The role of value co-creation in sustaining partner loyalty in B2B business: a service-domain logic approach

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INTRODUCTION

The agricultural industry has a prominent position within the economy of Indonesia. According to statistics provided by the Central Statistics Agency (BPS RI), there has been a consistent upward trend in the contribution of the agriculture sector to the Gross Domestic Product (GDP) throughout the years. Nevertheless, the agriculture industry had a modest rise of 1.4% in the year 2021. This observation suggests that the operational efficiency of management within the agriculture sector has been suboptimal. According to a study performed by Las and Tim in 2008, findings revealed that a significant proportion of agricultural land in Indonesia exhibits low organic matter content (Kartasasmita et al., 2009). The use of inorganic fertilizers in rice fields has led to a decline in land productivity because of the reduced soil organic matter content.

In order to address the issue of land productivity, the Indonesian government has implemented a strategy of allocating cash for fertilizer subsidies, specifically targeting organic fertilizers which involves PT Petrokimia Gresik, a subsidiary of PT Pupuk Indonesia (Persero). Its designated responsibility is the production of 300,000 tons of organic fertilizer, commencing in 2008. PT Petrokimia Gresik holds a patent for the organic fertilizer process under the trademark "Petrogenic," offers a potential investment opportunity for small and medium-sized enterprises (SMEs) situated in proximity to the source of animal manure raw materials. These SMEs can establish organic fertilizer factories, with their products being directly procured by PT Petrokimia Gresik. Nevertheless, the quantity of potential Petrogenic collaborators expressing interest in participation is limited to a just 30 partners, each with an average annual production capacity of 3,000 tons which falls short of the production objective set by the Minister of Agriculture Regulation (Permentan).
According to the data acquired from PT Petrokimia Gresik, it has been observed that the productivity of MSMEs serving as suppliers is suboptimal indicated by provision of organic fertilizer components might be attributed to the limited degree of supplier loyalty. The suppliers demonstrate a lack of commitment towards the management of the Petrogenic company in collaboration with PT Petrokimia Gresik, as they fail to adhere completely to the stipulations outlined in the cooperation agreement. Suppliers also fail to engage in proactive and robust contact with PT Petrokimia Gresik when encountering challenges in the operational domain, resulting in the failure to meet the desired production objectives.

Loyalty emerges as a paramount factor that may be achieved via the fulfillment of business partners in Business to Business (B2B) transactions. The satisfaction of business partners with the company’s performance is expected to provide long-term benefits, therefore fostering the development of a sustainable competitive advantage. The impact of intense coordination, communication, and cooperation on satisfaction and loyalty in B2B interactions has been seen in practical settings, since loyalty is found to be a dynamic construct (Nuvriasari, 2012). The absence of coordination, communication, and robust relationships might lead to a decrease in the loyalty of business partners.

To cultivate loyalty and foster a lasting cooperative alliance between PT Petrokimia Gresik and its suppliers at Petrogenic, it is imperative to engage in value co-creation. This entails the integration of resources possessed by Petrogenic suppliers, enabling them to consistently deliver Petrogenic products that meet the criteria of timeliness, quantity, and quality. Support may be given to Petrogenic suppliers via comprehensive training programs that address all aspects of their operations, including manufacturing activities, quality control, administrative records, promotional efforts, and other pertinent areas that pose challenges to these suppliers. According to a study done by Biswas and Bhatnagar (2013), it has been shown that the implementation of organizational coaching aimed at stakeholders has a significant beneficial impact on the levels of satisfaction in cooperative relationships and commitment.

According to Vargo and Lusch (2004), there was a paradigm change in marketing that emphasized the importance of value co-creation and relationship-building. The underlying premise of this line of thought is on the concept of economic trade, specifically the exchange of services, which is referred to as the Service Dominant Logic (SDL). The notion of SDL is a business approach that focuses on value co-creation through services to create benefits for companies and consumers. SDL concept was initially only focused on the company's relationship with its consumers as a product marketing strategy, so it was more widely used in the B2C context. Thus, research with the theme of SDL in terms of B2B relationships between suppliers and factories / industries / companies is still rare. However, according to Widyarini et al. (2018), the formation of co-creation through SDL can be done between companies, partners in the network, and consumers.

