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Literature Survey on Customer Satisfaction, Behavioral Intention, Trust and Security in Electronic payments system.

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Abstract – The literature survey is done to reveal the current trends in the field of Electronic payment system (EPS). Customer satisfaction, behaviour continuance intention, security, trust in electronic payment systems is considered for study. A main apprehension with usage of electronic payments systems is the perception of customers about security and trust. This paper is an attempt to review the literature on adoption of on Electronic payment system integrated with trust and security. After meticulous and thorough search, 45 research papers have been selected for this study. The study reviewed that trust and security remain one of the main constructs that act as a hindrance in the usage of electronic payment system. The research concluded that TAM was the most used model in electronic payment and widely used statistical tool was SEM. Study also revealed that Trust, security, perceived usefulness, perceived ease in usage, compatibility, risk perception, performance expectancy, and effort expectancy are the maximum recognized antecedents in customer satisfaction and behavioural intention in the electronic payment literature. This review encapsulates the vast research existing on electronic payments, wherein security and trust are important areas to be discussed.

Keywords - Electronic payments, Customer satisfaction, Behaviour continuance intention, Security, Trust.

1. Introduction-The usage of electronic payments in ecommerce has increased over the last few years due to the growing spread of online-banking and shopping activities. We have seen the rise of electronic payment systems and payments processing devices as the world advances with developed technology. With the growth of the secured online payment transactions the percentage of cash transactions will decrease. Electronic payment system defined as way of making transactions or paying for goods and services through an electronic platform, eliminate the use of cash or cheques. It's also called online payment system. Nowadays e-commerce is growing at a fast pace. Importance of electronic payment system in e commerce has increased. Electronic payments are generally cheaper, easier and faster than other modes of payment. Electronic payments are facing challenges to fulfil customer's expectations. With the advancement of technology, payment methods are changing. However, consumers lack trust as to the security of payment data and misuse of private data.

Trust and Security issues have affected the adoption of electronic payments. Trust (privacy and security) have been frequently used in research on the adoption of the EPS(Kim and Kim,2007).Trust is some established directions which a service provider as well as the user has to follow. Customers have fear of leakage of the data because their data is remotely located. The proprietor of the data should be given assurance that all security measures have been adequately executed before storing data. The customers data

must be confidential at every stage as after storage of data the data owner loses its control over it. But, due to involvement of massive delicate information in the EPS, the security and trust solutions have some breaches. Consumers insight of security and trust issues in EPS usage are affected by security statements, technical defences, process to transact, security declarations defined as information available to user's related with EPS process and security explanations. Technical defences are explicit and procedure also as to safeguard the user's safety over the transactions. Procedure to transact tdenotes the involvement of steps to enable the transaction by the users and mitigate their security panics. There must be a strong trust relationship between the users of electronic payments and electronic payment providers for secure and trusted communication. The EPS data is managed by third parties and all the data and services are stored in remote locations. Trust is not only associated to the electronic payment users, but it also relates to the applicability of technology, devices to store, services, and instruments to secure. Reliable flow of information needs both parties viz. EPS users and providers must have trust on each other. There are various factors- user experience, access time, past interaction, location, digital user ID, over-all denials, access frequency, self-protecting capabilities, and service susceptibilities that help in estimation of the trust of user's in the EPS.

2. Research Methodology- The literature related to the adoption of Electronic payment System has been reviewed to know the antecedents of Customer satisfaction and Behavioral Intention integrated with Trust and Security issues. Literature review has been bifurcated into two categories. Firstly, an attempt has been made to review literature on measurement of Customer satisfaction and Behavioral Intention in Electronic payment System. Secondly, Trust and Securityissues are discussed to integrate it in development of model for measuring continuous intention in Electronic payment System. This literature survey is from the papers published in journals such as Taylor & Francis, Elsevier, WILEY, Science Direct, Emerald, IEEE, Research gate, Science open, Wiley and Google scholar. A total of 45research papers have been selected for this review paper.

