

THE EFFECTS OF TECHNOLOGY ACCEPTANCE FACTORS ON CUSTOMER E-LOYALTY AND E-SATISFACTION IN MALAYSIA

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ABSTRACT

The rapid growth of Internet shopping has led to increasing interest in how to inspire customer e-loyalty and e-satisfaction in Malaysia. By using TAM and TRA as the theoretical base, this study aims to investigate the impact of perceived usefulness, perceived ease of use and perceived enjoyment on customer e-loyalty and e-satisfaction. SPSS and SmartPLS (M3) are used as the main analytical tool. 395 respondents participated in the study and empirical results indicated that perceived usefulness and perceived ease of use positively impacted customer e-loyalty and e-satisfaction. Several implications, limitations of the study, and recommendations for future research are outlined.

Keywords: Perceived Usefulness; Perceived Ease Of Use; Perceived Enjoyment; E-Satisfaction; E-Loyalty; Malaysia.

1. INTRODUCTION

The rapid growth of IT has encouraged Malaysians to do their shopping on the Internet, which now pervades all aspects of daily life (Chopra & Wallace, 2003). It is the best form of interaction between buyers and e-vendors (Khatibi, Thyagarajan & Seetharaman, 2003) and the most efficient medium of service delivery to e-consumers, e-government and e-retailers (Mahmud, 2008). The internet, furthermore, is considered the primary source of communication, information and entertainment. It is also a new marketing tool that can be used to tailor products and services on websites and to extend this to e-business (Swaminathan, Lepłowska-White & Rao, 1999). Its benefits are obvious, but the percentage of Malaysians using the Internet was relatively low (Zawawi, Yusuf & Khan, 2004). This could have been due to the issues of e-insecurity and privacy, and also the ambiguity of regulations (Khatibi et

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al., 2003). Additionally, Malaysians conservative minded and preferred to buy only when they could see and touch the products physically, rather than involve themselves in an e-transaction.

In Malaysia, e-shopping started in 2004 (Khatibi, Haque & Karim, 2006), but although it has been growing for almost eight years, Malaysian consumers were unfamiliar with and doubtful about this concept (Khatibi et al., 2006). However, a few tended to shop online because of the convenience (e.g., time convenience, transaction convenience and distance convenience), lower price, more product choice (Chua, Khatibi & Ismail, 2006) and cost saving (Kohli, Devaraj & Mohmood, 2004). The vast majority were likely to purchase books and flight tickets and to reserve hotel rooms (Lim, Yap & Lau, 2010). Indeed, most transactions by Malaysian e-users were less than RM500 (Alam & Yasin, 2010).

Hence, this study aims to gain a deeper understanding of customer e-loyalty and e-satisfaction amongst Malaysians. Specifically, it investigates the positive impact of perceived usefulness, perceived ease of use and enjoyment of customer e-loyalty and e-satisfaction. An attempt is made to answer the following questions:

- i) Does perceived usefulness affect customer e-loyalty and e-satisfaction?
- ii) Does perceived ease of use affect customer e-loyalty and e-satisfaction?
- iii) Does perceived enjoyment affect customer e-loyalty and e-satisfaction?

2. THEORETICAL FOUNDATIONS AND DEVELOPMENT OF HYPOTHESES

2.1. *e-Loyalty*

The term e-loyalty is more applicable to consumers who are likely to buy from the same website, rather than switch to other websites (Flavián, Guinaliu & Gurrea, 2006). E-loyalty also describes the positive perceived intention to use and revisit the website in the near future (Cyr, Head & Ivanov, 2009). Sohn and Lee (2004) note that this intention to revisit a particular website and to engage in an e-transaction (Hamid, 2008). In this respect, e-loyalty is a long term commitment between e-retailers and e-consumers (Butcher, Sparks & O'Callaghan, 2001). However, in this study, e-loyalty is defined as perceived loyalty of customers towards websites and their intention to visit the same website for the second purchase.

There are various complex drivers of e-loyalty according to Choi, Kim and Kim (2010), Collier and Bienstock (2006), Deb and Chavali (2009), Kassim and Ismail (2009) and Ponirin et al. (2009). Wang, Tang and Tang (2001) suggest that web loyalty links to repurchase intention and complaining behaviour (Luarn & Lin, 2003). Lam, Shankar, Erramilli and Murthy (2004) propose two dimensions, recommendation and patronage, to measure e-loyalty (Rauyruen & Miller, 2007). For the purpose of this study, the researcher adopts three dimensions to examine e-loyalty: word-of-mouth, complaining behaviour (Choi et al., 2010) and future purchase intention (Ponirin et al. 2009).

Word-of-mouth (WOM) is a communication process of purchasing products or services between e-retailers and e-consumers (Yang, Zhang & Wu, 2010). In the virtual world, WOM

does not involve direct interaction with e-retailers and it influences consumers' perception in the long term (Buttle, 1998). In this context, eWOM refers to the content of information to be spread out, share opinions and their past experience to the consumers quickly via the Internet (Hennig-Thurau et al., 2004). It is important to note that WOM is the most powerful and persuasive tool because of higher credibility (Liu & Payne, 2010). Customers tend to spread positive words to others on the web (Ha, 2005) and are likely to recommend the satisfied products or services to others (Del Río, Vázquez & Iglesias, 2001). The existing literature states that they are three to ten times more likely to spread negative words to others than positive words (Silverman, 2001). Therefore, personal information sources motivate consumers' purchasing intentions (Paynter, Satitkit & Chung, 2010) and lead to loyalty (Faullant, Matzler & Füller, 2008).

Positive WOM creates consumer trust (Deb & Chavali, 2009) and satisfaction (Ranaweera & Prabhu, 2003). Higher levels of trust and satisfaction boost customers' purchasing intentions (Kassim & Ismail, 2009). Hence, WOM is a more efficient tool than advertising, print ads, radio and personal selling (Lin et al., 2010). Indeed, it is four times more efficient than personal selling, twice more efficient than using the radio and seven times more efficient than using newspapers and magazines (Schoefer, 1998). Katz and Lazarsfeld (1955) found that WOM was the most effective and resourceful tool to influence purchasing decisions (Gruen, Osmonbekov & Czaplewski, 2006) in terms of reducing e-risks (Berndtson, 2010). Furthermore, WOM is a significant mechanism and powerful communication tool to attract new consumers (Jones & Sasser, 1995) and especially experienced customers. Their recommendations are trustworthy and more credible than inexperienced customers (Day, 1969). Correspondingly, new customers are likely to listen to others, who share their personal experiences of buying and the benefits of using particular products or services (Schoefer, 1998). In other words, they are more credible than salespersons (Silverman, 2001). Additionally, a consumer's recommendation of products or services leads to customer loyalty (Ou & Sia, 2003). Bowman and Narayandas (2001) found that WOM created customer loyalty (Gauri, Bhatnagar & Rao, 2008).

Purchase intention is defined as a consumer's favorable intention to purchase products or services (Sam & Tahir, 2010). It also describes a consumer's cognitive behavior and how he or she intends to buy a particular product online (Kwek, Lau & Tan, 2010). Pavlou (2003) argued that the purchase intention was a consumer's willingness to shop online and engage in e-transaction (Kwek et al., 2010). Moreover, future purchase intention has been noted to be the task of previous purchase intention (LaBarbera & Mazursky, 1983). An individual's intention to repurchase is the driver of measuring future behavior (Jones & Sasser, 1995). In this study, e-purchase intention evaluates an individual's behavior of purchase intention in the digital world (Salisbury et al., 2001).

Complaining behavior is a negative response of dissatisfaction (Chirico & Presti, 2008), which leads to unsatisfied customers and negative WOM and discourages re-patronage (Blodgett, Wakefield & Barnes, 1995). As stated in the literature reviewing, unsatisfied customers are inclined to switch to another website (Nielsen, 1999). Kolter (1994), furthermore, revealed that five percent of unsatisfied customers were likely to make complains (Söderlund, 1998). They were likely to share their negative experiences with eleven persons compared to satisfied

customers, who shared their experiences with about six persons (Hart, Heskett & Sasser, 1989). However, although these consumers are unsatisfied, they are still likely to purchase the service, maintain the relationship, generate positive WOM and create trust (Tax, Brown & Chandrashekar, 1998). The Technical Assistance Report Programs (1979) found that those consumers who were more likely to complain had higher repurchase intentions than non-complain consumers (Richins, 1983). Therefore, undesirable handling of complaints caused the company to suffer losses (Blodgett et al., 1995) and decreased customer retention rate (Zairi, 2000).

