The Effect Of E-After Sales Service And E-Service Quality In Repurchase Intentions On E-Commerce Mediated By Customer Engagement And Trust

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Abstract
Online business is multiplying nowadays. This study aims to analyze the effect of e-service quality and e-after sales service on repurchase intention. Moreover, it examines the impact of e-service quality and e-after sales service on customer trust and customer engagement, and customer trust as well as customer engagement on repurchase intention.

This research is a quantitative study, which is located in Indonesia. It was conducted on a heavy equipment distributor. The sample of this research was customers from heavy equipment companies in Indonesia who have already operated business with e-commerce. In order to get the samples, the non-probability sampling method was applied using convenience sampling. The number of respondents was 300 customers. The analytical tool used was SEM-PLS.

The research results prove that the e-service quality affects the repurchase intention, while the e-after sales service does not affect the repurchase intention. Customer trust and engagement have a direct effect on repurchase intention. Next, customer engagement affects customer trust. The e-service quality and e-after sales service affect customer trust. The e-service quality also affects customer engagement, but e-after sales service does not affect customer engagement. On the other hand, trust mediates the influence of e-service quality and e-after sales service on repurchase intention. Moreover, customer engagement does not mediate the effect of e-service quality and e-after sales service on repurchase intention.

Keywords: e-service quality, e-after sales service, customer trust, customer engagement, repurchase intention.

1. Introduction
The development of online business causes a shift in the philosophy of goods dominant logic to become a service-dominant logic (Vargo and Lusch, 2004). Service dominant-logic focuses on the interaction between producers, consumers, and partners in the supply network and value creation as the parties who co-create value. Based on the theory of service-
dominant logic, companies must develop e-service quality by empowering the participation of consumers. One of the factors determining a company's success in the online field is its ability to provide services to its customers (Solimun et al., 2018). Good service quality is associated with increased profitability, customer satisfaction, customer loyalty, and positive word of mouth and provides recommendations to new customers (Gallarza et al., 2011; Ganesh et al., 2000; Voss et al., 2004). Service quality is related to the development of the internet, so e-service quality is the variable used in this study. Companies must pay attention to the creation and improvement of e-service quality, the e-service quality during the online purchase process and after the customer has purchased the product, referred to as e-after sales service. E-after sales service is product support that can keep the product functioning properly for a long time (Patton, 2002). Current developments in e-commerce and e-business make it very possible and more effective to implement e-after sales services. Related to the service dominant logic theory, which is customer-oriented, which ultimately focuses on repurchase intention, which in this study is called repurchase intention, it cannot be separated from customer engagement and customer trust. Engagement is an antecedent of consumer loyalty (Thakur, 2016). Trust is an essential factor in an e-commerce-based business, and customer trust is critical for the growth and success of e-commerce. Over time with the increase in e-commerce transactions today, trust in the online environment has become attractive. Lack of trust is an obstacle in implementing e-commerce (Chiu et al., 2012). The purpose of this study was to analyze the influence of e-service quality and e-after sales service on repurchase intention mediated by customer engagement and customer trust in the heavy equipment industry in Indonesia.

2. Literature Review

E-Service Quality
E-service quality is defined as the perceived difference between customer expectations and evaluating what they receive (Gronroos, 1991; Parasuraman et al., 1988; Meywati et al. 2021; Realino & Moko, 2021). Parasuraman et al. (2005) define e-service quality as an extension of a website that facilitates effective and efficient purchasing and delivery. Thus, e-service quality is an activity from start to finish in a purchase transaction, including information retrieval, website navigation, orders, customer service interactions, delivery, and satisfaction with the purchased product.

E-After Sales Service
After-sales service is a type of service provided by the seller to the customer after a purchase transaction occurs (Kotler et al., 2009; Vitasek, 2005). Regarding e-business and e-commerce, the after-sales service variable is used as a variable for the e-after sales service. E-after sales services are services offered by producers to their consumers after the sales transaction is carried out as a quality assurance for the products they offer, carried out electronically.

