

The Effect of Online Service Quality toward Perceived Risk, Customer Attitudes, Relationship Quality, Online Purchase Intention, E-Loyalty, and Purchasing Behavior

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Abstract

This study aims to analyze and explain 1) the effect of online service quality toward perceived risk, 2) the effect of online service quality toward customer attitudes, 3) the effect of online service quality toward online relationship quality, 4) the effect of perceived risk toward customer attitudes, 5) the effect of perceived risk toward online relationship quality, 6) the effect of online service quality toward online purchase intention, 7) the effect of risk toward online purchase intention, 8) the effect of customer attitudes toward online purchase intention, 9) the effect of online relationship quality toward online purchase intention, 10) the effect of online purchase intention toward e-customer loyalty, 11) the effect of online purchase intention toward online customer attitudes, and 12) the effect of e-customer loyalty toward online customer attitudes.

This study was explanatory research, which describes the relationship between variables. The study was conducted on consumers who made online purchasing at SMEs who were members of the world's Top 50 SMEs in the online version of the *Marketeer* magazine. The unit of analysis consists of 123 consumers. The analytical tool used was the Generalized Structured Component Analysis (GSCA) to test the hypotheses.

The results showed that eight hypotheses with significant effect were online service quality toward perceived risk, online service quality toward customer attitudes, online service quality toward online relationship quality, perceived risk toward online relationship quality, customer attitudes toward online purchase intention, online relationship quality toward online purchase intention, online purchase intention toward e-customer loyalty, and e-customer loyalty toward online customer behaviors. The hypotheses with non significant effect were online service quality toward online purchase intention, perceived risk toward customer attitude, perceived risk toward online purchase intention, and online purchase intention toward online purchasing behavior.

Keywords: Online purchasing behavior, customer attitudes, online relationship quality, online purchase intention, customer e-loyalty

1. Background and Goals of the Study

Information is needed to support the achievement of company's competitive advantage. The development of computer technology and telecommunications has successfully created a new information infrastructure known as the internet. Kotler (2003) states "the Internet will create new winners and bury the laggards". The opinion implies the importance of the internet in helping marketers to win the competition. The internet is a source of information many companies use today. This is because the internet can reach all areas, is potential, and delivers information quickly that is universal, quality, and requires almost no cost (Adelaar, 2000).

Internet is global network of interconnected networks" (Strauss, 2003). These networks form a virtual market channel (marketspace) that replaces the physical market (marketplace) (Arnott and Bridgewater, 2002; Chaffey *et al.*, 2000; Eid and Trueman, 2002). The Internet has opened the marketspace with special characteristics. Marketspace includes sharing between producers or producers with consumers, real time, global, and open (Arnott and Bridgewater, 2002). According to Arnott and Bridgewater (2002), marketing opportunity opens wider for companies through marketspace.

In line with the development of the internet, a new understanding in marketing emerges, that is the concept of internet marketing (O'Leary *et al.*, 2004; Kotler, 2003; Linh and Tung, 2008). In the context of business, internet marketing transformational brings an impact that creates a new paradigm in business. If in the past there used to be a business model of traditional marketing interaction such as mass marketing and direct marketing that are face to face in nature in physical markets, now with the internet marketing, interaction model has been developed into a more interactive model engaging customers to a modern way of interaction that is electronic-based or e-commerce or faceless in the virtual marketplace, namely Business to Business (B2B), Business to Customer (B2C), dan Customer to Customer (C2C) (Arnott and Bridgewater, 2002).

There are various factors that can affect customer attitude and online relationship quality between customers and companies as well as affect customer behavior such as online purchase intention and customer e-loyalty and online purchase behavior in making online purchasing. These stimuli can come from outside or inside the customers. Stimulus coming from outside the customer is usually a marketing strategy of the company. External

stimuli examined in this study were the variable of online service quality. In addition to stimulus from the outside, there is a stimulus of the psychological factor of customers that may include such as perceived risk in making online purchase.

