The Roles of E-Tailer Quality as Antecedent of E-Satisfaction and Its Impact on Customer Attitudinal Loyalty Creation

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ABSTRACT
This paper aims at examining the effect of e-Tailer quality on customers’ e-satisfaction, which in turn impacts the creation of customers’ attitudinal loyalty. The study uses an empirical survey with the active participation of 283 respondents. Using Structural Equation Modelling (SEM) analysis, this study indicates that e-Tailer quality has a positive correlation and significant effect on the formation of customers’ e-satisfaction. Furthermore, e-satisfaction is positively correlated and has a substantial impact on the formation of attitude-based customer loyalty. Interestingly, e-Tailer quality does not have a fully significant effect on the formation of attitudinal loyalty. Only platform quality dimensions have a considerable impact on the formation of attitudinal loyalty. Third-party e-Marketplace companies are alleged to have a significant influence on the creation of consumer-based loyalty in the realm of C2C business in Indonesia.

Keywords: e-Tailer quality, e-satisfaction, attitudinal loyalty, digital ecosystem, Indonesia, platform quality, e-commerce

INTRODUCTION
Every business needs customer loyalty (Hidayat, Zalzalah, & Ekasasi, 2016; Yee, Ling, & Leong, 2015). In this context, both large-scale and individual scale businesses need to cultivate customer trust to survive and grow (Bilgihan, 2016; Kim, Jin, & Swinney, 2009; Ladhari & Leclerc, 2013; Sahney, Ghosh, & Shrivastava, 2013; Toufaily, Ricard, & Perrien, 2013). Large-scale businesses have corporate-class clients or large retailers. As in large-scale business chains, all mechanisms of transaction are bound by contracts as a foundation of the trust-building mechanism (Turilli, Vaccaro,
& Taddeo, 2010). Thus, in addition to interpersonal trust-based relationships, large-scale business transactions are protected by the existence of guaranteed legal contracts.

In contrast to large-scale businesses, it is much harder on the part of small retailers to get customer loyalty. Buyers are not bound by legal contracts requiring them to observe specific responsibilities to remain loyal to the purchaser, and as such are free to make a purchase and to move to another retailer (Atmojo et al., 2014). In other words, in a small business, a customer’s loyalty to a particular retailer is determined by the customer (Tjhin, Tavakoli, & Atmojo, 2016). Research into customer loyalty in the e-Commerce ecosystem has shown that price and availability of products are some of the aspects that determine the choice of the retailer (Liu, Feng, & Wei, 2012; Liu, Wei, & Chen, 2009). Furthermore, price comparison features enable a customer to compare the selling prices of several products quickly and simultaneously.

For consumer-to-consumer transactions (C2C) in Indonesia, Atmojo et al. (2016) have found that customer loyalty in digital and offline markets is a critical aspect for consumer retention. In other words, there are opportunities for C2C retailers to secure customer loyalty and grow their business. This explores the causes of attitude-based customer loyalty in e-Marketplace transactions in Indonesia. Platform quality and vendor responsiveness are considered factors of e-Tailer quality. E-satisfaction serves as a mediation variable between e-Tailer quality and attitudinal loyalty. The findings could be a valuable reference for retailers to develop their service networks. Moreover, the results could serve as a foundation for similar studies, especially those dealing with digital business in Indonesia.

LITERATURE REVIEW

Electronic Retailer (e-Tailer) Quality

According to Pavlou, Liang and Xue (2007) and Ou, Pavlou and Davison, (2014), e-Tailer quality is a powerful factor alongside e-Image (Atmojo et al., 2015) that supports the establishment of online trust, guanxi, and e-Satisfaction. In this research, e-Tailer quality refers to the vendors’ ability to accommodate the needs of consumers in terms of technology infrastructure and social interaction to achieve optimal customer service and satisfaction. E-Tailer quality is a theoretical construct that can be studied from several perspectives such as the quality of e-Commerce (Cyr, 2013; Ribbink, Riel, Liljander, & Streukens, 2004) and vendor responsiveness in fulfilling customer orders (Ou et al., 2014; Zhang et al., 2011). Regarding the quality of e-Commerce business transactions, Cyr (2013) mentioned that online businesses need to develop information content, information design, navigation design and visual design when preparing a digital marketing platform. In a comparative study of eight countries, Cyr (2013) described that for countries with high levels of uncertainty avoidance such as Canada and the United States, it is vital for platform developers to provide excellent
The Roles of E-Tailer Quality as Antecedent

Information content and platform design. US and Canadian consumers have a very high level of discomfort over instability and ambiguity in business transactions. In other words, an imperfect e-Commerce platform design is a barrier to success for vendors in achieving consumer purchase intention. Furthermore, for countries with substantial uncertainty (both high and low business transaction volatility) such as India, Japan and China, meeting minimum quality standards of e-Commerce is essential for operating online. In other words, in addition to the social capital, businesses need to develop minimum standards to convince consumers about the security of transactions and to achieve shopping convenience.