Customer Engagement
The development of e-commerce and new media channels allow customers to easily interact with other customers and companies through social media (Evans et al., 2010). The manifestation of the interactive relationship experienced by the customer is known as the concept of customer engagement (Verhoef et al., 2010; Kumar, 2013). Engagement refers to a sense of engagement which is the basis for the emergence of other parties to participate in activities (Bryce et al., 2015; Curran et al., 2018; Taheri et al., 2014).

Customer Trust
Trust is essential in online business (Setyorini and Nugraha, 2016) and is a critical element in the purchasing process (Chaudhuri and Hobbrook, 2001; Delgado and Aleman, 2005; Morgan and Hunt, 1994). Trust is defined as a specific party's belief in the reliability and integrity of its peers (Morgan and Hunt, 1994). In addition, trust strengthens long-term relationships and loyalty between two parties (Ball et al., 2004; Garbarino and Johnson, 1999; Keh and Xie, 2009; Lin and Luarn, 2003; Singh and Sirdeshmukh, 2000) as well as the initiation of loyalty that mediates the relationship between loyalty and customers (Chaudhuri and Holbrook, 2006).

Repurchase Intention
Hellier et al. 2003 explain that repurchase intention is a person's planned intention decision to make a repurchase intention that impacts a long-term commitment to maintain the relationship between the company and the customer. Several studies also show repurchases are positively related to the company's future, customer trust and satisfaction (Kumar and Reinartz, 2016; Bove and Johnson, 2006; Ammari and Bilgihan, 2019).

Hypothesis
H1: E-service quality has a significant effect on repurchase intention
H2: E-after sales service has a significant effect on repurchase intention
H3: Customer trust has a significant effect on repurchase intention
H4: Customer engagement has a significant effect on repurchase intention
H5: Customer engagement has a significant effect on customer trust
H6: E-service quality has a significant effect on customer engagement
H7: E-after sales service has a significant effect on customer trust
H8: E-service quality has a significant effect on customer trust
H9: E-after sales service has a significant effect on customer engagement
H10: E-service quality has a significant effect on repurchase intention mediated by customer engagement
H11: E-service quality has a significant effect on customer trust mediated by customer engagement
H12: E-after sales service has a significant effect on repurchase intention mediated by customer engagement
H13: E-after sales service has a significant effect on customer trust mediated by customer engagement
H14: E-quality has a significant effect on repurchase intention mediated by customer trust
H15: E-after sales service has a significant effect on repurchase intention mediated by customer trust
H16: Customer engagement has a significant effect on repurchase intention mediated customer trust

3. Methodology
The object of research is the heavy equipment industry in Indonesia. The consideration of using heavy equipment distributor customers is that distributor customers always need after sales service for the products they buy. In addition, some heavy equipment distributors have used e-commerce in their business transactions even though they are included in the industrial product category. Moreover, the tendency to use e-commerce in the heavy equipment business tends to increase in recent years. Therefore, the target population for this study are consumers or customers of heavy equipment distributors in Indonesia. The research sample was 360 people. This study's sampling method used a non-probability sampling method, using convenience sampling. Next, the data collection was conducted using questionnaire using 5-point Likert scale.

The e-service quality variable is measured by indicators of reliability, responsiveness, access, flexibility, efficiency, assurance, security and customization (Zeithaml et al., 2000). E-after sales service is measured by indicators of technician visits, repair calls, spare parts, technical dimensions and warranty coverage. Customer engagement variables are measured by indicators of liking, writing reviews, creating products and services, social networking and innovation collaboration. Customer trust variables are measured by indicators of websites, products, shopping channels, competence and integrity. Finally, the repurchase intention variable is measured by indicators of customer satisfaction, commitment and word of mouth (WOM).

After the data was collected, the research instrument was examined through validity and reliability tests. Descriptive and inferential data analysis was also conducted. The analysis tool was SEM-PLS. The questionnaires were given online through google-form and offline, that is by providing direct and feasible questionnaires.