External stimulus of online service quality is indicated to be able to affect external stimulus that is perceived risk. Furthermore, there is an indication that customer attitudes can be influenced by online service quality offered by a company to customers. Online service quality is assumed to have a significant effect on online relationship quality. This study also indicates that there is significant influence of online service quality toward online purchase intention (Zeithaml, 2002; O'Connell, 2010; Gounaris *et al.*, 2010; Fang and Chiu, 2011).

Furthermore, perceived risk is assumed to affect the customer attitudes. Lin *et al.* (2010), Rogers (2010), Lu *et al.* (2005) and Linh (2009) also found similar results. Customer attitudes can affect online purchase intention. This has been confirmed by the results of empirical studies by Kumar (2012), Ghorban (2012) and Phillips *et al.* (2013); by the Theory of Reasoned Action (TRA) (Fishbein and Ajzen, 1980); by Theory of Planned Behavior (TPB) (Ajzen, 1991); and by the Technology Acceptance Model (TAM) (Davis *et al.*, 1989). Online relationship quality will significantly influence online purchase intention (Ki, 2012); Skarmeas and Shabbir (2011); Jani (2011); Tohidinia (2011) and Zhang (2011).

Online purchase intention is assumed to affect e-loyalty. There have not been any studies that examine the influence of online purchase intention toward loyalty. Meanwhile, based on TRA, TPB and TAM, it is generally argued that the intention will affect the behavior of customers. Loyalty according to Zeithaml, Berry and Parasuraman (1996) also refers to customer behavior so these theories should also apply to loyalty and support this hypothesis.

Furthermore, online purchase intention is assumed to significantly influence online purchasing behavior. This is clearly noted in the theory of TRA and TPB, and is also confirmed by previous empirical studies such as the results of research by Cai and Shannon (2012), Göttsche (2011) and Guo and Barnes (2011).

2. Literature Review

2.1. Internet Marketing

Mohammed, Fisher, Jaworski and Paddison (2003) define internet marketing as "internet marketing (online marketing), also referred to as web marketing, online marketing, or e-marketing, is the marketing of products or services over the internet". According to Smith and Chaffey (2004), e-marketing (electronic marketing) is a type of marketing set to achieve the goal through the use of electronic communication technologies such as the internet, email, ebooks, databases and mobile phones. It is a more general term than online marketing which is only limited to the use of internet technology to achieve marketing goals. According to Sheth and Sharma (2005), e-marketing creates a fundamental change in the behavior of consumers and businesses in the use of the internet as a platform that enables companies to adapt to customer needs, reduce transaction costs, and enable customers to move in a wider scope. The goal of internet marketing is to use the internet as part of a multi-channel marketing strategy so different marketing channels are integrated and support each other in terms of the development of propositions and communications based on their benefits for customers and the company (Chaffey *et al.*, 2006).

2.2. Theory of Reasoned Action

The theories that explain the relationship between attitudes and behavior include the Theory of Reasoned Action (TRA) which has its roots on social psychology, based on the assumption that human beings are rational and use the information available to them in a systematic order for their interests, and they will consider all the implications of their actions before they decide to act or not act in certain situations (Ajzen and Fishbein, 1980). In TRA, it is assumed that humans have control over their behavior while in the Theory of Planned Behavior (TPB) humans do not entirely have control over their behavior, and therefore the perceived behavioral control is an important variable that distinguishes TRA to TPB.

2.3. Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA) (Ajzen, 1991). TPB tries to explain that complex consumer behavior needs behavioral control. TPB explains that behavioral intention is not only influenced by attitude towards behavior and subjective norm, but is also influenced by perceived behavioral control. Perceived behavioral control is influenced by past experience and estimation regarding the levels of difficulties a person will face to perform a particular behavior (Anwar, 2003).

2.4. Online Service Quality

Parasuraman, Zeithaml and Berry (1985) argue that "service quality can be defined as the extent of discrepancy between customer expectations and their perception or desire". Online services quality is a new concept introduced by Zeithaml *et al.* (2002) as an electronic service quality (e-SQ), which is defined as "broadly to encompass all phases of a customer's interactions with a Web site: the extent to which a Website facilitates efficient and effective shopping, purchasing, and delivery". Lin and Wu (2002) define online service quality (OSQ) as the difference between customer expectations and perceptions of the online services offered.

