
Gender differences and consumer's repurchase intention: the impact of trust propensity, usefulness and ease of use for implication of innovative online retail

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Abstract: The importance of online consumer behavioural retention among different group has been recognised as an issue for online marketer in light of expansion of e-commerce and implication for online retailing innovativeness and continuous improvements. As such, gender differences beg attention for further studies in internet retailing context. This study endeavours to examine the impact of perceived ease of use (PEOU), perceived usefulness (PU) and trust propensity on repurchase intention (RI) in which the role of gender differences is concerned with implication of website innovativeness. The online and offline surveys among Malaysian online shoppers performed to empirically test the proposed research framework with a total of 300 valid questionnaires. The findings suggest that there is significant difference between males and females in determining RI, thus, gender can be used to predict RI. Moreover, PU and trust propensity found to be key predictor factors in online shopping behavioural intention while PEOU does not. Specifically, gender differences between males and females found higher in trust propensity rather than PU, PEOU and overall RI. The social implication, practical implication and theoretical contribution of research with concern of limitation are discussed.

Keywords: perceived ease of use; PEOU; perceived usefulness; PU; trust propensity; repurchase intention; RI; innovativeness; online retailing; Malaysia.

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1 Introduction

The advanced business purpose uses of the internet by consumers have caused vast developments in the electronic commerce arena. While e-commerce offers an opportunity to expand business activities, there are notable obstacles to market the products online (Murphy and Tocher, 2011) and online consumer repeat purchase intention (My and Kemp, 2013). Research on internet-based e-commerce specifically retailing has been phenomenal over the past decade (Joo et al., 2011) for building effective and innovative online retail. By examining the influential factors of consumer behaviours the enterprise identifies the customer demand, enhance the factors that promote consumer purchasing and change unfavourable factors, taking the satisfaction of consumer as the start point and ultimate goal of marketing behaviours (Guo, 2011) which lead to continuous improvement of business (Medrano-Sáez and Olarte-Pascual, 2013) and boost the online shopping. RI leads to profitability of company in long run in which understanding gender differences play a vital role and enable marketing researchers to enhance our understanding of this paradigm (Frank et al., 2013). A better understanding of consumers' perspectives of website visualisation based on gender is important when it comes to designing a website that will attract young internet users and potential

customers (Ozdemir and Kilic, 2011). According to Akman and Mishra (2010), the demographics of internet users is an interesting area or study for researchers. Previously, the statistically significant different in internet usefulness and anxiety were found among different education levels, male and female employees, and age groups (Zhang, 2005). Thus, the investigation of gender gap, online consumer's behaviour and purchase intention needs attention in prospect of E-commerce development and enhancement of retailing strategy toward development of innovative web retail (Sebastianelli et al., 2008).

In Malaysia, online shopping is and electronic retailing still consider as new phenomena with moderate adoption and there is not much knowledge of about how the online shoppers behave and make repurchase decisions thus creating a gap in this area (Ling et al., 2010). Most of research on this area conducted in developed countries. For organisations with good and loyal customers, it is detrimental that they have proper customer management programs in place. The main final outcome which represent consumer behaviour are focused either on the present use of an information technology (IT) (current online behaviour), or on the future use (intentions or future online behaviour) (Hernandez et al., 2009). It is critical that even for online customers the notion of repeat purchases are successfully carried out (Lee et al., 2011). Moreover, the need to predict and assess RI of the internet consumers has increased. Additionally, gender is an important variable in attitudes towards the internet and online shopping behaviour (Zhang, 2005; Ozdemir and Kilic, 2011). Literatures in different discipline shows that males and females exhibit different attitudes and behaviours (Jackson et al., 2011) which gender has the ability to impact the trends of online shoppers (Rodgers and Harris, 2003) and learning (Liu, 2008). Previously, companies attempt to target different segments through product category (Viswanathan et al., 2007). Gender differences help characterise to control in the shopping experience to complete the shopping task and those seeking affiliation in the mall shopping experience (Baker and Wakefield, 2012). Therefore, a substantial body of research reveal that the internet research has not fully explored gender as a key variable for market segmentation specifically in online retailing in prospect of building an innovative retail website.