2.2. *e-Satisfaction*

In traditional retailing, offline satisfaction measures the outcome of individuals' feelings towards a store's attribute, and its image is the outcome of consumer judgment and approach (Hou & Xu, 2010). Thus, customers are willing to patronize a particular store with a good image (Samani et al., 2011). E-satisfaction in this study is measured based on non-store retailing. E-satisfaction means that overall a customer feels comfortable with e-shopping (Szymanski & Hise, 2000) and has a positive attitude and response towards a website (Muyllé, Moenaert & Despontin, 2004). This is influenced by the effectiveness of services delivered to customers (Bansal, McDougall, Dikoli & Sedatole, 2004). Therefore, satisfaction with a website is achieved when its attributes exceed satisfaction levels; user satisfaction is obtained when information systems matched with the presented information (Teerling & Huizingh, 2010).

In previous studies, e-satisfaction was measured by repeat purchase intention (Jones & Sasser, 1995; Shim, Shin & Nottingham, 2002). Satisfaction affects customer intention to repurchase (Harris & Goode, 2004). Indeed, according to Anderson and Sullivan (1990), repurchase intention significantly influences satisfaction levels (Choi et al., 2010). This finding is consistent with the study of Bolton and Drew (1991). For the purpose of this research, the researcher selects repurchase intention (Choi et al., 2010) and revisit (Liang & Lai, 2002) as the dimensions of customer e-satisfaction.

Customer satisfaction is the outcome of WOM, repurchase intention and purchasing behavior (Omar, 2009). WOM contributes to repurchase intention followed by e-delivery (Gauri, Bhatnagar & Rao, 2008). Bearden and Teel (1983) discovered that satisfaction was positively affected by WOM, repeat purchase and customer loyalty (Yap & Kew, 2010). Similarly, Wang et al (2001) suggested that website satisfaction significantly affected repurchase intention and post-purchase complaining behavior (Luarn & Lin, 2003). Additionally, the finding of Kao (2005) showed that e-satisfaction was a significant factor in the decision of customers to reuse a particular website and to recommend it to others. However, unsatisfied customers tend to stop purchasing (LaBarbara & Mazursky, 1983) and refuse to repurchase, which reduces the profit margins of e-tailors (Liu, He, Gao & Xie, 2008).

Repurchase intention is a post-purchase phenomenon of customer satisfaction (Chiu et al., 2010). It refers to the number of e-purchasing of website users (Reibstein, 2001). Hellier et al. (2003), moreover, explained repurchase intentions as a decision to re-buy from the same

retailer (Yap & Kiew, 2010). Repeat purchase is also defined as consumers' intention to purchase products or services from e-vendors in the future (Chiu, Chang, Cheng & Fang, 2009), to motivate repurchasing (Seiders, Voss, Grewal & Godfrey, 2005) and to maintain the relationship with service providers (Donnelly, 2009). In this study, repurchase intention refers to the volume of e-purchasing amongst customers of a particular website (Reibstein, 2001). The study of Zeithaml, Berry and Parasuraman (1996) focused on the importance of future behavioral intentions, for instance, repurchasing from the same e-retailers (Choi, Kim & Kim, 2010). Huang (2008) confirmed that e-satisfaction contributed to consumer behavioural intentions to use the internet for e-purchasing. If customers are dissatisfied, the intention to repurchase from the same website decreases (Shim et al., 2002). Therefore, customer satisfaction strongly affects future behavioral intentions (Broekhuizen, 2006).

The re-patronage intention is defined as customer intention to revisit the same company and purchase the same products or services in the future (Oliver, 1999). This intention is related to customers' perception value, needs and wants. Higher involvement in purchasing results in a higher level of re-patronage intention (Seiders et al., 2005). Additionally, Revisit is defined as the decision to repurchase the same products and visit the same stores regularly (Dholakia & Bagozzi, 2001).

2.3. Technology Acceptance Model (TAM)

TAM is an influential model (Baraghani, 2007) that was established by Davis (1989). It was developed based on the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), who adapted belief-attitude-intention-behavioral relationship with IT acceptance. TAM and TRA are relevant in exploring website use intention in this research. In TRA, beliefs influence an individual's attitude and lead to behavioral intentions. However, TAM is a widely used model in the study of IT and is better than TRA (Davis, 1989). Researchers in the past have applied TAM in computer use (Lin & Chou, 2009; Teo & Noyes, 2010); technology acceptance (Catalán & Luque, 2010; Stafford & Schkade, 2004); e-commerce (Hernández, Jiménez & Martín, 2010; Lee, Ahn & Han, 2006); e-transaction (Katos, 2009); e-purchasing intentions (Ha & Stoel, 2009; Tang & Chi, 2010); and e-shopping (Shang, Chen & Shen, 2005).

There are three important attributes: perceived usefulness, perceived ease of use and enjoyment. Perceived usefulness is the degree to which a user believes that using the internet is a useful tool (Jeong & Lambert, 2001). This is further noted as the use of technology that improves a consumer's performance (Davis, 1989). Usefulness is also defined as the belief levels of e-consumers that enhance the actual intention's performance (Davis, 1989), in terms of buying products from e-retailing (Purosothuman, 2008). Usefulness itself is one of the benefits of using the Internet, as daily interaction tool especially in the growing of e-transformation. Usefulness itself is one of the benefits of using the internet. Internet users obtain more meaningful and unlimited information to make better purchasing decisions (Tam, 2010). Hence, the usefulness of websites convinced consumers to accept web retailing (Fenech & O'Cass, 2001).

Perceived ease of use is defined as the degree of belief amongst individuals that is free of effort (Al-Momani & Noor, 2009); namely, easy to use, easy to read, highly accessible and

quick to download (Lederer et al., 2000). Ease of use means that a visitor enjoys exploring the site for the first time (Ribbink et al., 2004). Good navigation and organization are provided and e-consumers can access product information quickly (Elliot & Speck, 2005). In other words, the “user friendliness” (Purosothuman, 2008) of the site is emphasized as well as its usability (Swaminathan et al., 1999). To this extent, ease of use affects e-purchasing intention (Klopping & McKinney, 2004).

Perceived enjoyment is defined as the degree of performances (Davis, 1982) and intrinsic motivators in technology acceptance (Davis, 1989). This refers to the pleasurable feelings of technology use (Rauyruen & Miller, 2007). Beatty and Ferrell (1988) stated that consumers enjoyed shopping when they felt free and viewed the process of purchasing as pleasurable and fun (Kwek et al., 2010). In this study, shopping enjoyment is based on the playfulness of previous e-shopping experience – this relates to hedonic and utilitarian values (Kwek et al., 2010). Utilitarian value concerns functional benefits, whereas hedonic value refers to the experience benefits from shopping behaviour (Overby & Lee, 2006).

Menon and Kahn (2002) found that an individual who experienced higher levels of pleasure from the internet exhibited higher levels of responses to e-retailing (Prasad & Aryasri, 2009) and generated positive intention to use and revisit the same website (Tam, 2010). Van Der Heijden (2003) stated that perceived enjoyment relatively influenced an individual’s attitude towards website use (Cyr et al., 2009). Moreover, Jarvenpaa and Todd (1997) discovered that enjoyment of shopping experience gained a customer’s attitude towards shopping (Cheung & Lee, 2005). Therefore, as Childers et al. (2001) stated, perceived enjoyment is the most critical determinant of attitude towards e-purchasing (Cyr et al., 2009).

2.4. Technology Acceptance Factors with Customer e-Loyalty and e-Satisfaction

Past studies have shown that perceived usefulness, ease-of-use and enjoyment influenced attitude and e-purchasing intention (Chiu et al., 2009; Monsuwé, Dellaert & De Ruyter, 2004). The findings showed that perceived usefulness impacts customer loyalty of e-shopping (Shih, 2004). This is congruent with the finding of Ha and Stoel (2009). Positive attitude towards a web site’s usefulness contributed to customers’ purchase intentions (Verhagen & Van Dolen, 2007). The ease of use of a website also increased customer loyalty in e-shopping (Gefen et al., 2001). Smith (2001) found that ease of use influenced e-loyalty (Olson & Boyer, 2005). This result concurred with the study of Wolfinbarger and Gilly (2001). Furthermore, a survey study highlighted that perceived usefulness and perceived ease of use positively impacted upon consumers’ attitudes towards e-retailing in Hong Kong (Liao & Shi, 2009) and intentions to use e-service (Roca et al., 2009). Additionally, past research has isolated perceived enjoyment as the predictor of customer loyalty (Mäntymäki, 2009).