4. Result
Based on the study results, there were 279 male respondents and 21 female respondents, with the most extensive age range in the 41-50 years age range. The least in the age range <21 years. Most respondents are with a Bachelor's level education. Respondents used many products under the Komatsu brand, and many had become customers between 0-5 years and made purchases more than three times a year.

Results of Smart PLS Analysis
The measurement model (outer model) for testing the validity and reliability of constructs consists of convergent validity, discriminant validity, and composite reliability. The result of convergent validity shows that the outer loading value is more significant than 0.7, and the t-count value is greater than the t-table (1.96). The discriminant validity test is fulfilled, with the cross-loading value on the variable being more significant than the correlation value.
between indicators and other constructs or variables and the AVE value > 0.5. Testing of composite reliability is also fulfilled, with the composite reliability and Cronbach's alpha values greater than 0.7.

The measurement model is carried out on the research variables: variable e-service quality, responsive indicators. Responsive refers to the speed of distributors who respond quickly to customer and providing a complaint centre. Quick response to customer complaints through the complaint centre is an essential factor for customers to assess the quality of e-services. In the e-after sales service variable, the technical dimension indicator gives the most significant contribution. The technical dimension relates to repair services provided by distributors to customers and good quality repair services from distributors. In the customer engagement variable, the social network indicator gives the most outstanding contribution. The customer shows engagement with the distributor by engaging in the distributor's social network and being involved in community activities organized by the distributor. In the customer trust variable, the shopping channel indicator has the most significant contribution to the customer trust variable. The shopping channel in the customer trust variable refers to the customer's trust in the distribution channel from the distributor and the ease of access to the distribution channel. Finally, in the repurchase intention variable, the commitment indicator gives the most outstanding contribution. Commitment is the buyer's commitment to becoming a loyal customer of the distributor and the customer commitment to establishing a long-term business relationship with the distributor.

Measurement of the structural model, through the value of R-Square ($R^2$) for the dependent variable (endogenous), and Stone-Geisser Q-Square ($Q^2$) for predictive relevance, is presented as follows. The R-Square ($R^2$) value for the customer engagement variable (CE) is 0.493. It means that the e-service quality variable/e-service quality (SQ) and the e-after sales service variable (ASS) contribute to the customer engagement variable (CE) by 49.3%, and the remaining 50.7% is the contribution of other variables not examined in this study. The R-Square ($R^2$) value for the customer trust variable (CT) is 0.656. It means that the e-service quality variable (SQ) and after-sale service variable (ASS) contributed to the customer trust variable (CT) by 65.6%, and the remaining 34.4% was the contribution of other variables not examined in this research. The R-Square ($R^2$) value for the repurchase intention variable (RI) is 0.709. It means that the variable customer engagement (CE) and customer trust (CT) contribute to the repurchase intention variable (RI).

The Q-Square ($Q^2$) value measures how well the model and its parameter estimation generate the observed value. The obtained value is 0.95 or 95%, which means that the model in this study is feasible and can be said to have a relevant predictive value.

**Hypothesis test**

**Figure 1 Structural Model Path Diagram in PLS**
Based on the research results in tables 1 and 2, H1 is accepted; The quality of e-services provided by distributors to customers directly can increase intention in repeat purchases. This result is in line with the research of Murali et al. (2016), Sun and Pang (2017), Solimun et al. (2018), Kassim and Abdullah (2010), Sheng and Liu (2010), Saleem et al. (2017) and Venetis and Ghauri (2004). H2 is not accepted. It is rejected; e-after sales services provided by distributors to customers directly cannot increase repurchase intention. This finding is in line with the results of research conducted by Lymperopoulos et al. (2008). H3 is accepted; customer trust in distributors directly can increase customer repurchase intention. This finding is in line with the results of a study conducted by Upamanyuet al. (2015), Setyorini and Nugraha (2016), Saleem et al. (2017) and Fang et al. (2014).

