

Hypermarkets' E-commerce Adoption among Youth in Puchong, Malaysia

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Abstract--- *Businesses across the world are adopting e-commerce to reduce costs and serve customers better. Consequently, many “brick and mortar” businesses (physical stores) have changed to “click and mortar” businesses (both an online and a physical stores). Previous studies indicated that lack of adequate investments in e-commerce innovations have lagged the business transformation and growth and also on how youths are adopting e-commerce. Therefore, this study examines the factors affecting consumers' adoption of e-commerce in Malaysian hypermarkets among youth. The dimensions used in this study are trust, service quality, time-saving, convenience and ease of use, to check the effect on consumer e-commerce adoption. In this study, the explanatory and descriptive research design were employed. The cross-sectional survey method employed using Likert scale questionnaire containing 30 questions. A sample of 229 respondents obtained using convenience sampling and later analyzed using SPSS by conducting descriptive statistics, correlation and regression analyses to examine the effect of the independent variable on e-commerce adoption. The findings indicated that service quality, time-saving, convenience and ease of use have a positive significant effect on e-commerce adoption among youth. Diffusion of innovation theory supports that trust is relevant for consumers to accept any innovation because youth are now easily adapting to more technology, its convenience and safe of time. Expectation disconfirmation theory explains the importance of service quality in meeting consumer expectation on new technologies and innovation.*

Keywords--- *E-commerce, Adoption, Youth.*

I. INTRODUCTION

Electronic commerce (E-commerce) has been making significant contributions towards growth of the businesses and consumers over the years and they have been experiencing positive outcomes (Pham, Pham, and Nguyen, 2011). In a modest adapted meaning, e-commerce involves commercial transactions between buyers and sellers over the internet for the exchange of products, services and information (Napier et al., 2013; Porter, 2016; Turban et al., 2008; Turban et al., 2015; Kalakota and Whinston, 2010). The emergence of e-commerce as a business technology has fundamentally changed the structure (Pastor and Alessandro, 2014) and business environment, offering businesses and customers a powerful channel and making it possible for buyers and suppliers to come together in more efficient ways by creating new marketplace (Sumanjeet, 2010).

E-commerce provides numerous benefits in terms of providing improved and quality products and services, informative information, enhancing brand image, improving the business processes and improving the customer services as well as improved speed of delivery (Khatibi et al., 2016; Chaudhury and Kuiboer, 2002). Furthermore, e-commerce significantly lowers purchase transactions costs by eliminating the middleman in the distribution channels

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(Gallaugher, 2016; Benjamin and Wignad, 2018) and ease of entrance for the customers and businesses to enter wide-open market-space (Pham, Pham, and Nguyen, 2011). Peixin Li (2012) revealed that many businesses across the world are adopting and introducing e-commerce to reduce costs, serve customers and expanding their markets. Consequently, many “brick and mortar” businesses (physical stores) have changed to “click and mortar” businesses (they have both an online and a physical store), such as, Wal-Mart and Tesco. Many other organizations conduct their businesses purely via cyberspace and only have a dot com location such as Amazon, eBay and Alibaba. Many firms have attempted to adopt e-commerce to upgrade their formidable competitive capabilities and thereby build their own competitive advantages.

Essentially, many have achieved positive outcomes with the e-commerce engagement. These types of e-commerce businesses are incapable to succeed unless consumers adopt and accept them. E-commerce is experiencing enormous growth in Europe and the United States and in Asia continues despite the general economic slowdown (Westenberg, 2015, Dunne et al., 2014).

E-commerce progressed in various means of business relationship between businesses and consumers. It can be in the form of Business to Customer (B2C), Business to Business (B2B), Business in Business (BIB), and lastly, Customer to Customer (C2C). Generally, B2B which is between organizations formed the large part of the e-commerce activities. Although e-commerce facilitate these relationships, the technology itself plays greater role in meeting their objectives successfully with the related information available for them (Heizer and Render, 2014). As such, the significant role of internet as the main tool in e-commerce is becoming more relevant as it also act as distribution channel in addition to the participation of the traditional intermediaries such as wholesalers, agents and retailers (Vrana, 2014). E-commerce can help to boost country's competitiveness domestically and at the worldwide arena because of the efficiencies gained through Internet technologies. However, many countries lag behind in the e-business race, and in many cases, those countries are on the bottom of the traditionally measured worldwide competitive rankings. (Sprano, 2000)

As far as Asia is concerned, e-commerce has its own platform for consumers such as Taobao, Ezbuy, Zalora, Lazada etc However, those consumers and their patterns of e-commerce activities can be observed clearly through involvement of youth. ATKearney (2019a) found that 70% of ASEAN population is aged 35 or below, spending more than half of the day online and above 50% of mobile users are more prone to buy online. Furthermore, Malaysian young entrepreneurs dominated 40% of the country's population are growing stronger. According to the report by Google and Temasek Holdings, the e-commerce market in South-East Asia is expected to be worth US\$200bil by 2025 with more participation from the youth (SMEBIZ, The Star Online, 2019).

