



E-tail Quality and Online Social Communication for the i-Generation: Impacts on Online Purchase Intention

Risca Fitri Ayuni

Department of Management, Brawijaya University, Indonesia

Abstract

Internet has changed the way humans live in the world. As means of communication that connecting person with others for individual or business goals. Online communication will replace nearly offline ones; such as shifting people preference for buying product from offline to online. The i-Generation is representing those who highly influenced by online interactions because they are very used to accessing the internet at a very young age. E-retailers are doing business by adopting technology and internet such as website. They need to find new ways to engage the i-Generation by embracing technology and internet collaboration. Willingness and intention of the i-Generation have to be gained, as they are very potential customer of E-retailers. This study examined the relationship of E-tail quality (E-tailQ); online purchase intention (OPI) and online social communication (OSC). A total of 285 respondents from the i-Generation participated in this study. Partial least square (PLS) 3 was employed to analyze the data. The PLS 3 estimation shows that OSC has no significant effect on OSC and it is not mediating the relationship between E-tailQ and OPI. In addition, among the four dimensions of E-tailQ only website customer service and web design have significant effects on OSC. In contrast, all dimension of E-tailQ has a significant effect on OPI.

Keywords: Website Design; Website Reliability; Website Security; Website Customer Services; E-tail Quality; Online Purchase Intention; Online Social Communication

1. Introduction

Over a couple of decades, internet has changed the way humans live in the world. As means of communication that connecting person with others for individual or business goals, internet has become outstanding invention in the history of mankind. Online interactions will replace nearly offline ones; such as shifting people preference for buying product from offline to online.

In 2016, Asia is the biggest number of Internet usage in the world (more than 4 billion people using internet or up to 55.2% of world population) (www.techcrunch.com, 2016). Growth of internet usage in Asia is 1515.2% during 2000-2016. Indonesia, as part of Asia, is the third country that has the biggest number internet users or about 7.2% of Asia population (behind China 39.1% and India 25%).

As of 1 January 2017, the population of Indonesia was estimated to be 262,647.546 people (www.worldometers.info, 2017). According to countrymeters.info (2017), Indonesian age structure is 27.3% of population under 15-year-old, 66.5% between 15 and 64-year-old and 6.1% of population is above 65-year-old.

Regarding Indonesia Communications and Information Ministry, more than half of internet users, or 58.4%, were between 12 and 34 years of age (dominated by young generation) on 2015. In addition, they spend time for online about 5 h by laptop or personal computer; and about 2 h through mobile devices. Moreover, as many as 62 million people are active on social media and 52 million of them accessed social media through mobile devices for about 3 h/day (The Jakarta Post, 2015).

The i-Generation is representing those who highly influenced by online interactions (online social communication [OSC]) because they are very used to accessing the internet at a very young age. The i-Generation or as known as Generation Z, which includes those born between 1996 and 2010, grew up immersed in many forms of communication (social media, E-mail, instant messaging, etc.) often carrying cell phones in grade school and having multiple social media accounts by middle school and high school (Laura et al., 2017). In 2017, the number population of Generation Z is approximately two billion on globally (Millwardbrown, 2017) and predicted to reach 2.6 billion by 2020 (National Retail Federation, 2017; Smith, 2017).

The way the i-Generation seek information and build communication, they use five screens on average: Smartphone, TV, laptop, desktop, and iPod/iPad. With more than 50% of those would rather buy clothes, books, and electronics online (Abramovich, 2015; CMO, 2015). The i-Generation prefers to shop online versus in stores through their devices (Business Insider Indonesia, 2015).

Businesses, especially marketers, have to pay attention to the i-Generation behavior. Even if they are not business target at the moment, they will be soon. Since the i-Generation internet usage is constantly increasing, marketers should collaborate with technology such as internet and any other supporting devices.

International players and financiers are interested to target Indonesian people to be their business consumers. Intention to collaborate with Indonesia could happen because of phenomena of online trading and transport apps particularly in Indonesia are generating interest and offering a solid foundation for other start-ups (Oxford Business Group, 2016).

A large number of internet users in Indonesia are potential to be explored. E-commerce is the application of computer and computer networks for modern business purposes, or in other words E-commerce is a modern business methodology that addresses the needs of organizations, merchants and consumers, to reduce cost, to improve the quality of goods and services (Gupta, 2011). E-commerce uses information and communication technology to enable the external activities and relationships of business with individuals, groups and other businesses (Bagad, 2009).

Indonesia presents much opportunity for E-commerce among other emerging Asian economies, with current projections putting this archipelago nation's E-market at \$130 billion by 2020 (coming third behind China and India) (Techcrunch, 2016). Many new international and domestic players are entering the E-commerce industry in Indonesia, such as eBay (US), Baidu (China), and Alibaba (China). MatahariMall.com (Indonesia), Bukalapak (Indonesia), and Tokopedia (Indonesia). Most of them are retailers that selling goods purchased based largely on several social media recommendations. In addition, potential growth of electronic retailers (E-retailers) is supported by mobile applications (apps) that have facilities to make ordering goods easier.