Generally, technology acceptance factors lead to e-satisfaction (Teerling & Huizingh, 2010). Perceived usefulness is part of the post-purchasing expectations that relate to satisfaction (Chea & Luo, 2005) and influence attitudes towards internet usage (Amoroso & Hunsinger, 2009). Previous fo Furthermore, perceived ease of use determined customer satisfaction (Cheung &

Lee, 2005; Mäntymäki, 2009) and contributed to repurchase decisions in e-shopping (Chiu et al., 2009). Nonetheless, enjoyment encouraged e-consumers to revisit the website (Koufaris, 2002). Therefore, the researcher hypothesizes that:

- H1: Perceived usefulness is positively related to customer e-loyalty and e-satisfaction.
- H2: Perceived ease of use is positively related to customer e-loyalty and e-satisfaction.
- H3: Perceived enjoyment is positively related to customer e-loyalty and e-satisfaction.

3. METHOD

3.1. Samples and Procedure

The survey site of this study is in Malaysia, specifically in Kuala Lumpur, Klang Valley (KL) and Petaling Jaya (PJ). These three states are located in urban area and have a higher number of internet users. This research was specifically interested in users who had made an e-transaction and e-purchase at least once in the previous three months. The sample size was 395, which fulfilled Roscoe's (1975) rule of thumb (Sekaran, 1992). In order to select the sample, the researcher used non-probability sampling technique. The purposive sampling method was conducted to select samples. The quantitative method was employed to collect the primary data in this study. The data were gathered through a set of questionnaires which consisted of two sections: section A, the constructs of the antecedents of e-satisfaction and e-loyalty, with 106 items, and section B, the demographic profile, with 13 closed-ended questions. Respondents were asked to complete the questionnaire if they had prior purchasing experience, and provided answers based on the products or services they had bought previously. Confidentiality was guaranteed in all cases. A careful review of the literature was undertaken in order to develop multi-items of constructs. Each dimension contained multi-items measured by a 7-point Likert-scale.

e-Loyalty is constructed of three dimensions. These are word-of-mouth, future purchase intention and complaining behavior. The indicators of e-loyalty are adapted from a number of sources: WOM (Deb & Chavali, 2009; Mukherjee & Nath, 2007; Srinivasan, Anderson & Ponnnavolu, 2002), future purchase Intention (Anderson & Srinivasan, 2003; Lin & Sun, 2009) and complaining behavior (Deb & Chavali, 2009; Janda, Trocchia & Gwinner, 2002).

e-Satisfaction is made up of revisiting intention and repurchase intention. Revisit intention is extracted from the study of Chen, Zhang and Huang (2010), Hausman and Siekpe (2009) and Vrechopoulos and Atherinos (2009). Repurchase intention is adapted from Ha and Janda (2008), Song and Zahedi (2001) and Stewart (2002).

Technology acceptance factors are constructed by perceived usefulness, perceived ease of use and perceived enjoyment. Perceived usefulness attributes are adapted from Cyr, Bonnni, Bowes and Ilsever (2005), Davis (1993), Hassanein and Head (2010). Perceived ease of use is developed from Bressolles and Durrieu (2010), Hassanein and Head (2010), Koufaris and Hampton-Sosa (2002), and Teerling and Huizingh (2010). Lastly, perceived enjoyment is extracted from the study of Broekhuizen (2006), and Hassanein and Head (2010).

4. FINDINGS

The data are analyzed using SPSS and SmartPLS 2.0 (M3). PLS is a latent variable modeling technique which incorporates the multiple dependent constructs and recognizes measurement error (Karim, 2009). It is appropriate in exploratory and confirmatory analysis (Barroso, Carrión & Roldán, 2010). PLS path modeling is also less limiting in terms of distributional assumptions and requires a smaller sample size (Chin, 2010).

The researcher conducted descriptive statistics to obtain the general information of the respondents. Of the total 395 respondents, females represented 213 (53.9%) and males 182 (46.1%). A large number were single (n=230) and 164 were married. In terms of age, the majority of the respondents fell into the 26 to 30 years old category; 21.5% (n=85) were 18 to 25 years old; and 21.3% (n=84) were 31 to 35 years old. The sample also consisted of 66 respondents (16.7%) from the 36 to 40 years old group and 27 respondents (6.8%) from the 41 to 45 years old group. These respondents were experienced users of e-shopping and will become the primary segment of e-consumer population in the near future. In terms of ethnic composition, most of the respondents were Chinese – 48.4% (n=191). There were also Malay – 30.1% (n=119) – followed by Indians – 8.9% (n=35). The highest percentage were undergraduate degree holders (77.7%, n=307), followed by Master's degree (10.4%, n=41) and diploma holders (7.6%, n=30). Educational attainment indicated that they were cultured and knowledgeable. The majority of the respondents, moreover, could be categorized as others (43%, n=170) – university students, waitresses, etc. The second largest groups were professionals, 133 respondents (33.7%), followed by 42 executives (10.6%). From the findings, the respondents had a monthly income ranging from RM3001 to RM5000; 29.9% (n=118) were within the range of RM1001 to RM3000; followed by 17.5% (n=69) who earned RM5001 to RM7000. According to the Malaysia Salary Guide (MSG) 2005, the average monthly salary of Malaysians was less than RM1, 000 to RM5, 000 (Lallmahamood, 2011).

Besides capturing the general profile of respondents, the collected data provided information about computer usage, frequency of using the internet and the number of e-purchasing reported. Approximately 41.5% (n=164) of the respondents had been using the internet for one to five hours a week; 16.2% (n=64) for over 20 hours; 15.9% six to 10 hours; and 13.7% 11 to 20 hours. Korgaonkar and Wolin (2002) found that Malaysian consumers were medium internet users, if they spent about three hours per day online (Lim, Yap & Lau, 2010). In total, 386 respondents (97.7%) had experience of e-purchasing in the past three months. However, 390 (98.7%) frequently sought out product information. This was in line with the finding of Lim et al. (2010) that Malaysians were likely to search and obtain information from websites. A significant number (156), moreover, had experience of about two to three e-transactions. Notably, 48.9% of internet users were involved in e-purchasing in 2001 and also intended to make from one to 10 transactions in a year (Osman et al., 2010). In terms of types of buyer, 60.5% (n=239) were regular e-buyers, 31.4% (n=124) irregular e-buyers and 8.1% (n=32) first-time e-buyers.

4.1. Assessment of the Measurement Model

Confirmatory factor analysis (CFA) through PLS was used by the researcher to test the measurement model, which included convergent validity and discriminant validity. Convergent validity was accessed by composite reliability (CR) and Average Variance Extracted (AVE). However, discriminant validity emerged when the square root of AVE exceeded correlation. As shown in Table 2, all composite reliability fulfilled the recommended value (0.7) as suggested by Gefen, Straub and Boudreau (2000). Similarly, all the constructs (see Table 2) Cronbach α values exceeded the ideal value (0.7) as recommended by Nunnally and Bernstein (1994) and Sekaran (1992). The results that are presented in Table 2 show that the AVE of each model constructs exceeded the acceptable level of 0.50 (Halawi & McCarthy, 2008). In terms of factor loading, the item loadings in each construct ranged from 0.613 to 0.947, which exceeded the acceptable value of 0.5 as suggested by Hair et al. (2006). In summary, the model constructs of this study achieved good convergent validity (Bagozzi & Yi, 1988), with the evidence of all indicators load much higher on the hypothesized factors than other factors (own loading is higher than cross loadings) (Chin, 2010) (see Table 1). Additionally, to ensure the discriminant

Table 1: Loading and Cross Loading

	PU	PEOU	ENJ	e-LOY	e-SAT
PU1	0.724	0.521	0.494	0.506	0.489
PU2	0.725	0.534	0.509	0.539	0.567
PU3	0.725	0.497	0.460	0.509	0.491
PU4	0.533	0.378	0.388	0.365	0.330
PU5	0.672	0.585	0.538	0.555	0.549
PU6	0.749	0.568	0.521	0.590	0.618
PU7	0.654	0.557	0.487	0.476	0.490
PEOU1	0.489	0.710	0.541	0.479	0.443
PEOU2	0.575	0.613	0.496	0.526	0.492
PEOU3	0.602	0.763	0.571	0.587	0.600
PEOU4	0.503	0.725	0.545	0.471	0.463
PEOU5	0.591	0.681	0.477	0.575	0.585
PEOU6	0.544	0.799	0.624	0.485	0.558
PEOU7	0.523	0.745	0.595	0.447	0.549
ENJ1	0.528	0.540	0.682	0.523	0.515
ENJ2	0.604	0.611	0.843	0.575	0.537
ENJ3	0.558	0.621	0.864	0.540	0.551
ENJ4	0.556	0.643	0.770	0.499	0.520
MeanWOM	0.703	0.657	0.616	0.875	0.724
MeanFPI	0.638	0.622	0.599	0.867	0.680
MeanCB	0.436	0.429	0.403	0.679	0.547
MeanREP	0.689	0.689	0.615	0.729	0.942
MeanRI	0.722	0.706	0.651	0.793	0.947