The study of consumer behaviour has a long history in a variety of disciplines (Joh et al., 2006) while study online shopper behaviour is back to last decades. There is a great implication for manager to understand the current issue in online environment, not because of e-commerce only but by understanding online environment marketer can serve consumers in market place more effectively. A deeper assessment of differences between male and female could make marketers more aware of the possible effects of browsing frequency for information seekers on WWW and their final decision on brand selection. This study driven by two main research objectives, firstly, to examine the impact of gender gap on online shopping behavioural retention among Malaysian online shoppers and secondly to investigate the impact of PEOU, PU and trust propensity on RI for implication of retailing continuous improvement. Therefore, the study organised in following parts. Firstly, theoretical research framework and literature review are discussed to explore the gender differences according to previous studies. Research methodology and statistical method approaches and process are explained accordingly in third part of study. Next, the results, conclusion and managerial implication of study are discussed according to literature. Thus, this study contributes an integrated model and testing empirically evidence of the role of gender in context of online retailing based on technology acceptance model (TAM) and trust model in Malaysia.

2 Literature review

“The rapid growth of internet marketing stimuli marketing researchers to investigate traditional consumer behaviour theories apply in the internet context” [Kim, (2007), pp.279–288]. This study built a model upon TAM (Davis, 1989) and model of trust (Mayer et al., 1995). TAM consider as the most influential use theory in understanding electronic commerce (Tong, 2010; Wang et al., 2013; Ibrahim et al., 2011) which was built on the theory of reasoned action (TRA) (Ajzen, 1991). The differences in gender are discovered in the model of TAM (Yuen and Ma, 2002). There are two central beliefs in the TAM taken from the TRA, namely the notion of usefulness and ease of use. TAM is generally used in studies that investigate the adoption of technology by users and is said to be a dynamic and reliable model (Vijayarathy, 2004). The TAM uses the TRA connection as a way to describe the acceptance of IT use (Rezaei and Amin, 2013). The main factors in the use of IT is said to include PU and the factor of PEOU (Liao and Hsieh, 2010) in which recent studies (e.g., Purnawirawan et al., 2012) take PU in exploring attitudes and intention of users.

The internet usage is a specific human behaviour trait in which gender plays an essential role in predicting future behaviour usage (Trombley, 2011) as Akman and Mishra (2010) explained that gender has significant impact on the average daily time spent on communication/e-mailing/chat. Accordingly, compared to males, females have greater tendencies to use abbreviations, avoid using self denigration, and using informal language with no expert language (Ozdemir and Kilic, 2011). Some significant differences are found in both genders in such issues as usage of derogatory statements, expert language, colours in typeface, and straight lines. Some differences are also found in the use of blue/black typeface, abbreviations, informal language, and the use of formal images, headings, male figures, and formal typography (Ozdemir and Kilic, 2011). In fact, gender and age may moderate the relationships between shopping orientation and control/ intimacy (Baker and Wakefield, 2012). Meanwhile, Slyke et al. (2002) used gender as a determinant for observing online purchasing. In order to understand online shoppers behaviour, it is important to know the demographic of these customers and how they behave online (Chang and Samuel, 2004). Hence, this research paper set to examine how gender differences influence online shopping behaviour in Malaysia.

2.1 *Perceived usefulness (PU)*

Perceived usefulness (PU) “is the consumers’ perception of how online shopping is useful to user” [Lee et al., (2011), pp.200–221]. Usefulness is secondary in terms of compatibility in the model. In this study we define PU as a total usefulness of web shopping by both males and females. Accordingly, measuring and predicting end users’ usefulness and convenience have also become an area of academic interest (Joo et al., 2011). Besides, PU of using the internet for getting information and making product comparisons is related positively to the notion of online shopping (Vijayarathy, 2004).