Despite these developments, there seems to be an inadequate research that covers the key factors that affect consumers' adoption of e-commerce in Malaysia. In order to carry out investigation on these factors and develop what is intended to be a unique inquiry, this research conducts two empirical examinations that complement each other. The first part investigates those factors that affect consumers' adoption of e-commerce from their youth point of view. The latter part is to theoretically find the appropriate suppliers and government agencies to talk about consumers' perspectives, i.e. the obstacle and accomplices derived from the former.

With the advent of internet technology and its rapid growth during the last few years, electronic commerce has become an increasing reality. While e-commerce still constitutes a small part of many countries' economies, it is seen by many as an opportunity to reduce cost and improve productivity. This is absolutely true, as many economies are transforming themselves into knowledge-based economies, where information and innovation are held as the competitive instruments in strengthening their revenue streams (Busli Chan, 2017). Many businesses are using the Internet to expand their reach, improve customer services, develop and maintain closer connexions with their customers.

For example, customer relationship management (CRM) software enables marketers to offer online interactions that are customizable to the individual customer, allowing online marketers to better match their offerings and the online experience to consumers' needs, wants and preferences, even in markets with millions of prospects and customers. (Xia Yang, 2017)

Malaysian e-commerce is projected to grow at 15% for B2C and 85% for B2B by 2010 worth RM114 billion (ATKearney, 2019b). These statistics indicate that the penetration rate of e-commerce in Malaysia has substantially increased on yearly basis. This development would definitely provide a huge potential for SMEs to adopt e-commerce in their business. Due to the technological advancement and increasing number of internet users, e-commerce business owners might foresee opportunities from growing interests by Malaysian consumers' in doing online shopping. Therefore, there is a significant research gap exist to identify the significant factors that influence the adoption of the e-commerce among the youth.

II. LITERATURE REVIEW

Icek Ajzen introduced the Theory of Planned Behaviour (TPB) in 1985. The theory explains the links and gaps between belief and behaviour, (Ajzen, 2014). This theory predicts a deliberate behaviour, because behaviour can be premeditated, (Ajzen & Sheikh, 2016). The theory focuses on how consumer behaviours could be changed to influence their intentions and motives (Ajzen & Sheikh, 2016). This was developed from Theory of Reasoned Action (TRA), which suggests that a person's behaviour is determined by his/her intention to perform the behaviour and that this intention is, in turn, a function of his/her attitude toward the behaviour and his/her subjective norm. The best predictor of behaviour is intention, (Lee, 2017). TPB reviews that human action is influenced by three kinds of considerations which are behavioural belief, normative belief and control belief, (Cameron, 2011). This theory helps to explain why different markets have different rate of new technology diffusion, (Lee, 2017).

Ajzen and Fishbein (1980) introduced the TRA to understand different human behaviours and intentions. Ajzen and Fishbein (1980) combined this theory with TPB (Ajzen, 1985). This is a relevant theory in understanding consumer behaviour towards e-commerce. Godin (2017) supported the TRA saying attitude behaviour is multidimensional, which is complex; it depends upon the person's beliefs, feelings and action tendencies. This theory will help to predict consumer behaviours and outcomes towards e-commerce. 'Consumers are usually quiet rational and make systematic use of information available to them. People consider the application of their action before they decide to engage or not to engage in a given behaviour.' (Ajzen and Fishbein, 1980). The theory reviews that if consumers perceive that the outcome of e-commerce is positive, they will participate or engage.

Phares (2013) did a research in Kenya on e-commerce adoption among micro, small and medium sector in Nairobi. The variables engaged by Phares (2013) was owner/manager profile, customer pressure, supplier pressure, compatibility and complexity. The research findings revealed that the key factor that influence e-commerce adoption was owner/manager. In other study, Sibett (2016) investigated the factors affecting consumer adoption of e-commerce among Malaysian hypermarkets and variables tested was trust, service quality, time saving, convenience and ease of use. The findings showed that trust and service quality were insignificant in affecting consumers' e-commerce adoption among hypermarkets, while, convenience and ease of use has strong relationship with e-commerce adoption.

