 1980). Study found that e-banking user's satisfaction is affected by the size and performance of banking product and service (Sharma and Ojha, 2004). Homburg *et al*. (2006) in their study supported that the acquisition and consumption of banking products and services has significant influence on user's satisfaction.

However, in Jordan, the developmental transformation in e-banking services has been constrained by lack of trust (Ali and Ezz, 2009). Owing to fast growing innovation changes in information technology adoption in e-banking services, it is deemed important to review influences associated with lack of trust to the adoption of e-banking services in Jordan. Determining these constrains is helpful in improving banking effectiveness and in promoting e-banking services among Jordan banks. Jordanian banking sectors has resorted to e-banking because of its recorded efficiencies in meeting customers need through offering better services and reaching out to wide geographical distance however; overcoming problems associated with lack of trust will further motivated the adoption of the technology (Siam, 2006; Ali and Ezz, 2009).

Efficiency and capability of e-banking performance represents operational enhancement measure of internet-facilitated banking performance. Lack of trust is a major constrain to the use of IT infrastructure for online banking services and discourages users from conducting online transaction (Al-Smadi and Al-Wabel, 2011; Ali and Ezz, 2009). Online information can be manipulated to suite user's intension as a result; users are always concerned about trust in online transaction (Ponemon, 2005; Princeton Survey Research Associates, 2002). Problems associated with lack of trust are of great concern and have affected e-banking adoption over the years (Blanca, 2011). Therefore, the adoption of e-banking in Jordan should take into consideration the use of certain security measure such as the use of password as a measure to improve services quality and acceptance of e-banking technological innovations and operational standard (Al-Smadi and Al-Wabel, 2011).

TRUST AND USER'S SATISFACTION

Customer satisfaction and trust in e-banking services has been considered important theoretical and practical issues (Ala`Eddin and Hasan, 2011; Godwin *et al*., 2010). Customer's satisfaction is partly a measure of product and service size via online transaction and is seriously affected by lack of trust. Trust is vital for e-banking activities because online banking services are prone to undesirable and unwanted behavior. Avoidance of these unwanted behaviors promotes successful transaction and reduces risk and uncertainty in transaction costs and facilitates collaboration among banking sectors (Jeoungkun *et al*., 2011). Trust is importantly needed in e-banking services as all transactions are conducted with little or no face to face interaction.

Owing to the impeding dangers to lack of trust in online transaction, customer knowledge on e-banking services is of great value in conducting e-banking transaction in Jordan (Alrawahdeh, 2010). Trust in e-banking transaction is very important so as to ensure safe transaction that maximizes user's satisfaction and free from possible online vulnerabilities. In most cases, protective software such as firewall are used to protect users' from external penetrating to their system during online transaction especially where tendency to violate trust in online transaction exist (Amtul, 2011).

E-banking user's satisfaction has been subject of great interest among Jordanian banking sectors (Ala`Eddin and Hasan, 2011) in providing pleasurable level of acceptance of the technology. Offering satisfactory e-banking services to Jordanian has its central focus on maintaining trust. E-banking user's satisfaction has been theorized as an important success measuring factor that produces user's loyalty in Jordan (Badi *et al*., 2012). Customer satisfaction and trust are positively related in e-banking services (Godwin *et al*., 2010). However, e-banking user's satisfaction encompasses fulfilling response to a successful online

Table 1: Review on the characterization of adopted variables used for the evaluation of trust

Factors	Characteristics
Personal variables	• Have greater ability to deal with change
	• Have greater rationality
	• Have greater intelligence to adoption of new technology
	• Have favorable attitude towards change in e-banking
	• More able to cope with uncertainty and risk
	• Have a more favorable attitude towards education
	• Have a more favorable attitude towards science
	• Are less fatalistic
	• Have higher levels of achievement motivation
	• Have higher aspirations (e.g., for education, occupations)
Communication behavior	• Have more social participation
	• Are more highly interconnected in the social system
	• Have more change agent contacts
	• Have greater exposure to mass media communication channels
	• Have greater exposure to interpersonal communication channels
	• Seek information about innovations more actively
	• Have greater knowledge of innovations
	• Have higher degree of opinion leadership
	• Likely to belong to interconnected systems
Socio-economic status	• Have more years of education
	• More likely to be literate
	• Have higher social status
	• Have a greater degree of upward social mobility
	• Have larger-sized units
	• More likely to have a commercial economic orientation
	• Have a more favorable attitude towards credit
	• Have more specialized operations

Shing *e al*. (2007)

transaction and accounts for positive feeling towards adopting the technology and has been tested base on interest, surprise, anger, enjoyment, wise choice (Blanca, 2011; Godwin *et al*., 2010).

