

## **Factors Affecting Purchase Intention of Customers to Accept E-Commerce Transaction: A Conceptual Framework**

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**Abstract:** The main purpose of the study is to investigate behavioral intention for E-business usage among customers. User's perception explains the intention to transact This study aims to investigate the customer intention to purchase Small and Medium Enterprises (SMEs) products online based on Sharia perspective. With an increase of E-commerce investigation, online purchase intention and the demand for secured online transaction has progressed and the awareness has been created on such issues as security, privacy, trust and consumer's awareness. Developing online trust and coping with the risks of online transactions are major challenges of E-commerce industry. In this framework this study presents the issues the SMEs face and the potential of E-commerce in the new environment linked with Sharia law in the context of Theory of Planned Behavior (TPB). The findings of the study revealed that Islamic assurance plays an important role for the customers to purchase SMEs products through E-commerce. If the SMEs are able to reach out to customers with Islamic assurance, the perceived value to purchase online will be enhanced.

**Key words:** E-business, environment, E-commerce, enhanced, Malaysia

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### **INTRODUCTION**

The function of E-commerce in SMEs includes the provision of new opportunities and generation of new revenue streams in the global market. SMEs in developed countries have started adopting E-commerce in their businesses but in the developing countries like Malaysia and other Islamic countries are still reluctant to use E-commerce in their business operations. Hence, it becomes essential to indicate issues that determine the behavioural intention of customers when performing E-commerce dealings of products on SME websites. By definition, E-commerce is a concept that describes the process of sharing business information, maintaining business relationship and performing business transactions via computer networks (Chaffey, 2010).

The level of E-commerce implementation in the Malaysian organizations and the future of E-commerce technology in their businesses and they have found that E-commerce technology is rapidly increasing in the businesses all over the world as well as in Malaysia, the increasing rate of this technology is attracting the intentions of owners, managers, consumers and researchers for the adoption implications and its effect on the businesses and purchasing activities and it is interesting finding by Alam *et al.* (2011) who shows that

mostly larger companies in Malaysia have benefited from E-commerce adoption while the majority of small companies in Malaysia shows much lower pace of adoption.

Recent surveys showed that adoption of E-commerce by SMEs in Malaysia is still low and not as predicted. A survey conducted by the Associated Chinese Chambers of Commerce and Industry of Malaysia (ACCCIM) had found that SMEs in Malaysia were still depending on conventional business approach with only 28% of the 965 respondents being involved in business online and according to Google Malaysia, only 20% out of 700,000 SMEs in the country had websites while the remaining 80% did not. This data is confirmed by a Malaysia External Trade Development Corporation "E-commerce adoption among Small and Medium Enterprises (SMEs) is still low and the low adoption of business online and E-commerce by SMEs is due to lack of awareness of its benefits, continued preference of traditional methods and a perception that E-commerce tools and technology were expensive.

There is a lack of investigation on the attitude of customers purchasing products and services online. As expected, buyers are more conscious when proceeding to payment online. These zealous consciousnesses are due to the lack of Islamic background and Islamic assurance

by SMEs. As a consequence, online transactions should comply with the Islamic sharia in order to increase sales through increasing the level of trust among customers. Therefore, the study will strengthen the knowledge of intention to purchase, thereby bringing a greater advantage to SMEs and enhance customer's adoption of E-commerce, particularly in Muslim countries.

**Literature review:** There is a particular purpose, in developed countries about the concept of purchase intention, this has been particularly focused on by previous studies (Chibelushi and Costello, 2009; Karakaya and Shea, 2008; Mohamad and Ismail, 2009) as well as in developing countries (Duncombe, 2011; Olatokun and Kebonye, 2010; Sin *et al.*, 2009; Sutanonpaiboon and Pearson, 2006) have concluded that the chapter on E-commerce adoption is old whereas; others have urged for the new dimensions of understanding E-commerce adoption issues by customers.

Since the adoption of information technology systems in SME's is wide comparing to some developed countries, therefore E-commerce can't be implemented without major hinders and in order to make the adoption of E-commerce successful, these hinders must be identified and removed before stating the adoption of E-commerce and conducting business online. This opinion is identical with Mansor and Abidin (2010) who found that the level of applying E-commerce among SMEs is still at its infancy. They added that SMEs need to be convinced rather than coerced into getting their business online and they discovered that government policy is the hindrance factor for SMEs to adopt E-commerce. With more efforts put by the government to create interest of SMEs in ecommerce application, the lesser were their involvement. Efforts were taken by the government urging the local SMEs not to wait long to adopt E-commerce.