Vijayarathy (2004) declare that applying the TAM to a collection of data regarding consumers of online shopping will be able to assist managers to know about the issues that are important to consumers and also about their level of IT usage. Therefore, this study proposes a model of online repurchasing behaviour intention of university students based on TAM (Davis, 1989). A study (Rezaei and Amin, 2013) among Malaysian online

shoppers found that PU and PEOU are positively significant factors in predicting RI. This study considers a few studies' attempts to empirically examine the impact TAM behavioural constructs of PU and PEOU were tested for predicting user acceptance of the World Wide Web (WWW) regarding to implication of innovative retail. Therefore, we combined TAM with trust construct to predict RI of target population.

The findings reveal that even though what customers perceive regarding the benefit of shopping online is important for them to keep returning but an equally important issue is the notion of having an enjoyable experience online (Chiu et al., 2009). Dong and Zhang (2011) found that male users were more thoroughly thoughtful than female users in their decision-making to accept information systems. Shashaani and Khalili (2001) release that there is no significant gender divergences in respondents' liking for computers or their perceptions of the usefulness of computers. The usefulness perceived by individuals positively influences their present purchasing behaviour (Hernandez et al., 2009). A number of studies found that men are more motivated by PU on behaviour intention (Midha, 2012). Thus, we hypothesise:

H1 There is a significant difference between male and female in PEOU and RI.

2.2 Perceived ease of use (PEOU)

A deep understanding of customer connivance would lead to ease of transaction process and decision making, thus, repeat purchase. The vital role of the PEOU as it is used for IT usage makes it imperative to understand those factors that contribute to this user experience (Joo et al., 2011). According to online consumer behaviour perceived ease of getting information or PEOU is defined "as the consumer's belief that it is easy to get information regarding products and services from an online website" [Awad and Ragowsky, (2008), pp.101–121; Rezaei and Amin (2013)]. In this study we define PEOU as a total convenience of web shopping by male and female users. As one of the most widely cited models for the topic, the TAM argues that people's acceptance of new technology is determined by two perceptions of the technology: PEOU and PU (Joo et al., 2011). Furthermore, PEOU impacts women's trust propensity of online activities more than men (Awad and Ragowsky, 2008).

The enhancement of website convention and friendliness is important for first time purchase intention in general and for experience customers specifically. Davis et al. (1989) suggested that developing a website so that it is user friendly will also enhance the overall performance of the site. For the men, the notion of PEOU is a non-issue in their use of computers. Even though PEOU is one of the factors in TAM, the intent to use computers is mainly governed by PEOU by highlighting PU (Yuen and Ma, 2002). According to Terzis and Economides (2011) women are more influenced by PEOU in IS and IT context. The ease of use perceived by individuals positively influences their attitude toward electronic shopping (Hernandez et al., 2009). Dong and Zhang (2011) argue that perceived behaviour control has significant effect on behavioural intention (BI) to accept information systems of Chinese users without the mediating effects of self-efficacy, ease of use and facilitating condition. Terzis et al. (2012) argue that PEOU will have a positive effect on the RI. Therefore we hypothesise:

H2 There is a significant difference between male and female in PU and RI.

2.3 *Trust propensity*

Trust “a willingness to rely on an exchange partner in whom one has confidence” is central to electronic shopping intention (Dennis et al., 2009) (In this study trust and trust propensity use interchangeably). While e-commerce has grown substantially over the last decade, it still is marred with the lack of trust and growing privacy concerns (Midha, 2012). Researchers have explored the subject of trust propensity in online shopping (Wu and Chang, 2006; Rezaei and Amin, 2013; Hsu et al., 2012), in explaining employees behaviour in organisational setting (Harorimana, 2013) and banking sector (Amin et al., 2013) with the mix results. Some researchers have proven that the value of trust when conducting business online is crucial to impacting customers’ buying behaviour (Chen and Lee, 2008). People are reluctant or are uncertain in transacting online if there is a lack of trust (Andaleeb, 1995). A meta-analysis of scales from widely used personality inventories from 1940 to 1992 showed that females scored slightly but consistently higher on scales of trust (Buchan et al., 2008). When it comes to online businesses, not having trust is an important matter for consideration. It is crucial to evaluate how customers’ buying intention is controlled by trust issues in their online transactions (Andaleeb, 1995). Making purchases online is lowered if there is no trust between the buyer and the online service provider (Lee et al., 2011). The definition of trust propensity is not widely agreed upon and varies from discipline to discipline (Midha, 2012; Murphy and Tocher, 2011). Thus, in this study we define trust as a total perception of trust by male and female shoppers.