### Table 1 Results of Direct and Indirect Effect Testing

<table>
<thead>
<tr>
<th>Exogen Variable</th>
<th>Endogen Variable</th>
<th>Path Coefficient</th>
<th>t-statistic</th>
<th>Note</th>
<th>Indirect Effect Coefficient</th>
<th>Note</th>
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<td>E-Service Quality (SQ)</td>
<td>Repurchase Intention (RI)</td>
<td>0.161</td>
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<td>E-Service Quality Customer Engagement Repurchase Intention</td>
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<tr>
<td>E-Service Quality (SQ)</td>
<td>Customer Engagement (CE)</td>
<td>0.589</td>
<td>5.678</td>
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Next, H4 is accepted; Direct customer engagement in distributor activities can increase customer repurchase intention. This finding is in line with the results of research conducted by Yoong and Lian (2019), Lee et al. (2019), Wen and Chung (2020), Hapsari et al. (2017) and Anggita and Trenggana (2020). Also, H5 is accepted; direct customer engagement in distributor activities can increase customer trust in distributors. This finding is in line with the

<table>
<thead>
<tr>
<th>E-Service Quality (SQ)</th>
<th>Customer Trust (CT)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>E-Service Quality</th>
<th>Customer Engagement</th>
<th>Customer Trust</th>
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<td></td>
<td>0.304</td>
<td>0.025</td>
<td>0.341</td>
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<td>0.215</td>
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</table>

<table>
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<tr>
<th>E-After Sales Service (ASS)</th>
<th>Customer Engagement (CE)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>E-After Sales Service Customer Engagement</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.126</td>
<td>0.025</td>
<td>1.187</td>
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<table>
<thead>
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<th>Customer Engagement (CE)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>E-After Sales Service Customer Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.224</td>
<td>0.126</td>
<td>2.892</td>
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<th>Customer Engagement (CE)</th>
<th>Customer Trust (CT)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>E-After Sales Service Customer Trust Repurchase Intention</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>0.365</td>
<td>0.301</td>
<td>6.753</td>
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<table>
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<th>Customer Engagement (CE)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>E-Service Quality Customer Trust Repurchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.301</td>
<td>0.133</td>
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</table>

<table>
<thead>
<tr>
<th>Customer Trust (CT)</th>
<th>Repurchase Intention (RI)</th>
<th>Significance</th>
<th>Customer Engagement Customer Trust Repurchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.439</td>
<td>0.160</td>
<td>Significant</td>
</tr>
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</table>
results of research conducted by Brodie et al. (2011), Wirtz (2013), and Vivieket al. (2012). H6 accepted; the quality of e-services provided by distributors can directly increase customer engagement. This finding is in line with the results of a study conducted by Prentice et al. (2019) and Adil (2020), proving that the quality of e-services affects customer engagement.

Moreover, H7 is accepted; e-after sales service provided by distributors to customers in person can increase customer's trust in the distributor. This finding is in line with the results of research conducted by Zeithaml (2000), Ashfaq (2019), Ladokun et al. (2013), Fazlzadeh et al. (2011) and Egonsson et al. (2013), who proved that e-after sales service affect customer trust. H8 is accepted; The quality of e-services provided by distributors can directly increase customer trust in distributors. This finding is in line with the results of research conducted by Alharthey (2019), Khairani and Hati (2017), Akbar and Parvez (2009) and Sidik (2013), which prove that the quality of e-services affects customer trust. H9 is rejected; e-after sales service provided by distributors to customers directly cannot increase customer engagement. This finding contradicts the results of a study conducted by Cronin et al. (2000), Rigo poulouet al. (2008), Kurata and Nam (2013) and Murali et al. (2016).

H10 is accepted; e-service quality can increase repurchase intention through customer engagement. H11 is accepted; e-service quality can increase customer trust through customer engagement.