The objective of this study is to address the existing research gap in the company's supplier relationships. Previously, the company's focus was primarily on supply chain values such as efficient production, quality assurance, and effective distribution. However, there is a need to shift towards a greater emphasis on value creation networks, specifically through services that encompass punctuality, precision in quantities, and accuracy in knowledge. This study also aims to examine the indirect impact of factors on the formation of customer loyalty, in order to identify the priority variable connection route for PT Petrokimia Gresik. The anticipated outcomes of this research are poised to provide ongoing enhancements to PT Petrokimia Gresik in identifying the necessary actions to foster enduring loyalty and high-quality, long-term commercial partnerships with its collaborators.

**Literature Review**

**Service Dominant Logics**

According to Vargo and Lusch (2004), there was a paradigm change in marketing that emphasized the importance of value co-creation and relationship-building. The underlying premise of this line of thought is on the concept of economic trade, specifically the exchange of services, which is referred to as the Service Dominant Logic (SDL). The notion of SDL is a business approach that emphasizes the significance of prioritizing customer service as a fundamental aspect of corporate operations. Organizations see consumers as a means of attaining a competitive edge by generating value via effective engagement and provision of services. The
business plan formulated is aligned with the viewpoint that focuses on how firms provide amenities and enhance the process of value co-creation to foster mutual advancement over an extended period of time.

Certain interpretations of Service-Dominant Logic (SDL) argue that SDL is a marketing paradigm that places emphasis on customer service and the co-creation of value via relational interactions. Value co-creation is often regarded as a key indicator of the effectiveness of a company strategy aimed at enhancing customer pleasure and fostering supplier loyalty, ultimately leading to mutual advancement. In the context of SDL, value co-creation refers to a cooperation that encompasses orative, interactive, and reciprocal attributes, while also exhibiting a unique and synergistic nature. According to Zhang et al. (2015)

The notion of business-to-business (B2B) connections within the SDL mentality is a novel viewpoint, whereby the exchange of services takes precedence. The term B2B refers to commercial transactions that occur between two or more businesses, rather than between a business and an individual consumer. Marketing refers to a distinctive system used by one firm to promote its products or services to another company, which deviates from the frequently recognized tactics and methods of marketing prevalent in the market. The concept of Business to Business (B2B) refers to the commercial transactions conducted between two companies, when one firm sells its products and services to another company. In this context, the buyer is often a professional who has expertise and training in assessing and comparing different offers. According to Kotler and Keller (2009).

**Value Co-Creation**

The concept of value co-creation in business-to-business (B2B) partnerships, whether inside industries or between service businesses, is increasingly recognized as a significant strategic factor in the establishment of competitive advantage (Sales-Vivo et al., 2021). The notion of value co-creation in a B2B setting may be traced back to the foundations of consumer behavior and strategic markets. In order to have a comprehensive understanding of the role of value co-creation in B2B interactions within the sector, it is advisable to include fundamental characteristics such as trust, contentment, commitment, and loyalty.

The notion of value co-creation has satisfaction implications that are centered on service and relationships. In their respective studies, Malik and Rizwan (2019) and Riana et al. (2019) have developed a conceptual framework that elucidates the connection between value co-creation and satisfaction. Both studies provide evidence that the practice of value co-creation has the potential to enhance customer happiness. According to Asnawi and Nina (2021), their study findings indicate that value co-creation has a beneficial impact on consumer confidence, customer happiness, and customer loyalty.

