

# **RETAINING ONLINE CUSTOMERS: INFORMATION QUALITY AS A SIGN OF CORPORATE SOCIAL RESPONSIBILITY**

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## **ABSTRACT**

This study aims to investigate the influence of website information quality on customer e-loyalty and the mediating role of customers' perception of Corporate Social Responsibility (CSR) in such relationship upon Vietnam B2C context. Additionally, the study evaluates the moderating role of variety seeking behaviour on the relationship between perceived CSR and customer e-loyalty. This research combines both qualitative and quantitative research methods. Specifically, five focus group sessions were conducted to develop the conceptual model and measurement scales for each construct while an empirical survey on 313 Vietnamese online shoppers from all walks of life was employed to test the hypothesized relationships using SEM. The results indicate that the quality of information disclosed on an online store in terms of accuracy, completeness, relevance, usefulness, understandability and timeliness has direct positive effects on both perceived CSR and customer e-loyalty in which perceived CSR mediates partially the effect of website information quality on customer loyalty. In addition, the moderating role of variety seeking behaviour on the relationship between perceived CSR and customer e-loyalty was also confirmed in a way that the higher tendency of variety seeking behaviour that an online customer has, the weaker the relationship between perceived CSR and customer e-loyalty is.

**Keywords:** E-commerce; Corporate social responsibility; Information quality; Customer loyalty; Vietnam

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## **1. INTRODUCTION**

Vietnam has witnessed an unprecedented expansion in e-commerce market in recent years. According to a report by Vietnam e-Commerce and Information Technology Agency released in 2016, the 2015 revenue of Vietnamese e-commerce market reached 4.07 billion USD demonstrating an enormous increase by 34% compared to that in 2014, and it is expected to rise 20 % each year to reach 10 billion USD by 2020. In addition, the report also reveals that the rapid growth of Vietnam e-commerce market in recent years has been driven by the increasing number of companies which create and manage B2C e-commerce platforms where various suppliers and customers can make transactions, namely Hotdeal, Lazada, Sendo, Vatgia, Adayroi and so on (i.e. these companies are hereafter called, in short, "e-tailers"). Featured by low initial investment and accelerating growth, the number of e-tailers is expected to increase sharply by 2020 (VECOM, 2017). Meanwhile, due to the

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high availability of equivalent alternatives and information, the switching costs to online shoppers are relatively minimal. As a result, retaining customers in online shopping environment is, therefore, getting harder to all e-tailers. Since acquiring new customers can cost up to 10 times as much as retaining an existing customer while a 10% increase in customer retention costs adds up to 30% to customer value compared to only less than 2% to overall customer value resulting from a 10% increase in acquisition costs (Lakshmi, 2013), understanding determinants of e-loyalty becomes crucial to build effective customer retention programs and thereby helps e-tailers to achieve sustainable business development growth.

In recent years, Corporate Social Responsibility, also known as CSR, has increasingly become the important strategy of many businesses in retaining customers. However, there is still a lack of empirical studies which investigating the relationship between perceived CSR and customer loyalty as well as the determinants of perceived CSR in e-tailing context. Since online transactions feature anonymity, lack of control and therefore, potential opportunism, information disclosed on online stores plays a key role in customers' decision making process (Wixom and Todd, 2005; Park and Gretzel, 2010). Therefore, disclosing false or incorrect information to mislead customers' purchasing decisions and cause their loss of money may have some linkage with the economic, ethical and legal aspects of CSR. Moreover, the direct relationship between information quality and customer e-loyalty has been affirmed in many previous studies (Chhikara and Ankit, 2015; Floh and Treiblmaier, 2006; Mithas et al., 2006; Wang et al., 2009). This research, therefore, firstly adopted focus group method so as to explore the potential interrelationship among information quality, perceived CSR and customer e-loyalty and develop hypotheses, followed by survey method to test the conceptual model. This research aims to provide implications for both marketing practitioners and scholars in retaining online customers upon the theme of sustainable development.

## **2. LITERATURE REVIEW**

### **2.1. Conceptual Framework**

The conceptual framework of this research is developed from findings of previous studies which affirm the positive relationship between perceived CSR and customer loyalty (Bae & Cameron, 2006; Brown & Dacin, 1997; Dung, 2017; Maignan & Ferrell, 2004; Lichtenstein et al., 2004). Specifically, according to Bhattacharya & Sen (2004), customers associate a company's good CSR initiatives with positive attitudes towards the company itself and its products and services. As a result, they may make repetitive purchase and provide positive WOM. However, most previous research treated perceived CSR as an exogenous or independent variable while there is hardly any study which investigates the determinant of perceived CSR, especially in an online shopping context. In addition, upon e-tailing environment, information plays a key role in online shoppers' decision making process and information quality has also been affirmed as a crucial determinant of customer e-loyalty (Chhikara and Ankit, 2015; Floh and Treiblmaier, 2006; Mithas et al., 2006; Wang et al., 2009).