Note: Bold values are loadings for items that are above the recommended value 0.5

validity, the researcher utilized the square root of AVE to test the inter-correlation amongst the tested variables (Chin, 2010). (see Table 4)

Table 2: Results of Measurement Model

Model Construct	Measurement Item	Cronbach Alpha	Factors Loading	CR ^a	AVE ^b
e-Loyalty	WOM	0.741	0.875	0.851	0.660
	FPI		0.867		
	CB		0.679		
e-Satisfaction	REP	0.879	0.942	0.943	0.892
	Revisit	0.947			
Perceived usefulness	PU1	0.811	0.724	0.861	0.572
	PU2		0.725		
	PU3		0.725		
	PU5		0.672		
	PU6		0.749		
	PU7		0.654		
Perceived ease of use	PEOU1	0.845	0.710	0.883	0.521
	PEOU2		0.613		
	PEOU3		0.763		
	PEOU4		0.725		
	PEOU5		0.681		
	PEOU6		0.799		
	PEOU7		0.745		
Enjoyment	ENJ1	0.799	0.682	0.870	0.629
	ENJ2		0.843		
	ENJ3		0.864		
	ENJ4		0.770		

Notes: ^a Composite Reliability (**CR**) = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (square of the summation of the error variances)}

^b Average Variance Extracted (**AVE**) = (summation of the square of the factor loadings)/{(summation of the square of the factor loadings) + (summation of the error variances)}

Table 3: Summary results of the Model Constructs

Model Construct	Measurement Item	Standardized estimate	t-value
e-Loyalty	WOM	0.875	36.105
	FPI	0.867	26.883
	CB	0.679	7.172
e-Satisfaction	REP	0.942	65.093
	Revisit	0.947	83.249
Perceived usefulness	PU1	0.724	8.822
	PU2	0.725	16.488
	PU3	0.725	10.925
	PU4	0.533	4.896
	PU5	0.672	10.338
	PU6	0.749	16.085
	PU7	0.654	7.598
Perceived ease of use	PEOU1	0.710	16.927
	PEOU2	0.613	7.896
	PEOU3	0.763	15.536
	PEOU4	0.725	11.023
	PEOU5	0.681	9.163
	PEOU6	0.799	15.694
	PEOU7	0.745	13.052
Enjoyment	ENJ1	0.682	8.201
	ENJ2	0.843	23.524
	ENJ3	0.864	24.522
	ENJ4	0.770	13.160

Note: Diagonals represent the square root of the average variance extracted while the other entries represent correlations

Table 4: Discriminant Validity of Constructs

Constructs	e-loyalty	e-satisfaciton	PU	PEOU	ENJ
e-loy	0.812				
e-sat	0.391	0.944			
PU	0.342	0.437	0.756		
PEOU	0.596	0.589	0.599	0.722	
ENJ	0.666	0.671	0.611	0.57	0.793

4.2. Assessment of Structural Model

Table 5 and Figure 1 display the summary of results of answering the developed hypotheses testing in this research study. The researcher calculated path coefficient (β) and t-statistics (t-value) for each of the proposed hypotheses by testing the bootstrapping. The findings showed that the perceived usefulness was positively related to customer e-loyalty and e-satisfaction ($\beta = 0.422$, t-value for e-loyalty = 3.296; $\beta = 0.399$, t-value for e-satisfaction = 2.964); this supporting H1. The results also gave a standardised Beta, 0.248 from perceived ease of use to customer e-loyalty with t-value = 2.042 and standardised Beta, 0.331 from perceived ease of use to e-satisfaction with t-value = 2.528. Thus, the findings implied that H1 and H2 were supported and Hypothesis H3 was not supported. The researcher tested the overall fit of the path model by PLS path analysis modeling. GoF is a global fit measure defined as the geometric mean of average communality and average R square (especially endogenous variables) (Tenenhaus, Vinzi, Chatelin, & Lauro, 2005). The researcher used the following formula to obtain the GoF value. In this study, GoF value was 0.50 ($R^2 = 0.618$, average AVE = 0.660 for customer e-loyalty) and 0.59 ($R^2 = 0.633$, average AVE = 0.892 for customer e-satisfaction). Both of the GoF value exceeded the largest cut-off value (0.36). These results indicated that the proposed model of this study had better explaining power than based on the recommended value of $GoF_{small} = 0.1$, $GoF_{medium} = 0.25$, and $GoF_{large} = 0.36$ (Akter et al., 2011).

$$GoF = \sqrt{AVE \times \bar{R}^2}$$

Figure 1: Results of the Path Analysis

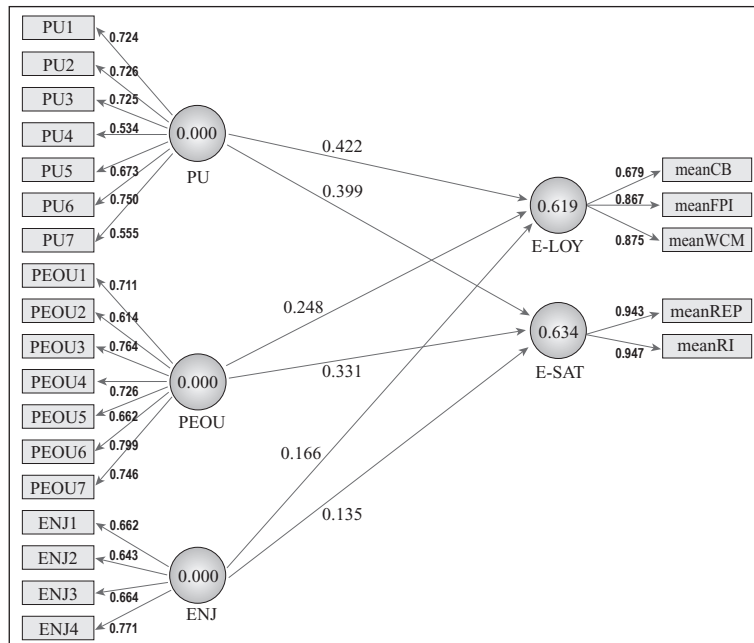


Table 5: Path Coefficient and Hypothesis Testing

Hy	Relationship	Coefficient e-loyalty	Coefficient e-sat	t-value e-loyalty	t-value e-sat	Supported
H1	PU → e-loyalty and e-satisfaction	0.422	0.399	3.296	2.964	YES
H2	PEOU → e-loyalty and e-satisfaction	0.248	0.331	2.042	2.528	YES
H3	ENJ → e-loyalty and e-satisfaction	0.188	0.135	1.491	1.491	NO

Note: * $P < 0.01$, $p < 0.05$

5. DISCUSSION

The present study was carried out to investigate the positive impact of technology acceptance factors in customer e-loyalty and e-satisfaction. As expected, the findings concurred with those of Teerling and Huizingh (2010), Chen et al. (2010), Ha and Stoel (2009), and Wolfinbarger and Gilly (2001). TAM has proven to be the useful theoretical base model to explain technology acceptance. It applied to the outcome of study and supported the body of knowledge in this paper. TAM explained how the integration of its attributes contributed to customer e-loyalty and e-satisfaction. Perceived usefulness and ease of use were the most notable determinants of computer user acceptance. Both of these dimensions are also an explainable component to predict the internet shoppers to evoke in e-purchasing. In the literature, usefulness and ease of use influenced individuals' attitudes towards internet usage (Porter & Donthu, 2006) and purchasing intention (Mäntymäki, 2009). Ahn, Ryu and Han (2007) found that usefulness significantly influenced online intention in e-retailing (Chiu et al., 2009). However, the results of this study revealed that enjoyment negatively related to customer e-loyalty and e-satisfaction. In this regard, the finding is in line with the study of Cai and Xu (2006) that shopping enjoyment is negatively related to customer e-loyalty and e-satisfaction. Teo (2001) also noted a negative relation to e-purchasing. Consistent with these studies, Lee and Murphy (2008) found that enjoyment negatively related to mobile loyalty. In the existing literature, the majority of consumers was motivated to engage in e-shopping because of hedonic or utilitarian values (Childers, Carr, Peck & Carson, 2001). Perceived enjoyment was important in assessing the hedonic shopping website (hedonic products), whereas enjoyment played a lesser role in the utilitarian website (utilitarian product) (Cai & Xu, 2006). Utilitarian shoppers were goal-oriented and experiential shoppers were experience-oriented (Chen, Lee, Lin & Tsai, 2010). In other words, utilitarian shoppers were purposeful, however, experience shoppers desired to obtain the highest fun and entertainment from the website. Therefore, e-retailer should identify the value of e-consumers of the various types of products in order to increase their e-purchase intentions.