Parasuraman, Zeithaml, and Berry (1985) have developed a model to measure the quality of service, known as SERVQUAL. However, SERVQUAL model cannot maximally measure the quality of service in a variety of industries and situations, especially in measuring the quality of online services, and then they develop a model which can measure the quality of online services, which is known as ES-QUAL/E-RecS-QUAL consisting of Efficiency, Fulfillment, System Availability, and Privacy. Furthermore, Parasuraman *et al.* (2005) also analyze the items that can be used to measure the quality of service improvement on a company's website so as to create the model of E-Recovery Service Quality (E-Recs-QUAL), which consists of three dimensions, namely Responsiveness, Compensation, and Contact.

2.5. Perceived Risk

Perceived risk is developed in terms of psychology by Bauer (1967) (in Featherman and Pavlou, 2002) and since then has been widely discussed in the literature of consumer behavior and is considered as one of the basic concepts. Bauer suggests that consumer behavior can be regarded as a kind of "risk-taking", because consumers cannot confirm the results of using the product at the time of purchase, so customers assume certain perceived risk. Kogan and Wallach (in Mitchell, 1999) state that the concept of risk can have two different aspects, namely "chance", where the focus is on the probability that might be obtained, and "danger", in which the emphasis is on the severity of the negative consequences that may be obtained. Furthermore, risk is defined as the amount at stake, the amount of goals to be achieved, the penalty to be imposed for inaccessibility, and the commitment to achieve the goals (Cox, in Mitchell, 1999). This study used the Perceived Risk Model developed by Mitchell and Grotorex (1993) (in Boksberger *et al.*, 2007).

H1: Online service quality significantly affects perceived risk.

2.6. Customer Attitudes

Ajzen (1991) states that attitude is "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question". Attitudes represent the feelings of like or dislike of a person to an object. Kotler (2003) defines attitudes as evaluations, emotional feelings, and action tendencies both preferred (favorable) and opposing (unfavorable), and last for long time from a person to an object or idea. This study adapted the model of Internet Attitude Scale (AIS) developed by Zhang (2005) to measure customer attitudes that is for those who make online purchase.

H2: Online service quality significantly affects customer attitudes.

2.7. Online Service Quality

Crosby *et al.* (1990) define relationship quality (service quality) as a high-level construction, which consists of at least two interrelated key factors, but of different dimensions, namely trust and satisfaction. Hennig-Thurau and Klee (1997) state that the quality of relationship focuses on the degree of appropriateness of a relationship to meet the needs of customers associated with the relationship. Therefore, relationship quality captures the positive nature of the relationship, which in turn is expected to provide a positive benefit to the customers. Gummesson (1987) considers relationship quality as the quality of interaction between customers and suppliers, which can be interpreted in terms of the accumulated value. According to Ravald and Grönroos (1996), perceived relationship quality varies from time to time, so the perceived value of relationship on each transaction is very important. Previous studies agree that the relationship of consumer satisfaction and performance of suppliers, of consumer trust and suppliers, and of consumer's commitment and suppliers are the key variables underlying perceived relationship quality (Crosby *et al.*, 1990; Dorschel *et al.*, 1998, Garbarino and Johnson, 1999; Palmer and Bejou, 1994).

H3: Online service quality significantly affects online relationship quality.

H4: Perceived risk significantly affects customer attitudes.

H5: Perceived risk significantly affects online relationship quality.

2.8. Online Purchase Intention

Online purchase intention refers to the tendency for an online consumer to shop at an online shopping store in the future and to recommend it to family and friends (Zeithaml, Berry, Parasuraman, 1996). Further, online purchase intention is defined as "measures of the strength of a consumer's intention to perform a specified purchasing behavior via the internet" (Chi *et al.*, 2005). Hsu and Chiu (2004) use the term 'web-purchasing intention' for online purchase intention which is defined as "the degree to which an individual intends to act such behavior during the web purchasing process, and can further lead to his / her actual purchasing behavior". The Web-Purchasing Intention model by Lin *et al.* (2010) consists of four dimensions, namely Information Provision, Price, Customer Service, and Alternative Evaluation.