Syed (2014) conducted an empirical study of factors affecting e-commerce adoption among small and medium sized enterprises (SMEs) in Malaysia with the exogenous variables examined were perceived compatibility, perceived complexity, e-commerce knowledge, external change agents and pressures from competitors. The study affirmed that perceived compatibility was importantly significantly factor in e-commerce adoption among SMEs. Apart from perceived compatibility, perceived relative advantage and management attitude towards e-commerce are also found to be significant in determining e-commerce adoption among SMEs. Giang (2017) conducted a similar research in Vietnam on the factors and setbacks for SMEs to participate in the e-commerce segment. In this study, the researcher has employed secondary data to derive at the findings and found that SMEs participation can provide Vietnamese with an understanding of the potential benefits which they can get from adopting e-commerce. It can also help them to comprehend factors affecting their adoption of e-commerce and barriers limiting new entrants to the e-commerce segment. It can provide Vietnamese SMEs with an understanding of the process of integrating e-commerce into business activities.

Louis (2016) examined the consumers' adoption of online shopping as major shopping medium in Malaysia with the variables, website factors, risk, service quality, convenience, price, subjective norms. The researcher found that perceived risk is a critical consideration for consumers in deciding whether to shop via the internet and has the strongest influence on the decision of consumers to adopt online shopping. Service quality provided by online retailers plays a significant role in influencing consumers' decisions to shop online. In addition, subjective norms, convenience and price too shown to have had effect on consumers' decisions to adopt online shopping. Study by Bahmanziari et al. (2015), Ng (2003) and Pavlou (2003) revealed that perceived usefulness and perceived ease of use influence consumers' to perform online shopping which is one part of the e-commerce. Besides that, in previous researches in various western countries found that perceived risk is related with consumer trust on technology related transactions (Bahmanziari et al.2015; Pavlou, 2017). Thus, this study is essential to examine same factors on e-commerce adoption in Puchong, Malaysia.

III. METHODOLOGY

This study was based on the quantitative research methodology, which it focused on testing the hypotheses, and the outcome. The sample size of 229 consumers for this study was sourced in using a convenience sampling method, in Puchong, a well-populated and developed city located in Selangor state of Malaysia. The survey instrument was based on Likert scale and administered online to suit the research topic. This research used both descriptive and

explanatory (descriptive explanatory). The reasons for the chosen methods was two-fold. Firstly, the survey aims to collect demographic profile of consumers adopting e-commerce which focused on the youth consumers and this will be descriptive. The survey also focused on identifying the impact of the independent variables on the dependent variable that is considered to explanatory, therefore it was a descriptive explanatory study (Harwell, 2010).

IV. FINDINGS

According to Childress (1985), correlation analysis is part of statistical tests to verify mathematically whether there are trends or relationships between two or more sets of data from the same list of items or individuals. Hence, for this study, the Pearson’s correlation analysis was conducted in other to find out if there was a significant relationship between independent variables and dependent variables as adoption of e-commerce.

Table 4.1: Correlation Analysis

	<i>Consumer adoption</i>	<i>Trust</i>	<i>Service quality</i>	<i>Time saving</i>	<i>Convenience</i>	<i>Ease of use</i>
Consumer adoption	1					
Trust	0.255*	1				
Service quality	0.412*	0.436*	1			
Time saving	0.172*	0.371*	0.385*	1		
Convenience	0.415*	0.369*	0.421*	0.494*	1	
Ease of use	0.563*	0.288*	0.416*	0.426*	0.463*	1

Table 4.1 shows that correlation among exogenous and endogenous variables. This makes sense because each variable reflects positive quality that's likely to contribute to consumers’ online transactions.

Table 4.2: Regression Analysis

<i>Model</i>	<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>
	<i>B</i>	<i>Std. Error</i>	<i>Beta</i>		
(Constant)	2.808	1.472		1.907	.058
Trust	0.040	0.061	0.039	.650	.516
Service quality	0.238	0.076	0.198	3.154	.002
Time saving	0.220	0.063	0.221	3.499	.001
Convenience	0.251	0.077	0.211	3.253	.001
Ease of use	0.575	0.077	0.466	7.513	.000

Table 4.2 shows t-statistics and their associated 2-tailed p-values used in testing whether a given coefficient is significantly different from zero. Using an alpha of 0.05, trust does not have a significant effect on consumers’ adoption with a t-value of 0.650 and a p-value is 0.058, which is more than 0.05. Trust is a foundation in conducting business activities. Broadly speaking, business transactions between two parties or more can only occur if they trust each other. Like a catalyst, trust serves to smooth satisfactory transactions as expected by those parties (Yousafzai et al. 2003). In this case, trust is defined as the trait of believing in reliability of others who will fulfil all of the obligations as expected.