Concerning the quality standards of an e-Commerce platform, websites and mobile sites need network connections protected by a secure socket layer or encryption technology. Every vendor should develop an e-Commerce platform with visual and navigational design standards outlined in the eight golden rules by Ben Shneiderman. According to Ou et al. (2014), every online business is also required to have a communication system that is real-time, open and honest. A communication system using text-based instant messaging and a mechanism for consumer feedback and testimonials is an example of a medium that must be provided by the e-vendor. Such computer-based communication facilities highlight the vendor’s social presence in the e-Commerce ecosystem as well as the creation of social capital in online business channel transactions (Cyr, 2013).

This study defined a quality e-Commerce platform as digital media that can accommodate the needs of users in conducting sustainable business transactions. The study adapted Cyr’s (2013) measurement indicators to the Indonesian context. The measurement indicators consist of: (i) the completeness of information content provided by vendors in guiding consumers on the web or mobile platforms; (ii) the design of a user interface (graphical user interface) provided by the vendor to attract consumers; (iii) the ease of navigation features that makes it easy for consumers to shop; (iv) well-organised information content layout that meets consumers’ expectations; (v) e-Commerce platform that is updated by the vendor; (vi) reliable network connections and adequate payment security mechanisms; (vii) product type variance level and shipping delivery methods; and (viii) a variety of purchase packages and a diversity of payment methods.

Vendor responsiveness reflects the capability of online vendors to fulfil customer needs. Sophisticated technological infrastructure does not guarantee successful online business. Without good service performance and without being based on the attitudes of honesty, empathy and good deeds, online business will not perform optimally (Gregg & Walczak, 2008; Ou et al., 2014). Excellence in business transforms potential customers into loyal customers. In the online environment, social presence and social capital are social interactions that should be shaped by businesspeople to
prevent negative experiences for consumers as a result of transacting online using machines. Therefore, the responsiveness of the businessman is needed so that consumers do not feel that the shopping experience differs from in-store shopping. Referring to research by Ou et al. (2014), vendor responsiveness is defined as two-way communication between vendors and consumers that is controlled and synchronised. Zhang et al. (2011) defined the fulfilment of consumer orders as a process of completing a consumer’s demand for products/services offered by vendors either online or offline. It is understood that a product ordered and paid for by the consumer must be delivered to the consumer safely and as described. The ability of vendors to complete the ordering process quickly and responsibly is a positive aspect of services to consumers.

Referring to the fundamental research by Ou et al. (2014) and Zhang et al. (2011), this study defined vendor responsiveness as a seller’s ability to recognise, accommodate, and customise consumer needs to provide the best service to consumers through the e-Commerce platform. The measurement indicators of vendor responsiveness in this study consisted of (i) level of ability in terms of vendor responsiveness in completing the customer ordering process; (ii) responsivity standards and vendor ethics ensuring vendors provide appropriate accountability in cases of dispute while maintaining ethics and kindness in communicating with consumers; (iii) communication capability that allows for transparent and honest two-way communication with consumers; (iv) seller openness to suggestions by providing consumers with the opportunity to offer suggestions and criticism needed to improve services; and (v) capability for remaining fair by providing answers to consumers quickly and responsibly, while allowing consumers discretion over the information content provided by the vendor.

**Electronic Satisfaction**

Kim, Chung and Lee (2011) defined electronic satisfaction (e-Satisfaction) as a key factor that vendors need for creating long-term relationships and acquiring recurring purchase intention from consumers. Wu (2013) defined e-Satisfaction as the positive outcome of a vendor’s services. E-Satisfaction is the consumer’s confirmation of the facilities and quality of services provided by online vendors. According to Wang and Tong (2010), online satisfaction comprises the cognitive dimension, emotional dimension and behavioural dimension (conative).