The evaluation of value co-creation between PT Petrochemia Gresik and Petrogenic Partners in this research is conducted by evaluating many indicators, including forms of collaboration, access to information, risk assessment, and transparency. PT Petrochemia Gresik assumes the role of overseeing Production Partners with regards to the evaluation of the comprehensive business system implemented by Petrogenic Partners entails conducting evaluations and offering ideas for enhancing the system. Based on the aforementioned information, the hypothesis for this research may be formed as follows:

**Hypothesis 1: Value Co-Creation has a positive effect on B2B partnership satisfaction.**

**Customer satisfaction**

Satisfaction is the feeling felt by the buyer towards the company's performance so that the buyer's expectations can be met (Spreng et al., 1996). Satisfaction will be felt if the cooperative relationship is carried out as expected and gets a quick response from work partners. According to Bernarto and Patricia (2019), that satisfaction has a positive influence on trust and loyalty while trust has no positive effect on loyalty. Other results show that the relationship between satisfaction variables has an insignificant positive effect on brand trust variables (Rini and Eka, 2014). Meanwhile, Shamsher (2021) states that satisfaction has no effect on trust in the retail market in Bangladesh. Based on the results of existing research, there is a potential relationship between the satisfaction variable and the trust variable, so that it becomes a consideration for researchers.

In the study conducted by Bauer et al. (2002) as cited in Ivan Lai's (2014) research, it was shown that satisfaction plays a crucial role in fostering commitment inside organizations that use customer relationship strategies. Additionally, the findings indicate that satisfaction has a noteworthy and beneficial impact on commitment, alongside its influence on trust. In the part pertaining to service relationships, Halinen (1996) and Labahn and Kohli (1997) conducted research on the topics of satisfaction and commitment after the provision of services, as discussed in Casalo et al.’s (2007) study. According to the findings of the research, it is shown that when customers experience satisfaction, they are more likely to develop a sense of commitment towards the continued use of the goods or services offered by the organization. In a study conducted by Chen et al. (2014), it was shown that there exists a non-significant correlation between the measure of customer satisfaction and effective commitment. Notably, the variable of customer satisfaction was seen to function as a mediating variable in this connection.

Satisfaction has been shown to have an influence on loyalty in some investigations, as demonstrated by Espejel's (2007) research. Geykens et al. (1999) and Woodruff and Flint (2002) claim that customer satisfaction plays a crucial role in fostering enduring connections between suppliers or firms and customers, and is closely linked to consumer loyalty (Johnson et al., 2001; Lam et al., 2004). According to Briici et al. (2015), it has been said that there exists a direct and positive relationship between customer pleasure and loyalty. In the study conducted by Dagger and David (2012), it was shown that satisfaction is likely to have a significant adverse impact on loyalty. Therefore, it is essential for PT Petrokimia Gresik to provide high-quality services and ensure a satisfactory
customer experience in order to foster loyalty among its Petrogenic partners. Based on the above explanation, the hypothesis in this research may be expressed as follows:

Hypothesis 2: The level of satisfaction with the cooperative partnership is positively correlated with the level of trust in the B2B partnership.

Hypothesis 3: The level of satisfaction about the cooperative partnership is positively correlated with the B2B partners commitment.

Hypothesis 4: The level of satisfaction with the cooperative partnership is positively correlated with the B2B partners loyalty.

Trust

According to Yousafzai et al. (2003), trust plays a crucial role in facilitating transactions between sellers and buyers, ultimately leading to the desired level of consumer satisfaction. The study conducted by Bricci et al (2015) revealed that there exists a significant and positive relationship between consumer trust and both commitment and satisfaction. The evaluation of trust is determined based on the parties’ competence and communication. According to Badar and Ali (2017), there exists a positive correlation between the level of confidence that a partner has in the capacity and quality of communication, and the level of commitment in the relationship. According to Gounaris (2005), many study findings have shown that a strong level of consumer confidence in service providers has the potential to diminish customer loyalty towards these suppliers.