Furthermore, this phenomenon shows that not only mass E-retailers but also individual E-retailers to target the same demographic, internet and smartphone users, which dominated by the i-Generation who more active on OSC. Consequently, E-retailers should take strategies to win the market by improving quality, technology, and other important aspects.

Delivering quality in service has been highlighted as a very important factor in targeting consumers. E-retailers should ensure that all services are managed to enhance consumers' perceived quality and to influence purchasing intention since more and more consumers are engaging with companies over the internet. As E-retailers gain more experience, they realize that consumers are concerned with the process of how the service is delivered along with the outcome of the service (Katz, 2001). Moreover, if a company face a problem, a company must be aware of the importance of service recovery in the resolution of the problems (Holloway and Beatty, 2003). Lee et al. (2016) proposed four dimensions of E-retailer quality (E-tailQ) consist of website design (WD), website reliability (WR), website security (WS), and website customer services (WC).

Technology acceptance model, proposed by Davis (1986) stated that perceived usefulness and perceived ease of use on attitudes affect attitudes on using internet, behavioral intention, and actual usage (Gefen et al., 2003).

Prior researches studied about the relationship between E-tailQ and online purchase intention (OPI) and the relationship between online social connection (OSC) and OPI. However, it seems that

there are no previous researches studying OPI as the mediating variable in the relationship between E-tailQ and OPI as this study conduct.

2. Literature Review

2.1. Service quality concept

Service quality is a consumer's overall impression of the relative inferiority/superiority of the organization and its services (Bitner and Hubbert, 1994). It has been widely discussed by researchers. One of the most popular methods to measure service quality called SERVQUAL (Parasuraman et al., 1988). SERVQUAL propose five dimensions for measure service quality: Tangibles, empathy, assurance, reliable, and responsiveness. These dimensions are subdivided into 22 statements. Tangibles are the physical facilities, equipment, appearance of personnel, and communication materials. Empathy refers to the caring, individualized attention provided to customers. Assurance means knowledge and courtesy of employees and their ability to inspire trust and confidence in the customer toward the service provider. Reliability is the ability to perform the promised service dependably and accurately, and responsiveness refers to willingness to help customers and provide prompt service. The items for each of the dimensions have been modified in many previous studies to suit a particular context as noted by Parasuraman et al. (1988, p. 31) that the SERVQUAL instrument could be "adapted or supplemented to fit the characteristics or specific research needs of a particular organization."

2.1.1. Service quality in electronic retailing

Many enterprises which are involved in E-commerce realized that the key determinant to be success or failure is the quality of the electronic service which is deliver to consumer and not only website presence or low price and any other factor (Yang, 2001; Zeithaml et al., 2002).

After carefully analyzing various research studies conducted using the SERVQUAL model by Parasuraman et al. (1988), in different service industries such as telecommunication, education, restaurants, banking, and health care, there was limited empirical study has been conducted using the SERVQUAL model to assess service quality in electronic retailers (E-retailers). We argue that E-retailers as part of the service industry because they deal with retailing of goods to consumers and in the course of retailing these goods E-retailers offer services to facilitate the shopping experience of consumers.

Some researchers have been modifying service quality scale by Parasuraman et al. which compatible to type of industries. One of the researchers has proposed new service quality scale was Lee et al. (2016), called E-tailQ.

2.1.2. E-tailQ scales

E-tailQ composed of WD, WR, WS, and WC service. At the first dimension of E-tailQ, some items were used: The online sellers websites do not waste my time; it is quick and simple to complete a transaction on the websites; The level of personalization of the websites is about right, not too much or too little; The websites understand what I needs and want; and I feel comfortable when surfing the website.

A good quality of WD can make increasing buyers involvement (Ganguly, 2010). Lee and Lin (2005) and Lee et al. (2016) found that WD the positively significant influence OPI of buyers.

WR was measured by delivered products are suitable as ordered products through website; buyer get the products by the time that is promised by E-retailers; buyers get the correct products that they bought through website; there is no error when buyer doing transaction. Lee et al. (2016) stated that if E-retailer can fulfill orders of online buyers correctly, timely and error-free transaction, it will be highly valued by the online buyers and significantly influence OPI.

Security and privacy are very important aspect for most people when shopping online. If buyers feel safe and trust, it creates the buyers willingness to order products through E-retailers website. WS can be measured by ability of website to protect the privacy information; website is safe when buyers

give their credit card number; website have adequate security features; website can create customer trust and positive experience to the buyers. Lee et al. (2016) and Niranjnamurthy and Dharmendra (2013) found that WS and privacy affect OPI.

The last dimension is WC service that composed willingness of customer services to respond, to help buyers when buyers get problem quickly. WC is the most dominant predictor of OPI (Lee et al., 2016; Syed, 2008).

2.2. OSC

Most of teenagers or adults are socially communicating through online channels. One of the online channels that most commonly used is Facebook (Pew Internet and American Life Project, 2013). By media social, people discuss their lives and share information with others. Twitter provides ways to connect with friends and acquaintances that may be interested in what they have to post (Java et al., 2007). In business context, OSC affects business activities. Since many social medias used by people, business began to discover new ways advertising. By social media, it gives advantages to business in doing market research, building their brand, trading their products, maintaining their customer, and evaluating customer satisfaction.

