



**The Mediating Effect of Purchase Intention toward the
Relationship of Attitude, Subjective Norm, Perceived
Usefulness, Trust and Online Shopping Behavior**

by

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LIST OF ABBREVIATIONS

UniMAP	Universiti Malaysia Perlis
UUM	Universiti Utara Malaysia
SPSS	Statistical Package for the Social Sciences
AMOS	Analysis of Moment Structures
SEM	Structural Equation Modeling
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
TAM	Technology Acceptance Model
EAM	E-commerce Adoption Model
WEB	Web Characteristics
P&G	Procter & Gamble
EPU	Economic Planning Unit
PC	Personal Computer
ICT	Information and Communications Technology
MCMC	Malaysian Communications and Multimedia Commission
PEMANDU	Performance Management & Delivery Unit
GMBO	Get Malaysian Business Online
SME	Small & Medium Enterprise
MNC	Multinational Company
C2C	Consumer-to-Consumer
M2U	Maybank2u
SST	Self Service Technology

CR	Composite Reliability
AVE	Average Variance Extracted
SD	Standard Deviation
GFI	Goodness-of-Fit Index
RMSEA	Root Mean Square Error of Approximation
CFI	Comparative Fit Index
TLI	Tucker Lewis Index
CFA	Confirmatory Factor Analysis
CMIN	Chi-square
DF	Degree of Freedom
MI	Modification Indices
ATT	Attitude
SN	Subjective Norm
PU	Perceived Usefulness
T	Trust
OSB	Online Shopping Behavior
OPI	Online Purchase Intention
E-commerce	Electronic Commerce
RM	Ringgit Malaysia

LIST OF SYMBOLS

N	Sample size
χ^2	Chi-Square
β	Beta

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Kesan Pengantaraan Keinginan Pembelian terhadap Hubungan antara Sikap, Norma Subjektif, Tanggapan Kemanfaatan, Kepercayaan dan Gelagat Membeli atas Talian

ABSTRAK

Kajian ini dijalankan untuk menyelidik gelagat pengguna terutamanya gelagat membeli-belah secara atas talian khususnya mahasiswa berumur antara 18 dan 34 tahun yang sedang melanjutkan pelajaran di Universiti Malaysia Perlis. (UniMAP). Sebanyak 800 set borang soal-selidik telah diedarkan dan 662 borang soal-selidik telah dipulangkan untuk pengekodan, analisis dan ujian hipotesis. Data untuk semua pembolehubah kajian dikumpulkan melalui pengurusan secara persendirian dan dianalisis menggunakan perisian *SPSS Version 18.0* dan *AMOS Version 16.0*. Pemodelan Persamaan Berstruktur (*SEM*) dijalankan untuk menguji kesesuaian model dan ujian hipotesis. Hasil kajian menunjukkan bahawa sikap dan kepercayaan mempengaruhi secara positif dengan keinginan dan gelagat membeli atas talian manakala tanggapan kemanfaatan mempengaruhi secara negatif dengan keinginan dan gelagat membeli atas talian. Norma subjektif telah menunjukkan hubungan positif dengan keinginan pembelian manakala hubungan negatif dengan gelagat membeli atas talian. Keputusan juga menunjukkan keinginan membeli atas talian mempengaruhi secara positif dengan gelagat membeli atas talian. Apabila keinginan pembelian bertindak sebagai pengantaraan, sikap dan gelagat membeli atas talian adalah dimediasi sepenuhnya, norma subjektif dan gelagat membeli secara atas talian adalah diperantarakan sebahagian dan hubungan antara tanggapan kemanfaatan dan kepercayaan tidak dipengaruhi oleh pengantaraan. Keputusan menunjukkan model adalah sesuai dan sembilan hipotesis adalah disokong dan empat hipotesis tidak disokong dalam kajian ini. Sampel daripada golongan pekerja dan pembolehubah yang berkaitan dengan pembelian secara atas talian adalah dicadangkan untuk kajian pada masa akan datang.