Cognitive satisfaction is related to extrinsic factors that motivate consumers to visit and intend to purchase products from a particular vendor. For example, an online testimonial provided by an anonymous customer about the quality of a seller’s services can increase the confidence of other consumers to purchases products from the recommended vendor. Furthermore, professional references on the seller’s work skills and excellent online shopping experience can motivate potential customers to purchase from that vendor.
Emotional customer satisfaction is related to a buyer’s motivation to recommend the service to others. The reasons and purpose of emotional satisfaction differ, but irrespective of purpose, consumer recommendations are a significant motivational force attracting other potential consumers. The third dimension of customer satisfaction is behaviour-based satisfaction. Consumer intention to make repeat purchases consists of intrinsic and extrinsic factors. It is risky for a consumer to conduct business transactions with an unknown party, particularly when the party is located in distant regions. Any information relating to the characteristics or image of online vendors contributes to a consumer’s satisfaction capital and motivates the customer to transact online. When consumers comment on their experience transacting with a particular vendor, future consumers who transact based on that information are doing so based on behaviour-based comfort in the e-commerce transaction.

In this study, e-satisfaction was defined as the customers’ evaluation of products or services obtained in an electronic transaction experience that has met the expected value or benefits for the product or service. Cognitive-based e-Satisfaction is defined as the satisfaction felt by the consumer after being exposed to the quality of service that has met expectations. The measurement indicators consist of the level of time efficiency and the perceived benefits. Here, emotionally based e-Satisfaction results in the consumer’s motivation to share his or her positive experience. This is measured by the support level when consumers recommend others to try online shopping due to the ease of transaction. Behaviour-based e-satisfaction is when consumer expectations are met, and they are motivated to repeat purchase online. It is measured by consumers’ level of commitment to repurchasing and the product/service being able to meet expectations.

Customer Attitudinal Loyalty

Several scholars (Yoo, Sanders, & Moon, 2013) defined attitudinal loyalty as consumers’ attitude and preference based on self-desire as well as the external environment to recommend that others should purchase from a particular vendor. According to Toufaily et al. (2013), attitudinal loyalty is the consumers’ motivation to invite others to purchase from a particular vendor. Sharifi and Esfidani (2014) defined attitudinal loyalty as the cognitive and affective component of consumer attitude to influence oneself and others to purchase from a particular vendor. The cognitive component comprises the human attitude that leads to the mental construction of the benefit of a product. Human attitudes related to emotional patterns such as respect or admiration also contribute to attitudinal loyalty.

In this study, attitudinal loyalty referred to consumers’ intrinsic and extrinsic motivations to recommend a certain vendor’s services to others. It was measured by four indicators: (i) level of consumer support through favourable reviews of vendors that are often used to guide online
purchase behaviour; (ii) consumer support for repeat purchases; (iii) level of confidence in vendor integrity; and (iv) level of support by providing purchase recommendations to close relatives. If a colleague, close relative or consumer family wished to buy products/services online, the consumer would recommend the vendor.

Based on the detailed theoretical framework, this research proposed the following hypotheses:

• **H1**: E-Tailer quality (through e-Platform quality and vendor responsiveness) is positively correlated and has a significant effect on the establishment of Indonesia’s e-Commerce customers’ e-Satisfaction.

• **H2**: E-Satisfaction is positively correlated and has a significant effect on the establishment of attitudinal loyalty among Indonesia’s e-Commerce customers.

• **H3**: E-Tailer quality (through e-Platform quality and vendor responsiveness) is positively correlated and has a significant effect on Indonesia’s e-Commerce customers’ attitudinal loyalty.

**MATERIALS AND METHODS**

The non-probabilistic sampling method with convenience sampling approach was the most appropriate strategy for the context of this research (Atmojo et al., 2014; Herington & Weaven, 2007; Huang, Liang, Lai, & Lin, 2010; Sahney et al., 2013). In this study, the respondents selected for analysis were experienced e-commerce customers in Indonesia. In other words, the sample comprised buyers of online products who had bought from the same vendor/retailer at least twice. The vendor was a merchant who sells on Indonesia’s e-Commerce association (IdEA) ecosystems. Tokopedia, BukaLapak, Kaskus and Lazada are examples of companies providing hybrid technology platforms that provide marketplace facilities for peer-to-peer sales transactions. A total of 283 usable surveys were returned from a total of 300 questionnaires distributed to respondents directly. The demographic composition was 154 male respondents and 130 female respondents. All respondents were undergraduate students of a private university in Jakarta.