Frequency of OSC usage can be used to predict online and offline communication frequency (Ledbetter et al., 2010). What remains less clear, however, is the extent to which OSC is associated with offline communication between Facebook friends. Some research suggests that those who engage in social networking behavior when online are also likely to do so when communicating offline (Quan-Haase et al., 2002; Tufekci, 2008).

Thus, this study proposed that OSC might significantly predict OPI. The study assumed that OPI is part of online communication

2.3. OPI

OPI can be represented by some items: I think that the idea of using the websites to continuously purchase a product or service is encouraging; I think that using the online sellers websites to continuously buy a product or service would be a good idea; I prefer the idea of purchasing a product/service online; It is likely that I will return to the online seller's websites; It is likely that I will consider to repurchase a product/service from the websites in the short term; given the chance, I intend to use the online seller's website to buy products.

OPI can be forecasted with theory of planned behavior (Ajzen, 2002). In TPB, the motivational variable is one of the important variables that influence an individual behavior. It includes how a person perceives quality of online seller's website (Lee et al., 2016).

3. Research Method

This paper aims to investigate the effect OSC on OPI as well as the effect of E-tailQ on OSC of the i-Generation.

Population of this research is the i-Generation or Generation Z that defined as people who born from 1996 to 2010 in Indonesia and using internet for communicate with others (Laura et al., 2017). 285 respondents from the i-Generation participated in this study. Purposive sampling technique as a non-probability sampling was employed in the study. PLS 3 was used to analyze the data.

The instrument in this study was a questionnaire that adopted from literature and modified from previous researches to fit the study. This study employed the descriptive statistics to assess the demographic profile of respondents.

3.1. Measurement development

To evaluate the relationship among different kind of E-tailQ, OSC, and OPI, multi-item questionnaires are developed in this study. There are three sections on questionnaires. The first section is to collect

demographic information of respondents that consist of two basic questions: Gender and educational background. The second section is the measurement scale of E-tailQ that adapted from Lee et al. (2016) that contained four dimensions: WD, WR, WS, and WC. The third section, OPI scale was developed by Lee et al. (2016) and the fourth section was OSC scales from Kyle et al. (2013).

3.2. Hypotheses

To investigate the relationship between WD, WR, WS, WC, OPI and OSC, the study set up several hypotheses as follows (Figure 1):

H_{1a}: WD affects OPI.

H_{1b}: WR affects OPI.

H_{1c}: WS affects OPI.

H_{1d}: WC affects OPI.

H₂: OSC affects OPI.

H_{3a}: WD affects OSC.

H_{3b}: WR affects OSC.

H_{3c}: WS affects OSC.

H_{3d}: WC affects OSC.

H₄: OSC mediates the relationship between WD, WR, WS and WC and OPI.

4. Findings

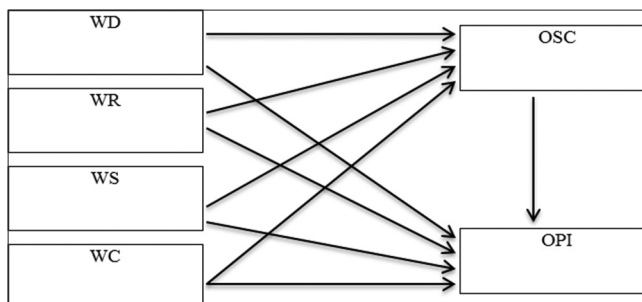
4.1. Profiles of respondents

Based on frequency distribution and percentage, the demographic information includes the following characteristic of respondents: Gender and educational background. A total of 300 questionnaires were distributed to the i-Generation, 285 completed questionnaires were collected, and 15 questionnaires were incomplete. Hence, a total of 285 questionnaires were finally analyzed for this study. The respondents' demographic characteristics are presented in Table 1. From the 285 respondents in this study, 170 (59.6%) were female and 115 (40.4%) were male. Most of the respondents of educational background were university level (66.3%) and followed by senior high school level (33.7%).

In psychological science, the expert found that female love to shop more than male. It is consistent with the result of this study, which the number of female respondents is greater than male. Theory state that the i-Generations are those who born in 1996 to 2010. It means the age of the i-Generations in 2017 (year this study conducted) are between 7 and 21 years old.

Moreover, the number of university and senior high school students that dominated in this study also supported by data from Indonesia Communications and Information Ministry which state that more than half of internet users, or 58.4%, were between 12 and 34 years of age.

Figure 1: Hypotheses model



4.2. Measurement model

Convergent validity, discriminant validity and reliability test were conducted to measure the model the study. The convergent validity of the constructs (Table 2) was supported for all construct indicators through factor loadings (>0.6) (Chin et al., 2008), average variance extracted (> 0.5) (Hair, 2006), and composite reliability (>0.7) (Hair, 2006).

The exceptions were item WD 1 and WR 4 which have factor loading score <0.6 , hence those items were deleted from the study (Figure 2). After deleting items, PLS 3 was run for second order and it resulted loading score >0.6 for each indicator.