6. LIMITATIONS

This study suffers from some limitations. First, it lacks diversity in terms of the sample used. The survey concentrates on the urban area only, and does not represent the whole of Malaysia. Second, the sample size of this study achieves the acceptable level of 395 and fulfills Roscoe's role (1975) (Sekaran, 1992). However, future research should maximize samples to generate higher generalization of the findings. Third, the quality of data used in this study may be doubted because of the way the questionnaire was answered by respondents. Fourth, the product or service types should be under consideration. In this study, respondents were free to think of any product or service website before filling the questionnaire. In this regard, a future researcher has to classify clearly what products or services websites to use in order to avoid selecting inaccurate variables. Different product types have different variables to evaluate (Lowengart & Tractinsky, 2001) and generate different perceived utilitarian and hedonic value.

7. IMPLICATION

The findings in this study are expected to add to the body of knowledge on Internet consumer behaviour. It provides helpful guidelines for e-marketers and e-retailers in Malaysia. Presently, there is limited literature that focuses on the adoption, acceptance and intention to use websites amongst Malaysians. Due to this, it is important for e-marketers to understand attitudes and behaviors' in order to encourage more Malaysians to become involved in electronic-based activities. The current research intends to generalize awareness of the usefulness of the Internet. Consequently, the adoption intention of websites will be improved and, furthermore, perceptions towards computer use will be positive. The findings also reveal to e-retailers the importance of designing professional and well-structured websites with good content, in order to attract and retain existing and new e-consumers. With a professional website, e-retailers are able to communicate product or service information to e-consumers in a short period of time. As a result of rapid technological growth, the Internet is the most effective marketing tool to deal with customers. Indeed, the volume of e-business has increased because of the ability to conduct business more quickly and across the country.

8. CONCLUSION

The analytical results indicated that PU and PEOU were significantly linked with customer e-loyalty and e-satisfaction. The results of the study added to the body of literature in developing the antecedents of customer e-loyalty and e-satisfaction in Malaysia. This work also contributed to a better understanding of the determinants of e-purchasing behavior and intention amongst Malaysian e-consumers that led to prompt internet marketing in the country. Generally-speaking, it is of help to e-retailers and website designers to understand what Malaysian online buyers want, as well as how to encourage them to become involved in e-shopping. At the same time, Malaysian e-consumers perceive positively the internet as the fastest and most efficient communication channel. Apart from this, it increases the market share in this competitive marketplace. The generalized findings also will help e-marketers to develop a consistent web-based shopping strategy to boost the e-economy.

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REFERENCES

- Ahn, T., Ryu, S., & Han, I. (2007). The impact of web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3), 263-75.
- Akter, S., D'Ambra, J., & Ray, P. (2011). Trustworthiness in mHealth information services: an assessment of hierarchical model with mediating and moderating effects using partial least squares (PLS). *Journal of the American Society for Information Science and Technology*, 62(1), 100-116.
- Alam, S. S., & Yasin, N. M. (2010). An Investigation Into The Antecedents of Customer Satisfaction of Online Shopping. *Journal of Marketing Development and Competitiveness*, 5(1), 71-78.
- Al-Momani, K., & Noor, N. A. (2009). e-Service quality, ease of use and enjoyment as antecedents of e-CRM performance: an empirical investigation in Jordan mobile phone services. *The Asian Journal of Technology Management*, 2(2), 50-63.
- Amoroso, D. L., & Hunsinger, D. S. (2009). Understanding consumers' acceptance of online purchasing. *Journal of Information Technology Management*, 20(1), 15-41.
- Anderson, E. W., & Sullivan, M.W. (1993). The antecedents and consequences of customer satisfaction for firms. *Marketing Science*, 12(2), 125-143.
- Anderson, R. E., & Srinivasan, S. S. (2003). e-Satisfaction and e-loyalty: a contingency framework. *Psychology & Marketing*, 20(2), 123-138.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation model. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Bansal, H. S., McDougall, G. H. G., Dikolli, S. S., & Sedatole, K. L. (2004). Relating e-satisfaction to behavioral outcomes: an empirical study. *Journal of Service Marketing*, 18(4), 290-302.
- Baraghani, S. N. (2007). *Factors influencing the adoption of internet banking*. (Master's thesis). Department of Business Administration and Social Sciences, Luleå University of Technology.

- Barroso, C., Carrión, G. C., & Roldán, J. L. (2010). Applying maximum likelihood and PLS on different sample sizes: studies on SERVQUAL model and employee behavior model. In V. E. Vinci, W. W. Chin, J. Henseler & H. Wang. (Eds.), *Handbook of Partial Least Squares: Concept, Methods and Applications* (pp. 427-447). Berlin, Germany: Springer-Verlag.
- Bearden, W. O., & Teel, J. E. (1983). Selected Determinants of Consumer Satisfaction and Complaint Reports. *Journal of Marketing Research*, 20(1), 21-8.
- Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: modeling its precursors. *Journal of Retailing*, 74(2), 169-191.
- Berndtson, M. (2010). Word-of-mouth retransmission in a business-to-business context – a network analysis. Work-in-progress Paper.
- Blodgett, J. G., Wakefield, K. L., & Barnes, J. H. (1995). The effects of consumer service on consumer complaining behavior. *Journal of Service Marketing*, 9(4), 31-42.
- Bolton, R. N., & Drew, J. H. (1991). A multistage model of customers' assessment of service quality and value. *Journal of Consumer Research*, 17(1), 375-384.
- Bowman, D., & Narayandas, D. (2001). Managing Customer-initiated Contacts with Manufacturers: the Impact on Share of Category Requirements and Word-of-Mouth Behavior. *Journal of Marketing Research*, 38, 291-297.
- Bressolles, G., & Durrieu, F. (2010). *Impact of e-service quality on satisfaction and loyalty intentions: differences between buyers and visitors*. BEM Management School, France.
- Broekhuizen, T. (2006). *Understanding channel purchase intentions: measuring online and offline shopping value perceptions*. The Netherlands: Labyrinth Publications.
- Butcher, K., Sparks, B., & O'Callaghan, F. (2001). Evaluative and relational influences on service loyalty. *International Journal of Service Industry Management*, 12(4), 310-327.
- Buttle, F. A. (1998). Word of mouth: understanding and managing referral marketing. *Journal of Strategic Marketing*, 6, 241-254.
- Cai, S., & Xu, Y. (2006). Effects of outcomes, process and shopping enjoyment on online consumer behavior. *Electronic Commerce Research and Applications*, 5, 272-281.
- Catalán, B. L., & Luque, P. D. (2010). m-Commerce adoption: TAM vs technology provider perspective through cognitive maps. Retrieved August 12, 2010, from http://74.125.155.132/scholar?q=cache:reEyDG9t-6MJ:scholar.google.com/&hl=en&as_sdt=2000.
- Chea, S., & Luo, M. M. (2005). e-Service customer retention: the roles of negative affectivity and perceived switching costs. Proceedings from *The 11th Americas Conference on Information Systems*. Omaha, NE, USA.