In expanding the existing knowledge about the linkage among information quality, perceived CSR and customer e-loyalty in an e-tailing environment, five focus group sessions were conducted with Vietnamese customers to identify whether there is any relationship between customers' evaluation of an online-store's information quality and their perception towards the e-tailer's CSR and if such relationship exists, which dimension of CSR bears the strongest correlation with website information

quality. The data resulting from the focus group were then filtered, summarized and conceptualized with the literature review to suggest the conceptual model, develop hypotheses and formulate measurement constructs.

Findings from focus group revealed that respondents perceived an e-tailer which provides good information quality as having good CSR and they are willing to repeat their transactions with that e-tailer. Perceived CSR, therefore, may be the mediator in the relationship between information quality and customer e-loyalty. Figure 1 demonstrates the proposed model in which all of information quality and perceived CSR have direct effects on customer loyalty while perceived CSR mediates the relationship between information quality and customer loyalty.

### *Information Quality*

Information quality is an important dimension of an e-store's quality besides service quality, system quality and vendor-specific quality (Alptekin et al., 2015; Çebi, 2013; DeLone and McLean, 2003; Devaraj et al., 2002; Lee and Kozar, 2006). Since virtual shopping environment is associated with special features such as anonymity, high transaction risk due to lack of control and potential opportunism, quality of website information is a crucial factor affecting an e-tailer's ability to initiate new transactions and retain customers (DeLone and McLean, 2003; Kim et al., 2003). According to McKinney et al. (2002), information quality is visitors' perception of website information's quality. Information quality is a multi-dimensional construct measured upon six dimensions as presented in Table 1.

**Table 1:** Dimensions of Information Quality

Authors	Accuracy	Completeness	Timeliness	Relevance	Understandability
Alptekin et al. (2015)	*	*	*		*
Argawal and Venkatesh (2002)	*	*	*	*	
Çebi (2013)	*				
DeLone and McLean (2003)		*		*	*
Devaraj et al. (2002)			*		
Ecer (2014)				*	*
Janda et al. (2002)	*		*		
Katerattanakul (2002)			*		
Kim and Lim (2001)			*		
Lee and Kozar (2006)			*	*	*
Lin (2007)	*	*			
Nilashi et al. (2012)	*	*	*		
Tung and Chang (2008)	*	*			
Tzeng et al. (2007)	*				
Wang (2003)	*	*			
Webb and Webb (2004)	*				
Chang and Chen (2008)	*	*	*		*

According to Kim and Lennon (2008), in e-tailing environment, information quality actively supports and influences customers' purchase decision making while reducing perceived risks related to an online transaction. Therefore, information quality helps set up and maintain relationships between customers and their current e-tailers.

### ***Customer Loyalty***

Since customer loyalty is a key variable reflecting relationship quality and business performance, it has been the primary focus of many studies in Marketing (Berry and Parasuraman, 1991; Sheth and Parvatiyar, 1995). Customer loyalty can be categorized into behavioral and attitudinal loyalty (Algesheimer et al., 2005; Morrison and Crane, 2007; Oliver, 1999; Teo et al., 2003). In more details, behavioral loyalty refers to the commitment to rebuy or to favor a particular brand despite external influences and marketing efforts that may encourage brand switching while attitudinal loyalty is defined as a positive attitude towards a brand or product driven by "good feeling" and intention to endorse the favorite brand or product with positive WOM.

Upon e-tailing environment, e-loyalty is defined as online shoppers' favorable attitude toward their current e-tailer that motivates them to make repetitive purchases (Srinivasan et al., 2002). This study investigates e-loyalty upon both behavioral and attitudinal dimensions; accordingly, e-loyalty is measured as favorable customers' attitude toward an online retailer and the likelihood of their repetitive purchases. In an online shopping context, it is getting harder to retain online shopper since alternative offerings and instant information are available at relatively low cost (Kuttner, 1998). In a such competitive online shopping environment, enhancing e-loyalty is one of the crucial strategies to gain customer retention, thereby, ensure sustainable business growth.