The next step, discriminant validity was employed. Table 3 showed that each indicator has higher correlation with its latent variable than another latent variable. Moreover, Table 4 indicates that loading score of each indicator is higher than all its cross loadings compare to other constructs. It means that the correlation between indicator and latent variable has a good discriminant validity.

Reliability of measurement was depicted in Table 5. It showed that all values of Cronbach's alpha were higher than 0.6 (Hair et al., 2010).

Table 6 presented moderate R^2 endogenous latent variables. Goodness of fit (GoF) of study can be measured by GoF index that developed by Tenenhaus et al. (2005). The model this study has GoF value

Table 1: Respondents demographic characteristics

Characteristics	Frequency (%)
Gender	
Female	170 (59.6)
Male	115 (40.4)
Educational background	
Senior high school	96 (33.7)
University	189 (66.3)

Table 2: Convergent validity

Variables	Composite reliability	AVE
OPI	0.863	0.513
OSC	0.846	0.580
WC	0.844	0.575
WD	0.778	0.469
WR	0.803	0.576
WS	0.846	0.527

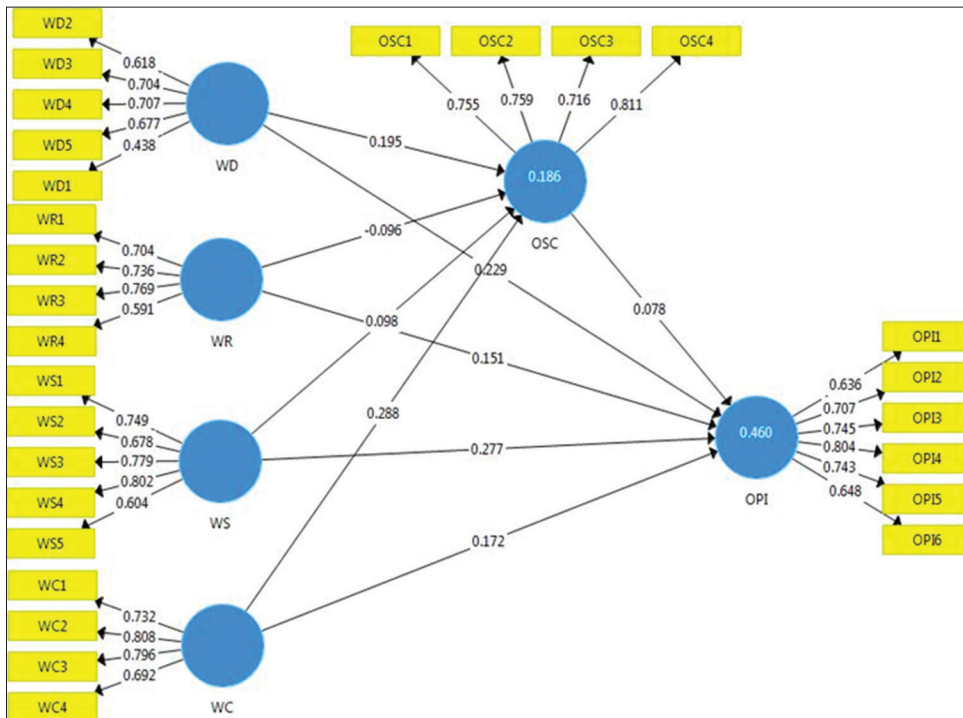
AVE: Average variance extracted, OPI: Online purchase intention, OSC: Online social communication, WD: Website design, WR: Website reliability, WS: Website security, WC: Website customer services

Table 3: Discriminant validity

	OPI	OSC	WC	WD	WR	WS
OPI	0.716					
OSC	0.321	0.761				
WC	0.502	0.381	0.759			
WD	0.530	0.336	0.455	0.685		
WR	0.468	0.168	0.441	0.417	0.759	
WS	0.565	0.279	0.479	0.464	0.478	0.726

OPI: Online purchase intention, OSC: Online social communication, WD: Website design, WR: Website reliability, WS: Website security, WC: Website customer services

Figure 2: Loadings score



0.418; it means this study has a very good model. The result refers to Hoffmann and Birnbrich (2012) cutoff values for assessing the results of the GoF analysis that can be classified into three categories: GoF = 0.1 (small), GoF = 0.25 (medium), and GoF = 0.36 (large).

4.3. Path coefficient and hypotheses result

Table 7 depicted that the path coefficient between endogenous and exogenous variables. H_{1a} , H_{1b} , H_{1c} , H_{1d} were supported ($P < 0.05$ and t-statistic values > 1.96) (Hair, 2014 and Kock, 2012). It indicates that all dimensions of E-tailQ (WD, WR, WS, and WC) are good predictors of OPI. In other word, OPI was influenced by four dimensions of E-tailQ. H_2 was rejected since P values > 0.05 and t-statistics values < 1.96 . It meant OSC was not statistically significant affect OPI (Figure 3).

This finding also explained the mediating role of OSC. The mediating effect of OSC between E-tailQ dimensions and OPI was assessed by path model. Table 7 shows that OSC was not mediating the relationship between exogenous variables and endogenous variable (H_4 was rejected).