Service quality has a positive significant effect on consumers’ adoption with a t-value of 3.154 and a p-value of 0.002, which is less than 0.05. A well-developed e-commerce website not only adds to the value of the product or service being offered but also enhances the worth of the corporation. Therefore, it is important that a company

choose the correct development strategy in order to obtain the greatest return on its investment. Web quality is a useful diagnostic tool for assessing the perceived quality of an organization's e-commerce operation.

Time saving has a positive significant effect on consumers' adoption with a t-value of 3.499 and a p-value of 0.001, which is less than 0.05. Time is essentially important for the businesses because everything is needed in time and all the businesses are affected by time. With providing sufficient and convenience information through website, company can do lots of savings in customers valuable time. This action can attract lot of customers because customers definitely benefit from time savings going online than conventional approach. Therefore, attracting customers lead the company to gain better revenues through e-commerce.

Convenience has a positive significant effect on consumers' adoption with a t-value of 3.253 and a p-value of 0.001, which is less than 0.05. Convenience has direct effect on e-commerce success of companies. With providing the easy and clear view of information, customers can have lots of options to buy service or goods. Personalization in the websites helps companies to attract more customers to their website. This type of attracting customers is one of the most effective ways of marketing for a company.

Ease of use has a positive significant effect on consumers' adoption with a t-value of 7.513 and a p-value of 0.000, which is less than 0.05. Web developers need to keep in mind that ease-of-use will be particularly important in creating the search engines that accompany their sites. These basic search engines and the terms that allow for advanced search need to be intuitive and clear to potential customers. Features of the site that process the order and shipping information and display collected data are less sensitive in that the customer is instrumentally and extrinsically motivated.

V. CONCLUSION

One of the main advantages of e-commerce is that it minimizes the cost of transportation, advertising, and marketing. E-commerce also reduces the distance between buyer and seller, and thus permitting rapid exchange of information, products or services between buyers and sellers around the globe. E-commerce not only provides options of goods and services at a lower cost, but it can potentially enables much more options to the needs of individual buyers. Nowadays, it is relatively costs low for starting any business through Internet.

E-commerce which consists of marketing and other business processes conducted over the computer-mediated online networks is changing the way organizations conduct their business affairs in many industries. It leads to the modernisation of some job functions and replaces others with self-service operations, raising output per worker and creating new employment requirements in some occupations. (Hecker, 2001). The introduction and implementation of new technologies has posed important challenges for the commercial workers worldwide. Among the issues that workers has to deal with are, both B2B and B2C, self-scanning, logistics system, multimedia and other in-store sales support applications. In many ways, they are already deeply affecting labour market (Gottardi et al., 2004). In contrast, e-commerce has spurred employment in industries producing software, and systems used by e-commerce and other occupations associated with websites and networks. The youth especially in the area of engineering and technology are benefiting from these developments. More and more people are required in the various markets that engage e-commerce. Online shopping is rising quickly and steadily. Lots of people refer to purchase products online

from the comfort of their home. Today, more than 60% of people shop online as it is a comfortable mode of shopping by just click of a mouse. E-commerce brings changes in our way of living. E-commerce has a very strong impact on socio-economy status of Malaysia by providing new opportunities towards the people, especially the youth being the backbone of the country.