The main barrier for people who are hesitant to buy things online is the security issue related to the payment systems. Purchasing a product online means that one has to release personal information regarding their credit card and this has many people to be afraid of this issue. Research provides increasing evidence that women and men differ in their decisions to trust information systems; research does not satisfactorily explain why these gender differences exist (Riedl et al., 2010). Moreover, trust propensity has been found to be strongly influenced by gender: men trust more in the (mathematical) abilities of their interaction partners, in particular of women, than women do (Schwieren and Sutter, 2008). Trust has always been an important element in marketing, and especially in electronic commerce (Liao and Hsieh, 2010). Online shoppers cannot inspect the service environment and see or touch the products. Buchan et al. (2008) found that men trust more than women, and women are more trustworthy than men. Building trust with customers is essential for the success of business-to-consumer e-commerce (B2C) ventures (Murphy and Tocher, 2011). Therefore, we hypothesise:

H3 There is a significant difference between male and female in perceived trust propensity and RI.

3 **Methodology**

3.1 *Data collection method and sampling process*

The data were collected via e-mail survey and offline survey. The primary data is from self-administered questionnaires adopted from relative previous study (see Appendix). Thus, this study employed both offline and online survey. In the online survey, out of

250 e-mail surveys sent out to the respondents, only 186 responded. The online response rate was 74.4% and offline survey rate was 95%. In the offline survey, 120 questionnaires were distributed among students of which 114 questionnaires were collected. Non probability sampling was used in this study which 300 respondents were chosen from four different Malaysian universities (two public universities and two private universities). Therefore, the online and offline surveys of 300 respondents were from four university students namely UTM, UPM and MMU and Limkokwing University.

3.2 Questionnaire design and measurement

The five Likert scale was used in this study ranging from 1 strongly disagree to 5 strongly agree. Appendix shows questioners items and sources. To measure PU, five questions were adopted from (Chiu et al., 2009), to measure PEOU three items were adopted from previous study (Jaiswal et al., 2010), to measure trust eight items were adopted (Chen and Barnes, 2007) and to measure RI two items were adopted from Bhattacharjee (2001).

Prior to distribution of actual questionnaires, a pilot study was performed to measure the reliability of items and avoid any wording issue. Therefore, 30 respondents from MMU Cyberjaya campus were participated in pilot study. Internal consistency was calculated using Cronbach's Alpha for research variables as shown in Table 1. Based on the information and analysis conducted from the pilot survey, questions in the questionnaires amended and improved accordingly before the actual data collection took place. Shown in Table 1, the Cronbach's Alpha for all items was reliable.

Table 1 Results of reliability analysis in pilot study

<i>Variable</i>	<i>Cronbachs Alpha</i>
PU	0.769
PEOU	0.771
Trust	0.721
RI	0.833

4 Results

This study employed both offline and online survey. In the online survey, out of 250 e-mail surveys in which the hyperlink was sent out to the respondents, thus, only 186 valid responses were collected from this strategy. In the offline survey, 120 questionnaires were distributed among students of which 114 questionnaires were collected. By looking at the frequency analysis in Table 2, these 300 respondents categorised as below based on respondents demographic profile. Therefore, the online response rate was 74.4% and offline survey rate was 95%.