In addition, the findings of this study stated that two dimensions of E-tailQ, WS, and WR, not influenced OSC. Whereas the other two dimensions, WD and WC were supported ($P < 0.05$; t-statistics values > 1.96).

5. Conclusion

The more we use technology, the more we get advantages from technology. Reducing cost of communication, improving the speed of information exchange, allowing communication in diverse formats, promoting the sharing of ideas and causing security concerns are some advantages of technology usage. Today, using internet and technology is a human lifestyle. One of the technologies that

Table 4: Cross loadings

	OPI	OSC	WC	WD	WR	WS
OPI1	0.638	0.224	0.332	0.369	0.193	0.418
OPI2	0.707	0.209	0.348	0.375	0.281	0.399
OPI3	0.744	0.193	0.343	0.367	0.358	0.388
OPI4	0.805	0.328	0.441	0.407	0.431	0.525
OPI5	0.743	0.221	0.357	0.368	0.380	0.342
OPI6	0.646	0.181	0.317	0.393	0.342	0.327
OSC1	0.223	0.756	0.249	0.254	0.078	0.114
OSC2	0.218	0.756	0.391	0.318	0.190	0.285
OSC3	0.203	0.719	0.179	0.161	0.061	0.121
OSC4	0.319	0.813	0.293	0.257	0.149	0.277
WC1	0.413	0.285	0.732	0.361	0.333	0.417
WC2	0.374	0.263	0.808	0.350	0.432	0.390
WC3	0.361	0.294	0.796	0.355	0.302	0.346
WC4	0.366	0.308	0.692	0.311	0.269	0.294
WD2	0.322	0.265	0.292	0.602	0.272	0.309
WD3	0.332	0.236	0.309	0.703	0.188	0.268
WD4	0.372	0.243	0.369	0.735	0.281	0.304
WD5	0.418	0.178	0.274	0.692	0.388	0.381
WR1	0.380	0.101	0.244	0.313	0.748	0.379
WR2	0.292	0.095	0.277	0.273	0.736	0.263
WR3	0.380	0.178	0.465	0.354	0.792	0.423
WS1	0.402	0.164	0.298	0.299	0.361	0.749
WS2	0.344	0.133	0.253	0.198	0.242	0.678
WS3	0.372	0.198	0.394	0.344	0.440	0.778
WS4	0.471	0.251	0.396	0.376	0.357	0.802
WS5	0.428	0.238	0.367	0.420	0.317	0.604

OPI: Online purchase intention, OSC: Online social communication, WD: Website design, WR: Website reliability, WS: Website security, WC: Website customer services

Table 5: Cronbach's alpha

Variable	Cronbach's alpha
OPI	0.863
OSC	0.844
WC	0.844
WD	0.778
WR	0.803
WS	0.846

OPI: Online purchase intention, OSC: Online social communication, WD: Website design, WR: Website reliability, WS: Website security, WC: Website customer services

have a great impact to communication process is the website. People can access website through their devices include mobile phone, laptop, desktop, and iPad. Website provides many functions (entertain, education, news, etc.) and can be used for many purposes such as personal website, a commercial website for company, a government website and a non-profit website.

Table 6: R² table

Variables	R ²
OPI	0.462
OSC	0.186

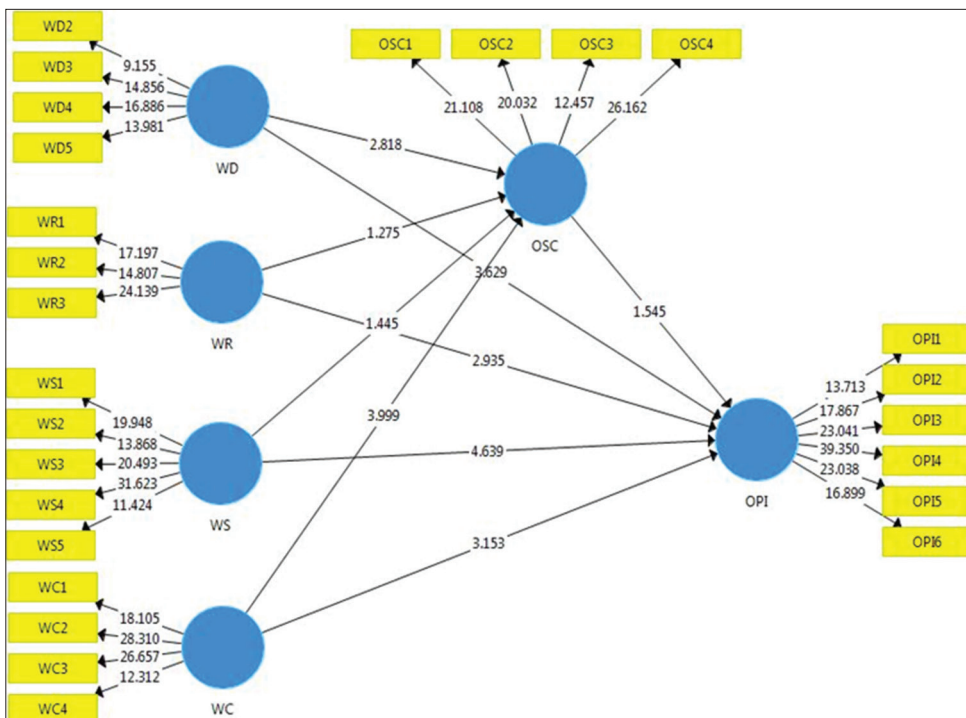
OPI: Online purchase intention, OSC: Online social communication