H6: The quality of online service significantly affects online purchase intention

H7: The perceived risk significantly affects online purchase intention

H8: Customer Attitude significantly affects online purchase intention

H9: Online relationship quality significantly affects online purchase intention.

2.9. Customer E-Loyalty

Jacoby and Kyner (1973) define loyalty as "a biased (nonrandom) repeat purchase of a specific brand (from a

set of alternatives) over time by a consumer, using a deliberate evaluation process”. Oliver(1999) defines loyalty as a deeply held commitment to repurchase or repatronize a preferred product or service consistently in the future, thereby causing repetitive purchase of the same brand or a set of brand, although there is the influence of situational and other marketing activities potentially causing displacement behavior (switching). In measuring e-customer loyalty the Four-Stage Loyalty Model developed by Oliver (1999) was used in this study, which implies that different aspects of loyalty does not appear simultaneously, but sequentially over time. The Four-Stage Loyalty Loyalty consists of Cognitive Loyalty, Affective Loyalty, Conative loyalty, and Action Loyalty.

H10: Online purchase intention significantly affects customer e-loyalty.

2.10. Online Purchasing Behaviour

Purchasing behavior is the decision process and the actions of those involved in the purchase and use of products. To measure purchasing decisions in this research, that is online purchasing behavior, this study adopted a model of decision buying by Kotler and Armstrong (2001). Kotler and Armstrong (2001) state the decision to buy taken by the buyer is a collection of a number of decisions. Any decision to buy has the five structure components, namely product selection, brand selection, distributor selection, purchasetiming and purchase amount selection.

H11: Online purchase intentionsignificantly affectsonline purchasing behavior.

H12: Customer e-loyaltysignificantly affectsonline purchasing behaviour.

2.11. Conceptual Models

The relationship between exogenous and endogenous variables is presented in Figure 2.1. Online Service Quality (OSQ) acts as exogenous variable, Perceived Risk (PR), Customer Attitudes (CA), Online Relationships Quality (ORQ), Online Purchase Intention (OPI), Customer E-Loyalty (CE-L), Online Purchasing Behavior (OPB) act as endogenous variables, as well the conceptual model of this study is shown in figure 1

3. Research Method

3.1. Instruments and Samples

This study used a survey method employing questionnaires in data collection. Likert scale was used as the scale in the questionnaires, with five alternatives, namely strongly disagree, disagree, neutral, agree, and strongly agree. The study was conducted on consumers who made online purchasing at SMEs who were members of the world's Top 50 SMEs in the online version of the Markeeter magazine. Samples were chosen through multistage sampling. From 500 questionnaires sent through e-mail, 123 were returned; thus, the unit of analysis consisted of 123 consumers.

3.2. Data Analysis

Inferential statistical analysis technique used in this study was Structural Equation Modeling (SEM) employing GSCA (Generalized Structured Component Analysis) program. The reason to use SEM is because the widely known statistical techniques of AMOS and LISREL have limitations in which they can only analyze a model having multivariate normality, big sample, and reflexive measurement for all variables. Yet in reality, the researchers were faced with situations in which not all models were reflexive measurement and small sample size which did not meet the multivariate normality. In this study, the sample size was less than 200, thus measurement of variables was done using using reflexive and formative techniques. Therefore, the proper analysis was SEM using GSCA.