### ***Perceived CSR***

The term "Corporate Social Responsibility" or CSR was first proposed in the book titled "Social responsibilities of the businessman" by Bowen (1953) which is about the responsibility that a business needs to fulfill for the society's sake in order to meet the public's expectation. Accordingly, CSR practices require firms to take into consideration all parties before implementing any strategies as well as achieve its own economic prosperity while using its resources to enhance the welfare of the whole society (D'Amato et al., 2009; Kok et al., 2001). Despite various perspectives on CSR dimensions, in general, CSR includes responsibilities to interest group who benefit from the company's business activities such as employees, stakeholders and the governments and those to society and environment (Gigauri, 2012). Specifically, the literature reveals five main dimensions of CSR including economic, legal, ethical, environmental and philanthropic components (Carroll, 1991; McIntosh and Mohan, 1999; Salmones et al., 2005; Warhurst, 2001). Table 2 below summarizes the definitions of each CSR dimension:

**Table 2:** Dimensions of CSR

CSR dimensions	Definition	Authors who suggested
Economic	Responsibility to ensure the economic benefits of interest groups including employees, collaborators or shareholders.	Carroll (1991); Tafti et al. (2012); Saeed & Arshad (2012)
Legal	Responsibility to comply with laws and regulations	Carroll (1991); Tafti et al. (2012); Saeed & Arshad (2012); Virvilaite & Daubaraite (2011); Rasoulzadeh et al. (2013)
Ethical	Responsibility to comply with social norms or ethical standards even though they are not regulated in any laws or regulations	Carroll (1991); Tafti et al. (2012); Saeed & Arshad (2012)
Philanthropic	Responsibility that goes above and beyond what is simply required involving making an effort to benefit the society such as donation or engaging social projects that improve public welfare or health, etc.	Carroll (1991); Tafti et al. (2012); Virvilaite & Daubaraite (2011); Rasoulzadeh et al. (2013)
Environmental	Responsibility to protect the environment, minimize pollution and save natural resources	Adeyanju (2012)

Since the scope of CSR is large while this study only investigates perceived CSR under the effect of website information quality, we conducted five focus group sessions in order to find out which dimensions of CSR are the most relevant to information quality.

### ***Variety seeking behavior***

Variety seeking behavior is a tendency that a customer wants to switch to various products due to their curiosity (Steenkamp and Baumgartner, 1995). Specifically, even when they are satisfied with the current products, they still want to try other products or brands offered by competitors. Variety seeking behavior usually exists in case of low involvement product or low switching costs.

## **2.2. Hypothesis Development**

### ***The effect of information quality on perceived CSR***

Most of the previous studies on perceived CSR have treated perceived CSR as an exogenous variable which has a direct effect on other variables. There are only few researches which identify factors which have influence on CSR such as recovery satisfaction (i.e. customer satisfaction recovered by a provider after service failure) (Choi and La, 2013) or product pricing (Ahn, 2015) and there is hardly research investigating the influence of information quality on perceived CSR upon e-tailing environment. Findings resulting from the focus group suggest that providing false or vague information about products or services in order to mislead customers' purchase decision making is perceived as an unethical and illegal practice since it causes loss of money and disappointment while violating the Laws on advertising. Therefore, it is likely that providing website information of good quality may be perceived as good CSR, especially in terms of

economic, ethical and legal dimensions are. In line with the above discussion, the following hypothesis will be tested:

*H1: Information quality has a direct positive effect on perceived CSR.*

### ***The effect of information quality on customer e-loyalty***

The positive relationship between website information quality and e-loyalty has been affirmed in many previous studies (Chhikara and Ankit, 2015; Floh and Treiblmaier, 2006; Mithas et al., 2006; Wang et al., 2009). Specifically, the higher information quality, the more loyal customers become. In line with the existing literature, this study hypothesizes that:

*H2: Information quality has a direct positive effect on e-loyalty*

### ***The effect of perceived CSR on e-loyalty***

The relationship between perceived CSR and e-loyalty has been affirmed in many previous studies. According to Trawick et.al (1991) and Whalen et.al (1991), customers' purchasing intention significantly reduces when they perceive the supplier's actions as unethical. Moreover, according Gundlach and Murphy (1993); Roman (2003) and Maignan and Ferrell (2004) suggest that complying to ethical principles helps businesses enhance customer loyalty and build a beneficial long-term relationship with customers. More specifically, customers usually associate good CSR with positive evaluation of products and services provided by the business. As a result, the business gain more customer trust and loyalty (Asatryan, 2002; Chun and Bang, 2016; Du et al., 2007). This research, therefore, hypothesizes that:

*H3: Perceived CSR has a direct positive effect on e-loyalty*

### ***The mediating role of perceived CSR in the relationship between information quality and e-loyalty***

As discussed above, information quality may have a direct positive effect on perceived CSR which, in turn, influences on customer loyalty. Therefore, perceived CSR may mediate the relationship between information quality and customer e-loyalty. Although there is hardly research which affirms the mediating effect of perceived CSR in the relationship between information quality and customer e-loyalty, in line with the above discussion and results from the focus group, this study hypothesizes that:

*H4: Perceived CSR mediates the effect of information quality on customer e-loyalty*