E-banking technology offer many capabilities and opens access to much potential threat to online transaction. The disclosure of important and confidential information to unauthorized persons can result to huge financial losses to users and to banking sectors. Change of personal information by modifying or rewriting data without authorized access could potentially affect banks as well as their customers. As a result, customer prefers making transaction using a trusted medium (Siam, 2006). Trust is important for e-banking transactions especially when parties in e-banking transaction lack control over the trustee which could lead to high operational risks in choosing and maintaining services applications (Jeoungkun *et al*., 2011). To reduce the influences arising from lack of trust in online transaction, chains of variables have been reviewed in attempt to evaluate associated influences with trust and are as shown in Table 1.

TRUST AND E-BANKING

E-banking is relatively new electronic delivery channels and its adoption in Jordan has been influenced by trust (Ali and Ezz, 2009). The lack of trust in e-banking service affects its adoption in Jordan because services are conducted with physical presence or face-to-face interaction between bank staffs and their customers. E-banking services therefore require appropriate transactional features in Jordan to encourage the growing population to adopt its practices.

Trust of paramount importance to banking transaction as online transaction requires mutual relationship with customers via trust-oriented collaboration processes with banking sectors in Jordan (Badi *et al*., 2012). Concern has grown over lack of trust in e-banking services owing to its enormous potentially risk to users satisfaction (Siam, 2006). However, trust is most needed in a risk-prone transaction in other to secure certain particulars from abused (Sulieman *et al*., 2011). Trust is often interwoven with risk because it reduces the risk of being victimized to undesirable behavior or conduct. Trust has been noted as situational specific in the context of e-banking. However, numerous definition of trust exists and is as shown in Table 2.

E-banking adoption in Jordan has recorded tremendous improvement over recent years (Badi *et al*., 2012; Ali and Ezz, 2009). However, trust is central to e-banking transaction and of paramount importance in satisfying users need (Crumlish and Malone, 2009).

Table 2: Review on definitions of trust

Study	Definition
Rotter (1967)	Trust is "The belief that a party's word or promise is reliable and a party will fulfill his/her obligations in a exchange relationship".
Morgan and Hunt (1994)	Trust occurs "When one party has confidence in an exchange partner's reliability and integrity".
Mayer *et al*. (1995)	Trust is "The willingness of a 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 trust or, irrespective of the ability to monitor or control that other party".
Rousseau *et al*. (1998)	Trust is a "Psychological state comprising the intention to accept vulnerability based upon positive expectation of the intentions or behavior of another".
Gefen (2000)	Trust on an online vendor is the "Willingness to make oneself vulnerable to actions taken by the trusted party based on the feeling of confidence and assurance".
Ba and Pavlou (2002)	Trust is "The subjective assessment of one party that another party will perform a particular transaction according to his or her confidant expectation, in an environment characterized by uncertainty".

Shumaila *et al*. (2003)

The role of trust in e-banking transaction arises from a consumer perspective. Research findings showed that e-banking users trust their friends and family members more than any other source of information about products and services transacted through online (Al-Smadi and Al-Wabel, 2011). Effect of trust on e-banking transactions has broader dimensions of risk compare to face to face transactions because of extensive use of IT facilities and open access IT infrastructure (Kim and Tadisina, 2005; Komiak *et al*., 2005). IT infrastructures facilitate e-banking transactions in Jordan however; fear lack of trust on personal information of user's are among the factors that constrained faster adoption of e-banking (Al-Smadi and Al-Wabel, 2011; Siam, 2006).