Investigating a consumer's perspective towards E-commerce, Thaw *et al.* (2012) concluded that secured online transaction privacy of personal data and trustworthiness of E-commerce providers are important factors that affects individual's attitude. As an extension, the next subsection sheds more light on the trust of E-commerce adoption. Furthermore, Panigrani *et al.* (2014) added that implementation of technology has increased rapidly due to rapid advancement in technology upgradation and usage.

Opposite to the above perspectives, Alam *et al.* (2011) suggests that in Malaysia understanding of manager's perception about E-commerce in their businesses play an important role for its adoption. While

Jehangir *et al.* (2011) have investigated the level of E-commerce implementation in the Malaysian organizations and the future of E-commerce technology in their businesses and they have found that E-commerce technology is rapidly increasing in the businesses all over the world as well as in Malaysia, the increasing rate of this technology is attracting the intentions of owners, managers, consumers and researchers for the adoption implications and its effect on the businesses and purchasing activities and it is interesting finding by Alam *et al.* (2011) who shows that mostly larger companies in Malaysia have benefited from E-commerce adoption while the majority of small companies in Malaysia shows much lower pace of adoption. The above conclusions is identical with (Jalali and Soleimani, 2014) who mentioned that E-commerce could help SMEs to increase communication with their customers in global market, managing fluctuations in foreign exchange efficiently and be more competitive. It is very important for SMEs that managers must actively facilitate usage of E-commerce in order to make the firm competitive in the global market.

This study argues for a behavioral-technical dimension that situates E-commerce adoption in the customers through Sharia perspectives. This study further establish the combination of perspective and attitude towards E-commerce adoption that play an important contribution to the development of SMEs performance and ICT environment along with increasing confidence level of Muslim customers towards E-commerce adoption.

**Behavioral attitude and purchase intention:** Behavioral attitude is defined as an individual's attitude towards an object need not be related to any single behavior performed with respect to the object (Cushman and McPhee, 2013). An individual's attitude towards an object influences the overall pattern of response to the object. Some studies have focused on customer's attitude towards ICT adoption Guo and Jaafar (2011) who found that online security, privacy protection and after sale service are believed to be complicate for online purchase and could directly influence customer's attitude. Trust in E-commerce is one of the main elements that make the implementation of E-commerce a swift and less complicated process Siala *et al.* (2004) and the trust factor plays a significant role in implementing E-commerce in any country, moreover the lack of trust is the important deterrent.

However, Grabner-Krauter and Kaluscha (2003) argues that a country with high level of trust to use E-commerce can easily adapt new technologies including

E-commerce while Pennanen (2009) states that the Internet exchange process is an interaction of four different entities: buyer, seller, third party and technology and according to these four entities, scholars in E-commerce build up various web trust models to examine the factors that may induce trust and enhance the intention to purchase (Pennanen, 2009). In the context of an E-shopping, customers' attitude was shown to rely on trust (Richards and Jones, 2008) and thus related to intention to use a vendor due to its influence on attitude and intention. Therefore, many scholars have evaluated the trust factor and how trust is considered a key element in increasing the intention to purchase online.

**Subjective norms and purchase intention:** Subjective norms is considered to be a part of belief that specific individuals approves or disapproves the performing of behavior (Ajzen, 2005). Individuals who believe that they are motivated to comply with others to perform their behavior are actually surrounded with social pressure and the individuals who are motivated to comply and disapprove by avoiding performing the behavior will have subjective norm. Thus it can be said that subjective norms is expressed symbolically that is the combination of normative beliefs and motivation.

Adopting E-commerce varies according to different characteristics of local environment including both infrastructural and socio-economic. In addition, Efendioglu and Yip (2004) provided cultural characteristics like transaction trust, bargaining and friendly conversation between customer and service providers. These characteristics increase the quantity of personal relationships and enhance social bonding. E-commerce does not allow possessing face to face communication between customer and supplier.

However, Refaat and Edeen (2009) examined the role of culture for acceptance of E-commerce system highlighting the factors like role of trust, uncertainty avoidance, internet store familiarity and reputation as salient features. The main concerns for E-commerce vendors to have loyal customers but this can't be achieved without knowing the culture of community that affects the decisions of buyer when buying online using unconventional way for them.