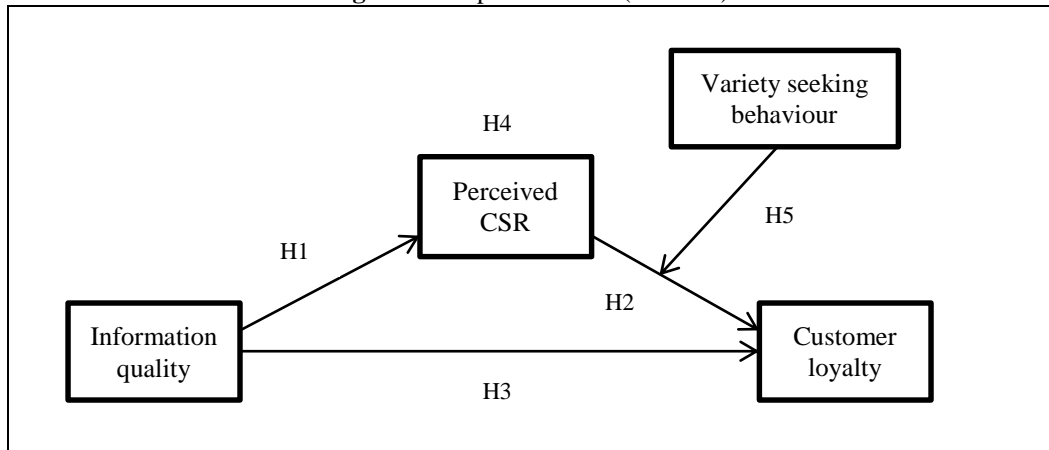
### ***The moderating effect of variety seeking behavior on the relationship between perceived CSR and customer e-loyalty.***

Variety seeking behavior reflects the personal trait of customers in a specific circumstance. Since online shopping environment associates with highly available alternatives with low switching costs, this variable will be investigated as the moderator on the relationship between perceived CSR and customer e-loyalty upon e-tailing context. Specifically, findings from the focus group

reveal that the higher tendency of variety seeking behavior is, the weaker the relationship between perceived CSR and customer e-loyalty becomes. Although there is hardly research which investigates the moderating effect of variety seeking behavior on the relationship between perceived CSR and customer e-loyalty, in line with the above discussion, this study hypothesizes that:

*H5: Variety seeking behavior moderates the effect of perceived CSR on customer e-loyalty*

**Figure 1:** Proposed Model (Model 1)



### 3. METHODOLOGY

This research comprises two phases:

**Phase 1:** Qualitative method was employed to explore the potential relationships among three variables including information quality, perceived CSR and customer e-loyalty, especially to identify whether customers' perception about website information quality has an effect on which dimensions of perceived CSR. Specifically, five focus group sessions were conducted in February, 2018 with total 49 Vietnamese online shoppers (i.e. nine to ten participants for each session). In order to ensure the demographic diversity of the participants in terms of gender, age, income, education level and online shopping experience, snowball sampling method was employed (Miles & Huberman, 1984) in which four respondents were invited purposively and each of them was required to invite three more people with specific characteristics. Each focus group session lasted one hour and 30 minutes and was monitored by an experienced mediator. The data collected from the focus group sessions were analyzed to develop research hypotheses and measurement scales.

**Phase 2:** In order to test the proposed research model, survey method with paper-based questionnaire was adopted. Measurement scales used in the questionnaire were developed from previous researches. Information quality was measured upon five items including accuracy, completeness, relevance, understandability and timeliness which are repeatedly used in the

literature as suggested by Chang and Chen (2008). According to findings from the focus group, customers' evaluation of information quality is the most associated with the economic, ethical and legal aspects of perceived CSR. Consistent with the literature and findings from the focus group, this research develops measurement scales for perceived CSR in terms of the economic, ethical and legal aspects upon those proposed by Maignan (2001); Öberseder et al. (2014); Pérez and Bosque (2013); Salmones et al. (2005); Turker (2009) and Wagner et al. (2008). Customer e-loyalty was tapped with three measurement items suggested by Jeon and Jeong (2017) covering both behavioral and attitudinal dimensions. All these variables were measured by using five-point Likert scale ranging from 1 (i.e. Strongly disagree) to 5 (i.e. Strongly agree).

The questionnaire was translated into Vietnamese in the most natural and understandable way by a Vietnamese interpreter and further adjusted upon results from a pilot test which was conducted upon twenty Vietnamese shoppers so that the quality of the questionnaire in terms of comprehension; easy-to-understand language and phraseology; ease of answering; practicality and length of the survey is affirmed (Hague et.al, 2004). The survey was conducted during March of 2018. Data collection was conducted through paper-based questionnaires to ensure a higher response rate and to enable direct and in-person support while respondents are filling in the questionnaires. At the beginning of the questionnaire, respondents were asked to select only one e-tailer from which they have recently made purchases among a list of popular e-tailers in Vietnam including Sendo.vn; Adayroi.com; Lazada.vn; Hotdeal.vn; Shopee.vn; Tiki.vn; Lotte.vn or if such e-tailer is not in the list, they are required to write its name down. Accordingly, all questions were concerned with the e-tailer which has been selected by the respondent or listed. Since this study focus on e-tailers, if respondents list the name of a company or website which is not an e-tailer, their filled questionnaires are regarded as unusable.

