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Analysis of the relationship between Co-Created Value, Consciousness Value, Perceived Economic Value, and Customer Loyalty Layout

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ABSTRACT

This study examines the simultaneous impact of Co-creating Customer Value (CCV), Value Consciousness (VC), and Perceived Economic Value (PEV) on Customer Loyalty (CL) within the Service-Dominant Logic (SDL) framework, highlighting the importance of customer loyalty amidst intense business competition. This study aims to analyze the partial and simultaneous effects of co-created value, value consciousness, and perceived economic value on customer loyalty toward eco-friendly flavored products, while also examining whether environmentally conscious consumers are more responsive to these variables, offering strategic insights for enhancing customer loyalty. This study addresses a theoretical gap in the literature by exploring the individual dimensions of the three elements, which have only been examined separately in prior research. A survey-based quantitative approach was used, with 150 respondents from the retail sector analyzed through multiple linear regression. The results show that the three independent variables have a unidirectional relationship with the dependent variable CL, which is significant regarding zinc. It is concluded that CCV, VC, and PEV significantly affect CL in terms of zinc. Individually, PEV provides the highest number in its influence, followed by VC, while CCV, although small, can adjust in the influence of combination. These findings support the concept of value-in-context, affirming that interaction value, benefit awareness, and economic perception determine customer loyalty. Theoretically, this study enhances the understanding of the multi-dimensional impact of value on customer loyalty, while managerially, it urges companies to emphasize economic benefits, strengthen co-creation, and communicate value effectively.

Keywords: *Business Competition, Value in Context, Eco-Friendly, Multi-dimensional Value*

INTRODUCTION

Previous research has shown that co-created value, value consciousness, and perceived economic value significantly affect customer loyalty to sustainable products. Customers involved in value creation, the alignment between price and quality of value received, and the financial benefits of product knowledge led to an increase in customer loyalty to products, incredibly sustainable and healthy products (Yi & Gong, 2013; Choi & Ok, 2018; Jin & Yong, 2019). The researchers concluded that co-created value, value consciousness, and perceived economic value play an important role in shaping customer loyalty. In particular, customers' involvement in value creation positively affects their emotional connection with the brand (Yi & Gong, 2013); value consciousness makes them choose products with a price-quality balance, even when other options are available (Choi & Ok, 2018).

Customer loyalty is supported by co-created value, value consciousness, and perceived economic value, which are important: co-created value supports emotional bonds with the brand, value reinforces the price-quality balance consumers desire, and perceived economic value increases economic benefits and repeat purchases. All three are the basis for market retention strategies in difficult competitors (Yi & Gong, 2013; Choi & Ok, 2018). There are five current roles each of co-created value, value consciousness, and perceived economic value to increase customer support, including the following: first, symbolic benefits (Yi & Gong, 2013); second, helping

consumers identify brands that provide optimal value (Choi & Ok, 2018); third, providing direct incentives; and fourth, creating differentiation in the market. There will be at least one of the roles per instance or two, and all three are possible. That means using the three concepts and interacting with all three builds customer support towards value, developing "customer value" (Jin & Yong, 2019).

Based on the findings of specific studies, co-created value, value consciousness, and perceived economic value can also be insignificant in specific contexts. For example, co-created value does not influence customers when they feel their contribution does not significantly affect them (Chang & Taylor, 2016). Value consciousness is also insignificant in premium-class products, where buyers are less concerned about price than quality (Kwon & Schumann, 2015). Perceived economic value is also irrelevant in the luxury goods setting, where customer service is purely based on social value and status, and there is little difference between economic advantage (Shukla, 2010). The results of these three variable linkages show that their impact on customer loyalty varies and depends on the context.

Using the context of flavoring products with eco-friendly packaging, we formulate the research problem as follows: Although co-created value, value consciousness, and perceived economic value have been shown to influence customer loyalty, the effects of these three variables may differ in the context of flavored products and the case of flavored products with eco-friendly packaging in particular. While in general, most consumers may behave rationally and be interested in the economic benefits they expect from flavored products, how they respond to eco-packaging or their contribution to the co-creation value of the product may vary. Therefore, it is challenging to develop a general formula for these three variables and how their influence changes in specific situations or segments. The research question is (1) Do co-created value, value consciousness, and perceived economic value each significantly influence customer loyalty in the more environmentally conscious consumer segment? (2) Do co-created value, value consciousness, and perceived economic value simultaneously affect customer loyalty in environmentally friendly packaged flavoring products?

In this study, service-dominated logic is the basic theory used to understand the effect of co-created value, value consciousness, and perceived economic value on customer loyalty. This definition is relevant to this research because the concept concerns the relationship between service providers and consumers, as shown by specific results from the literature and research context. The description of the research variables, namely co-created value, value consciousness, and perceived economic value, is important to understand in exploring the meaning related to customer loyalty.

Value and co-created value are the values the company and customers estimate in the objective process. SDL is not only value situated by the company based on the customer, but it is the future result of activities that require customers to be involved in creating products and services that customers consume (Vargo & Lusch, 2016; Ranjan & Read, 2016). Value is said to be a passive site by the current customer. However, he participates in creating the value used in value co-creation at the product level. Value products have gained valuable experience and satisfied demand. To elaborate on H1, which is the strong relationship between co-created value and customer loyalty, the logic specification and concept of the relationship align with the following arguments. Assuming SDL, co-created value is seen as a consequence of collaboration between producers and consumers, making consumers get value and participate in creating meaningful value (Vargo & Lusch, 2016)—hypothesis 1. Thus, they can formulate a hypothesis from the logical deduction, consequent relationships, and arguments above. H1: Co-created value has a positive and significant influence on customer loyalty.