- Chea, S., & Luo, M.M. (2005). e-service Customer Retention: The Roles of Negative Affectivity and Perceived Switching Costs. *In the Proceedings of the 11th Americas Conference On Information Systems*, Omaha, NE, USA August 11th-14th 2005.
- Chen, J., Zhang, C., & Huang, L. (2010). Determinants of customer loyalty in China C2C e-commerce: from a Social Network Perspective. Proceedings from *The Fifteenth European Conference on Information Systems*. St. Gallen, Switzerland.
- Chen, M. H., Lee, H. H., Lin, S. W., & Tsai, K. M. (2010). Creating values for online shoppers. Retrieved August 20, 2010, from http://scholar.googleusercontent.com/scholar?q=cache:62vcvsmhn88J:scholar.google.com/&hl=en&as_sdt=0,5
- Cheung, M. K., & Lee, M. K. O. (2005). Research framework for consumer satisfaction with internet shopping. *Sprouts: Working Papers on Information Systems*, 5(26), 1-19.
- Childers, T. L., Carr, C. L., Peck, J., & Carson, S. (2001). Hedonic and utilitarian motivations for online retail shopping Behavior. *Journal of Retailing*, 77(4), 511-535.
- Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook Of Partial Least Squares: Concept, Methods And Applications* (pp. 655-690). Berlin, Germany: Springer-Verlag.
- Chirico, P., & Presti, A. L. (2008). A customer loyalty model for services based on a continuing relationship with the provider. *Journal of Marketing*, 3, 168-171.
- Chiu, C. M., Chang, C. C., Cheng, H. L., & Fang, Y. H. (2009). Determinants of customer repurchase intention in online shopping. *Online Information Review*, 33(4), 761-784.
- Chiu, C. M., Hsu, M. H., Fang, Y. H., & Yen, C. H. (2010). Exploring online repeat purchase intentions: the moderating role of switching cost. Proceedings from The Pacific Asia Conference on Information System, PACIS 2010. Taipei, Taiwan: DBLP.
- Choi, D. H., Kim, S. I., & Kim, S. H. (2010). Antecedents and behavioral consequences of customer satisfaction on internet retail store. *International Center for Electronic Commerce*, 9-18.
- Chopra, K., & Wallace, W. A. (2003). Trust in electronic environment. Proceeding from *The 36th Annual Hawaii International Conference on System Sciences*. USA, Hawaii: IEEE.
- Chua, A. P. H., Khatibi, A., & Ismail, H. (2006). e-Commerce: a study on online shopping in Malaysia. *Journal of Social Science*, 13(3), 231-242.
- Collier, J. E., & Bienstock, C. C. (2006). Measuring service quality in e-tailing. *Journal of Service Research*, 8(3), 260-275.
- Cyr, D., Bonanni, C., Bowes, J., & Ilsever, J. (2005). Beyond trust: web site design preferences across cultures. *Journal of Global Information Management*, 13(4), 25-54.

- Cyr, D., Head, M., & Ivanov, A. (2009). Perceived interactivity leading to e-loyalty: development of a model for cognitive-affective user responses. *International Journal Human-Computer Studies*, 67, 850-869.
- Davis, C. G. (1982). Linkages between socioeconomic characteristics, food expenditure patterns and nutritional status of low income households: a critical review. *American Agriculture Economic Association*, 64(5), 1017-1025.
- Davis, F. D. (1989). Perceived usefulness, perceived ease-of-use and acceptance of information technology. *MIS Quarterly*, 13(3), 319-340.
- Davis, F. D. (1993). User Acceptance of Information Technology: System Characteristics, User Perceptions, And Behavioral Impacts. *International Journal Management-Machine Studies*, 38, 475-487.
- Day, G. S. (1969). A two-dimensional concept of brand loyalty. *Journal of Advertising Research*, 9(3), 29-35.
- Deb, M., & Chavali, K. (2009). A study on the significance of e-trust and e-loyalty in online banking. *AIMS International Journal of Management*, 3(3), 241-257.
- Del Río, A. B., Vázquez, R., & Iglesias, V. (2001). The effects of brand associations on consumer response. *Journal of Consumer Marketing*, 18(5), 410-425.
- Dholakia, U. P., & Bagozzi, R. P. (2001). Consumer behavior in digital environments. In J. Wind, Y. W & V. Mahajan (Eds.), *Digital Marketing: Global Strategies From The World's Leading Experts*. NY, USA: John Wiley & Sons, Inc.
- Donnelly, M. (2009). *Building customer loyalty: a customer experience based approach in a tourism context*. (Master's Thesis). Waterford Institute of Technology, Ireland.
- Elliot, M. T., & Speck, P. S. (2005). Factors that affect attitude toward a retail web site. *Journal of Marketing Theory & Practice*, 13(1), 40-51.
- Faullant, R., Matzler, K., & Füller, J. (2008). The impact of satisfaction and image on loyalty: The case of Alpine Ski Resorts. *Managing Service Quality*, 18(2), 163-178.
- Fenech, T., & O'Cass, A. (2001). Internet users' adoption of web retailing: user and product dimensions. *Journal of Product and Brand Management*, 10(6), 361-381.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: an introduction to theory and research*. Reading, MA: Addison-Wesley.
- Flavián, C., Guinaliu, M., & Gurrea, R. (2006). The role played by perceived usability, satisfaction and consumer trust on website loyalty. *Information and Management*, 43(1), 1-14.
- Gauri, D. K., Bhatnager, A., & Rao, R. (2008). Role of word-of-mouth in online store loyalty. *Communication of the ACM*, 51(3), 89-91.

- Gefen, D., Silver, M., & Devine, P. (2001). Service quality dimensions of business to consumer e-commerce. Retrieved August 8, 2011, from <http://www.pages.drexel.edu/~silverm/Xi'an%20Conference%2020021.doc>
- Gefen, D., Straub, D. W., & Boudreau, M. C. (2000). Structural equation modeling and regression: guidelines for research practice. *Communications of the Association for Information Systems, 4*(7), 1-79.
- Gruen, T. W., Osmonbekov, T., & Czapslewski, A. J. (2006). e-WOM: The impact of customer-to-customer online know-how exchange on customer value and loyalty. *Journal of Business Research, 59*, 449-445.
- Ha, H. Y., & Janda, S. (2008). An empirical test of proposed customer satisfaction model in e-service. *Journal of Service Marketing, 22*(5), 399-408.
- Ha, S., & Stoel, L. (2009). Consumer e-shopping acceptance antecedents in a technology acceptance model. *Journal of Business Research, 62*, 565-571.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. Sixth ed. Upper Saddle River, NJ: Prentice Hall.
- Halawi, L., & McCarthy, R. (2008). Measuring students perceptions of blackboard using the technology acceptance model: A PLS Approach. *Issues in Information Systems, 9*(20), 95-102.
- Hamid, N. A. A. (2008). The relative importance of trust and usable website design in building e-loyalty intention on internet banking. *Communications of the IBIMA, 3*, 101-113.
- Harris, L. C., & Goode, M. M. H. (2004). The four levels of loyalty and the pivotal role of trust: a study of online service dynamics. *Journal of Retailing, 80*, 139-158.
- Hart, C. W. L., Heskett, J. L., & Sasser, Jr., W. E. (1989). The profitable art of service recovery. *Harvard Business Research, 148*-156.
- Hassanein, K. S., & Head, M. M. (2010). Building online trust through socially rich web interfaces. Proceeding from *The Second Annual Conference on Privacy, Security and Trust*. University of New Brunswick, Fredericton, New Brunswick, Canada.
- Hausman, A. V., & Siekpe, J. S. (2009). The effect of web interface features on customer online purchase intentions. *Journal of Business Research, 62*, 5-13.
- Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer Repurchase Intention: A general Structural Equation Model. *European Journal of Marketing, 37*(11/12), 1762-1800.
- Hennig-Thurau, T., Gwinner, K. P., Walsh, G., Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: what motives consumers to articulate themselves on the Internet? *Journal of Interactive Marketing, 18*(1), 38-52.