Customer loyalty in relationship marketing depends on brand or corporate image confidence. Trust creates a mutually advantageous and valued reciprocal connection, which may explain this. According to Morgan and Hunt (1994) and Bernarto and Patricia (2019), consumer trust does not increase customer loyalty. In contrast, Lapasiang et al. (2017) found that consumer trust positively affects customer loyalty. Bernarto and Patricia (2019) found that customer trust reduces loyalty. Thus, partners’ devotion to joint activities depends on long-term cooperative connections (Griffin, 2003). Therefore, drawing on the elucidation of the interplay between trust, commitment, and loyalty, the following hypothesis might be posited:

Hypothesis 5: The level of trust has a beneficial impact on the commitment of B2B Partner.

Hypothesis 6: The level of trust has a beneficial impact on the loyalty of B2B Partner

Commitment

Loyalty may be defined as an ongoing purchasing behavior shown towards one or more alternative brands among a set of comparable brands. This concept encompasses emotional elements as well. Commitment may be seen as an extension of the need to sustain a relationship, which arises from the economic advantages and costs associated with switching partners (Peppers and Rogers, 2004). The research conducted by Fullerton (2003) demonstrates that there exists a favorable relationship between customer commitment and consumer loyalty. The assertion made is further substantiated by the findings of Bricci et al (2015), whose study demonstrates a direct and favorable impact of commitment on customer loyalty. In contrast, a study conducted by Ercis et al. (2012) indicates that there is no statistically significant relationship between commitment and loyalty.

Petrogenic partners are committed to fulfilling all cooperation contract articles, including investing in land, office buildings, warehouse buildings, factory buildings, machinery, equipment, laboratories, and rotating working capital. Partner trust and cooperation in allocating Petrogenic fertilizer production resources will build corporate loyalty. Partners may have to pay a switching fee if they leave PT Petrokimia Gresik. Thus, the hypothesis can be formulated as:

Hypothesis 7: Commitment in the cooperative relationship affects the loyalty of B2B partner.

Research and Methodology

The research was conducted using a quantitative approach that focuses on testing the relationship between co-innovation in SDL on B2B business partners’ commitment and satisfaction which leads to loyalty. Data was collected in this study using a survey method using a questionnaire. Answers to the question items in the questionnaire used a 5-point Likert scale with a scale of 1 (strongly disagree) to 5 (strongly agree). Value co-creation is measured using four indicators adapted from Malik and Rizwan (2019), namely forms of cooperation, access to information, risk assessment, and transparency. To measure business partner satisfaction, the indicators of feedback and fear of relationship loss are adapted from Barnes (2003). Then, trust is measured using shared values, ability, and quality of communication adapted from Peppers and Rogers (2004) and Mayer et al (1995). Trust, willingness, and involvement are indicators used to measure business partner commitment adapted from Morgan and Hunt (1994) and Mukherjee and Nath (2007). Finally, business partner loyalty is measured using two indicators, namely future usage and referrals adapted from Griffin (2003).

The survey utilized in this research was administered through offline means to all Petrogenic partners. A total of 143 Petrogenic partners were requested to participate in the study by responding to inquiries pertaining to research variables and business characteristics, including the duration of their collaboration with PT Petrokimia Gresik, their geographical location, annual average purchase order volume, annual production capacity, and the number of employees affiliated with the partners as Petrogenic suppliers.
Out of the entire number of questionnaires that were distributed, a mere 139 partners provided comprehensive responses. The characteristics of the respondents gathered for this study are detailed in Table 1.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Frequency (n)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration Time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4 Years</td>
<td>28</td>
<td>20.1</td>
</tr>
<tr>
<td>5-9 Years</td>
<td>65</td>
<td>46.8</td>
</tr>
<tr>
<td>&gt;10 Years</td>
<td>46</td>
<td>33.1</td>
</tr>
<tr>
<td>Purchase Order</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-2.000 Tons</td>
<td>31</td>
<td>22.3</td>
</tr>
<tr>
<td>2.001-4.000 Tons</td>
<td>37</td>
<td>26.6</td>
</tr>
<tr>
<td>4.001-6.000 Tons</td>
<td>43</td>
<td>30.9</td>
</tr>
<tr>
<td>8.001-10.000 Tons</td>
<td>20</td>
<td>14.4</td>
</tr>
<tr>
<td>&gt;10.000 Tons</td>
<td>8</td>
<td>5.8</td>
</tr>
<tr>
<td>Production Capacity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small (≤ 6.000 Tons)</td>
<td>87</td>
<td>62.6</td>
</tr>
<tr>
<td>Medium (6.001 – 9.000 Tons)</td>
<td>22</td>
<td>15.8</td>
</tr>
<tr>
<td>Large (≥ 9.001)</td>
<td>30</td>
<td>21.6</td>
</tr>
<tr>
<td>Number of Employee</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 15 Persons</td>
<td>33</td>
<td>23.7</td>
</tr>
<tr>
<td>15-30 Persons</td>
<td>50</td>
<td>36.0</td>
</tr>
<tr>
<td>31-60 Persons</td>
<td>42</td>
<td>30.2</td>
</tr>
<tr>
<td>&gt;60 Persons</td>
<td>14</td>
<td>10.1</td>
</tr>
</tbody>
</table>