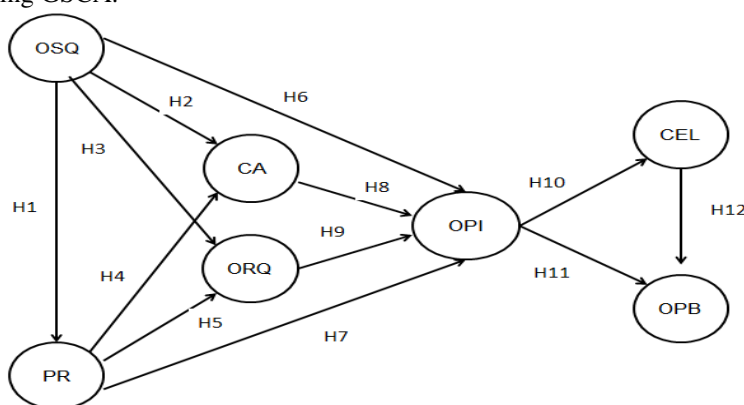


Figure 1: Conceptual Models

4. Results and Discussion

4.1. Validity and Reliability

Validity is a state in which the instrument used in the study is able to measure what it should be measured (Arikunto, 2000). Testing the validity of the data is done by calculating the correlation between the score of each

question with a total score and r-table above the 0.05 significance level ($\alpha = 5\%$). From the analysis, it was found out that all items were significant as they had a score of > 0.05 , thus they could confirm the convergent validity of each variable. To test the reliability level, Cronbach alpha formula (Arikunto, 2000) was used in the study. Minimum limit widely used is 0.60. Significance test was carried out on a significant level of 0.05, which means that the instrument can be said to be reliable if the Alpha value is greater than the critical r of the product moment correlation. To test the instrument used in this study, the limit of Cronbach Alpha value was set to 0.60. Based on the research results, it was known that all the variables had a Cronbach's Alpha value above required 0.60. Thus, it can be said that all of the items from each of the variable was a reliable measure of each variable. The Cronbach Alpha for online service quality was 0.856, perceived risk was 0.877, customer attitude was 0.868, online relationship quality was 0.811, online purchase intention was 0.814, e-customer loyalty was 0.742, and online purchase behavior was 0.847.

4.2 . Hypotheses Testing

After measuring each variable to determine the validity and reliability, further appraisal and testing of structural models hypothesis was conducted. Analyses were performed on several stages to know the relationship between the independent and dependent variables. From the 12 hypothesis, the hypotheses showing significant effects were 8 and the rest 4 hypotheses were not significant, as presented in Table 4.1

4.2.1. The Effect of Online Service Quality toward Perceived Risk

Online service quality had significant effect on perceived risk but the effect was negative. This was evidenced by the coefficient of -0.527^* with the value of CR of 7.2^* ($7.2 > 1.96$). The results of this study support the theory of ES-QUAL/E-RecS-QUAL by Parasuraman (2005) and the results of the studies by Chen *et al.* (2013), Cheng *et al.* (2008), Garretson and Clow (1999), and Aleksandra *et al.* (2004). Good quality of service received by consumers will further reduce the risk perceived by customers (Snojet *et al.*, 2004).

Table 1: *Structural Model*

Relationship	Path Coefficients			Hypothesis	Significance
	Estimation	SE	CR		
OSQ → PR	-0.527	0.073	7.2*	H1	Significant
OSQ → CA	0.418	0.098	4.26*	H2	Significant
OSQ → ORQ	0.343	0.099	3.46*	H3	Significant
PR → CA	-0.056	0.094	0.6	H4	Insignificant
PR → ORQ	-0.229	0.114	2.01*	H5	Significant
OSQ → OPI	0.135	0.089	1.53	H6	Insignificant
PR → OPI	0.037	0.111	0.33	H7	Insignificant
CA → OPI	0.331	0.098	3.38*	H8	Significant
ORQ → OPI	0.412	0.080	5.16*	H9	Significant
OPI → CEL	0.600	0.065	9.19*	H10	Significant
OPI → OPB	0.128	0.115	1.12	H11	Insignificant
CEL → OPB	0.536	0.097	5.54*	H12	Significant

4.2.2. The Effect of Online Service Quality toward Customer Attitudes

Online service quality had significant effect on customer attitudes and the effect was positive. The coefficient was 0.418^* with the value of CR of 4.26^* ($4.26 > 1.96$). The results of this study support the Theory of Perceived Risk Model by Mitchell and Grotorex (1993) in Boksberger *et al.* (2007), the results of the studies by Allamehet *et al.* (2012), Carlson and O'Cass (2010), Hwanga and Ok (2013), Lee (2007), Linh (2009), and Vijayarathy (2003).