Table 3 depicts the correlation and means of online shopping components. Correlation among the components of online shopper behavioural retention and means are presented in Table 3. The correlations among all components are high and significant. Depicted in Table 3, the PU construct has a strongest correlation with three other components.

Table 2 Demographic characteristics of respondents

	<i>Demographic profile</i>	<i>Category</i>	<i>Frequency</i>
1	Gender	Male	59%
		Female	41%
2	Age	18 to 24	33%
		25 to 31	22.7%
		31 to 37	37%
		Above 37	7.3%
3	Marital statuses	Single	70%
		Married	30%
4	Race/nationality	Chinese	44.7%
		Malay	25.7%
		Indian	14.3%
		Other nationalities	15.3%
5	Location of residency	Kuala Lumpur	22.7%
		Cyberjaya	29.0%
		Serdang	33.7%
		Melaka	10.7%
		Other areas	4.0%
6	University	MMU	30.0%
		UPM	46.7%
		UTM	20.3%
		Limkokwing University	3.0%
7	Education level	Undergraduate	56.0%
		Postgraduate	44.0%
8	Allowance (income) per month	Less than RM 200	29.0%
		RM 201 to RM 300	22.7%
		RM 301 to RM 400	37.3%
		RM 401 to RM 500 and above	11.0%

Table 3 Correlation and means of online shopping components

	<i>Online shopping components</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>M</i>
1	PU	1			4.44
2	PEOU	0.718*	1		4.50
3	Trust	0.691*	0.713*	1	4.48
4	RI	0.636*	0.613*	0.649*	4.45

Note: * $p < 0.001$

Table 4 depicted the result of confirmatory and reliability factor analysis (Table 4). The total items, with expectation of effect item shown high loading ($> .066$) on their total item intended factor. The Cronbach Alpha used to assess and examine the validity of construct with internal reliability of more than 0.67.

Table 4 Rotated component matrix

	<i>Component</i>				<i>Cronbach's Alpha</i>
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	
<i>PU1</i>	0.927				0.773
<i>PU2</i>	0.662				
<i>PU3</i>	0.835				
<i>PU4</i>	0.958				
<i>PU5</i>	0.899				
<i>PEOU1</i>		0.770			0.673
<i>PEOU2</i>		0.814			
<i>PEOU3</i>		0.692			
<i>Trust1</i>			0.927		0.720
<i>Trust2</i>			0.958		
<i>Trust3</i>			0.976		
<i>Trust4</i>			0.935		
<i>Trust5</i>			0.756		
<i>Trust6</i>			0.976		
<i>Trust7</i>			0.835		
<i>Trust8</i>			0.756		
<i>RI1</i>				0.976	0.832
<i>RI2</i>				0.935	

Table 5 depicts the result of gender differences in online shopping by using of t-test analysis. As a result, gender differences between male and female was found higher in trust other than PU, PEOU and overall behavioural retention.

Table 5 Gender differences in online shopping

<i>Construct</i>	<i>Male</i>	<i>Female</i>	<i>Difference</i>	<i>t-value</i>	<i>p-value</i>
1 PU	4.5141	4.3301	124.958	3.217*	0.000**
2 PEOU	4.5217	4.4580	146.298	1.238	0.056
3 Trust	4.5982	4.3100	231.661	10.974*	0.000**
4 RI	4.4774	4.4024	285.715	1.630*	0.001**

Notes: *T-statistic > 1.96, one-tailed test, **p < 0.001

4.1 Number of purchase made by respondents

Shown in the Table 6, 29.3% of the respondents of this study purchased more than ten times. 11% purchased once, 7.3% purchased two times, 26% between three to five times, 26.3% purchased between six to nine times.