According to the data presented in Table 1, it can be shown that nearly half of petrogenic partners (46.8%) have engaged in collaborative works with PT Petrokimia Gresik for a duration ranging from 5 to 9 years. The data reveals that more than half (50.4%) of petrogenic partners serving as suppliers of organic fertilizers for PT Petrokimia Gresik are located in East Java. This finding suggests a notable concentration of partners in close vicinity to PT Petrokimia Gresik, which is situated inside the East Java Province.

According to Table 1, the majority (30.9%) of partners get an average purchase order from PT Petrokimia Gresik ranging from 4,001 to 6,000 Tons annually. The quantity of purchase orders corresponds to the production capacity of the majority (62.6%) of petrogenic partners, who are limited to a maximum output of 6000 tons of organic fertilizer material. The amount of production is not so large due to the scale of the company which is still medium which can be seen from the number of employees owned by petrogenic partners where the majority (36.0%) of petrogenic partners only have 15 - 30 employees.

Complete questionnaire data from 139 respondents who have been obtained will then be analyzed using Partial Least Square Structural Equation Modeling (PLS-SEM) with the help of SmartPLS 4.0 software.

**Result**

**Measurement (Outer) Model Evaluation**

The first step in structural equation modeling (SEM) analysis involves assessing the outer (measurement) model. The outer model encompasses three distinct assessments, including convergent validity, construct reliability, and discriminant validity. Convergent validity assesses whether different measures of the same latent variables are measuring the same underlying concept or trait (Fan et al., 2023). The convergent validity assessment is carried out by looking at the outer loading and Average Variance Extracted (AVE) values (Hair et al., 2019). The outer loading value shows the correlation between the indicator and the construct formed while the AVE is the average value of the square of the outer loading for each indicator Outer loading of more than 0.7 and AVE of more than 0.5 indicates that all measurement indicators have good convergent validity (Hair et al., 2022). Based on the results of the convergent validity evaluation in Table 2, it is known that the AVE on value co-creation (0.712), satisfaction (0.964), trust (0.870), commitment (0.885), and loyalty (0.926) is greater than 0.5. The evaluation results in Table 2 also show that the outer loading on all indicators in Table 2 is greater than 0.7. Thus, it can be stated that convergent validity on the measurement model in this study has been achieved.
Construct reliability is the second evaluation in the measurement model. The concept of construct reliability refers to the degree to which a measuring scale or instrument regularly and accurately assesses the underlying construct it is designed to evaluate. It is a measure of the internal consistency and stability of the items or indicators used to measure a particular construct (Byrne, 2016). Construct reliability in PLS-SEM can be assessed using composite reliability which is formed from the outer loading of each indicator. A composite reliability value greater than 0.7 indicates that the variable has good internal consistency. Based on the evaluation results in Table 2, it is found that all variables of value co-creation (0.959), satisfaction (0.962), trust (0.981), commitment (0.952), and loyalty (0.908) have a composite reliability value of more than 0.7. Therefore, it can be stated that all variable constructs have achieved construct reliability.