REFERENCE

- [1] Aine Dunne, M.A. L. J.R., 2008. Young People's Use of Online Social Networking. School
- [2] Ajzen, I. (2014). The theory of planned behaviour is alive and well, and not ready to retire: a commentary on Sniehotta, Pesseau, and Araújo-Soares. 37-41.
- [3] Ajzen, I. From intentions to actions: A theory of planned behavior. In Action Control; Kuhl, J., Beckmann, J., Eds.; Springer: Berlin/Heidelberg, Germany, 1985; pp. 11–39.
- [4] Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behaviour.
- [5] Ajzen, I., & Sheikh, S. (2016). "Action versus inaction: anticipated affect in the theory of planned behavior": Erratum. *Journal of Applied Social Psychology*, 46(5), 313-314.
- [6] ATKearney. (2019a). Trend Macro, MasterCard, PayPal, Frost & Sullivan, A.T.Kearney analysis. Retrieved from https://www.miti.gov.my/miti/resources/Gallery_Walk.pdf.
- [7] ATKearney. (2019b). 2014 –2020 data from EPU, MDeC, Euromonitor, WorldBank, A.T.Kearney analysis, National e-Commerce Strategic Roadmap Overview. Retrieved from https://www.miti.gov.my/miti/resources/Gallery_Walk.pdf.
- [8] Bakos, Y., 1991. A Strategic Analysis of Electronic Marketplaces. MIS Quartely.
- [9] Bethlahmy, W. a., 2009. nvestigation of factors affecting the adoption of mobile shopping (DBA, Dissertation). p. 27.
- [10] Busli Chan, S. A.H., 2017. The development of e-commerce in Singapore: The impact of government initiatives. *Business Process Management Journal*, Volume Vol. 8.
- [11] Cameron, R. (2011). Ajzen's Theory of Planned Behaviour and Social Media. *American Journal of Psychological Research*, 1-20.
- [12] Chan, B., 2017. The development of e-commerce in Singapore: The impact of government initiatives. View point.
- [13] Chaudhury, A. & Jean-Pierre Kuiboer. 2002. *E-Business and E-Commerce Infrastructure: Technology Supporting the E-Business Initiative*. New York: McGraw-Hill. Computer-mediated communication.
- [14] Davis, P.B. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Market science vol.33*, 982-1003.
- [15] Daya, J. (2015). Determinant Factors of E-commerce Adoption by SMEs in Developing Country: Evidence from Indonesia. *J name Procedia - Social and Behavioral Sciences* 195, 145-150.
- [16] Englewood Cliffs, NJ: Prentice-Hall.
- [17] Gallagher, J.M., 2009. E-commerce and the undulating distribution channel. pp. 89-95.
- [18] Godin, G.K. (2017). The theory of planned behaviour: a review of its applications to healthy related behaviors.
- [19] Harwell, M. (2010). Research Design in Qualitative/Quantitative/ Mixed Methods. In M. Harwell, *Research Design in Qualitative/Quantitative/ Mixed Methods*.
- [20] Heizer, B.R. a. J., 2014. Operations Management. 6th ed. s.l.: Prentice Hall PTR.
- [21] Kevin Thomson, L.H., 2001. Value-adding communication: Innovation in employee communication and internal marketing. General review.
- [22] Lee, J. (2017). Theory of Planned Behavior and Teachers' Decisions Regarding Use of Educational Technology.
- [23] Li, P., 2012. A strategic framework for determining e-commerce adoption. s.l.: Emerald Group Publishing Limited.
- [24] Li, P., 2012. A strategic framework for determining e-commerce adoption. Conceptual paper of marketing.
- [25] Pavlou, p. A., 2017. Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model. *International Journal of Electronic Commerce*, p. 34 Pages.
- [26] Peixin Li, W.X. (2012). A strategic framework for determining e-commerce adoption. *Journal of Technology Management in China*, Volume Vol. 7.

- [27] Pham. L, Pham LN, & Nguyen DTT. (2011)- Determinants of e-commerce adoption in Vietnamese small and medium sized enterprises. *International Journal of Entrepreneurship*.
- [28] Ravi Kalakota, A.B.W., 2010. *Frontiers of Electronic Commerce illustrated ed.* s.l.: Diane Publishing Company.
- [29] Rolf T. Wignand, R.I.B., 1995. *Electronic Commerce: Effects on Electronic Markets*.
- [30] Sanzogn, L. (2010). Factors influencing the adoption and usage of online services in Saudi Arabia. 1-32.
- [31] SMEBIZ, The Star Online, (18, March, 2019). Leverage digital platform to meet demands. Retrieved from <https://www.thestar.com.my/business/smebiz/2019/03/18/leverage-digital-platform-to-meet-demands/>
- [32] Sprano, E. (2000). *E-commerce Capable: Competitive Advantage for Countries in the New World Economy*, 10.
- [33] Turban, E., D. Leidner, E. McLean, J. Wetherbe, 2008. *Information Technology for Management*, Wiley.
- [34] Vrana, V., 2014. *Tourism agents' attitudes on internet adoption: an analysis from Greece.* s.l.: Emerald Group Publishing Limited.
- [35] Wood, C.M., 2004. Marketing and e-commerce as tools of development in the Asia-Pacific region: a dual path. *International Marketing Review*, Volume Vol. 21.
- [36] Xia Yang, Z.U.A., 2017. Consumer preferences for commercial Web site design: an Asia-Pacific perspective.