3. Discussions

3.1. Customer satisfaction and Behavioural intention

Satisfaction means the fulfilment of expectations. It is one of the pillars in marketing and an important factor that affects trustworthiness of the consumer (Marinković and Kalinić 2017). Studies found a number of variables affecting customer satisfaction like perceived usefulness, perceived ease of use, utilitarian attitude, Perceived enjoyment, Mobility, Social influence, trust, trial ability and perceived risk, perceived credibility, customer involvement, comparative value, perceived cost etc(Susobhan,2017; Chong,2013; Agrebi and Jallais ,2015; Veljko Marinkovic et al., 2017; Tobbin,2010; Shanmugam et al.,2014; Veljko Marinković,2019; Abrahao et al., 2016). Behavioural intention is associated with customer retention and customer loyalty. The users' satisfaction is the main key factor that influences the users' behavioural intention. Satisfaction increases if after purchasing the consumer is experiencing improved product or service than his expectations (Yeh and Li 2009). Satisfied customers normally repurchase the products and take part in constructive spread of information (Wang and Liao 2007). Customer satisfaction has significant and positive on behavioral intentions among online food services (Sharma et al, 2019). A strong relationship has been established between legal protection, perceived benefits, risk avoidance and satisfaction of the e-payment which further influenced behaviouraland continuance intention (Huang, et al,2012).Satisfaction note worthily affect m-commerce behavioural intentions among customers (Chong,2013); Satisfaction also have a positive influence on behavioural intention of mobile-shopping (Shang and Wu ,2017),mobile purchases (Gao et al, 2015),m-banking (Liébana et al. 2017), mobile utilities (Kuo et al., 2009; Susanto et al.,2016) and mobile apps (Hsiao et al.,2016; Tam et al.,2018).

Table 1 Studies on Customer satisfaction and Behavioural intention

Author/year	Antecedents	Tools and methodology used
(Tobbin,2010; Shanmugam et al.,2014; Susobhan,2017)	Perceived ease of use, perceived usefulness, perceived trust, trialability, perceived risk, perceived credibility, utilitarian attitude	Structural Equation Modelling (SEM); cross-section research
(Geetha and Vinay,2017)	Financial security, reliability, Education and training Connectivity.	Statistical package for social science (SPSS)
(Veljko Marinković,2019; Abrahao et al., 2016)	Performance expectancy, comparative value, effort expectancy, social influence, customer satisfaction, customer involvement, comparative value, trust, perceived risk, perceived cost	multi-group Structural Equation Modelling

3.2. Issues of Security and Trust in EPS

Distrust and absence of security in electronic payments has been constantly slowing the development of electronic payments. EPS consumers should be given defences technically so that their trust is strengthened in EPS(Kim et al., 2010).Declarations in regard to secured systems, process to transact, mechanical defences and own previous involvement are identified factors that affect customers' insight of security and trust in EPS. Transaction procedure has significant influence on the security and trust in EPS (Hwang, Li, & Hsiao, 2006; Kim et al., 2010).Electronic payment system will be secured if it has nine elements- authentication, prevention of fraud, transferability, confidentiality, prevention of duplicate spending, divisibility, payer traceability, payment privacy and anonymity. Unofficial usage of the EPS and transaction procedure are major security issues. Advanced process to transact and procedural connections need to be evolved to reduce users' supposed security and trust issues (Kim et al., 2010). protection of information is an important factor that affects EPS usage (Kim et al., 2010; Linck et al., 2006); technical details of protection -privacy and integrity. Past experience has significant influence on the use of EPS, it can lead to augmented adoption and use of EPS. According to Lee and Turban (2001), online purchases and payments require trust in the digital merchant, trust in mechanism to provide the delivery of the services, and trust in the web as medium of transact. Ssecurity statements on electronic payment system websites are major factor that have influence user's trust in online services (Mukherjee and Nath,2003).By providing information and reassurance to the consumers about how secured are their payment system; quality of security available(Huang et al ,2012), it's a possible way to gain consumers' perceived trust in Electronic payment system.Risk perception, trust and serviceability affect client's behavioural intentions towards e-payment system (Sevgi et al ,2010); High security and privacy issues would lead to lower propensity to use m-payment (Lei-da Chen and Ravi Nath,2008).Customers attitude toward electronic payments are linked with their perception of the system's security because these payments involves greater uncertainty and risk, as it operates in a simulated and wireless setting, infected with viruses, stolen; data leakage, online frauds. Technical and transaction mechanism and security accessare the factors that improves consumer's perceived security, whereas access to security guidelines and security affected trust significantly and also disclosed that consumers' perceived trust had a positive effect on the adoption of EPS (Maryam Barkhordari et al 2017). A study found negative relationship between perceived trust and environmental risk whereas there was significant relation between perceived trust and firm reputation. Perceived usefulness and perceived ease of use are the factors with no effect on MPS Adoption. Perceived trust, mobility and attitude have a positive impact on adoption of MPS

(İkramDaştan et al, 2016). (Cao et al., 2018) found that trust has positive impact on satisfaction and continuance intention of mobile payment. There is requirement of building the trust to reduce risk factor and promote their continual use. Trust is an important variable of intention, in m-commerce and m-shopping continue intention of Chinese customers (Chong 2013); (Gao, Waechter, and Bai, 2015).