Value consciousness is customers' awareness of the price they pay relative to the benefits they receive from a particular product or service. In the context of SDL, value consciousness illustrates that customers do not seek value from the perspective of the lowest price because value-conscious customers also consider the additional benefits they obtain. Value-conscious users are usually more demanding and critical in choosing products, as they are always looking for the best product at the best price, both in terms of financial value and benefits (Choi & Ok, 2018). Based on the logic, relationship concepts, and arguments above, the hypothesis that can be formulated is as follows: H2: Value Consciousness has a positive and significant effect on Customer Loyalty.

Perceived Economic Value is the understanding that customers have about the economic value of the products they use concerning the costs or prices that customers pay. Perceived economic value in the context of SDL is the value that customers assess not from the price of use but from the economic benefits, they feel during or after use. SDL emphasizes that value is not found in the product itself but occurs because of the Tarjih: Agribusiness Development Journal. Volume X Number X (2021) Page: x-x DOI: https://doi.org/10.47030/ There are three interactions between the company and the customer when using the product or service (Vargo & Lusch, 2016). Based on the arguments regarding the relationship between perceived economic value and customer loyalty that has been explained, the hypothesis can be formulated: H3: Perceived Economic Value has a positive and significant influence on (Customer Loyalty 2019).

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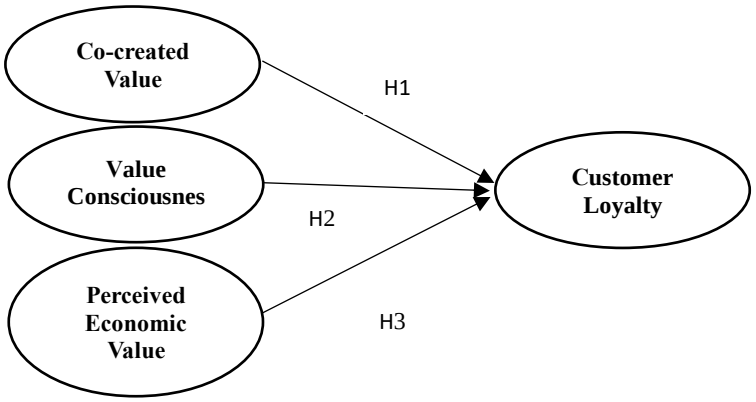

Figure 1. Research conceptual framework

Based on the description of the problem above, the purpose of this study is to analyze the partial and simultaneous effects of co-created value, value consciousness, and perceived economic value on customer loyalty in flavoring products with environmentally friendly packaging and to determine whether more environmentally conscious consumers are more responsive to the three main variables, which provides strategic insights for improving customer loyalty.

RESULTS AND DISCUSSION

Sample and Data Collection

This study targets a specific population of users of environmentally friendly cooking flavoring product packages in East Java province. The base population was determined based on demographic and product-related characteristics of the core. The Thumb Rule approach is a case technique used to obtain the minimum sample size in survey research when the actual population is unknown. Based on the case technique, the Thumb Rule approach is as follows: According to the Thumb Rule approach, the minimum sample size required for elementary statistical analysis is between 100 and 200. According to Hair et al. (2019), the minimum sample of a study involving regression or SEM is 100 to 200 or at least 10 times the amount of independent variation being measured.

However, sampling based on the Thumb Rule approach is still relevant for a study targeting users of eco-packaged cooking seasonings in East Java. One reason is semistra - the population of interest will likely have a population or absolute representativeness that is not explicitly known. Here, a population such as users of cooking spices with eco-friendly packaging is almost impossible to identify accurately. In this case, the Thumb Rule is more likely to estimate a representative sample size. Therefore, whether the following conditions arise, values between 150 - 200 are an adequate group: where the number of independent variables is or exceeds three, the number of influences and relationships between variables is too complex, and demographics and consumer habits are also considered. The respondents who would eventually be included in this study had to fulfill specific criteria: female, aged 25-40, educated to at least high school, married, and this product has been in active use for at least one year. Again, with a total sample size of 150, customer preferences and Loyalty towards environmentally friendly products can still be revealed, which is becoming an increasingly relevant aspect supported by consumers' increasing awareness of the environment.

Sampling Procedure:

1. The questionnaire is complete with a list of questions for each indicator, and the questionnaire is designed with a 5-point Likert scale, where respondents rate statements based on the following scale:
    i. 1 = Strongly Disagree
    ii. 2 = Disagree
    iii. 3 = Neutral
    iv. 4 = Agree
    v. 5 = Strongly Agree
2. Identify User Groups In the first sampling step, identify communities or groups that respondents might target. Most online communities, such as cooking-focused Facebook or WhatsApp groups, local culinary forums, and platforms like Instagram and TikTok, fall into this category. Niche platforms, such as Kaskus discussion forums or e-commerce consumer review platforms, are often populated by users who actively share their experiences using flavoring products.
3. Respondent Selection Criteria Ensure that respondents are married women, aged between 25-40 years, at least a high school graduate, and actively using flavoring products for at least one year. The initial

screening used filter questions in the questionnaire so that respondents who did not meet the criteria did not proceed to the main questionnaire.