E-banking technology utilizes computer-mediated services, software, network and electronic technologies to substitutes for physical interactions between customers and banking institution. The advances in e-banking technology led to minimization of traditional barriers such as time and space as well as face-to-face interactions between customers and bank officers (Shi-Ming *et al*., 2011). E-banking created virtual banking interaction between customer and their banks. However, customers are required to have valid bank account and internet connection to participate in virtual banking (Ala`Eddin and Hasan, 2011). E-banking services started in the mid 1990s in an attempt to provide convenient banking services through bank proprietary software and its adoption increased rapidly as World Wide Web was introduced with competitive attractiveness for an extensive research (Badi *et al*., 2012; Siam, 2006). The integration e-banking services into Jordanian banking sector alleviated the need to send out bills, monthly account statement and balance, reduction of paperwork and time spent on online transaction. This improvement collectively transformed financial processes via IT-based infrastructures (Ala`Eddin and Hasan, 2011).

However, need arises to review trust in e-banking practices in Jordan so as to evaluate adoption functionalities that facilitates faster and efficient transaction as e-banking service has long been influence by lack of trust and is presently a major obstacle to e-banking user's satisfaction (Harris and Dennis, 2011). Trust influences users behaviour (Ja-Chul *et al*., 2009) and is central to e-banking services (Harris and Dennis, 2011) influences user's willingness to engage in online transaction (Ala`Eddin and Hasan, 2011; Al-Smadi and Al-Wabel, 2011) and is vital to economic activities (Jeoungkun *et al*., 2011). These trust-related problems have great negative impact on e-banking user's satisfaction in Jordan. Knowledge of trust determinant in e-banking processes is vital so as to promote e-banking adoption in Jordan and to overcome their effect to e-banking user's satisfaction (Blanca, 2011).

DETERMINANTS OF TRUST IN E-BANKING

E-banking technologies provide fast and inexpensive services and have been constrained by lack of trust. Determinant of trust has been considered very important issue in promoting e-banking services. Previously, trust determinants to e-banking practices include feedback profile, lack of dependability, reputation and security, propensity to trust, structural assurances and word-of-mouth (Ja-Chul *et al*., 2009) and are illustrated in Fig. 2. However, study reported that trust is built from factors such as guarantees, safety nets and can be improved through easy-to-use e-banking technology such as ability to use access information, privacy policy, content of e-banking site and convenience at which the technology can be used (Ali and Ezz, 2009).

Accessibility entails the ability of users to access information, product and services from the web such as content format; software and settings; user's hardware, internet connections. Website accessibility relates to the

Fig. 2: Structural illustration of the determinants of trust in e-banking

implementation of website content in a way to maximize the ability of users to access it. However, provision of text equivalent for image content of a web page enables users with visual disabilities access to the information through screen reader. The techniques created easy access to web pages for people with disabilities to address other access issues such as download speed and discoverability to enable users to trust e-banking transaction (Al-Smadi and Al-Wabel, 2011). Users trust in online transaction can also be improved through enactment of policies to protect user's private information in online transaction. Trust on privacy policies has been reported as a strong determinant of effective e-banking services and improves user's satisfaction and willingness to engage in online transaction. Unprotected private information leads to open access to fraud which negatively influences user's satisfaction and behavioral intention to adopt e-banking-based transaction (Krebs, 2008; Gounaris and Koritos, 2008). Content of e-banking website is also an important determinant to trust in e-banking transaction as it provides useful information to e-banking practices. Trust associated with authentic website motivates users to engage in e-banking transaction. However, the convenience at accessing e-banking information requires basic e-banking computer skill.