For data collection, the empirical survey was employed and the questionnaires were administered directly to respondents. This approach was considered the most appropriate for the purpose of the study. Furthermore, the questionnaire instrument used a Likert qualitative scale with intervals of 1-5 (low-high) that were converted to a quantitative scale using the successive interval (MSI) method. Scale conversion was used to obtain more stable and objective weighting scores. To address outliers, we used the Mahalanobis Distance approach with the assistance of the SPSS 17 software. The aim of controlling outliers was to guarantee the data were valid and reliable so as to reduce the risk of ‘extraordinary’ data inclusion that could lead to biased
research results. The last stage of analysis was to test the model and hypotheses. In the final stage of analysis, we applied the Structural Equation Modelling - Partial Least Squares (SEM-PLS) method with the latest SmartPLS version 3 software. The use of SEM-PLS was appropriate for this research given that it was exploratory research (Latan, Ringle, & Jabbour, 2016; Ringle, Wende, & Will, 2005). Figure 1 illustrates this study’s research model.

**RESULTS AND DISCUSSION**

Figure 2 presents the results of the inner model test using SmartPLS software.
Table 1

<table>
<thead>
<tr>
<th>Latent Var.</th>
<th>Cronbach’s alpha α</th>
<th>rho_A</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Quality</td>
<td>0.928</td>
<td>0.929</td>
<td>0.941</td>
<td>0.664</td>
</tr>
<tr>
<td>Vendor Responsiveness</td>
<td>0.91</td>
<td>0.914</td>
<td>0.933</td>
<td>0.737</td>
</tr>
<tr>
<td>e-Satisfaction</td>
<td>0.895</td>
<td>0.896</td>
<td>0.92</td>
<td>0.657</td>
</tr>
<tr>
<td>Attitudinal Loyalty</td>
<td>0.879</td>
<td>0.88</td>
<td>0.917</td>
<td>0.735</td>
</tr>
</tbody>
</table>

According to the results in Table 2, with $\rho_A > 0.4$ and Cronbach’s alpha $\alpha > 0.7$, all of the measurement models in this study met the criteria for good individual value of reliability. Moreover, the results fulfilled the confirmatory study requirements (Hair et al., 2014; Wong, 2013). All indicators in this study scored $>0.6$ each. This indicates that the structural model met the suitable criteria. Referring to Wong (2013) and Hair et al. (2014) regarding the structural model convergent validity, the minimum standard of the Average Variance Extracted (AVE) value should be in the range of $>0.5$. All variables exceeded 0.5, meaning the measurement model met the expected level. Table 3 shows the Fornell-Larcker Criterion analysis to measure the discriminant validity.
The square root of each AVE value was required to measure the discriminant validity. The results of the Fornell-Larcker analysis are given in Table 3. The (*) means that every marked score had a greater value than the other correlation score variables in each column. For example, attitudinal loyalty in column one had a higher value (0.857) than platform quality (0.555), vendor responsiveness (0.484), and e-Satisfaction (0.578). As for the values in other columns, attitudinal loyalty had a higher score than the other variables.

**Table 3**

Criterion analysis for discriminant validity measurement referring to Fornel-Larcker test

<table>
<thead>
<tr>
<th>Latent Var.</th>
<th>Attitudinal Loyalty</th>
<th>Platform Quality</th>
<th>Vendor Responsiveness</th>
<th>e-Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitudinal Loyalty</td>
<td>0.857*</td>
<td>0.555</td>
<td>0.484</td>
<td>0.578</td>
</tr>
<tr>
<td>Platform Quality</td>
<td>0.555</td>
<td>0.815*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vendor Responsiveness</td>
<td>0.484</td>
<td>0.774</td>
<td>0.859*</td>
<td></td>
</tr>
<tr>
<td>e-Satisfaction</td>
<td>0.578</td>
<td>0.641</td>
<td>0.615</td>
<td>0.810*</td>
</tr>
</tbody>
</table>

**Bootstrapping Process**

With a total sample of 283 confirmed records, we used a sub-sample of 5000 data, two-tailed test, no-sign changes and complete bootstrapping. The memory heap was set at 2048 MB. Figure 3 shows the results of the inner model after the bootstrapping procedure.

**Figure 3.** Results of inner model test after the bootstrapping process
Table 4 describes the inner model path coefficients after the bootstrapping procedure.