4. Questionnaires are distributed through Google Forms or other survey platforms, and links are distributed through social media, cooking community groups, and specialized mailing lists. Offline: Physical copies of the questionnaire were distributed at strategic locations, traditional markets, supermarkets that stock flavoring products, and cooking community activities in East Java. Participatory Approach: Offer incentives, such as e-vouchers or product discounts, to customer respondents who complete this questionnaire as an appreciation for their cooperation.
5. Reminder technique. Send reminders via email, SMS, or WhatsApp messages to potential respondents who have been contacted to increase response rates. Three weekly reminders can optimize the sample size encountered in the survey.

The usefulness of Multiple Linear Regression Analysis Multiple Linear Regression Analysis is used to measure the influence between more than one predictor variable (independent variable) on the dependent variable.
Formula:

$$Y = a + b1X1+b2X2+...+bnXn$$

Y = variable
a = constant
b1,b2 = coefficient
X1, X2 = independent variable

Benefits and Justification

A reliable representative measure, purposive sampling allows the researcher to select specific respondents within the population relevant to the study. Therefore, it provides better quality data than the random sampling pursued. A sample size of 150-200 respondents can be effectively represented in descriptive and inferential research with specific products. This number of respondents is sufficient for relevant statistical analysis, as per Malhotra (2015), and this number is adequate with theme regression analysis. It provides cost and time savings. Purposive sampling does not require surveying the entire population, thus offering cost and time savings for the researcher. Therefore, with feedback on a suitable community of specific product users, the fixed sample contains adequate attributes to answer the research questions without word bias. The quality of the research data is corroborated by the fact that the researcher conducted discretionary sampling.

RESEARCH METHODS

Measurements and Measurement Results Corrected Item Total Correlation Validity Test and Split-half Reliability with SPSS

Validity Test Corrected Item Total Correlation

Understanding the Corrected Item Total Correlation Test is a test procedure carried out by researchers on each item in a research instrument to assess its validity. This validity is measured by how strong the score relationship is on the instrument's items with the entire instrument's total score. This correlation relationship states whether or not the item is suitable as a representative of the measured construct. Basic Decision Theory. According to V. Wiratna Sujarweni (2014: 192), the validity test decision criteria are:

- If the value of r count> r table Product Moment, the item is declared valid.
- If the value of r count < r table Product Moment, the item is declared invalid.

The purpose of the validity test is to measure the level of validity of the validity of the items in the questionnaire or research instrument to ensure that all items are appropriate and relevant to the construct being measured. Validity trust is important to get accurate results—problems Discussed. As a result of high validity, instruments only measure the variables they are intended to measure without any bias. A valid instrument becomes a strong foundation for data analysis to get accurate data.

The role of a validity test is constructive for researchers in filtering invalid items and can help the research process by only using relevant items. Maintain the integrity of the research instrument. Suggestions: If many invalid items are taken, immediately update the instrument by revising the reiki questions, removing inappropriate items, and trade conducting retests on students or anyone until the instrument has fulfilled the desired validity.

Split-Half Reliability Test

The Split-Half Reliability Test definition is a method for measuring the internal consistency of a research instrument. The instrument is split into two, usually by item order or randomly. The consistency between the two

versions is calculated to determine reliability. Basic decision theory. Based on Jonathan Sarwono (2015: 249), the decision criteria for the reliability test:

- If the Guttman split-half coefficient ≥ 0.80, the instrument is reliable.
- If the Guttman split-half coefficient > 0.80, then the instrument as a whole can be declared reliable.
- The item can be declared reliable if the Guttman Split-Half Coefficient value per question item (Cronbach's Alpha if Item Deleted) > 0.80 for each item.

The importance of high reliability indicates that the instrument has good internal consistency. So that the results of the research are reliable, it is crucial to support the validity of the complete network of data. The role of the reliability test ensures that the items in the instrument work together to measure the construct represented. If the reliability is not good, evaluating the questions in the inconsistent items is necessary, grouping the remaining questions in the article declared reliable.

Based on Tables 1, 2, 3, and 4. All question items are valid because the calculated r value for each question item has a value> 0.159 r product moment table, and reliable because, in combination, it has a Guttman Split-Half Coefficient value> 0.80. Moreover, It is reliable for each question item because it has a Cronbach's Alpha if the Item Deleted value> 0.80.

Table 1. Results of Validity Test and Reliability Test of Co-Creating Value (CCV)

Indicators	Questionnaire Items	Corrected Item-Total Correlation (r count)	Validity Criteria	Cronbach's Alpha if Item Deleted	Reliability Criteria
CCV1: Time spent is valuable	CCV1.1: The time I spend interacting with this product is valuable.	0.560	Valid	0.890	Reliable
	CCV1.2: The time I spend using this product feels worthwhile.	0.389	Valid	0.894	Reliable
	CCV1.3: I feel satisfied with the time I spend participating with this product.	0.741	Valid	0.884	Reliable
CCV2: Working together	CCV2.1: I am cooperating with the company in creating product value.	0.373	Valid	0.896	Reliable
	CCV2.2: I am involved in a collaboration to improve the product.	0.568	Valid	0.888	Reliable
	CCV2.3: The company and I work together to ensure product quality.	0.591	Valid	0.887	Reliable
CCV3: Contributing experience	CCV3.1: My experience is recognized in the development process of this product.	0.679	Valid	0.883	Reliable
	CCV3.2: I feel the company values the contribution of my experience to this product.	0.829	Valid	0.878	Reliable
	CCV3.3: I actively contribute my experience to improve this product.	0.753	Valid	0.880	Reliable
CCV4: Shared benefits	CCV4.1: I feel the benefits of my participation in using this product.	0.560	Valid	0.890	Reliable
	CCV4.2: My participation in this product benefits both me and the company.	0.389	Valid	0.894	Reliable
	CCV4.3: I get benefits equivalent to the effort I put into interacting with this product.	0.741	Valid	0.884	Reliable
CCV5: Enjoying the process	CCV5.1: I enjoy the process of using this product.	0.373	Valid	0.896	Reliable
	CCV5.2: The process of using this product gives me pleasure.	0.568	valid	0.888	Reliable
	CCV5.3: I feel good every time I engage with this product.	0.591	Valid	0.887	Reliable