Non-probability sampling technique with quota sampling method is employed to draw an initial sample of 400 respondents including Vietnamese Internet users from all walks of life who have ever shopped online. Finally, 313 filled questionnaires are usable. As shown in Table 3, the sample includes 52.4% female and 47.6% males. The larger age groups were young consumers aged below 36 years old (87%). Most respondents have shopped online from three times and above a month (62.3%) with incomes mostly above 5 million VND (60.1 %).

**Table 3:** Sample Description

Indicator	Segment	Frequency	Percentage
Gender	Male	149	47.6
	Female	164	52.4
Age range	18 - 25	157	50.2
	25 - 30	60	19.2
	30 - 35	55	17.6
	Above 35	41	13.0
Online shopping frequency (per month)	Once to twice	118	37.7
	From 3-4 times	114	36.4
	More than 4 times	81	25.9
Online shopping experience	Less than 1 year	131	41.9
	From 1-2 years	94	30.0
	More than 2 years	88	28.1



Indicator	Segment	Frequency	Percentage
Monthly income (VND)	Less than 5 million	125	39.9
	From 5 – 10 million	98	31.3
	More than 10- 15 million	55	17.6
	More than 15 million	35	11.2

## 4. RESULTS AND DISCUSSION

### 4.1. Findings from the Focus Group Research

Respondents in the focus groups have discussed their opinions and perceptions about an e-tailer which provides false or vague information on its website. Some respondents have mentioned the aspects of corporate social responsibility in terms of economic, ethical and legal as featured by Carroll (1991) and Tafti et al. (2012). Based on the respondents' discussions in the focus groups, three dimensions of perceived CSR include economic, ethical and legal have found to directly relate to the online shoppers' evaluation of information quality. For example, they have indicated that:

*E-tailers provide false information because they want to mislead customers' purchase decision towards fake or inferior products*

*[...] Providing false or vague information is such an unethical and illegal practice*

*[...] Providing information of poor quality either intentionally or unintentionally causes loss of money and disappointment*

*If my e-tailer provides inaccurate information, it violates the Law on advertising*

Since this study focuses only on the impact of information quality and perceived CSR, only dimensions of perceived CSR which is relevant to the customer evaluation of information quality the most will be investigated. The above findings from the focus group suggest that only economic, ethical and legal aspects of CSR should be included in this study

In order to explore the moderating trend of variety seeking behavior in the relationship between perceived CSR and customer loyalty, another question regarding customer intention to stay loyal with an e-tailer which provides good information quality and demonstrate good CSR and switch to a new e-tailer if the current one demonstrate poor CSR practices. The answers of respondents were not consistent. Specifically, some respondents are not sure about whether they switch their current e-tailers since they can find a wide range of products advertised by the e-tailers and they still hope that not all products' information are of poor quality. Meanwhile, some respondents still intend to switch their current e-tailers even if these e-tailers demonstrate good CSR practices through providing good information quality since they want to look for and experience a wide range of products. These findings suggest that when variety seeking behavior tendency increases, the relationship between perceived CSR and customer loyalty may become weaker.

## 4.2. Findings from the survey

### Assessment of the measurements

Upon the use of structural equation modeling, this study assessed the reliability and validity of the measurement scales as well as the overall fit with data of the measurement model based on the guidance suggested by Anderson and Gerbing (1988) and Churchill (1979).

Specifically, confirmatory factor analysis (CFA) was conducted on AMOS 22 to evaluate the convergent validity of items used to measure each latent variable. Table 5 presents factor loadings, p-value and model fit indicators resulted from the CFA. According to CFA results for multi-item constructs including information quality, perceived CSR, customer loyalty and variety seeking behavior, most factor loadings were statistically significant and higher than the cut-off value of 0.4 suggested by Nunnally and Bernstein (1994), except CSR1 and CSR8. Therefore, these two measurement items were removed and the remaining items were continued to undergo an exploratory factor analysis and reliability analysis on SPSS. The EFA results show four principal factors emerged upon the extraction method followed by varimax rotation that reflects four variables as intended to measure. These results confirmed the construct validity and demonstrated the unidimensionality for the measurement of constructs after CSR1 and CSR8 were removed (Straub, 1989). In addition, according to results shown in Table 6, the Cronbach's alpha coefficients for all four constructs were higher than 0.7, therefore, reliability or the internal consistency of the constructs were acceptable. Discriminant validity is assessed based on the comparison between AVE values and the squared coefficients. As shown in Table 6, all of AVE values are greater than the square of correlations between each of two constructs; therefore, the convergent validity of the constructs was also deemed verified (Anderson and Gerbing, 1988).