Table 6 Number of purchase made by respondents

	<i>Frequency</i>	<i>Percent</i>
One time	33	11.0%
Two times	22	7.3%
Three to five times	78	26.0%
Six to nine times	79	26.3%
More than ten times	88	29.3%
Total	300	100.0%

4.2 Frequency of type of product purchased

Table 7 represent the frequency of type of product purchased from the internet by respondents of study. The respondents who purchased gifts on the internet by frequency were 68 (22.7%) and laptops (PC) were 21.7%. Other products purchased were: clothing 15%, music CD, DVD, videotape 10.7%, food 7.7%, games 7.3%, books 3.7%, electronic products 3.7% and other products purchased by respondents were 7.7%.

Table 7 Frequency of type of product purchased from the internet

<i>Type of product</i>	<i>Frequency</i>	<i>Percent</i>
1 Electronics product	11	3.7
2 Music CD, DVD, videotape	32	10.7
3 Book	11	3.7
4 Laptop (PC)	65	21.7
5 Game	22	7.3
6 Clothing	45	15.0
7 Food	23	7.7
8 Gifts	68	22.7
9 Others	23	7.7
Total	300	100.0

As discussed, after the research gap was depicted according to literatures, all research objectives were then converted into complementing hypotheses. Table 8 shows the summary of hypotheses testing in the study. Shown in Table 8, hypotheses number 2 and 3 were accepted and the first hypothesis was rejected. In fact, PEOU could not be a predictor for future BI of online shopper. But, PU and trust are key predictor factors in online shopping BI and RI.

Table 8 Hypotheses testing

<i>No</i>	<i>Hypothesis</i>	<i>Decision</i>
H1	There is a significant difference between male and female in PEOU and RI.	Not supported
H2	There is a significant difference between male and female in PU and RI.	Supported
H3	There is a significant difference between male and female in perceived trust propensity and RI.	Supported

5 Discussions

This research adopted a survey based on previous related studies on online shopping behaviour (see Appendix) which contributes an integrated model and testing empirically evidence of the role of gender in context of online retailing based on TAM and trust model in Malaysia. Based on the proposed research framework and source of questionnaire items, this study embedded five questions to examine the impact of PU on online shopping behavioural intention. To determine PU a question was embedded to examine whether the website improves respondents' purchasing (time saving) when searching for and purchasing goods based on their experiences. 3.7% of respondents stated that they strongly disagree, 67.0% agree, and 29.3% strongly agree. Relatively to examine whether the website offered the best choice when searching for and purchasing goods based on the respondents' experiences 3.7% stated strongly disagree, 11.0% agree, and 85.3% stated strongly agree in response to this question. We also examine whether the website makes it easier to search for and purchase goods based on the respondents' experiences. The 3.7% of the respondents responded neutral, 44.3% agree and 52.0% strongly agree in response to this question. To examine whether the website enhances respondents' effectiveness in goods searching and purchasing based on their experiences, 7.0% of respondents stated neutral, 26.0% stated agree, and 67.0% stated strongly agree. Lastly, to examine whether the website is useful for searching for and buying goods based on respondents' experiences. Out of 300 the respondents, 7.0% stated neutral, 26.0% stated agree and 67.0% stated strongly agree.

Next we analysis the result related to PEOU. To examine whether the website is very convenient and easy to use (convenient in assessing and interacting on the website) based on respondents' experiences, 3.7% of respondents stated strongly disagree, 18.0% stated disagree, 48.3% stated neutral, 26.0% stated agree, and 4.0% stated strongly agree. To examine whether the website provides an easy way to make payment based on their experiences, out of 300 respondents, 11.0% stated strongly disagree, 25.3% disagreed, 27.05 stated neutral, 22.0% agreed and 14.7% strongly agreed. And also to determine whether what the customer wanted to buy can be quickly found on the website based on their experience, 18.7% stated of respondents were disagree, 26.0% neutral, 39.3% agreed, 16.0% stated strongly agree.