Table 7: Path coefficients

Variables	Original sample	Sample mean	Standard deviation	t-statistics	P values	Hypotheses result
OSC→OPI	0.075	0.073	0.049	1.545	0.123	H ₂ rejected
WC→OPI	0.163	0.162	0.052	3.153	0.002	H _{1d} accepted
WC→OSC	0.283	0.283	0.071	3.999	0.000	H _{3d} accepted
WD→OPI	0.237	0.240	0.065	3.629	0.000	H _{1a} accepted
WD→OSC	0.199	0.205	0.071	2.818	0.005	H _{3a} accepted
WR→OPI	0.148	0.147	0.051	2.935	0.003	H _{1b} accepted
WR→OSC	-0.083	-0.082	0.065	1.275	0.203	H _{3b} rejected
WS→OPI	0.285	0.289	0.061	4.639	0.000	H _{1c} accepted
WS→OSC	0.090	0.089	0.063	1.445	0.149	H _{3c} rejected

OPI: Online purchase intention, OSC: Online social communication, WD: Website design, WR: Website reliability, WS: Website security, WC: Website customer services

Figure 3: Path model



Website company can be used to commercial purposes (E-commerce). It permits buyers to purchase online. Buying product online is online shopping is increasingly adopted as a convenience way of

buying product (Chayapa and Cheng, 2011), especially among young consumers. Online shopping is a process of buying products through internet and it involves online buyers accessing online seller's websites to search, select, purchase, use, and dispose of goods and services, in satisfying their needs and wants (Shoki et al., 2014).

The E-retailers website quality (E-tailQ) affecting OPI is WD, WR, WS, and WC. This result is consistent with the finding of Lee et al. (2016), Ruchi et al. (2010) and Shoki et al. (2014), in which OPI affected by 4 dimensions of E-tailQ (WD, WR, WS, and WC).

One of the i-Generation characteristics that stated by Ernst and Young is the i-Generation is most likely to buy online for efficiency purposes (Business Insider, 2016). Especially on WD, E-retailers have to consider the characteristics of the i-Generation when design website. Friendly WD, easy directions, simple way to order, quick step to complete a transaction on websites and personalization of websites that provided by E-retailer would make the i-Generation more interested and more intending in buying product through E-retailers website. The only tool that the E-retailers can use to target their selected groups is the design of their websites and their advertising campaign (Rajesh, 2002).

E-retailers that use website to promote their products must pay attention to basic reason of the i-Generation doing shopping online, efficiency. That generation wants to get what they need and want through website in time, free of defect, and free of fault when ordering, paying, until receiving product. The result supported prior studies that conducted by Shoki et al. (2014), Shergil and Chen (2005), and Lee et al. (2016).

Shopping online brings consequences especially in security and privacy aspects. More people feel safe and secure, more they intend to do shopping online. The findings are same as previous researchers by Lee et al. (2016).

Time is important aspect for people buying products through online. Quick response that delivered by admin or customer services of website will make people feel respected. People in customer service must be helpful, humble, and patient and show their empathy to customers. Lee et al. (2016), and Wolfinbarger and Gilly (2003) found that WR is statistically significant influence OPI.

OSC was not influenced by all dimension of E-tailQ. Only two dimensions (WD and WC) and other two dimensions were not proven affected OSC in this study. It might be caused of the evolution of OSC. Not only for purchasing products, OSC has changed the trend as a place for share all information (positive or negative) even it is about politics. Hence, WR and WS are not important anymore. The i-Generation will make more interaction through online if the medias or devices make them comfort. By good design of website and helpful customer services, the i-Generation will communicate more.

OSC has no mediating role on the relationship between E-tailQ dimensions and OPI because of changing trend in communication. According to Pak and Paroubek (2014), it became more popular and interesting to share opinions on political topics, news topics, popular culture than share their opinions or experiences about companies' products (Pak and Paroubek, 2014). It is not guaranteed that the more the i-Generation make interaction through online; the more they have strong intention to buy products online, though E-retailers have good quality of website; it still cannot predict the i-Generation behavior.

6. Theoretical and Practitioner Implications

On the completion of this study, both theoretical and practical contributions were provided. Theoretically, this study explains the relationships among four dimensions of E-tailQ, OSC and OPI. Some findings of this study support prior theory. In contrast, some findings showed different condition to theory and needed more studies to explain those findings.

For practical standpoint, this study provides an insight for E-retailers managers to enhance OPI of the i-Generation because in 2020; the number of i-Generation will have grown to 2.56 billion versus 2.34 billion millennials (who born before 1996) (Fungglobalretailtech, 2017). The effect of the i-Generation to family spending will increase year by year. It causes extra effort to E-retailers to attract the i-Generation by marketing activities and develop better website or other medias to promote products.