TRUST AND BASIC COMPUTER SKILL IN E-BANKING

Innovative advances in the use of IT infrastructure for banking operation are synonymous with modification of various operating versions. These changes significantly affect e-banking transaction in Jordan as most users are not conversant with the modification in the use of the infrastructure and updated version of the facilities in use (Ali and Ezz, 2009). Study found that e-banking services among Jordanian banks are constrained by lack of basic e-banking computer skill (Al-Smadi and Al-Wabel, 2011) although the extent at which the influences occur were not reported, there is need to frequently acquaint e-banking users with the modification and changes in e-banking service routine. Technological innovation exposes e-banking users to new computer skills and should be accompanied by educating users on the basic e-banking computer skills. The associated influences on lack of basic e-banking basic computer skill among Jordanian e-banking users could facilitate wider adoption of the technology and its transaction strategies (Amman Stock Exchange, 2006). Innovative role of basic e-banking computer skills plays important role in the developing Jordan economic sectors since e-banking practices contributes enormously to the economic growth of Jordan (Annual Report of Central Bank of Jordan, 2010).

Acquisition of basic e-banking computer skill could enable users to overcome most problems associated with lack of trust such as identification of attack prone websites, updating of personal account e-banking services as well as gaining experiences on personal information should be used or shared with other internet users (Godwin *et al*., 2010; Liao and Cheung, 2008). Prevailing distinction arising from the use of traditional banking services to electronic-base

banking services relies on the willingness and ability to use e-banking technology for services offered through them in becoming partner in the delivery of e-banking services (Liao and Cheung, 2008). Although strong relationship between basic e-banking computer skills and trust exist study reported that increasing customer's knowledge and skill on a service set process is a key organizational strategy to manage user's satisfaction (Godwin *et al*., 2010).

Therefore there is need to go beyond web site design and navigation instructions in implementing e-banking transaction processes since adequate computer skill is required in handling electronic transaction services via online (Liao and Cheung, 2008). Basic computer skill is essential for efficient e-banking transaction and captures user's inclinations, learning styles as well as skill levels (Jimenez and Roman, 2005) and is needed to increase profit margin of banking services in Jordan (Siam, 2006). Differences in individual expertise in e-banking basic computer skills account for differences in perceived e- banking service quality and user's satisfaction (Godwin *et al*., 2010; Sulieman *et al*., 2011). In addition, differences on the acquisition e-banking computer skills could affect the outcome of specific IT usage (Uzoka *et al*., 2007). However, it is important that e-banking user's computer skills are enhance to meet the increasing technological advances that jointly contribute to efficient delivery of e-banking services. User's satisfaction can be driven by computer-base knowledge on how different innovation in information technology application is used during when transaction are made base on the competences in the use basic computer skill for e-banking transaction (Godwin *et al*., 2010). Study by Kassim and Souiden (2007) on the use of basic computer skill in Finland concluded that e-banking customers acknowledged that basic computer skills were needed for effective transaction.

Donio *et al*. (2006) in their study found that computer skill is very important in a digital environment. Dimitriades (2006) reported that computer skills and trust are important factor they improves user's satisfaction. Study reported that lack of computer skills is among the key barrier to e-banking. Lack of basic computer hinders a number of e-banking user's from engaging in online transaction which could result from high cost IT infrastructures such as computer and internet connection (Godwin *et al*., 2010). In Jordan, it a study found that basic e-banking computer skills are importantly needed (Siam, 2006) and determines the effectiveness of IT adoption into banking sectors in Jordan (Badi *et al*., 2012). Besides high cost of IT infrastructures, there is need to educate e-banking user with the proper tools to prevent malicious attacks, viruses and hackers (Wong, 2008). However, effectiveness of e-banking adoption in Jordan brought can be enhances through overcoming problem with trust in online services which poses serious threat to customer's during transaction (Al-Smadi and Al-Wabel, 2011).

TRUST AND ITS ASSOCIATED IMPACT IN E-BANKING

Trust is an important factor in e-banking transaction and affects user's behavior and the adoption of e-banking technology in Jordan (Siam, 2006). The influences from trust on e-banking drive its adoption in Jordan and have been found to be a strong driver of technology innovation and in capital market (Amman Stock Exchange, 2006). Trust is very important especially when it is difficult to regulate e-banking transaction agreement or rely on the other transaction party (McKnight and Chervany, 2001). Trust is considered a short-term issue however; it is most significant barrier to realizing the potentials of e-banking transaction (Sulieman *et al*., 2011). In addition, trust determines customer's willingness to engage in e-banking transaction and has been widely analyzed by previous research study base on the size of information, competitive advantage, performance and the attainment profitable relationships (McKnight and Chervany, 2001; McKnight *et al*., 2004). From economic perspective, trust reduces transaction costs, operates as governance mechanism and a primary source of positive consequences in online transaction (Association of Banks in Jordan, 2007).