The third stage in measurement model evaluation is discriminant validity. Discriminant validity tests whether measures intended to measure different constructs are not strongly correlated with each other, indicating that they are indeed measuring different concepts (Rönkkö & Cho, 2020). The assessment of discriminant validity may be conducted by using Fornell-Lacker’s criteria. The assessment is conducted by comparing the cross-loading value with the root value of Average Variance Extracted (AVE), wherein the AVE root value should exceed the correlation between certain constructs and other constructs. According to Hair et al. (2022), the model may possess enough discriminant validity if the square root of the average variance extracted (AVE) for each variable exceeds its correlation with other variables within the model. Table 3 show discriminant validity assessment result.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Outer Loading</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Co-Creation (VCC)</td>
<td>Forms of cooperation</td>
<td>0.854</td>
<td>0.712</td>
<td>0.959</td>
</tr>
<tr>
<td></td>
<td>Information access</td>
<td>0.844</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Risk assessment</td>
<td>0.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transparency</td>
<td>0.909</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction (STF)</td>
<td>Feedback</td>
<td>0.982</td>
<td>0.964</td>
<td>0.962</td>
</tr>
<tr>
<td></td>
<td>Fear of Relationship Loss</td>
<td>0.982</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trust (TRS)</td>
<td>Shared Values</td>
<td>0.923</td>
<td>0.870</td>
<td>0.981</td>
</tr>
<tr>
<td></td>
<td>Ability (Kemampuan)</td>
<td>0.934</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Quality of Communication</td>
<td>0.941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment (CMT)</td>
<td>Kepercayaan</td>
<td>0.945</td>
<td>0.885</td>
<td>0.952</td>
</tr>
<tr>
<td></td>
<td>Kemauan</td>
<td>0.962</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Keterlibatan</td>
<td>0.915</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loyalty (LYT)</td>
<td>Future Usage</td>
<td>0.964</td>
<td>0.926</td>
<td>0.908</td>
</tr>
<tr>
<td></td>
<td>Referral</td>
<td>0.960</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The discriminant validity assessment reveals that the root average variance extracted (AVE) for Value Co-Creation (0.844), trust (0.933), commitment (0.941), satisfaction (0.982), and loyalty (0.962) exceeds the correlation between each of these variables and other variables examined in the research. The discriminant validity test conducted using the Fornell-Larcker Criterion indicates that all variable constructs exhibit discriminant validity.

### Structural (Inner) Model Evaluation

The evaluation of the structural model in PLS-SEM (Partial Least Squares Structural Equation Modelling) entails the examination of the connections between latent variables inside the structural model, as well as the assessment of the model’s overall fit and validity (Hair et al., 2019). The examination of the path coefficient and p-value of the bootstrapping outcomes is used to evaluate both the connection and the study hypothesis. Furthermore, it is important to assess the adequacy of the model by examining the adjusted R² value, which provides a measure of the overall goodness-of-fit. When assessing the structural model, it is necessary to do a computation for the effect size (f²). The concept of effect size pertains to a numerical metric that signifies the extent or potency of an
impact or association inside a research study (Peterson & Foley, 2021). Cohen (1988) offered a categorization for impact size assessment (f²) into three levels: small (0.02), medium (0.15), and large (0.35). Table 4 show all result of structural model evaluation.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Relationship</th>
<th>β</th>
<th>P</th>
<th>f²</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>VCC → STF</td>
<td>0.904</td>
<td>0.000</td>
<td>0.496</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>STF → TRS</td>
<td>0.762</td>
<td>0.000</td>
<td>0.384</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>STF → CMT</td>
<td>0.523</td>
<td>0.000</td>
<td>0.509</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>STF → LYT</td>
<td>0.243</td>
<td>0.012</td>
<td>0.084</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>TRS → CMT</td>
<td>0.414</td>
<td>0.000</td>
<td>0.318</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>TRS → LYT</td>
<td>0.210</td>
<td>0.071</td>
<td>0.072</td>
<td>Rejected</td>
</tr>
<tr>
<td>H7</td>
<td>CMT → LYT</td>
<td>0.500</td>
<td>0.000</td>
<td>0.288</td>
<td>Supported</td>
</tr>
</tbody>
</table>