Finally, a CFA on the five-factor model also revealed that the proposed model with the remaining measurement items demonstrated a good fit with the data (CMIN/df = 1.717;  $p = .000$ ; CFI = 0.908; TLI = 0.887; RMSEA = 0.048; PCLOSE = 0.669).

**Table 4: Measurement Items**

Variables		Measurement items
Information quality (IQ)	IQ1	The content of the e-tailer's website is timely
	IQ2	The content of the e-tailer's website is accurate
	IQ3	The content of the e-tailer's website is complete
	IQ4	The content of the e-tailer's website is relevant
	IQ5	The content of the e-tailer's website is understandable
Perceived CSR (CSR)	CSR1	The e-tailer tries to obtain maximum profit from its activity
	CSR2	The e-tailer tries to obtain maximum long-term success
	CSR3	The e-tailer provides goods and services of reasonable quality
	CSR4	The e-tailer provides goods and services of reasonable pricing
	CSR5	The e-tailer cares about customer satisfaction
	CSR6	The e-tailer contributes to local economies
	CSR7	The e-tailer helps improve social welfare and living standards of local people

	CSR8	The e-tailer always respects to norms defined in the law when carrying out activities
	CSR9	The e-tailer behaves ethically/ honestly with its customers
	CSR10	Ethical principles have priority over achieving economic performance
Customer loyalty (CL)	CL1	I do not want to switch to other e-tailers since I highly appreciate this e-tailer
	CL2	I am a loyal customer of this e-tailer
	CL3	I would always recommend this e-tailer to someone who seeks advice
Variety seeking behaviour (VSB)	VSB1	I like to experience novelty and change in my daily routine
	VSB2	I like a job that offers change, variety, and travel, even if it involves some danger
	VSB3	I am continually seeking new ideas and experiences
	VSB4	I like continually changing activities
	VSB5	When things get boring, I like to find some new and unfamiliar experience

**Table 5:** Confirmatory Factor Analysis Results

Measurement Items	Mean	Standard deviation	Factor loading	P value
<b>IQ</b>				
IQ1.	3.52	0.70	0.46	<0,001
IQ2.	3.38	0.76	0.69	<0,001
IQ3.	3.44	0.70	0.63	<0,001
IQ4.	3.56	0.66	0.61	<0,001
IQ5.	3.25	0.75	0.76	<0,001
<b>CSR</b>				
CSR1	3.69	0.64	0.17	0.006
CSR2.	3.56	0.75	0.53	<0,001
CSR3.	3.44	0.69	0.62	<0,001
CSR4.	3.59	0.72	0.58	<0,001
CSR5.	3.51	0.74	0.64	<0,001
CSR6.	3.64	0.68	0.42	<0,001
CSR7.	3.49	2.40	0.20	<0,001
CSR8.	3.47	0.71	0.62	0,001
CSR9.	3.48	0.71	0.72	<0,001
CSR10.	3.16	0.76	0.72	<0,001
<b>CL</b>				
CL1	3.05	0.75	0.65	<0,001
CL2	3.12	0.75	0.88	<0,001
CL3	3.34	0.77	0.69	<0,001
<b>VSB</b>				
VSB1.	3.74	0.72	0.59	<0,001
VSB2.	3.51	0.77	0.60	<0,001
VSB3.	3.71	0.69	0.67	<0,001
VSB4.	3.48	0.76	0.62	<0,001
VSB5.	3.85	0.73	0.53	<0,001
<b>Model fit indicators:</b> CMIN/df = 1.717; p=.000; CFI = 0.908; TLI=0.887; RMSEA=0.048; PCLOSE=0.669				

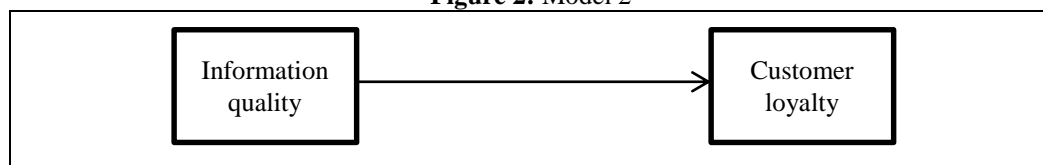
**Table 6:** Average variance extracted, inter-construct correlation and reliability

IQ	CSR	CL	VSB	Cronbach's Alpha
IQ	AVE= 0.467			0.767
CSR	0.346	AVE= 0.439		0.827
CL	0.209	0.270	AVE=0.606	0.772
VSB	0.063	0.138	0.097	AVE=0.442
				0.736

#### 4.2.2. Hypothesis testing

The hypothesis regarding both direct and mediating effects was tested using structural equation modeling (SEM) on AMOS 22. Model fit indices are all within an acceptable range (CMIN/df=2.029; CFI = 0.932; TLI= 0.909; RMSEA=0.057; PCLOSE=0.136). The proposed model as shown in Figure 1, therefore, was deemed to fit the data well.