7. Limitation and Future Research

Future research can replicate this study. Although this study enriches our knowledge related to service quality on E-retail, this study has also limitations of the result. First, this study did not take into account differences among generations (such as Baby Boomers, Generation X, and Generation Y) or countries. Future studies should apply the measuring instruments in other countries (developed countries and developing countries) and with different types of generations to test whether the result gained are general and across different samples.

In addition, future qualitative research might need to be undertaken to further refine E-tailQ dimensions, to give supporting information.

References

- Abramovich. (2015), 15 Mind-Blowing Stats about Generation Z. Available from: <http://www.cmo.com/features/articles/2015/6/11/15-mind-blowing-stats-about-generation-z.html#gs.RMNcAy4>. [Last viewed on 2016 Dec 10].
- Ajzen, I. (2002), *Attitudes, Personality, and Behavior*. Milton Keynes: Open University Press.
- Bagad, V.S. (2009), *Management Information System*. India: Technical Publications Pune.
- Bitner, M.J., Hubbert, A.R. (1994), Service quality: New directions in theory and practice. In: Rust, R.T., Oliver, R., editors. *Encounter Satisfaction versus Overall Satisfaction versus Quality*. Thousand Oaks, California: Sage Publications. p77.
- Business Insider. (2015), Move over, Millennials—Here's Where the Young Consumers of Generation Z are Spending their Money. Available from: <http://www.businessinsider.co.id/where-generation-z-shops-2015-10/3/#IT0uZBDmwtPqk2mw.99>. [Last viewed on 2016 Dec 20].
- Business Insider. (2016), Teen Generation Z is being called 'Millennials on Steroids,' and that could be Terrifying for Retailers. Available from: <http://www.businessinsider.co.id/millennials-vs-gen-z-2016-8/?r=US&IR=T#uT0ClAdbplfw702x.97>.
- Chayapa, K., Cheng, L.W. (2011), Online shopper behavior: Influences of online shopping decision. *Asian Journal of Business Research*, 1(2), 66-74.
- Chin, W.W., Peterson, R.A., Brown, P.S. (2008), Structural equation modelling in marketing: Some practical reminders. *Journal of Marketing Theory and Practice*, 16(4), 287-298.
- Country Meters. (2017), Indonesia Population. Available from: <http://www.countrymeters.info/en/Indonesia>. [Last viewed on 2017 Mar 16].
- Davis, F.D. (1986), A technology acceptance model for empirically testing new end-user information systems: Theory and results. Doctoral Dissertation. Cambridge, MA: MIT Sloan School of Management.
- Fung Global Retail and Technology. (2016), Gen Z: Get Ready for the Most Self-Conscious, Demanding Consumer Segment. Available from: <https://www.funnglobalretailtech.com/research/gen-z/>. [Last viewed on 2017 Feb 02].
- Ganguly, B., Dash, S.B., Cyr, D., Head, M. (2010), The effects of website design on purchase intention in online shopping: The mediating role of trust and the moderating role of culture. *International Journal of Electronic Business*, 8(4-5), 302-330.
- Gefen, D., Karahanna, E., Straub, D.W. (2003), Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Gupta, H. (2011), *Management Information System*. India: International Book House PVT.
- Hair, J.F., Black, B., Babin, B., Anderson, R.E., Tatham, R.L. (2010), *Multivariate Data Analysis*. 7th ed. Englewood Cliffs, NJ: Prentice Hall.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E., Tatham, R.L. (2006), *Multivariate Data Analysis*. Upper Saddle River, NJ: Prentice-Hall.
- Hair, J.f., Hult, T.M., Ringle, C.M., Sarstedt, M. (2014), *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Los Angeles: SAGE.
- Harsono, H. (2016), Available from: <https://www.techcrunch.com/2016/07/29/indonesia-will-be-asias-next-biggest-e-commerce-market/>. [Last viewed on 2016 Dec 25].
- Hoffmann, A., Birnbrich, C. (2012), The impact of fraud prevention on bank-customer relationships: An empirical investigation in retail banking. *International Journal of Bank Marketing*, 30(5), 390-407.
- Holloway, B.B., Beatty, S.E. (2003), Service failure in on-line retailing: A recovery opportunity. *Journal of Service Research*, 6(1), 92-105.
- Java, A., Song, X., Finin, T., Tseng, B. (2007), Why We Twitter. *Proceedings of the 9th WebKDD and 1st SNA-KDD*.