Notes:
1. The value of r table product moment significance 5%; N: 150 = 0.159
2. In the Reliability Statistics table for the Co-Created Value Variable, the Guttman Split-Half Coefficient value = 0.981\ is jointly reliable.

This study examined the effect of Value Consciousness VC, Co-creating Customer Value CCV, and Perceived Environmental Value PEV on Customer Loyalty CL. The analysis results show that CCV has a very low contribution of .8227% and is insignificant to CL p = 0.672. This result indicates that co-creation, in the context of this study, may not have a dominant role in shaping customer loyalty compared to VC and PEV. This finding relates to the research of Smith et al. (2019), where the deployment of co-creation may vary, depending on the relevance of the context and customer priorities. Customers may have been more concerned with the direct VA they get, i.e., competitive pricing or sustainability impact, than the co-creation process. However, this finding is not possible with Jones' (2020) research, where the authors found a significant effect of co-creation directly on CL in industries where customer cities were extensively explored.

Since co-creation is at the core of SDL, the values are likely less relevant to those customers if they feel involved in the co-creation process and that the view will lead to the expected outcome. This research has several implications. Theoretically, it enriches the SDL literature by enhancing that the contribution of the co-creation process can be influenced by context relevance and customer needs. Practically, it steers the company towards the proper co-creation process. The company must ensure the customer understands that engaging in the value-creation

process entirely makes sense and delivers the desired results. This can be done by enhancing the customer experience with a value creation process that is value-worthy and personalized, integrating PEV or VC design elements with co-creative communication, or integrating PEV from the customer. In general, companies should re-invest in value creation, invoke more value because it is actually from the customer, and deliver value that is feasible within the right bounds of reasonableness.

However, this study has some aspects that should be considered and improved. One is the measurement of CCV, which may not capture broader dimensions of user experience, such as emotional or social elements of co-creation. The demographics of the focused industry respondents may also be a limitation for generalization. As a result, future research is also needed to cover broader dimensions of co-creation, consider emotional and social values, and examine the role of CCV in a global context or in industries with higher levels of personalization. In conclusion, the contribution of CCV to CL in the case of this study was minimal and insignificant, suggesting that the relevance of co-creation depends on market imperatives and user needs. This is why this research provides important insights on how to sustain the co-creation process, focusing on how companies can maximize it through direct prioritization of relevance and user benefits in markets where economic and sustainability factors are key.

Table 2. Results of Validity Test and Reliability Test of Value Consciousness (VC)

Indicators	Questionnaire Items	Corrected Item-Total Correlation (r count)	Validity Criteria	Cronbach's Alpha if Item Deleted	Reliability Criteria
VC1: Paying attention to price and quality	VC1.1: I always look for products with affordable prices and good quality.	0.533	Valid	0.932	Reliable
	VC1.2: Product quality is as important as price to me.	0.815	Valid	0.924	Reliable
	VC1.3: I will not sacrifice quality for the low price.	0.533	Valid	0.932	Reliable
VC2: Checks price for best value	VC2.1: I compare prices before buying to ensure the best value.	0.702	Valid	0.926	Reliable
	VC2.2: I always check product prices across multiple stores before buying.	0.815	Valid	0.924	Reliable
	VC2.3: It is important to compare prices before making a purchase.	0.598	Valid	0.930	Reliable
VC3: Compares prices to ensure best value	VC3.1: I often compare prices of similar products to get the best value.	0.702	Valid	0.926	Reliable
	VC3.2: I would not buy a product without comparing its price first.	0.815	Valid	0.924	Reliable
	VC3.3: Comparing prices is an important part of my shopping process.	0.815	Valid	0.924	Reliable
VC4: Ensure the product/service is worth the money spent	VC4.1: I make sure the product I buy is worth the money I spend.	0.533	Valid	0.932	Reliable
	VC4.2: It is important to get value for money.	0.702	Valid	0.926	Reliable
	VC4.3: I will not buy a product if it is not worth the price.	0.815	Valid	0.924	Reliable
VC5: Maximize quality and benefits for the money spent	VC5.1: I try to get the best quality for every dollar I spend.	0.598	Valid	0.930	Reliable
	VC5.2: I look for products that offer maximum benefits for the price.	0.702	Valid	0.926	Reliable
	VC5.3: Maximizing the quality and benefits of every purchase is important.	0.533	Valid	0.533	Reliable

Notes:
1. The r table product moment significance value is 5%; N: 150 = 0.159.
2. The reliability Statistics table for the Value Consciousness Variable has a Guttman Split-Half Coefficient value = 0.989→Reliable in combination

The first research objective is to examine the correlation between Value Consciousness VC, Creating Customer Value CCV, Perceived Economic Value PEV, and Customer Loyalty CL. Data analysis shows that VC has a positive effect of 48.8991% p = 0.002 on CL. This means that VC plays a significant part in forming CL tormentors, especially in markets that place more importance on economic aspects. Furthermore, Li et al. (2022) found that in highly competitive markets, brand-conscious customers are more loyal to brands that can provide the best benefits in terms of value. Chen et al. (2021) also found that value-conscious customers are more likely to be loyal to transparent e-commerce platforms in price, exclusive discounts, and various other economic benefits simultaneously. However, in the Service-Dominant Logic SDL concept, the client appears as a value dilation that will always give more importance to value prevention than resources spent.