Table 7 shows the path analysis results which demonstrate the estimated standardized structural coefficients for the hypothesized relationships between the constructs and their significance. According to the path analysis results for the proposed model or Model 1, both information quality and perceived CSR have significant positive effects on customer loyalty while information quality significantly and positively enhances perceived CSR. Therefore, all of H1, H2 and H3 are supported.

**Figure 2: Model 2****Table 7:** Path coefficients

Path	Model 1 (Original)	Model 2 (after removing perceived CSR)
IQ to CSR	0.460**	
IQ to CL	0.172*	0.443**
CSR to CL	0.470**	
<b>Fit indices</b>		
CMIN/df	2.029	2.977
CFI	0.932	0.947
TLI	0.909	0.922
RMSEA	0.057	0.080
PCLOSE	0.136	0.021

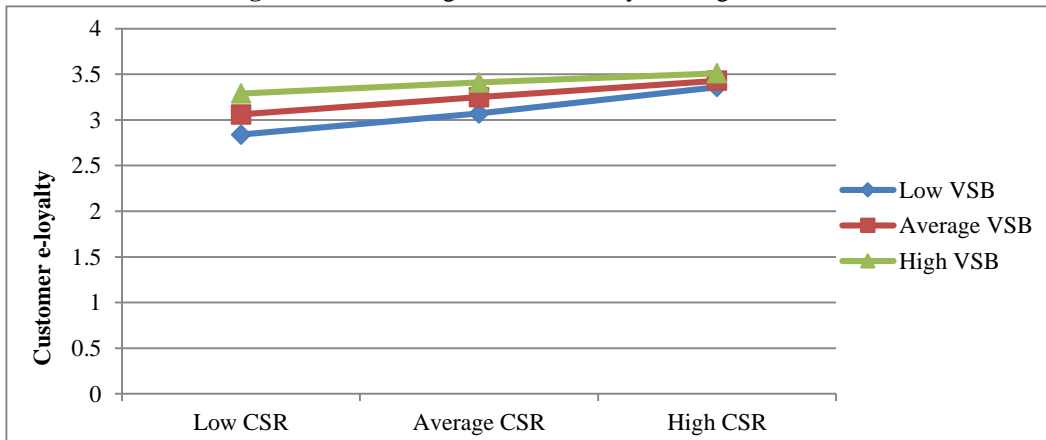
Notes: \* $p < 0.05$ ; \*\* $p < 0.001$

In order to test the mediating role of perceived CSR in the model, a mediation analysis suggested by Barron and Kenny (1986) in which different rival models are compared using SEM. Specifically, perceived CSR is removed from the original model or Model 1 that leads to the formation of Model

2 (see Figure 2). Accordingly, path analysis was run for the two models so that path coefficients resulted from each model were compared with that in the original full one. Path analysis resulted for Model 1 and Model 2 revealed that information quality has a significant positive effect on perceived CS while perceived CSR has a significant positive effect on customer loyalty. Moreover, in the absence of perceived CSR (Model 2), the impact that information quality has on e-loyalty is greater than that in the full model (Model 1). According to the mediating conditions suggested by Baron and Kenny (1986), these results indicate that perceived CSR mediates partially the effect of information quality on customer e-loyalty (support H4)

To test the hypothesis that whether variety seeking behavior moderates the relationship between perceived CSR and customer e-loyalty, a hierarchical multiple regression analysis was conducted. In the first step, two variables were included: perceived CSR and variety seeking behavior. These variables accounted for a significant amount of variance in customer e-loyalty. To avoid potentially problematic high multicollinearity with the interaction term, the variables were centered and an interaction term between perceived CSR and variety seeking behavior was created (Aiken and West, 1991). Next, the interaction term between perceived CSR and variety seeking behavior was added to the regression model, which accounted for a significant proportion of the variance in the customer e-loyalty,  $\Delta R^2 = .0033$ ,  $\Delta F(1, 307) = 0.49$ ;  $t(307) = 0.701$ ;  $p = 0.0483 < 0.05$ . According to the interaction plot as shown in Figure 3, when the level of variety seeking behavior increases (i.e. from low to high), the relationship between perceived CSR and customer e-loyalty becomes weaker. In other words, variety seeking behavior does significantly moderate the effect of perceived CSR on customer e-loyalty. Therefore, H5 is supported.