4.2.3. The Effect of Online Service Quality toward Online Relationship Quality

Online service quality had significant effect on online relationship quality and the coefficient was 0.346^* , which was bigger than the value of CR ($3.46 > 1.96$). Improvement on service quality can increase relationship quality (Hanzaee and Rahpeima 2012). The results of this study support the results of the studies by Caceres and Papparoidamis (2007), Hanzaee and Rahpeima (2012), Keating *et al.* (2010), Liao and Yen (2011), and Qin *et al.* (2009).

4.2.4. The Effect of Perceived Risk toward Customer Attitudes

Perceived risk had significant effect on customer attitude and the coefficient was -0.56^* , which was smaller than the value of CR ($0.56 < 1.96$). This means that customer attitudes were not shaped by the perceived risks, but by the service quality. Customers did not really think about the risk because of good service quality. The results of this study support the results of the studies by Lin *et al.* (2010), Linh (2009), Lu *et al.* (2005), and Rogers (2010).

4.2.5. The Effect of Perceived Risk toward Online Relationship Quality

Perceived risk significantly affects online relationship quality. This can be seen through the value of the coefficient that was -0.229^* and CR of 2.01 ($2.01 > 1.96$). Online service quality had negative and significant effect on online relationship quality. Negative influence can be interpreted as inversed influence. Thus the higher

the risk perceived, the lower the online relationship quality, and the other way around. The study supporting this finding is the one by Lee *et al.* (2010).

4.2.6. The Effect of Online Relationship Quality toward Online Purchase Quality

Online service quality affects the online purchase intention, and the relationship produces no significant effect. This is evidenced by the coefficient of 0.135 with a value of CR of 1.53 ($1.53 < 1.96$). This means that consumer online purchase intention is not solely determined by the quality of the service, but also by attitudes. With good service quality given by producers, consumers will choose to like it or not, to buy or not. Thus online purchase intention is not directly determined by the quality of the service but also by attitude. The results of the study support the studies by Al-Hawari (2009), Fang *et al.* (2011), and Hutchinson *et al.* (2009).

4.2.7. The Effect of Perceived Risk toward Online Purchase Intention

Perceived risk does not significantly affect online purchase intention. This can be seen through the value of the coefficient that was 0.037 and CR of 0.33 ($0.33 < 1.96$). This means that risk perceived by customers does not create online purchase intention. Online purchase intention is determined more by the quality of the relationship with SMEs. Thus, even when customers are faced with high risk, they will still choose to purchase when they have good relationship with SMEs. The studies supporting this finding are the ones by Be'linger and Carter (2008), Chen *et al.* (2013), Fen *et al.* (2012), Kim and Lennon (2010), Udo *et al.* (2010), and Ward *et al.* (2007).

4.2.8. The Effect of Customer Attitudes toward Online Purchase Intention

Customer attitudes significantly affect online purchase intention. This can be seen through the value of the coefficient that was 0.331* and CR of 3.38 ($3.38 > 1.96$). This means that risk perceived by customers does not create online purchase intention. This means that good customer attitudes will also result in good purchase intention and the vice versa. The studies supporting this finding are the ones by Al Maula (2011), Carlson and O'Cass (2010), Casseset *et al.* (2010), Ghorban (2012), Hansenaet *et al.* (2004), Ho *et al.* (2012), Khan and Noor (2012), and Hwang *et al.* (2011).

4.2.9. The Effect of Online Relationship Quality toward Online Purchase Intention

Online relationship quality significantly affects online purchase intention. This can be seen through the value of the coefficient that was 0.412* and CR of 5.16 ($5.16 > 1.96$). This means that good online relationship quality will also result in good purchase intention and the vice versa. The studies supporting this finding are the ones by Moliner (2007), Beatson *et al.* (2008), Jani and Han (2011), Ki and Hon (2012), Kim *et al.* (2011), and Lin and Wu (2011).