In this regard, the findings of this study may provide another global perspective in the context of SDL. Customers with high-value consciousness tend to assess costs and pay attention to economic functions and value processes that suit their needs. Gonzalez et al. (2020). This study also shows that customers with value consciousness are more likely to be loyal to a transparent brand that communicates competitive price engagement. These customers are generally more aligned with the brand because they feel that the product or service matches

their economic value expectations. This finding is important and corroborating, proving the theory that thoughts can control people's behavior. In this case, value-based marketing is also key to generating more customer engagement in the brand. Promoting features that make the brand stand out by combining price and quality based on better perception is one way out.

The implications of these findings are important on several levels, which can be summarized as follows: Theoretical: These findings reinforce the literature that Value Consciousness is one of the key dimensions in building Customer Loyalty, particularly in the context of SDL. Customers assess their value based on price and the holistic benefits they consider, including sustainability elements. Practically, companies have been shown to increase their customer loyalty through products that offer the best value in their category, i.e., optimal product quality at the lowest possible price. Efficiently communicate economic value through value-based promotions and marketing campaigns. Integrate sustainability as a new dimension to deepen the market's understanding of brand value to more environmentally conscious customers. Corporate Policy: Companies in value markets will be more vulnerable to marketers with high levels of value consciousness trying to understand how their prices are structured. Therefore, selective strategies in this sector should focus on cost efficiency.

The data shows that this model has two main limitations. First, it is restricted to a context that may not be generalizable to less price-sensitive markets. Second, this study's measurement of Value Consciousness involves the economic benefit dimension but not the emotional and social dimensions, which may be relevant in specific contexts. Therefore, future research should (i) look for relationships between Value Consciousness and other value dimensions, such as experiential value lead-to-us value and which are included; (ii) conduct cross-cultural studies to understand how Value Consciousness affects customer loyalty across different geographical contexts; and, finally, (iii) integrate digital elements and understand its role as a technology in enhancing Value Consciousness, by personalizing services and customer experiences. The results of this study show that Value Consciousness has a positive influence on Customer Loyalty. Customers with high-value consciousness are typically loyal to goods and services that appeal to value-oriented customers; value hunters tend to be loyal to goods and services that offer optimal apparent value. This valuable synergy provides important insights for companies, enabling them to strengthen customer relationships by integrating sustainability and cost-efficiency aspects in their marketing strategies.

Table 3. Results of Validity Test and Reliability Test of Perceived Economic Value (PEV)

Indicators	Questionnaire Items	Corrected Item-Total Correlation (r count)	Validity Criteria	Cronbach's Alpha if Item Deleted	Reliability Criteria
PEV1: Saving money	PEV1.1: This supplier helps me save money compared to other suppliers.	0.688	Valid	0.877	Reliable
	PEV1.2: Using products/services from this supplier makes me feel more economical.	0.628	Valid	0.879	Reliable
	PEV1.3: I realize that I can reduce costs by choosing this supplier.	0.480	Valid	0.887	Reliable
PEV2: Value or convenience	PEV2.1: This supplier provides better value than others.	0.608	Valid	0.880	Reliable
	PEV2.2: Products/services from this supplier offer greater convenience.	0.645	Valid	0.878	Reliable
	PEV2.3: I perceive additional value when using products from this supplier.	0.475	Valid	0.888	Reliable
PEV3: Competitive and reasonable price	PEV3.1: The price of products from this supplier is competitive compared to other suppliers.	0.548	Valid	0.884	Reliable
	PEV3.2: The prices offered by this supplier are reasonable.	0.583	Valid	0.882	Reliable
	PEV3.3: The price from this supplier is proportional to the quality I receive.	0.628	Valid	0.879	Reliable
PEV4: Low price/performance ratio	PEV4.1: This supplier has a lower price/performance ratio than other suppliers.	0.688	Valid	0.877	Reliable
	PEV4.2: The product quality is comparable to the price offered by this supplier.	0.628	Valid	0.879	Reliable
	PEV4.3: I get adequate performance for the price I pay at this supplier.	0.608	Valid	0.880	Reliable

Note:
1. The r table product moment significance value is 5%; N: 150 = 0.159.
2. The Reliability Statistics table for the Value Consciousness Variable has a Guttman Split-Half Coefficient value = 0.941 → Reliable in combination.

This study aims to examine the effect of Value Consciousness (VC), Creating Customer Value (CCV), and Perceived Economic Value (PEV) on Customer Loyalty (CL) and the tub between the two. The analysis results show that PEV significantly affects CL, with a relative contribution of 50.2897% and p-value = 0.000. This finding confirms that customers' perception of value for money or economic value obtained from a product or service

significantly influences their Loyalty. To a large extent, it is important for benefit and efficiency markets based on today's consumer markets. The research findings also support the results of research by Kaur et al. (2021), showing that customers who feel they get value for money tend to remain loyal consumers.