**Figure 3:** Moderating Effect of Variety Seeking Behavior



#### 4.3. Discussion

Since the e-tailers and their offerings are not physically presented in the virtual shopping environment, information quality is the key to success of any e-tailers since it directly and primarily influence customer's online purchasing decision (DeLone and McLean, 2004; Huizingh, 2000). Although information is a critical prerequisite for starting a relationship with customers (Salaün and

Flores, 2001), information quality helps strengthen such relationship. Specifically, consistent with previous researches, this study's results affirm that information quality helps to enhance customer e-loyalty (Chhikara and Ankit, 2015; Floh and Treiblmaier, 2006; Mithas et al., 2006; Wang et al., 2009). Moreover, extending previous studies on the outcomes of information quality, this empirical research reveals the evidence of the impact that information quality has on customers' perceptions of CSR and the mediating role of perceived CSR in the relationship between information quality and customer e-loyalty. Specifically, providing accurate, timely, relevant, understandable and complete information on e-commerce websites is perceived as a positive sign of economic responsibilities, corporate ethics and respect to laws which are three crucial dimensions of perceived CSR which, in turn, enhance customer e-loyalty.

Moreover, the moderating effect of variety seeking behavior on the relationship between perceived CSR and customer e-loyalty indicates that when a customer has a higher tendency of variety seeking behavior, the strength of the relationship between his or her perceived CSR towards the e-tailer and e-loyalty becomes weaker. The moderating role of variety seeking behavior can be explained that once customers prefer changes and pursue new experiences as their personal traits, they will switch to other e-tailers even when the e-tailer shows its good CSR as a way to strengthen customer relationships. Therefore, in order to gain loyalty from customers with high tendency of variety seeking behavior, e-tailers have to make greater efforts in enhancing customers' perception of its CSR or combine CSR practices with other strategies to either satisfy customers' needs for variety or raise the costs of switching.

## **5. CONCLUSION**

This research's findings highlight the role of information quality and perceived CSR in gaining customer loyalty upon e-tailing environment. Accordingly, e-store managers should, firstly, be aware that disclosing high-quality website information in terms of accuracy, timeliness, relevance, understandability and completeness is also perceived as a sign of CSR in e-commerce that in turn, helps enhance customer e-loyalty. These findings indicate that e-tailer managers should pay more attention to the linkage between content marketing and CSR in e-tailing context as a way to enhance customer retention.

Since information disclosed on B2C platforms may be provided by not only the e-tailer which builds and manages the e-store itself but also various suppliers who post their products and services' information for sales, this study provides implications for both the e-tailers and suppliers. Specifically, although managing information provided by various suppliers is time-consuming and costly, e-tailers or B2C platform managers should take efforts to frequently evaluate and take measures to ensure its website information quality as a CSR practice and part of its customer retention strategies. Moreover, real suppliers who provide information of their own products and services on B2C platforms should be aware of the effect of information quality on perceived CSR and customer loyalty to the B2C website in general and the supplier itself in particular so as to be more responsible in disclosing information. In fact, managers often evaluate the effectiveness of content marketing based on the attractiveness and persuasiveness of information disclosed on websites through indicators including impact factors, click-through rates, numbers of views, likes and shares, and so on. However, since information quality is perceived as the sign of corporate ethics and respect to laws

that in turn, maintain long-term exchange relationship, e-tailer managers and suppliers themselves can obtain significant benefits by integrating content marketing strategies with CSR initiatives.

Furthermore, this research also affirms the negative moderating effect of variety seeking behavior in the relationship between information quality and customer loyalty. This finding indicates that e-tailers should combine enhancing perceived CSR and reduce the tendency of customers' variety seeking behavior at the same time to strengthen customer e-loyalty effectively. Some measures can be taken in order to mitigate variety seeking behavior such as continuously expanding the range of products and services offered on the e-store while increasing the number of suppliers and brands so that the e-store becomes the one-stop shopping for customers with endless choices. Since switching costs in e-tailing context is relatively minimal that encourages higher tendency of variety seeking behavior, besides providing information of high quality and other CSR strategies, the e-tailers should implement other strategies in order to achieve customer e-loyalty such as using Google or Facebook ads as well as develop apps so as to continuously remind customers about its e-store while making easier and more convenient shopping access, providing special sale promotion for loyal customers and so on.

This research has a limitation regarding its methodology. Since the participants answer the questionnaire based on their memory of their recent actual online transactions with e-tailers, the data collected from the survey may be affected by recall bias (Tax et al., 1998). Future research may mitigate this problem by adopting experimental methods. In more details, experimental scenarios can be set up so that participants face a different level of information quality during their online shopping process and decide their perceived CSR and e-loyalty accordingly. As a result, this methodology may yield less biased data.

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