Moreover, Goethals *et al.* (2009) stated that customers can use a website in several steps of the purchasing process. While culturally customizing websites and adding cultural features to a website may be evaluated positively by an actual site visitor and companies need to know whether and for what functional purpose customers actually use the website. Most concerns of buyers when using unconventional way for

payment, therefore, they mainly focus on whether doing payment using unconventional way is legitimate or not according to the opinion of the researcher. Therefore, SMEs in Islamic countries should implement some clarifications and Islamic assurances that doing online trading or buying goods or services online is not a contrary to Islamic law in commerce, adding to that the Islamic culture urge people to develop their life and activities since the development is not affecting the fundamental principles of Islam. The conclusion is that there is a huge potential in developing countries to use such facilities as the internet to sell goods and services, however it may not be easy to spread E-commerce to its full potential in such developing countries because of the nature of the community, there is still a perceived lack of understanding of such platforms.

**Perceived behavioral control and purchase intention:** Perceived Behavioral Control (PBC) as compared to traditional consumer behavior plays an important role in E-commerce. In the literature of social psychology, PBC has been debated topic on the nature and role of PBC by clarifying the role of TPB and describing its underlying dimensions. Control beliefs and perceived power control play an important role for the acceptance of information system. Control beliefs are measured by behavior belief strength and control belief power. Control beliefs helps perceived behavioral control to be determined that facilitate performance of the behavior. For instance, Wurm *et al.* (2007) mentioned that control beliefs influence behavior, status and care along with performance outcomes. Individuals who believe that they have control over their behavior are more likely to engaged positive with behavior to have better behavioral outcomes.

To increase trust of consumers in various environments, perceived power control has been shown to have an important influence on emotional and behavioral response of consumers. In the context of E-commerce, trust and privacy are closely related to increase perceived power control. Perceived power control has been stemmed from technology acceptance model for the chosen behaviors. In addition, Ayass (2008) mentioned that only technology security measures and tools not enough for consumers perception and privacy of confidential data but there is a need for promoting identity management solutions for better authentication and access control. Secrecy and control of information ensures completeness and validity of information for the usefulness of information. Therefore, E-commerce users

need to validate the consistency of data to ensure that individuals can modify it with detection. Perceived control refers to fulfill security and privacy requirement of the consumers (Fazlollahi, 2001). In the context of E-commerce very few studies have explored the consequences of perceived power control and trust explaining perceived behavioral control of users.

**Information quality and purchase intention:** Information quality is defined as an “evaluation criterion and dimension of overall quality and usability of E-commerce websites” (Goi, 2015; Lee and Kozar, 2006) while others defined information quality as the aspects of a system and a measure of the information system outputs (Delone and McLean, 2003). Information on the web relies on both groups forming a common perception. In a global context, most web interfaces do not support effective usage due to the use of unsuitable tools for conveying information in a global context, as most of the information is presented on the web by icons, metaphors, shapes, colors of text and background, frame/text locations on screen, etc. (Kang and Araujo, 2006). Furthermore, Reunis *et al.* (2006) also states that full benefits from information systems can be achieved only if and when the end-users adopt the tool and apply it successfully in their everyday work using the system correctly and to its full potential. Information quality could be expressed in quality of media transmission, interface design and rich content and these dimensions considered as elements that encourage users to repeat visit to the website more than once.

In same context Parasuraman *et al.* (2006) argues that attributes of E-commerce intermediaries (e.g., eBay), measured by information quality are critical in that they

have direct impacts on how people perceive and feel their relationships with the intermediaries behind the information systems, primarily websites while Sun *et al.* (2007) states that information quality is positively related to perceived relationship quality and the intermediary should use websites as well as associated information systems and services to keep high quality relationships with its customers and subsequently enhance the business profitability.

The general conclusion is that it is profitable for small and medium companies to adapt websites to local tastes by adapting content, language and style (Sinkovics *et al.*, 2007). This conclusion is identical with (Kang and Araujo, 2006; Kang, 2005; Wen *et al.*, 2001) who concluded that web design for international users is one of the increasing issues in Web-Based E-commerce and it is not only for providing multi-language sites but also understanding users’ requirements from international website.