Trust in e-banking unveils that users willingness depend on a piece of software to perform a particular task during online transaction in Jordan (Migdadi, 2008). The reliability of e-banking technology and its effective functioning and quality is important in maximizing banking profitability at improved customer's satisfaction (Migdadi, 2008). Trust in e-banking environment influences quality of service and the operational characteristics of processes governing the efficiency of the transactional channel (Ala`Eddin and Hasan, 2011; McKnight *et al*., 2004). However, trust is major predictor in the adoption of e-banking technology in Jordan therefore; trust in e-banking is a fundamental factor in considering the adoption of online banking in Jordan.

In spite of the developmental trend in e-banking, studies found that bank customers reluctantly provide their personal information for online transaction as a result of lack of trust (Keen *et al*., 2000; Regan and Macaluso, 2000) because possibility of manipulation their personal information exist (Bandyopadhyay and

Fraccastoro, 2007). These barriers sums up to constrain e-banking services and prevents users from enjoying e-banking benefits. Trust in online transaction encompasses a host of concern and extends to the abuse and manipulation of personal information, viruses and malicious attack, hacking activities for illegal gain (McKnight *et al*., 2004; Campbell, 2003).

Most studies adopted theories and models in an attempt to overcome problem associated with lack of trust and lack basic e-banking computer skill. However, most of these models have not been extensively used in the developing countries although inconsistent result is predominant with the tested models (Bandyopadhyay and Fraccastoro, 2007; Sarel and Marmorstein, 2004). Harris and Dennis (2011) found that trust have significant impact on e-banking and added that risk arises from the integration of new channels into existing banking channels. The complexity associated with trust in the context of electronic transaction arises from the creation of multi-transaction service route (Neha and Saroj, 2010). Thus, the advances in information technology have also impacted the developmental progress of online banking in that it exposes banking transaction to internet fraud (Migdadi, 2008; Khamis, 2003; Kuo-Wei *et al*., 2011).

This implies that e-banking services in Jordan can be successfully managed through proper dissimilation of information resources through secure channel. Although the complexity in multidimensional interdependent of information system success requires careful definition and measurement of the dimensions variable as well as to measure the interactions between the success dimensions, overcoming problem associated lack of trust could enhance the effectiveness of e-banking services in Jordan. Lack of trust is a major obstacle preventing the adoption of e-banking technology and is a prerequisite in online transaction (Sulieman *et al*., 2011; Shi-Ming *et al*., 2011). Trust influences user's willingness to participate in online banking services as their personal information can be used for fraudulent act (Ala`Eddin and Hasan, 2011). However, problems associated with e-banking transaction channel could be quantitatively translated to costs that should be borne by the bank in order to eliminate insecure banking transaction resulting to financial lost such as happened to Citibank in USA (Storey *et al*., 2000).

CONCLUSION

Delivery of e-banking services to customers via electronic medium such as personal computer, mobile phone, desktop software, telephone or digital television has been constrained by lack of trust and basic e-banking computer skills. Although the innovative changes in e-banking sectors provided enhancement opportunities to most service, potential drawbacks arises from the integration of IT facilities into the banking sector such as exposing of user's personal information to hackers and destructive viruses from infected websites. Determinants of trust in e-banking transaction has been reviewed as a measure to overcome these problems so as to further improve user's satisfaction while delivering e-banking services at convenience in Jordan. Although the adoption of e-banking technology has positively contributed to the stabilization of Jordanian monetary policy through the use of IT-based infrastructures, implementation of trust determinant in e-banking services could provide greater opportunity and rewarding benefit that can potentially enhance user's satisfaction. However, technological progresses requiring computer skills and experience need to be circumvented to facilitated banking services for better coordination of fiscal and monetary policies in Jordan.

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