- Workshop on Web Mining and Social Network Analysis - WebKDD/SNA-KDD '07.
- Kantar Millward Brown. (2017), Available from: <http://www.millwardbrown.com/global-navigation/news/press-releases/full-release/2017/01/10/brands-get-ready---gen-z-are-growing-up-and-ready-to-challenge-says-kantar-millward-brown>. [Last viewed on 2017 Jan 15].
- Katz, M.J. (2001), Avoiding pitfalls in the transition to e-commerce. *Consulting to Management*, 12(4), 34-8.
- Kock, N. (2012), *WarpPLS 3.0 User Manual*. Laredo, TX: ScriptWarp Systems.
- Kyle, A.H., Holloway, B.B., White, D.W. (2013), Cross-cultural effects in e-retailing: The moderating role of cultural confinement in differentiating Mexican from non-Mexican Hispanic consumers. *Journal of Business Research*, 66, 321-327.
- Laura, K.G., Andersen, P.A., Afifi, W.A. (2017), *Close Encounters: Communication in Relationships*. Thousand Oaks: SAGE Publications.
- Ledbetter, A.M., Mazer, J.P., DeGroot, J.M., Meyer, K.R., Mao, Y., Swafford, B. (2011), Attitudes toward Online Social Connection and Self-Disclosure as Predictors of Facebook Communication and Relational Closeness. Thousand Oaks, CA: Communication Research Sage Publication.
- Lee, G.G., Lin, H.F. (2005), Customer perceptions of e-service quality in online shopping. *International Journal Retail and Distribution Management*, 33(2), 161-176.
- Lee, T.S., Ariff, M.S.M., Zakuan, N., Sulaiman, Z., Saman, M.Z.M. (2016), Online sellers' website quality influencing online buyers' purchase intention. *IOP Conference Series: Materials Science and Engineering*, 131, 012014. DOI: 10.1088/1757-899X/131/1/012014.
- Niranjanamurthy, M., Dharmendra, C. (2013), The study of e-commerce security issues and solutions. *International Journal of Advanced Research in Computer and Communication Engineering*, 2(7), 1-12.
- Oxford Business Group. (2016), E-commerce expansion primed for Indonesian market. Available from: <http://www.oxfordbusinessgroup.com/news/e-commerce-expansion-primed-indonesian-market>. [Last viewed on 2017 Dec 20].
- Pak, A., Paroubek, P. (2014), Twitter Opinion Mining. *Encyclopedia of Social Network Analysis and Mining*. New York: Springer-Verlag. p2259.
- Parasuraman, A., Zeithaml, V.A., Berry, L.L. (1988), SERVQUAL: A multiple-item scale for measuring consumer perceptions of services quality. *Journal of Retailing*, 64(1), 12-40.
- Pew Internet and American Life Project. (2013), Social Networking Fact Sheet. Available from: <http://www.pewinternet.org/fact-sheets/social-networking-fact-sheet/>. [Last retrieved on 23 May 2014].
- Quan-Haase, A., Wellman, B., Witte, J.C., Hampton, K.N. (2002), Capitalizing on the net: Social contact, civic engagement, and sense of community. In: Wellman, B., Haythornthwaite, C., editors. *The Internet in Everyday Life*. Malden, MA: Blackwell. p291-324.
- Rajesh, C. (2002), *The Asian Manager's Handbook of E-commerce*. New Delhi, India: Tata McGraw-Hill Education.
- Ruchi, N., Ashish, N., Gupta, S.L. (2010), To study the impact of website factors on consumer online buying behavior in India. *IJMMR*, 1(1), 1-16.
- Shergil, G.S., Chen, Z. (2005), Web-based shopping: Consumers attitudes towards online shopping in New Zealand. *Journal of Electronic Commerce Research*, 6(2), 79-94.
- Shoki, M.A., Yan, N.S., Norhayati, Z., Kamaruzaman, A.R., Khalid, I. (2014), *Online Purchasing Behaviour of Malaysia's Young Consumers*. Recent Trends in Behavioral Science. Florida, USA: Taylor and Francis Group. p167-173.
- Smith, A.S. (2017), Despite Living a Digital Life, 98% of Generation Z Still Shop in-Store. Available from: <https://www.nrf.com/media/press-releases/despite-living-digital-life-98-percent-of-generation-z-still-shop-store>. [Last viewed on 2017 Feb 03].
- Syed, S.A. (2008), Young consumers online shopping: An empirical study. *Journal of Internet Business*, 5, 81-89.
- Tenenhaus, M., Vinzi, V., Chatelin, Y.M., Lauro, C. (2005), *PLS Path Modelling*. Amsterdam: Elsevier.
- The Jakarta Post. (2015), Internet Users in Indonesia Reach 73 Million. Available from: <http://www.thejakartapost.com/news/2015/03/10/internet-users-indonesia-reach-73-million.html>. [Last viewed on 2017 Dec 23].
- Tufekci, Z. (2008), Grooming, gossip, Facebook and MySpace: What can we learn about these sites from those who won't assimilate? *Information, Communication and Society*, 11, 544-564.
- Wolfenbarger, M., Gilly, M.C. (2003), E-tail: Dimensionalizing, measuring, and predicting e-tail quality. *Journal of Retailing*, 79(3), 183-198.
- World Meters. (2017), Available from: <http://www.worldometers.info/world-population/indonesia-population/>. [Last viewed on 2017 Mar 16].
- Yang, Z. (2001), Consumer Perception of Service Quality in Internet-based Electronic Commerce. *Proceedings of the EMAC Conference*. p110-120.
- Zeithaml, V.A., Parasuraman, A., Malhotra, A. (2002), Service quality delivery through web sites: A critical review of extant knowledge. *Journal of the Academy of Marketing Science*, 30(4), 362-375.