The need for trust is even greater for online sellers that do not have a well established name in the marketplace (Murphy and Tocher, 2011). The existence of gender differences in trust behaviour (trusting others, being trusted by others and being trustworthy, i.e., rewarding trust through reciprocation) has important implications for economic behaviour (Buchan et al., 2008). In this study, eight questionnaire items were embedded in the survey to examine the possible impact of trust on online shopping BI. To determine whether the website is trustworthy and honest based on their experiences, out of 300 respondents, 3.7% stated strongly disagree, 67.0% stated agree, and 29.3% stated strongly agree. To examine whether the website wants to keep promises and obligations about promotion and pricing based on respondents' experience, 7.05% stated neutral, 26.0% stated agree and 67.0% stated strongly agree. To examine whether the information on the website is plentiful and of sufficient quality based on the respondents' experiences. None of respondents stated disagree or neutral. In fact, 52.0% stated that they agreed and 48.0% stated strongly agree in response to this question.

To examine whether the website offers secure personal privacy based on the respondents' experiences, none of the respondent's stated disagree; 3.7 stated neutral, 51.3 stated agree and 45.0% stated strongly agree in response to this question. And also to examine whether it is thought that this website keeps the respondent's best interests in mind based on the respondents' experiences. None of the respondents' stated disagree. Among all the respondents, neutral were 7.0%, 26.0 stated agree and 67.0% stated strongly agree in response to this question. To examine whether online shopping is secure and reliable based on the respondents' experiences, none of the respondents stated disagree or neutral. in fact, 52.0% agreed and 48.0% stated strongly agree. To examine whether online retailers would not behave opportunistically (e.g., gaining money illegally) based on the respondents' experiences, none of the respondents stated disagree. In fact, 52.0% agreed, 48.0% stated strongly agree. 3.75 stated neutral, 44.3 stated agree and 52.0% stated strongly agree. To examine whether the performance of the website meets the respondents' expectations based on the respondents' experiences. None of the respondents stated they disagree in response to this question. In fact, 7.0 stated neutral, 26.0% stated agree and 67.0% stated strongly agree.

To examine the respondents' willingness to continue using the website to purchase products based on the respondents' experiences. None of the respondent stated they disagree in response to this question. 52.0% stated agree, 48.0% strongly agreed in response to this question. And also to assess respondent's intention to continue purchasing products in the future based on their experiences on that retailers. None of the respondents stated they disagree in response to this question. 3.7% stated neutral, 51.3% agree and 45.0% strongly agreed. In this study impact of gender differences on online shopper BI among Malaysian students were examined. Based on scientific analysis, this study found that there is significant relationship between gender and RI among online shopper.

The result of study is consistent with previous studies on gender differences. Jackson et al. (2011) found that females derive greater levels of hedonic shopping value from a trip to the mall and also show more positive attitudes toward mall hygiene factors and entertainment options in comparison to males.

Shashaani and Khalili (2001) argue that significant gender divergences with respect to confidence about computers and stereotypic views of computer users. Dong and Zhang (2011) reveals that gender differences exist in Chinese adoption of information systems based on the findings from four universities and one firm in China. Joh et al. (2006) have revealed some significant differences between men and women are found. In spite of previous theory and managerial expectation, Raajpoot et al. (2008) have found few significant differences in the shopping mall patronage behaviour of men and women.

The study of gender differences has been a fertile area of research in marketing (Raajpoot et al., 2008). Accordingly, this study hypothesised PU, PEOU, and trust are predictor's variables towards students' behavioural retention in online shopping. This study found that PU and trust are key predictor factors in online shopping BI but PEOU is not strong in terms of predicting the future behavioural retention of online shopper. Terzis and Economides (2011) argue that PEOU will be higher for men than for women. Despite the fact that PEOU was key predictor in acceptance and adoption of online shopping, but it is not main factor in online customer retention behaviour and loyalty.