Table 4
**Inner model path coefficient values after Bootstrapping process**

<table>
<thead>
<tr>
<th>Latent Var.</th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>STDEV</th>
<th>T-Statistics</th>
<th>p-Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Quality → Attitudinal Loyalty</td>
<td>0.299</td>
<td>0.296</td>
<td>0.078</td>
<td>3.814</td>
<td>0.000</td>
</tr>
<tr>
<td>Platform Quality → e-Satisfaction</td>
<td>0.411</td>
<td>0.412</td>
<td>0.069</td>
<td>5.976</td>
<td>0.000</td>
</tr>
<tr>
<td>Vendor Responsiveness → Attitudinal Loyalty</td>
<td>0.024</td>
<td>0.027</td>
<td>0.081</td>
<td>0.296</td>
<td>0.768</td>
</tr>
<tr>
<td>Vendor Responsiveness → e-Satisfaction</td>
<td>0.297</td>
<td>0.296</td>
<td>0.068</td>
<td>4.353</td>
<td>0.000</td>
</tr>
<tr>
<td>e-Satisfaction → Attitudinal Loyalty</td>
<td>0.371</td>
<td>0.372</td>
<td>0.059</td>
<td>6.272</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Measuring the path coefficient significance level on the inner and outer model, Wong (2013) explained that the comparison results from T-statistics values with the critical t-values should follow several conditions: (i) two-tailed t-test analysis; (ii) the critical t-value should be better than 1.65 when the analysis is set at a 10% significance level; (iii) If the researcher uses a 1% significance level, then the critical t-value should be higher than 2.58; and (iv) If the researcher uses a 5% significance level, then the critical t-value should be higher the 1.96. According to the path coefficient values described in Table 4, using the level of significance set at 5%, the path coefficient in this inner model had positive correlation and was statistically significant in the relation between Platform Quality → Attitudinal Loyalty, with a coefficient value of 3.814 (p-value <0.05). This was followed by the relationship between Platform Quality → e-Satisfaction with a coefficient value of 5.976 (p-value <0.05). The relationship between Vendor Responsiveness → e-Satisfaction with a coefficient value of 4.353 (p-value <0.05). Moreover, the relationship between e-Satisfaction → Attitudinal Loyalty with a coefficient value of 6.272 (p-value <0.05). Only the relationship between Vendor Responsiveness → Attitudinal Loyalty was insignificant, with a coefficient value of 0.296 (p-value >0.05).

**The Hypothesis Testing (with Total Effects)**

The final section of this study showed the results of the cumulative effects after the bootstrapping process given in Table 5.
Referring to the cumulative value of the effects described in Table 5, we concluded that:

H1: E-Tailer quality (through e-Platform quality and vendor responsiveness) is positively correlated and has a significant effect on the establishment of Indonesia’s e-Commerce customers’ e-Satisfaction. (H1 accepted, p-values significant at [0.000] <0.05 and <0.01, respectively).

H2: E-Satisfaction is positively correlated and has a significant effect on the establishment of Indonesia’s e-Commerce customers’ attitudinal loyalty. (H2 accepted, p-values significant at [0.000] <0.05 and <0.01, respectively).

H3: E-Tailer quality through the dimension of vendor responsiveness is positively correlated but has no significant effect on the establishment of Indonesia’s e-Commerce customer attitudinal loyalty. (H3 rejected, p-values insignificant at [0.088] >0.05).

CONCLUSION

This research found that e-Tailer quality (through e-Platform quality and vendor responsiveness) had a positive and significant direct effect on e-Satisfaction, with a T-statistic value of 5.976 (platform quality) (p-values <0.05) and 4.353 (vendor responsiveness) (p-values <0.05). The e-Satisfaction variable in this study was positively correlated and had a significant effect on the establishment of Indonesia’s e-Commerce customer attitudinal loyalty, with a T-statistic value of 6.272 (p-values <0.05). Interestingly, we found that e-Tailer quality through the dimension of vendor responsiveness was positively correlated with attitudinal loyalty, but the dimension was not sufficient to build a significant effect on attitudinal loyalty. Instead, platform quality had a positive correlation and significant effect on customers’ attitudinal loyalty. Considering the sample of respondents used were e-Marketplace customers, as long as third-party e-Marketplace service providers such as Tokopedia, Lazada and BukaLapak have proper procedures for maintaining the
integrity and reliability of their suppliers (users acting as sellers), customers will not feel overly concerned. In other words, by joining the third-party e-Marketplace, the occurrence of potential fraud by the seller is minimised. This will make customers feel at ease and protected when shopping online.

REFERENCES