4.2.10. The Effect of Online Purchase Intention toward Customer E-Loyalty

Online purchase intention significantly affects e-loyalty. This can be seen through the value of the coefficient that was 0.600* and CR of 9.19 ($9.19 > 1.96$). This means the higher the intention, the higher the e-loyalty of customers will be and the vice versa. The results of this study support the Theory of Reasoned Action (Fishbein and Ajzen, 1980) and Theory of Planned Behaviour (Ajzen, 1991).

4.2.11. The Effect of Online Purchase Intention toward Online Relationship Quality

Online purchase intention does not prove to significantly affect online relationship quality. This can be seen through the value of the coefficient that was 0.128 and CR of 1.12 ($1.12 < 1.96$). This means that the assumption stating the higher the intention, the higher the quality of the relationship will be and the vice versa is not supported by the data. This is because customers' intention refers to intention of future purchase, and this intention stays within them (conative loyalty), thus to achieve purchasing behavior they should have achieved e-loyalty first.

4.2.12. The Effect of E-Loyalty toward Online Purchase Behavior

E-loyalty significantly affects online purchase behavior. This can be seen through the value of the coefficient that was 0.536* and CR of 5.54 ($5.54 > 1.96$). Positive effect can be interpreted as the effect of unidirectional or proportional effect between the independent variable and the dependent variable. Thus the higher the customer loyalty, the better the consumer behavior will be, and conversely the lower the loyalty, the lower the consumer behavior in terms of purchase of goods. Online purchase behavior is shown in real action to make purchases (loyalty measures). The results of this study support the research by Espejelet *et al.* (2007), Espejel (2008), Hong and Cho (2011), Kim *et al.* (2004), Shukla (2009), and Souiden and Pons (2009).

The theoretical contribution of this study is to develop knowledge about online purchases, especially online service quality, risk, attitude, relationships, intention, behavior and loyalty. The study plays a role in clarifying or expanding the existing theories, that the findings on the influence of intention to do online purchase toward e-customer loyalty strengthens the Theory of Reasoned Action (Fishbein and Ajzen, 1980) and Theory of Planned Behavior (Ajzen, 1991). The results of this study provide additional evidence that interest in online purchase has a very important role in building customer loyalty. The practical implication of this study is to provide an understanding and knowledge for SMEs in particular, especially those doing online sales on the importance of service quality as the main variables that affect risk, consumer attitudes, relationships and intention, which are able to induce a sense of loyalty that would finally lead to real purchase. In the end, SMEs should maintain and even improve the quality of services provided to online customers so that they develop good attitudes to the

company (they like the company's products). Companies have to maintain purchase intention by providing information, reasonable prices, and a wide range of products.

5. Conclusions.

This study was done on consumers who make online purchases on SMEs that are members of the Marketeer Magazine Top 50 SMEs in the Online World. Using the GSCA analysis, we concluded that online service quality has significant effect on perceived risk, the attitude of the customers the quality of the relationship, but has no significant effect on online purchase intention. Perceived risk has no significant effect on customer attitudes and interest in online purchases, but significantly affects the quality of the online relationship. Customer attitudes and relationship quality significantly influence online purchase intention. While online purchase intention has significant effect on e-loyalty, it has no significant effect on purchasing behavior, and e-loyalty significantly influences purchasing behavior.

There is no perfect research; research is complement one to another, and they improve limitations of previous studies. This study has several limitations. First, the respondents in this study are customers who make a purchase without considering the characteristics of SMEs business scale (micro, small or medium). Second, the basis for determining the SMEs in the study refers to the Marketeer Magazine Top 50 SMEs in the world online versions of Indonesia, and it does not differentiate the field of SME businesses (services, trade, and industry). Third, the selection of SMEs is based on technology adoption alone, namely the use of the internet in marketing their products.

Some things to consider in future studies is the characteristics of the business scale of SMEs (micro, small or medium) as well as the field of SME businesses (services, trade, and industry). In addition to considering the scale of the business and SME business sectors, selection on SMEs must remain on the use of technology in marketing their products. The results of the study can only explain 50.5% of the model, so it is necessary to study other variables that affect online purchasing behavior.

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