Table 2 Results of Mediation Testing with the Sobel Test

<table>
<thead>
<tr>
<th>Exogen</th>
<th>Mediation</th>
<th>Endogen</th>
<th>A</th>
<th>B</th>
<th>SEa</th>
<th>SEb</th>
<th>p-value</th>
<th>Z</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-Service Quality</td>
<td>Customer Engagement</td>
<td>Repurchase Intention</td>
<td>0.58</td>
<td>0.30</td>
<td>0.10</td>
<td>0.05</td>
<td>0.000</td>
<td>3.86</td>
<td>Significant</td>
</tr>
<tr>
<td>E-Service Quality</td>
<td>Customer Engagement</td>
<td>Customer Trust</td>
<td>0.58</td>
<td>0.36</td>
<td>0.10</td>
<td>0.05</td>
<td>0.000</td>
<td>4.34</td>
<td>Significant</td>
</tr>
<tr>
<td>E-After Sales Service</td>
<td>Customer Engagement</td>
<td>Repurchase Intention</td>
<td>0.12</td>
<td>0.30</td>
<td>0.10</td>
<td>0.05</td>
<td>0.246</td>
<td>1.16</td>
<td>Not Significant</td>
</tr>
<tr>
<td>E-After Sales Service</td>
<td>Customer Engagement</td>
<td>Customer Trust</td>
<td>0.12</td>
<td>0.36</td>
<td>0.10</td>
<td>0.05</td>
<td>0.242</td>
<td>1.17</td>
<td>Not Significant</td>
</tr>
<tr>
<td>E-After Sales Service</td>
<td>Customer Trust</td>
<td>Repurchase Intention</td>
<td>0.22</td>
<td>0.43</td>
<td>0.07</td>
<td>0.07</td>
<td>0.009</td>
<td>2.26</td>
<td>Significant</td>
</tr>
<tr>
<td>E-Service Quality</td>
<td>Customer Trust</td>
<td>Repurchase Intention</td>
<td>0.30</td>
<td>0.43</td>
<td>0.09</td>
<td>0.07</td>
<td>0.003</td>
<td>2.93</td>
<td>Significant</td>
</tr>
<tr>
<td>Customer Engagement</td>
<td>Customer Trust</td>
<td>Repurchase Intention</td>
<td>0.36</td>
<td>0.43</td>
<td>0.05</td>
<td>0.07</td>
<td>0.000</td>
<td>4.56</td>
<td>Significant</td>
</tr>
</tbody>
</table>

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H10 is accepted; e-service quality can increase repurchase intention through customer engagement. H11 is accepted; e-service quality can increase customer trust through customer engagement.
engagement. H12 is not accepted; e-after sales service cannot increase customer repurchase intention by mediating customer engagement. H13 is rejected; e-after sales service provided by distributors cannot increase customer confidence through customer engagement. H14 is accepted; e-service quality can increase customer repurchase intention through customer trust. H15 is received; e-after sales service can increase customer repurchase intention through customer trust. H16 is accepted that customer engagement can increase customer repurchase intention through customer trust.

**Research Implications**
The development of the research model by placing the customer trust variable as the mediating variable is tested. Trust mediates the influence of e-after sales service on repurchase intention with a perfectly mediating nature. Thus, customer trust is an essential factor in increasing consumer repurchases. In online business, customer trust is an essential factor. The placement of the customer engagement variable as a mediating variable is tested on the influence of e-service quality on repurchase intention and e-service quality on customer trust. However, customer engagement does not mediate the effect of e-after sales service on repurchase intention and e-after sales service on customer trust. It is an exciting finding. The research findings prove that the role of the customer trust variable as a mediating variable is more significant than the customer engagement variable.

Practically, the e-service quality and e-after sales service must be improved in distributor service. E-service quality is a critical success factor in online business, and e-after sales service is an essential factor related to the quality of service after a purchase is made. In addition, distributors must increase customer trust. Moreover, it is stated that customer trust is an essential thing in online business.

**Conclusions and suggestions**
The e-service quality is important because it can increase repurchase intention. Apart from e-service quality, customer trust must be considered. Trust is an essential factor in online business. Distributor companies must pay attention to and implement the best quality service responsive to every customer complaint by providing a complaint centre to customers. A good and fast response from distributors to customers will create customer satisfaction, which tends to make repeat purchases. In addition, distributors must pay attention and increase customer trust. Customer trust is crucial in an e-commerce-based business. Customer trust can be created by selling quality products on trusted sites, with reliable distribution channels of goods with the principle of convenience, and increasing the competence and integrity of distributors.

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