Kata Kunci: Sikap, norma subjektif, tanggapan kemanfaatan, kepercayaan, keinginan pembelian, gelagat membeli atas talian

The Mediating Effect of Purchase Intention toward the Relationship of Attitude, Subjective Norm, Perceived Usefulness, Trust and Online Shopping Behavior

ABSTRACT

This study was conducted to examine the consumer behavior specifically online shopping behavior of university students aged between 18 and 34 that currently pursuing their studies in University Malaysia Perlis. A total of 800 sets of questionnaires have been distributed and 662 questionnaires were returned and used for coding, analysis and testing the hypothesis. Data for all the study variables were collected through self-administered survey questionnaires and analyzed using SPSS version 18.0 and AMOS version 16.0. Structural Equation Modeling to test the model fits and hypotheses testing. The conclusion could be depicted that attitude and trust positively influenced online purchase intention and shopping behavior while perceived usefulness influenced online purchase intention and shopping behavior in negative way. It is interesting to note that subjective norm positively influenced purchase intention but negatively influenced online shopping behavior. Results also showed that purchase intention positively influenced online shopping behavior. The mediating effect of purchase intention indicated that attitude and online shopping behavior was fully mediated, subjective norm and online shopping behavior is partially mediated, whereas perceived usefulness and trust were not mediated. The results also demonstrated that the hypothesized model was fit and nine hypotheses were supported whereas four hypotheses were rejected. Sample from working adults and other variables that related to online shopping were suggested to be included in future research.

Keywords: Attitude, subjective norm, perceived usefulness, trust, purchase intention, online shopping behavior

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

During the past two decades, internet was growing its roles in affecting both the local and international organization to achieve its business success. Internet is an important tool for many purpose uses in this technology era. Business companies are using internet for internal communication among the colleagues to link each department to optimize the efficiency and effectiveness for more quality works and also connect their business partners around the globe. Government uses internet to provide information and services to the general public and internal communication between the government departments. Schools or universities use internet to search more teaching materials to improve the studies among students while for general public, internet is used to search information, social networking, education and now they can even use internet to purchase goods.

Yet, the internet speeds in Malaysia still need some improvement. According to Malaysian Digest (2014), Malaysia ranked in the top 10 slowest internet speeds in the world. In the press release in May, Malaysia Communications and Multimedia Commission (MCMC) is promising to upgrade broadband speeds and quality and it was their aim since 2010 to expand the broadband usage and implement High Speed Broadband (HSBB) project (MCMC, 2014). Malaysia itself has achieved rapid development in the adoption of broadband services within a short time period with the household broadband penetration

rate of 11 percent in 2006 to 31.7 percent in 2009 surpassing the target of 50 percent penetration rate set in 2010 (MCMC, 2012).

In this globalization era, e-commerce has potential growth in recent year and thus many successful retailers are seeking for global penetration especially through e-commerce. According to Hana, Mike and Parvaneh (2013), global online retail sales were increased from US\$236 billion in year 2007 to US\$521 billion in year 2012 which accounted for 17 percent annually from year 2007 to year 2012. It was slightly increased compared to 13 percent annually from year 2006 to year 2011 (Hana, Mike & Parvaneh, 2012). E-commerce is the easier and faster ways to expand business in the low cost manner and it provides opportunities for global retailers to build their brands and learn about the consumers in other countries before expand their business or invest a company or store in particular country. According to MCMC (2013), the population penetration rate of the broadband subscriptions in Malaysia was 67.1 percent. In order to promote Internet usage, government has setup 1Malaysia Internet Centre, mini community broadband Centre, 1Malaysia Community Broadband Library and 1Malaysia Wireless Village both in the West and East Malaysia (MCMC, 2013). From this evidence, it shows the government's aims to increase the internet usage among the citizens which indirectly boost the online shopping rates.

Since developed countries are confronting for revenue plateau, many retailers seek to expand and penetrate into developing countries because of its new and potential growth and to raise revenues in overall investments. Different from the vexation to offer consumers a seamless shopping experience in developed markets, retailers in developing markets are concerning the obstacles to online shopping such as financial and logistical infrastructure and cultural norms (Hana *et al.*, 2013; Tacconelli & Wrigley, 2009). An online business is a

safest way to test new markets as the online sales increase rapidly in developing countries. Developing country such as China with the highest online market attractiveness score of 84.0 and ranked in the top of the 2013 global retail e-commerce index compared to developed countries such as Japan (83.3), United States (82.8), United Kingdom (75.7), South Korea (72.2), Germany (70.4) and France (65.2) (Hana *et al.*, 2013).