From the Service-Dominant Logic viewpoint, value is determined by customers through their consumption experience, which is called value-in-context. PEV is one of the important elements of value-in-context because customers often evaluate the economic benefits they get based on the economic relevance of their context. The perceived economic value in this study indicates that customers feel the product or service meets their needs and provides significant benefits compared to the cost. This research also supports the findings of Wang et al. (2022), stating that perceived economic value can be strengthened through communication strategies, such as clear price promotions, and additional benefits, such as time savings. In practice, perceived economic value is not just price; it includes time efficiency, resource savings, and increased customer utility. Therefore, PEV should be considered a combination of consistent quality, direct benefits, and additional perceived economic attributes. Some important implications that can be drawn from this research are as follows:

Theoretical Implications: This research strengthens the literature that maintains that PEV is a key dimension determining Customer Loyalty, especially in markets based on efficiency and functional value. In the SDL frame, PEV describes value-in-context, where customers evaluate economic benefits based on the use context. Research Implications: In the context of SDL, buying customer loyalty paves the way to see the power of economic value in achieving Loyalty. Practical Implications: Companies can increase their market share by increasing their Loyalty by Providing products or services that mean economic value, i.e., value for money, through value policies and policies such as attractive prices. Companies should promote their advantages, e.g., distort PEV through advertising on results. Integrate burnt-based policies. Policy Implications: Firm policies may effectively elicit perceptions of PEV.

The main limitation of this study is that it was written primarily in a specific market that is unlikely to fully reflect customer preferences in other markets, such as premium markets that pay less attention to price. In addition, the PEV metric is calculated only in terms of direct economic benefits, without the aid of specific dimensions, such as time efficiency or emotional benefits of economic value. Future research should include: 1. Other dimensions of PEV, including efficient time and emotional benefits. 2. Cross-industry studies to understand how perceived economic value affects customer loyalty in each industry. 3. The role of technology in enhancing perceived economic value, such as price personalization or digital-based benefits. From the research results previously described, it can be concluded that Perceived Economic Value significantly affects Customer Loyalty. More efficiently written the market, customers are more likely to be loyal to brands that provide optimal economic benefits. This provides valuable insight into how companies can improve perceived economic value to strengthen customer relationships, especially by making cost efficiency and profit in marketing strategies more conspicuous.

Table 4. Results of Validity Test and Customer Loyalty Reliability Test (CL)

Indicators	Questionnaire Items	Corrected Item-Total Correlation (r count)	Validity Criteria	Cronbach's Alpha if Item Deleted	Reliability Criteria
PEV1: Saving money	PEV1.1: This supplier helps me save money compared to other suppliers.	0.677	Valid	0.862	Reliable
	PEV1.2: Using products/services from this supplier makes me feel more economical.	0.381	Valid	0.886	Reliable
	PEV1.3: I realize that I can reduce costs by choosing this supplier.	0.505	Valid	0.875	Reliable
PEV2: Value or convenience	PEV2.1: This supplier provides better value than others.	0.781	Valid	0.851	Reliable
	PEV2.2: Products/services from this supplier offer greater convenience.	0.570	Valid	0.870	Reliable
	PEV2.3: I perceive additional value when using products from this supplier.	0.781	Valid	0.851	Reliable
PEV3: Competitive and reasonable price	PEV3.1: The price of products from this supplier is competitive compared to other suppliers.	0.677	Valid	0.862	Reliable
	PEV3.2: The prices offered by this supplier are reasonable.	0.523	Valid	0.875	Reliable
	PEV3.3: The price from this supplier is proportional to the quality I receive.	0.781	Valid	0.851	Reliable

Notes:
1. The r table product moment significance value is 5%; N: 150 = 0.159.
2. The reliability Statistics table for the Value Consciousness Variable has a Guttman Split-Half Coefficient value = 0.889◊ Reliable.

Simultaneous Effect of CCV, VC, and PEV on CL

This study examines the simultaneous influence of Co-creating Customer Value (CCV), Value Consciousness, and Perceived Economic Value on Customer Loyalty. The results of the above analysis show that the three independent variables simultaneously have a significant effect on CL. The F value is 301.396 with a

value of 0.000. This percentage indicates that combining the three variables can explain the variation in customer loyalty claims by 86.1%. This result confirms that various factors, such as co-creation experience dimensions, value awareness, and economic perceptions of benefits, determine festival variables. Therefore, each variable plays a role in determining the loyalty variable. Customer loyalty will be more likely if these instruments are harmonized in one analysis.

The Role of CCV, VC, PEV in Simultaneous Relationship.

Co-creating Customer Value, or CCV, describes the collaboration process between customers and companies to create value. Although it contributes relatively less to VC and PEV, CCV is still a key component in enhancing customized customer experiences. As Grönroos and Voima (2013) suggest, value creation is more substantial in terms of Loyalty when customers feel actively involved in the value creation. For this reason, you may not see a direct influence of CCV on CL in this study. However, the simultaneous relationship shows that both dimensions in their contribution are still relevant as part of a broader framework. In the simultaneous relationship, Value Consciousness plays the most important role in influencing customers.

In the simultaneous relationship, VC is the main force that drives the strengthening effect of PEV and CCV on customer loyalty. Perceived Economic Value (PEV) shows the most significant influence in this model, which confirms the importance of customer perception of economic value in influencing Loyalty. In the simultaneous relationship, PEV serves as a decisive, independent factor and strengthens the effects of VC and CCV in building customer loyalty.