Distrust and lack of security has been viewed as the main hold-up to the dissemination of electronic payments. To strengthen the security and trust in electronic payments, its necessary to protect the users of EPS technically (Kim et al.,2010).Technical procedures, security statements, technical protection and past experience are the factors that affect user's perception of security and trust. Transaction procedure has a significant influence on the security and trust in electronic payments (Hwang et al, 2006; Kim et al., 2010). Secured Electronic payment system reveals nine elements- authentication, prevention of fraud, transferability, confidentiality, prevention of duplicate spending, divisibility, payer traceability, payment privacy and anonymity. Unauthorized use of the electronic payment system and transactional status are major Security issues, advanced transactional mechanism and process interaction must be evolved to reduce users' perceived security and trust issues (Kim et al., 2010). Protection of information is an important factor that affects EPS usage (Kim et al.,2010; Linck et al.,2006); technical details of protection -privacy and integrity. past experience also affected the use of EPS significantly, it can rise the chances of adoption and use of EPS.

Table 2- Studies on Security and Trust in Electronic payment system

Author/year	Aim of the study	Variables Discovered	Tools and methodology used
(Kavita and Kumar,2018)	mobile banking services and the perception of risk factors.	Financial risk and time risk, performance risk	Model was developed on customer adoption process
(Shoriful,2014)	Exploring the security issues of mobile banking and payments system	Security, data extraction method, data synthesis	Qualitative data analysis
(Maryam Barkhordari,2017)	Investigating the factors affecting trust in EPS	technical and transaction procedures, access to security guidelines and usability	SEM
(Prageet Aeron, et al,2019)	Revisiting trust towards e-retailers	Ability, benevolence, integrity, perception of e-retailer, online familiarity	Structural Equation Modelling
(Mary J. et al ,2015)	Information privacy issues, procedural fairness, impersonal trust	Procedural fairness, fair information, disclose information policy	discriminant analysis, chi square
(Hossein et al.,2016)	effect of perceived security on trust, perceived risk and acceptance	Privacy, credit, Reliability Benevolence, Honesty, Competence	Structural Equation Modelling
(Se Hun Lim et al.,2018)	Effects of perceived security and knowledge on continuance intention	Confirmation, perceived usefulness, satisfaction, continuance intention	structural equation modelling (SEM)

	to use mobile fintech payment services		
(Emrah et al.,2017)	Investigating the determinants of EPS usage- consumers' perspective	Technical protections, security statements, transaction procedures, past experience	structural equation modelling
(Hua Xin et al.,2015)	Consumer Trust in Mobile Payment Adoption	Perceived reputation of mobile service provider and payment vendor, Perceived opportunism of mobile service provider and payment vendor, perceived structural assurance, perceived environmental risk, trust, espoused uncertainty avoidance, disposition to trust	structural equation modelling
(Tasin,2017)	Factors Influencing Customer's trust in online shopping-bank Executives	Quality of information, site quality, online consumer review	Correlations & regressions

Measurement tools and models used in the studies to establish adoption of Electronic payments

Selection of the correct model is necessary to evaluate the relationship between customer satisfaction, behavioural intention, security and trust on Electronic payments. Fulfilment of different preconditions affirm the applicability of particular model to the studies. A number of modals have been deployed to establish the relation between customer satisfaction, behavioural intention, security and trust on Electronic payments like TAM (Sevgi et al., 2010; Alaknanda et al.,2018; Agrebi et al.,2015; Marinković and Kalinić,2017; Shang and Wu 2017; Shanmugam et al.,2014; Tobbin,2010; Susobhan,2017), UTAUTand Flow theory (Chong, 2013;Marinković and Kalinić,2017; Abrahão et al., 2016), DOI theory (Tobbin,2010; Geetha and Vinay,2017; Marinković and Kalinić, 2017;Gao et al., 2015), Trust transfer theory(Cao et al.,2018), TRA(Sevgi et al,,2010).

Conclusion-Present study has attempted to study literature on customer satisfaction and behavioural intention by integrating trust and security issues. The results from customer satisfaction and behavioural intention show that, most acknowledged antecedents are perceived risk, perceived ease of use, perceived usefulness perceived (privacy, security and trust). The results from the security and trust reviewed that there is less research work done in this area. The trust and security variables found under various studies are financial and time risk, data extraction, perceived privacy, security intention, technical and transaction procedure, access to security, information gathering, ability, benevolence, fairness, honesty, past experience, information and site quality. The most widely used tool for analysis from the literature is SEM. The study suggests more research on trust and security issues as these are the variables that inhibit the usage of electronic payment systems.

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