Based on the literature review, the proposed framework (Fig. 1) captures the potential factors that influence E-commerce usage. Based on the above discussions, it is clear that study on belief, trust and information quality will influence intention. In comparison a study by Wang and Emurian (2005), trust in the element of the web interface play an important role in persuading customers to buy. Similarly, Singh *et al.* (2005) found that tailoring the website design to the user experience leads to increased perceptions of website credibility. There are few studies done on E-commerce adoption concerning the trust factor on Muslim customers. Due to this, it can be perceived that behavioral attitude together with information quality and beliefs would enable to increase intention to conduct online shopping for SMEs products.

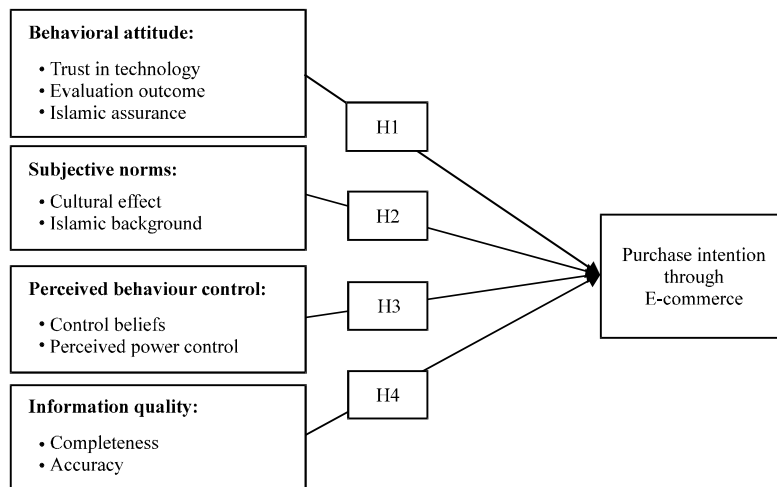


Fig. 1: Proposed research model of E-commerce adoption by SMEs

## MATERIALS AND METHODS

This study will use quantitative analysis for empirically testing the research questions through primary data collections in order to achieve research objective. The data will be collected using self-structured survey questionnaire on the customers having experience of using E-commerce online through structural equation modelling method. The way of collecting the data for this study is the use of statistical survey which is the method used to collect in a systematic way (Fowler, 2008), information about online buyer and purchasing behavior to identify how buyers make their decisions to buy products online, also to know their attitude and backgrounds and other information that serve the main objectives of the study. According to Baeza-Yates *et al.* (2006) and Panigrahi *et al.* (2014) quantitative method is able to demonstrate situation factors, practices and other phenomena (Sekaran, 2003). Customers with IT knowledge are able to provide information accurately through the survey questionnaire.

The data will be analyzed using AMOS through SEM after the reliability and validation of the data collected is tested. Measurement Items will be measured in accordance with the Likert scale: 1 (strongly disagree) to 5 (strongly agree). Data screening and outlier detection process will be done in order to ensure correct input of data. Data screening is very crucial for confirming the variables to be normally distributed without any bias or outliers. According to Hair data need to be examined properly before applying structural equation modeling technique. Therefore, this study will use univariate outlier detection test and the distribution of scores for each individual constructs will be examined.

## RESULTS AND DISCUSSION

This study was made significant due to the issues surrounding the adoption of E-commerce application by the customers especially from Islamic countries. Therefore, it is assumed that the research model will give insight to the reason of low adoption of E-commerce. This model would also enlighten the policy makers for strategic decision making. This paper is a conceptual framework for E-commerce adoption using Theory of Planned Behavior (TPB) in the context of sharia perspective considering Islamic assurance and Islamic background as an important factor for purchase intention. This study will examine direct relationship between behavioral attitude, subjective norms, perceived behavioral control and information quality with purchase intention.

## CONCLUSION

Previous studies emphasized the need to address issues relating to users of the website. This study will add value to the online businesses of SMEs, it will also improve their revenue, along with understanding customer's behavioral intention towards their products and online purchasing activities. It will provide useful information for future researchers on the subject of perceived behavioral intention and SMEs. The conclusions and theories of this study will also help managers to make important decisions; it will be useful in determining whether customers' requirement and quality information requirement are fulfilled. Though the variables in this study are yet to be tested, the complexity of the relationship between TPB factors and purchase intention to adopt E-commerce need to be included in order to become imperative.

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