Interpretation of the Theory Environment. In the SDL environment, value is co-produced by clients and producers through created and significant interactions. The joint influence of CCV, V C, and P EV explains the relationship between the three constructs. Therefore, client loyalty behavior is attributable not to a single value dimension but to a mixed pattern. For example, these results confirm the theory of value in context. Client value is adjusted based on relevance and experience.

The implications generated through this study can shed light on several important findings:

From the analysis, it is proven that Co-creating Customer Value, Value Consciousness (VC), and Perceived Economic Value have a significant influence on the Customer Loyalty variable. The three variables can explain 86.1% of the customer loyalty variable; therefore, a multi-dimensional approach to marketing strategy is required because all these independent variables influence the dependent variable. The study results provide insight for companies to utilize the interaction of co-creation, economic value, and customer awareness to achieve higher levels of Loyalty.

Classical Assumption Test with SPSS
Normal distribution

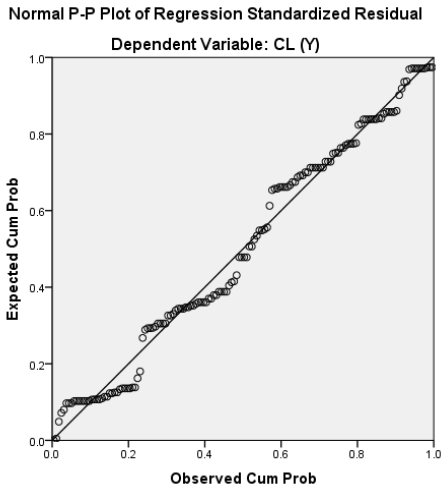

Figure 2. Normal P-P Plot Graph of CL (Y)

Regular P-P Plot Graph: The above graph displays the Normal P-P Plot graph used to test the normality assumption. The points on the graph are allowed to follow the diagonal line or the identified distribution line. The X-axis shows the cumulative probability of Observed Cum Prob residuals, while the Y-axis aims to show the cumulative probability of Expected Cum Prob residuals. The dots are the observed standardized residual values, and the diagonal line is the ideal normal distribution. If evenly distributed points follow the diagonal line and there

are few deviations, the residuals are normally distributed. The basis for decision: Normal P-P Plot visualization: 1. If the points follow the diagonal line consistently, then the assumption is met. 2. If there is a deviation from the diagonal line to a specific size, the assumption is not met. Graph Conclusion: Based on the graph above, the points on the Normal P-P Plot follow the diagonal line well, and the residual distribution is close to normal.

Multicollinearity

Knowledge Test Processing Multicollinearity on Result Tolerance and VIF

Multicollinearity is a test to determine whether the linear relationship between the independent variables in the regression model is robust. Multicollinearity will affect the interpretation of regression coefficients.

1. Tolerance parameter: Tolerance measures the proportion of variance in an independent variable that other independent variables cannot explain. A small tolerance value will indicate potential multicollinearity. Formula: Tolerance=1-R 2 (coefficient of determination of independent variables on other variables).
2. Variance Inflation Factor (VIF) measures how much the coefficient variability increases due to multicollinearity. Formula: VIF=1/Tolerance.

Table 5. Multicollinearity Test processing results

Model	Tolerance	VIF
CCV (X1)	0.977	1.024
VC (X2)	0.155	6.441
PEV (X3)	0.155	6.465

The commonly used decision criteria for determining tolerance and VIF are as follows:
Tolerance:
If the Tolerance value> 0.1, then there is no multicollinearity problem.
If the Tolerance value ≤ 0.1, then multicollinearity is indicated.

VIF:
If the VIF value is ≤ 10, there is no multicollinearity problem.
If the VIF value is > 10, there is a multicollinearity problem.
Interpretation of results based on output:
CCV variable (X1):
Tolerance = 0.977 (no multicollinearity).
VIF = 1.024 (no multicollinearity).
VC variable (X2):
Tolerance = 0.155 (no multicollinearity because it is still above 0.1).
VIF = 6.441 (no multicollinearity as it is below 10).
PEV variable (X3):
Tolerance = 0.155 (no multicollinearity).
VIF = 6.465 (no multicollinearity because it is below 10).
Conclusions: There is no serious problem with multicollinearity in this model. This is because all VIF ≤ 10 and tolerance > 0.1.

Heteroscedasticity

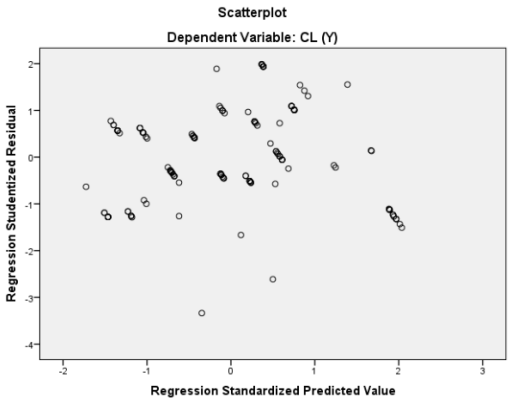

Figure 2. Regression Standardized Predicted Value.

Explanation of Classical Assumption Test: Heteroskedasticity

The heteroscedasticity test aims to evaluate whether the residual variance in the regression model is homoscedasticity or changing (heteroscedasticity). If the qualitative data does not meet the assumptions, it will cause brilliance so that the causal results are misinterpreted.