5.1 Managerial implications and recommendations

The study extends TAM construct with trust model to enhance the understanding of online consumer intentions and gender differences in light of development of innovative retail website. By utilising scientific method and using statistics methods the conclusion and recommendation are explained to help online marketer to target company market segmentation more precisely in the light of gender gap. Gender difference of online shopper is a demographic variable which is crucial for marketer to understand it and then shape their prospect strategy in building innovative retail website. Demographic characteristics, as discussed by several studies, may impact and constrain the usage of WWW (Zhang, 2005). According to Hasan (2010) a better understanding of web shopping attitude and behaviour is critical for designing and managing effective a retail websites that can help companies attract and retain online customers. Thus, our results demonstrate that PU and trust propensity found to be key predictor factors in online shopping BI while PEOU does not. Specifically, gender differences between male and female found higher in trust propensity rather than PU, PEOU and overall RI.

Despite the rapid development of e-commerce globally, the advancement of internet retailing in Malaysia is in initial phases and marketer should move from market-place marketing to market-space marketing. Accordingly, manager should recognise gender differences to retain online customer. In the other hand, online marketer should differentiate between male and female when designing and setting strategy for target customer. It could assume that behavioural retention of online shopper is based on their gender and then gender influence on PU and trust. Little attention, however, has been given to potential gender differences in the effectiveness of these strategies in building trust propensity and building a continuous innovative online retail (Murphy and Tocher, 2011). Manager should realise the fact that in order to enhance usefulness of website as well as making trust on the internet which would imply the continuous intention of their marketed product. Moreover, the dynamically evolving nature of the internet has made it difficult to predict its impact on marketing communications, transactions, and distribution (Jones and Vijayasathy, 1998). PU and trust were significant antecedents toward online shopping acceptance and adoption and still these two factors seem to be antecedent's factor in light of customer retention and loyalty. But the main points are gender differences that are one of factor in marketing area. Therefore, online retailers should emphasise on the usefulness and trustworthiness of their website rather than convenience to build an innovative retail.

5.2 Limitations and directions for future research

This study is not without limitations as with any research, so care should be taken when generalising the results of study (Chang and Chen, 2008). This study left some limitation and recommends some area for future researcher in light of online shopping behavioural retention. Firstly, this study examines student's behaviour intention toward shopping activities. Future study should target professional who are working to generalise the finding of this study achievements. Secondly, the data collection of this study was cross sectional data collection approach. Future researchers should utilise longitude data collection approach to understand behaviour of online shopper more precisely. Because of time constraint this study could not utilise the above limitation. Future researcher should apply this research framework in different country other than Malaysia to

generalise the finding of study. Lastly, this study extends our understanding of PEOU, PU, trust and RI regarding to gender gap. Future research, however, should explore into experienced online shoppers by using flow theory constructs and self-confidence variable to examine online shopper's RI.

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Appendix

Measurement scales

- 1 Perceived usefulness (PU)
 - *PU1*: This online retail improves my performance when searching for and purchasing goods.
 - *PU2*: This online retail increases my productivity when searching for and purchasing goods.
 - *PU3*: This online retail makes it easier to search for and purchase goods.
 - *PU4*: This online retail enhances my effectiveness in goods searching and purchasing.
 - *PU5*: Generally, this online retail is useful for searching for and buying goods.
- 2 Perceived ease of use (PEOU)
 - *PEOU1*: This online retail is very convenient to be use for shopping purposes.
 - *PEOU2*: This online retail provides easy to follow search paths.
 - *PEOU3*: This online retail, whatever I want to buy can be quickly found.
- 3 Trust propensity (TRT)
 - *TR1*: This online retail is honest.
 - *TR2*: This online retail is committed to keep promises and obligations.
 - *TR3*: The information on this online retail is plentiful and of sufficient quality.
 - *TR4*: This online retail offers secure personal privacy.
 - *TR5*: It is thought that this online retail keeps my best interests in mind.
 - *TR6*: Compared to other online retailer, this website is secure and reliable.
 - *TR7*: This online retail would not behave opportunistically (e.g. gaining money illegally).
 - *TR8*: The performance of this online retail meets my expectations.
- 4 Repurchase intention (RI)
 - *RI1*: If I could, I would like to continue using this online retail to purchase products.
 - *RI2*: I intend to continue purchasing products from this online retail in the future.