- Hernández, B., Jiménez, J., & Martín, M. J. (2010). Customer behavior in electronic commerce: the moderating effect of e-purchasing experience. *Journal of Business Research*, 63, 964-971.
- Hou, M., & Xu, X. F. (2010). Study on the influence of service to the retailing store image-based on the theory of halo effect. *Journal of Business Economics*, 1(8), 10-16.
- Huang, E. (2008). Use and gratification in e-consumers. *Internet Research*, 18(4), 405-426.
- Janda, S., Trocchia, P. J., & Gwinner, K. P. (2002). Consumer perceptions of internet retail service quality. *International Journal of Service Industry Management*, 15(5), 412-431.
- Jarvenpaa, S. L., & Todd, P. A. (1997). Consumer reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1(2), 59-88.
- Jeong, M., & Lambert, C. U. (2001). Adaptation of an information quality framework to measure customers' behavioral intentions to use lodging Website. *International Journal of Hospitality Management*, 20(2), 129-146.
- Jones, T. O., & Sasser, Jr, W. E. (1995). Why satisfied customers defect. *Harvard Business Review*, 1-14.
- Kao, Y. F. (2005). e-Satisfaction of NTO's Website case study: Singapore Tourism Board's Taiwan Website. In A, Frew (Eds.), *Information and Communication Technologies in Tourism 2005* (pp. 227-237). Wien: Springer-Verlag.
- Karim, J. (2009). Emotional labor and psychological distress: testing the mediatory role of work-family Conflict. *European Journal of Social Sciences*, 11(4), 584-598.
- Kassim, N., & Ismail, S. (2009). Investigating the Complex Drivers of Loyalty in e-Commerce Settings. *Measuring Business Excellence*, 13(1), 56-71.
- Katos, V. (2009). An integrated model for online transactions: methodological issues and challenges. *Methodological Innovations Online*, 4(3), 27-40.
- Katz, E., & Lazarsfeld, P. F. (1955). *Personal influence*. Glencoe, IL: Free Press.
- Khatibi, A., Haque, A., & Karim, K. (2006). e-Commerce: a Study on internet shopping in Malaysia. *Journal of Applied Sciences*, 6(3), 696-705.
- Khatibi, A., Thyagarajan, V., & Seetharaman, A. (2003). e-commerce in Malaysia: perceived benefits and barriers. *VIKALPA*, 28(3), 77-82.
- Klopping, I. M., & McKinney, E. (2004). Extending the technology acceptance model and the task-technology fit model to consumer e-commerce. *Information Technology, Learning and Performance Journal*, 22(1), 35-48.

- Kohli, R., Devaraj, S., & Mohmood, M. A. (2004). Understanding determinants of online consumer satisfaction: a decision process perspective. *Journal of Management Information System*, 21(1), 115-135.
- Koufaris, M. (2002). Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*, 13(2), 205-223.
- Koufaris, M., & Hampton-Sosa, W. (2002). *Customer trust online: examining the role of the experience with the website*. Department of Statistics & Computer Information Systems, Zicklin School of Business, Baruch College.
- Kwek, C. L., Lau, T. C., & Tan, H. P. (2010). The effects of shopping orientations, online trust and prior online purchase experience toward customers' online purchase intention. *International Business Research*, 3(3), 63-76.
- Kwek, C. L., Tan, H. P., & Lau, T.C. (2010). Investigating the shopping orientations on online purchase intention in the e-commerce environment: A Malaysian Study. *Journal of Internet Banking and Commerce*, 15(2), 1-22.
- LaBarbera, P. A., & Mazursky, D. (1983). A longitudinal assessment of customer satisfaction or dissatisfaction: the dynamics aspect of the cognitive process. *Journal of Marketing Research*, 20, 393-404.
- Lallmahamood, M. (2011). Privacy over the internet in Malaysia: a survey of general concerns and preferences among private individuals. Retrieved 21 August 2011, from <http://resources.mim.edu.my>
- Lam, S. Y., Shankar, V., Erramilli, M. K., & Murthy, B. (2004). Customer Value, Satisfaction, Loyalty, and Switching Costs: An Illustration From a Business-to-Business Service Context. *Journal of Academy of Marketing Science*, 32(3), 293-311.
- Lederer, A. L., Maupin, D. J., Sena, M. P., & Zhuang, Y. (2000). The technology acceptance model and the World Wide Web. *Decision Support Systems*, 29, 269-282.
- Lee, H. Y., Ahn, H., & Han, I. (2006). Analysis of trust in the e-commerce adoption. Proceedings from *The 39th Hawaii International Conference on System Sciences*. Hawaiiian, USA: IEEE.
- Lee, R., & Murphy, J. (2008). The moderating influence of enjoyment on customer loyalty. *Australian Marketing Journal*, 16(2), 11-21.
- Liang, T. P., & Lai, H. J. (2002). Effect of store design on consumer purchases: an empirical study of online bookstores. *Information and Management*, 39, 431-444.
- Liao, Z., & Shi, X. (2009). Consumer perceptions of internet-based e-retailing: an empirical research in Hong Kong. *Journal of Service Marketing*, 23(1), 24-30.
- Lim, Y. M., Yap, C. S., & Lau, T. C. (2010). Online search and buying behavior: Malaysian experience. *Canadian Social Science*, 6(4), 154-166.

- Lin, C. S., Tzeng, G. H., Chin, Y. C., & Chang, C. C. (2010). The effect of recommendation sources and consumer involvement on trust and purchase intention in online and offline environments. Retrieved September 23, 2011, from http://scholar.googleusercontent.com/scholar?q=cache:V24zBzWcVWMJ:scholar.google.com/&hl=en&as_sdt=0,5
- Lin, G. T. R., & Sun, C. C. (2009). Factors influencing satisfaction and loyalty in online shopping: an integrated model. *Online Information Review*, 33(3), 458-475.
- Lin, P. C., & Chou, Y. H. (2009). Perceived usefulness, ease-of-use and usage of citation database interfaces: a replication. *The Electronic Library*, 27(1), 31-42.
- Liu, D., & Payne, A. (2010). Word-of-mouth and fundamental attribution error: external influencing factors and a research agenda. Retrieved June 13, 2010, from http://anzmac.info/conference/2008/_Proceedings/PDF/S01/_Liu%20%26%20Payne_S4%20S1%20P4.pdf
- Liu, X., He, M., Gao, F., & Xie, P. (2008). An empirical study of online shopping customer satisfaction in China: a holistic perspective. *International Journal of Retail and Distribution Management*, 36(11), 919-940.
- Lowengart, O., & Tractinsky, N. (2001). Differential effects of product category on shoppers' selection of web-based stores: a probabilistic modeling approach. *Journal of Electronic Commerce Research*, 2(4), 142-156.
- Luarn, P., & Lin, H. H. (2003). A customer loyalty model for e-service context. *Journal of Electronic Commerce Research*, 4(4), 156-167.
- Mahmud, M. N. (2008). Modeling the dynamics of internet adoption. *Computer and Information Science*, 1(1), 95-103.
- Mäntymäki, M. (2009). Customer in social virtual worlds. Proceedings from *The 22nd Bled e-Conference E-Enablement: Facilitating an Open, Effective and Representative e-Society*. Bled, Slovenia.
- Menon, S., & Kahn, B. (2002). Cross-category effects of induced arousal and pleasure on the Internet shopping experience. *Journal of Retailing*, 78(1), 31-40.
- Monsuwé, T. P., Dellaert, B. G. C., & De Ruyter, K. (2004). What drivers consumers to shop online? a literature review. *International Journal of Service Industry Management*, 15(1), 102-121.
- Mukherjee, A., & Nath, P. (2007). Role of electronic trust in online retailing. *European Journal of Marketing*, 41(9/10), 1173-1202.
- Muyllé, S., Moenaert, R., & Despontin, M. (2004). The conceptualization and empirical validation of web user satisfaction. *Information and Management*, 41, 543-560.
- Nielsen, J. (1999). *Designing Web Usability*. New Riders Publishing, Indianapolis, Indiana USA.

- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory*. 3rd Edi. New York: McGraw-Hill.
- Oliver, R. (1999). Whence customer loyalty? *Journal of Marketing*, 63, 33-44.
- Olson, J. R., & Boyer, K. K. (2005). Internet ticketing in a not-for-profit, service organization: building customer loyalty. *International Journal of Operation & Production Management*, 25(1), 74-92.
- Omar, M. W. (2009). The mediating effects of cognitive and emotional satisfaction on customer loyalty. *International Journal of Management Innovation Systems*, 1(2), 1-13.
- Osman, S., Chan, Y. F. B., & Choo, B. H. (2010). Undergraduates and online purchasing behavior. *Asian Social Science*, 6(10), 133-146.
- Ou, C. X., & Sia, C. L. (2003). Customer loyalty strategy in the internet era. Proceedings from *The 7th Pacific Asia Conference on Information Systems*. Atlanta, GA: Association for Information Systems (AIS).
- Overby, J. W., & Lee, E. J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and Intentions. *Journal of Business Research*, 59, 1160-1166.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101-134.
- Paynter, J., Satitkit, S., & Chung, W. (2010). Evaluating usability of New Zealand e-tailing sites. University of Auckland, Department of Management Science and Information Systems Working Paper No. 224.
- Ponirir, P., Scott, D., & Von Der Heidt, T. (2009). *Does e-store service quality affect customer loyalty?* School of Commerce and Management, Southern Cross University.
- Porter, C., & Donthu, N. (2006). Using the technology acceptance model to explain how attitudes determine Internet usage: the role of perceived access barriers and demographics. *Journal of Business Research*, 59, 999-1007.
- Prasad, C. J. H., & Aryasari, A. R. (2009). *Determinants of shopper behavior in e-tailing: an empirical analysis*. Retrieved June 25, 2010, from <http://webcache.googleusercontent.com>
- Purosothuman, N. P. (2008). *Key determinants of virtual store acceptance among the Malaysians consumers* (Master's thesis). University of Malaya.
- Ranaweera, C., & Prabhu, J. (2003). Customer satisfaction and trust as determinants of customer retention and positive word of mouth. *Journal of Targeting, Measurement and Analysis for Marketing*, 12(1), 82-90.
- Rauyruen, P., & Miller, K. E. (2007). Relationship quality as a predictor of B2B customer loyalty. *Journal of Business Research*, 60, 21-31.