Malaysia ranked top 30th of the 2013 Global Retail E-Commerce Index among other countries with the online market attractiveness score of 36.8 point of the overall online market size, consumer behavior, growth potential and infrastructure (Hana *et al.*, 2013). This satisfactory index could be due to the government efforts to promote e-commerce among Malaysia citizens. Nordin and Nik Kamariah (2011) demonstrated that well-developed infrastructure is very important for marketing activities over the internet. Thus, it is vital that well-developed logistics infrastructure in Malaysia is an added advantage to compete with other countries. Masaya Ueno, the president and chief executive officer of Rakuten Online Shopping Malaysia said that online shopping is gaining its attention in Malaysia (The Star, 2014, March 29). In a related finding, Hana *et al.* (2012) stated that half of the households in Malaysia own a computer, 56 percent of the population is connected to the internet and more than half of the active users purchase products and services online. This finding showed that Malaysia has potential growth in e-commerce and therefore it is important to understand the online shopping behavior of consumers and new technology challenges.

1.2 Problem Statement

Online shopping is growing rapidly nowadays since consumers found it convenient because they can shop whenever, wherever and whatever they like. Online shopping is important and convenient particularly during a holiday season because the consumers do not have to stuck in a traffic jams, find a parking spot in a mall, queue up and wait in a long line or search from store to store to purchase a product or service. According to Wong (2014), there are 87 percent of the online store are operated by one to five full timers while the remaining 13 percent of the online store are operated by six to thirty full timers. Furthermore, there are 68 percent of the online retailers earned less than RM10000 a month while only 18 percent of the online retailers made profits more than RM50000 a month (Wong, 2014). From these evidences, it showed that most of the online stores in Malaysia are relative small setup and lack in profit earning. The importance of the consumer behavior particularly in online retailing has raised interest of the successful retailers to focus on this area, but it also prevent some of the retailers to investigate the complexity of the consumer behavior that always change over time and it requires huge amount of investment. Based on the annual report of 2012 presented by MCMC (2012), internet users that use internet for online shopping constitute for 24.5 percent and internet users that use internet for selling goods or services only constitute for 9.4 percent which is the second lowest.

The reason was due to understanding consumer behavior in a virtual store is complex than understanding consumer behavior in a traditional store as no physical interaction between the online retailers and the online shoppers (Jiang *et al.*, 2008). Therefore, it is necessary to put more efforts to investigate the drivers of consumer

behavior and the results of this study can provide useful information to the retailers to build their marketing strategies. The sophisticated and high demand from the consumers make sellers to become more creative and skillful in order to survive in the competitive business environment. For example, Amazon discloses its mini-drone delivery system that can deliver the parcels to its customers in just 30 minutes time (The Star, 2013, December 3). In fact, retailers around the world especially in the developed and developing countries are exploring online retail because consumers can go online to buy products and expand more business lines (Deloitte, 2011; Hana *et al.*, 2013; Jones Lang LaSalle, 2013).

Malaysia government implemented various efforts to promote online shopping and one of the approaches is providing broadband to all new residences (Performance Management & Delivery Unit, 2010). Huge amount of capital have been invested by government in order to promote internet uses and make use of e-commerce to generate income among Malaysian citizens. In fact, government of Malaysia has collaborated with the communication and multimedia industry for targeting at least one tele-centre in each sub-district (*mukim*). This approach is to provide opportunities for local community to learn new skills through Internet and these tele-centres are believed to contribute to e-commerce in the future which parallel with the government's aims to promote e-commerce among Malaysian (Economic Planning Unit, 2010). This planning is in tandem with One Home One PC projects that launched in 2003 by the government to increase Information and Communications Technology (ICT) literacy among households (Economic Planning Unit, 2010) and National Broadband Initiative in 2008 with the aim to provide broadband access to all Malaysians (MCMC, 2012).

Another initiative such as ICT training workshops were organized by MCMC to introduce online business to assist local communities for improving their socio-economic