The results of the structural model evaluation in Table 4 show that value co-creation (β = 0.904, p = 0.000) is proven to have a significant positive effect on petrogenic partner satisfaction. The findings show that petrogenic partner satisfaction will have a positive impact on increasing trust (β = 0.762, p = 0.000), commitment (β = 0.523, p = 0.000), and also loyalty (β = 0.243, p = 0.012). The evaluation results found that trust (β = 0.414, p = 0.000) has a significant positive relationship with partner commitment to continue supplying petrogenic raw materials. However, the relationship between trust (β = 0.210, p = 0.071) and loyalty was not supported by the test results. Finally, this study reveals that commitment (β = 0.500, p = 0.000) is proven to increase partner loyalty to PT Petrokimia Gresik.

Based on the effect size value, the effect of value co-creation (f² = 0.496) on satisfaction can be categorized as a large effect. Similar findings are also found in the effect of satisfaction on trust (f² = 0.384) and commitment (f² = 0.509) can also be categorized as a large effect, while the effect of satisfaction on loyalty (f² = 0.084) is a small effect. The evaluation results also found that trust has a medium effect on commitment (f² = 0.318) and a small effect on loyalty (f² = 0.072). Finally, this study found that commitment has a medium effect on loyalty (f² = 0.288). The results of this study also found that the independent variables were able to explain well the independent variables both on satisfaction (adj R² = 0.817), trust (adj R² = 0.578), commitment (adj R² = 0.771), and also loyalty (adj R² = 0.800) which is indicated by adjusted R² greater than 0.25 (Cohen et al., 2003).

**Discussion**

This study aims to examine the effect of value co-creation on partner loyalty in B2B through satisfaction, trust, and commitment by using the Service Dominant Logic Framework. This study found that six out of seven research hypotheses were proven where value co-creation affects satisfaction, and satisfaction is proven to affect trust, commitment, and loyalty. Meanwhile, trust was found to only affect commitment, but not loyalty. Finally, commitment was found to have a positive effect on B2B partner loyalty.

The first finding in this study supports the results of Malik and Rizwani’s (2019) research which shows that value co-creation between partners in B2B can increase partner satisfaction with the collaborative relationship. This research demonstrated that value co-creation improves business partner satisfaction, notably amongst suppliers and customers. PT Petrokimia Gresik and Petrogenic Partners collaborate on all aspects of the organic fertilizer production system with the Petrogenic brand, including trademarks, industrial design, fertilizer production, production coaching, knowledge transfer, and government subsidy sales. All assistance provided by PT Petrokimia Gresik with regard to value co-creation is an expression of the service-centric approach utilized to enhance product quality, which also incorporates petroleum partners as suppliers. Overall assistance between PT Petrokimia Gresik and Petrogenic Partners satisfied the collaboration relationship.

The second finding of this research is that satisfaction and trust are positively correlated. Giese and Cote (2000) define satisfaction as an emotional response that occurs within a certain time after a cooperative relationship is formed. Owned satisfaction forms trust, an emotional bond between members in value co-creation, especially in providing the best products for end users. This study supports Bernarto and Patricia’s (2019) finding that pleasure affects trust between people and organizations in cooperation. The study shows that petrogenic partners feel comfortable dealing with PT Petrokimia Gresik due to its excellent service. Services include detailed, comprehensive information on changes in cooperation norms at 6-month meetings. PT Petrokimia Gresik trains partners in technical and managerial skills to help them become more professional. With petrogenic partners’ contentment, PT Petrokimia Gresik gains trust.