- Reibstein, D. J. (2001). The internet buyer. In J. Wind & V. Mahajan (Eds.), *Digital Marketing: Global Strategies from the World's Leading Experts*. NY, USA: John Wiley & Sons, Inc.
- Ribbink, D., van Riel, A. C., Liljander, V., & Streukens, S. (2004). Comfort your online customer: quality, trust and loyalty on the Internet. *Managing Service Quality*, 14(6), 446-456.
- Richins, M. L. (1983). Negative word-of-mouth by dissatisfied consumers: a pilot study. *Journal of Marketing*, 47, 68-78.
- Roca, J. C., García, J. J., & De La Vega, J. J. (2009). The importance of perceived trust, security and privacy in online trading systems. *Information Management and Computer Security*, 17(2), 96-113.
- Salisbury, W. D., Pearson, R. A., Pearson, A. W., & Miller, D. W. (2001). Perceived security and world wide web purchase intention. *Industrial Management and Data Systems*, 101(4), 165-176.
- Sam, M. F. M., & Tahir, M. N. H. (2010). Website quality and consumer online purchase intention of air ticket. *International Journal of Basic & Applied Sciences IJBAS*, 9(10), 20-25.
- Samani, M. B., Hashim, N. H., Golbaz, N. E., & Khani, N. (2011). A proposed model of lifestyle and store attributes for hypermarkets' loyalty. Proceeding from *The 2nd International Conference on Business and Economic Research*. Langkawi, Kedah.
- Schoefer, K. (1998). *Word-of-mouth: influences on the choices of recommendation sources* (Degree thesis). University of Norttingham Grobritannien.
- Seiders, K., Voss, G. B., Grewal, D., & Godfrey, A. (2005). Do satisfied customers buy more? Examining moderating influences in a retailing context. *Journal of Marketing*, 69, 26-43.
- Sekaran, U. (1992). *Research methods for business: a skill-building approach*. New York: John Willey & Sons.
- Shang, R. A., Chen, Y. C., & Shen, L. (2005). Extrinsic and intrinsic motivations for consumers to shop online. *Information and Management*, 42, 401-413.
- Shih, H.P. (2004). An Empirical Study On User Acceptance of e-Shopping On The Web. *Information and Journal*, 41: 351-368.
- Shim, J. P., Shin, Y. B., & Nottingham, L. (2002). Retailer website influence on customer shopping: an exploratory study on key factors of customer satisfaction. *Journal of the Association for Information Systems*, 3, 53-76.
- Silverman, G. (2001). *The secrets of word-of-mouth marketing: how to trigger exponential sales through Runaway word of mouth*. New York: American Management Association.
- Smith, E. (2001). Seven steps to building e-loyalty. *Medical Marketing and Media*, 36(3), 94-102.

- Söderlund, M. (1998). Customer satisfaction and its consequences on customer behavior revisited: the impact of different levels of satisfaction on word-of-mouth, feedback to the supplier and loyalty. *International Journal of Service Industry Management*, 9(2), 169-188.
- Sohn, C., & Lee, D. (2004) - Trust and switching cost as a way to build e-loyalty in internet markets. *International Journal of Internet and Enterprise Management*, 2(3), 209-220.
- Song, J., & Zahedi, F. M. (2001). Web design in e-commerce: a theory and empirical analysis. Proceedings from *The Twenty-Second International Conference on Information Systems*.
- Srinivasan, S. S, Anderson, R., & Ponnnavolu, K. (2002). Customer loyalty: an exploration of its antecedents and consequences. *Journal of Retailing*, 78, 41-50.
- Stafford, T. F., & Schkade, L.L. (2004). Determining uses and gratifications for the Internet. *Decision Sciences*, 35(2), 259-288.
- Stewart, K. J. (2002). Trust transfer on the world wide web.
- Swaminathan, V., Lepkowska-White, E., & Rao, B. P. (1999). Browsers or buyers in Cyberspace? an investigation of factors influencing electronic exchange. *JCMC*, 5(2), 1-23.
- Szymanski, D. M., & Hise, R. T. (2000). e-Satisfaction: an initial examination. *Journal of Retailing*, 76(3), 309-322.
- Tam, C. T. W. (2010). An Integrated Online Customer Loyalty Model. Retrieved May 23, 2010, from http://www.sba.muohio.edu/abas/2003/brussels/tam_pb-6310christinetam.pdf
- Tang, T. W., & Chi, W. H. (2010). The role of trust in customer online shopping behavior: perspective of technology acceptance model. Retrieved May 23, 2010, from http://www.casos.cs.cmu.edu/events/conferences/2005/2005_proceedings/Tang
- Tax, S. S., Brown, S. W., & Chandrashekar, M. (1998). Customer evaluations of service complaint experiences: implications for relationship marketing. *Journal of Marketing*, 62, 60-76.
- Technical Assistance Research Programs. (1979). *Consumer Complaint Handling In America: Summary of Findings and Recommendations*. Washington, DC: U. S. Office of Consumer Affairs.
- Teerling, M. L., & Huizingh, E. K. R. E. (2010). How about integration: the impact of online activities on store satisfaction and loyalty. Retrieved March 12, 2010, from <http://som.eldoc.ub.rug.nl/FILES/reports/themeF/2004/04F08/04f08.pdf>

- Tenenhaus, M., Vinzi, V. E., Chatelin, Y. M., & Lauro, C. (2005). PLS path modeling. *Computational Statistics and Data Analysis*, 48, 159-205.
- Teo, T. S. H. (2001). Demographic and motivation variables associated with internet usage activities. *Internet Research: Electronic Networking Applications and Policy*, 11(2), 125-137.
- Teo, T., & Noyes, J. (2010). Exploring attitudes towards computer use among pre-service teachers from Singapore and the UK. *Multicultural Education and Technology Journal*, 4(2), 126-135.
- Van der Heijden, H. (2003). Factors influencing the usage of websites: the case of a generic portal in The Netherlands. *Information and Management*, 40(6), 541-549.
- Verhagen, T., & Van Dolen, W. (2007). Explaining Online Purchase Intentions: A Multi-Channel Store Image Perspective. *Vu Serie Research Memoranda*: 1-28.
- Vrechopoulos, A., & Atherinos, E. (2009). Web Banking Layout Effects on Consumer Behavioral Intentions. *International Journal of Bank Marketing*, 27(7), 524-546.
- Wang, Y. S., Tang, T. I., & Tang, J. T. E. (2001). An Instrument for Measuring Customer Satisfaction Toward Web Sites That Market Digital Products and Services. *Journal of Electronic Commerce Research*, 2(3), 89-102.
- Wolfenbarger, M., & Gilly, M. C. (2001). *Shopping online for freedom, control and fun*. Center for Research on Information Technology and Organizations. University of California, Irvine Working Paper June 2000.
- Yang, X., Zhang, X., & Wu, J. (2010). Impact of marketing efforts and customer satisfaction on word-of-mouth: study based on mobile Phone Users in China. Retrieved April 22, 2010, from <http://www.seiofbluemountain.com/upload/product/200911/2008scyxhy01a7.pdf>
- Yap, S. F., & Kew, M. L. (2010). Service quality and customer satisfaction: antecedents of customer's re-patronage intentions. *Sunway Academic Journal*, 4, 59-73.
- Zairi, M. (2000). Managing customer dissatisfaction through effective complaints management systems. *The TQM Magazine*, 12(5), 331-335.
- Zawawi, S. N. H. M., Yusuf, S. N. S., & Khan, N. I. (2004). A study on the awareness of e-commerce amongst the bachelor of accountancy students in public universities in Klang Valley. *Journal of Financial Reporting and Accounting*, 2(1), 31-42.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60, 31-46.