This research demonstrated that partner satisfaction affects their commitment to provide organic fertilizer manufacturing materials. This study supports studies by Puspitawati and Riana (2014) showing partner satisfaction in B2B business affects their commitment to maintain cooperating. Commitment is important since it demonstrates a willingness to preserve the cooperative partnership long-term. Petrogenic's manufacturing partners consistently meet PT Petrokimia Gresik's factory facilities, production, quality, and operational criteria, demonstrating their dedication to this research.
This research suggested that Petrogenic business partners would be more loyal to PT Petrokimia Gresik if they were satisfied. This research supports Siregar (2019), who discovered that satisfaction affects loyalty, especially B2B partner loyalty. Petrogenic partners exhibit dedication by delivering fertilizer according to PT Petrokimia Gresik standards. Reliable Petrogenic partners will only make Petrogenic organic fertilizers. Petrogenic partners are happy with their cooperative partnership with PT Petrokimia Gresik and want to keep using its commercial chances. This research shows that respondents are loyal to their service provider because they trust it and have difficulty switching providers.

This research also indicated that partners' trust in PT Petrokimia Gresik would drive their commitment to continue supplying petrogenic raw materials. This research confirms Gounaris (2005) findings that trust positively and significantly affects organizational commitment, including in B2B cooperative interactions. Quality communication builds trust via clear and open information access. PT Petrokimia Gresik holds transparent meetings to review Petrogenic fertilizer distribution. This makes partners believe PT Petrokimia Gresik sets a reasonable output goal based on Petrogenic producing partners' capability and abilities. Trust also fosters Petrogenic producing partners' commitment, as seen by completely implemented improvement proposals. When Petrogenic production partners get precise, relevant, and thorough information, their confidence will grow.

This study findings show that trust does not increase Petrogenic partner loyalty to PT Petrokimia Gresik. This is due to the captive market position in which PT Petrokimia Gresik must acquire Petrogenic fertilizer from Petrogenic partners. In contrast, Petrogenic partners created an organic fertilizer plant because PT Petrokimia Gresik offered economic opportunity to become a supplier of Petrogenic fertilizer while completing its government obligations. Trust does not build loyalty, but mutual need between Petrogenic partners and PT Petrokimia Gresik does. This research confirms Bernarto and Patricia (2019) conclusion that trust does not affect loyalty. This may happen because government restrictions require mutual need, which breeds loyalty even without trust.

Finally, this research indicated that petrogenic partners' commitment increases their loyalty to PT Petrokimia Gresik. Petrogenic partners' willingness to fulfill all cooperation contract articles, such as investing in land, office buildings, warehouse buildings, factory buildings, machinery, equipment, laboratories, and rotating working capital, shows their commitment. This is to accomplish production objectives and maintain excellent relations with PT Petrokimia Gresik. This research supports Fullerton (2003), who say partner commitment, particularly in B2B, is crucial to corporate loyalty.

**Conclusion**

This research investigates the impact of value co-creation using the Service Dominant Logic (SDL) framework on the loyalty of business partners, specifically suppliers in B2B contexts. Loyalty in these relationships is fostered through the development of trust, satisfaction, and partner commitment, which result in the delivery of optimal performance within the agreed-upon cooperative arrangement. The present research discovered that the use of the Service-Dominant Logic (SDL) method in value co-creation has the potential to enhance business partner satisfaction, particularly among suppliers. The findings indicate that satisfaction acts as a mediating factor, fostering trust and commitment, eventually leading to increased loyalty. The present study exhibits promising prospects for future development, particularly as a strategic approach to fostering and sustaining partnerships across entities inside B2B organizations. This study offers valuable insights for PT Petrokimia Gresik, serving as a potential reference for the enhancement of supplier loyalty inside the organization. In future endeavors, research may be conducted via the development of a research model that involves the integration of ServQual models, as well as the comparison and use of other relevant models as deemed necessary.

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**References**


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