Scatterplot Interpretation

X-axis: shows the Regression Standardize Predicted Value (model prediction result).

Y-axis: shows the regression studentizes Residual (error justified).

Data pattern:

1. The assumption of homoskedasticity is met if the data points are randomly scattered around a horizontal line that does not form a pattern (for example, a cone, arc, or cluster pattern).
2. The assumption of homoskedasticity is not met if the data points show a specific pattern (for example, a bush, narrowing, or a specific systematic pattern).

Results Based on Figure. From the scatterplot, as follows The dots appear scattered around the horizontal line with no pattern for narrowing or widening the line. There is no apparent systematic pattern in the distribution of points. Conclusion. Heteroscedasticity Assumption: There is no sign of heteroscedasticity in the regression model. Therefore, the model meets the assumption of homoscedasticity.

Multiple Linear Regression Analysis

Table 6. The result of the t-test processing

Model		t	Sig.
1	(Constant)	1.775	0.078
	CCV (X1)	0.686	0.494
	VC (X2)	7.675	0.000
	PEV (X3)	4.389	0.000

Explanation of Significance Test of Regression Coefficient The t-test assesses the significance of each independent variable in influencing the dependent variable in the regression model. It aims to see whether the independent variable has a significant relationship with the dependent variable.

Parameters used:

1. T-Value: A test statistic to measure the effect of the independent variable on the dependent variable.
2. Sig. (p-value): A probability value that indicates the significance level of the relationship. Usually, the significance level used is 0.05.

Decision Criteria:

1. H_0 (Hypothesis 0): The regression coefficient of the independent variable = 0; There is no effect
2. H_1 (Alternative hypothesis): The regression coefficient of the independent variable ≠ is 0; There is an effect

Decision: 1. Reject H_0 if p-value ≤ 0.05; there is an effect 2. AcceptAccept H_0 if p-value > 0.05; there is no significant effect.

Interpretation of Results

Based on the output obtained:

Constant t = 1.775, Sig. = 0.078 The constant is insignificant (p> 0.05), indicating that if all independent variables take place, the constant value can be zero.

CCV (X1): t = 0.686, Sig. = 0.494

The CCV variable is not significant (p> 0.05). This means that CCV has no significant effect on the dependent variable CL in this model.

VC (X2):

t = 7.675, Sig. = 0.000 The VC variable is significant (p ≤ 0.05). This means that VC has a significant influence on the dependent variable CL. Due to the large t-test value, it can be concluded that VC is a strong predictor in the model.

PEV (X3): t = 4.389, Sig. = 0.000

The PEV variable is significant (p ≤ 0.05), indicating that PEV also significantly influences the dependent variable CL. The sizable t-test value indicates the strong influence of PEV on the model.

Test t conclusion Independent variables that are significant in the model:

VC (X2) with a value of t = 7.675 and Sig. = 0.000. PEV (X3) with t value = 4.389 and Sig. = 0.000.

Independent variables that are not significant: CCV (X1) with t value = 0.686 and Sig. = 0.494. This variable does not significantly contribute to the model's dependent variable.

Recommendations Focus on significant variables: VC X2 and PEV X3 need more attention in the study because they significantly influence CL Y. So, strategies that involve increasing value-consciousness VC and perceived environmental value PEV will have a tangible impact on the dependent variable. Variable evaluation is not significant: CCV X1 may require additional evaluation, such as Considering the role of this variable in the indirect relationship, for example, as a mediator or moderator. If the results remain insignificant, consider removing this variable from the model to simplify the analysis.

Table 7. F Test Processing Results

	Model	F	Sig.
1	Regression	301.396	0.000[b]
	Residual		
	Total		

Explanation of F Test in Regression Model This F or ANOVA test is used to determine whether the regression model as a whole is significant. In other words, this test wants to know whether all independent variables can significantly affect the dependent variable. Therefore, the explanation of this F test is based on the following table output: Description: F = 301.396 is the statistical value of the F test. The greater the value, the more significant the combined effect of the independent variable on the dependent variable. Sig. = 0.000: is the p-value result. In the SPSS output, a "sig." result shows how significant the model is.

Decision Criteria Hypothesis:

1. H0: There is no simultaneous significant effect between the independent variable and the dependent variable; regression coefficient = 0
2. H1: There is a simultaneous significant effect between the independent variable and the dependent variable; regression coefficient ≠ 0

Decision:

If Sig ≤ 0.05, then reject H0, the model is significant simultaneously.
If Sig > 0.05 fails to reject H0, the model is not significant simultaneously.

Interpretation of Results:

In output: F = 301.396, Sig. = 0.000; The regression model is significant at the α= 5% significance level.

Conclusion:

The model is simultaneously significant; the independent variables in the model can explain the variability of the dependent variable. From the F test above, it can be concluded that the overall regression model is significant;

Analysis of Relative Contribution Value and R-Square

The Relative Contribution and R-squared values illustrate how much each independent variable contributes to producing a regression equation's dependent variable. SR (%) shows the percentage contribution of each independent variable to the dependent variable used. The following calculation is obtained:

1. CCV: 0.8227%. The CCV variable contributes a very small SR (%) to the dependent variable CL.
2. CV: 48.7991%. CCI has the highest SR percentage (%) of insurance payment claims.
3. PEV: 50.2897%. PEV contributes the most SR (%) to the correlation between other variables.
4. R-Square: 86.1%. 86.1% of all CV, PEV, and CCV variables explain CL (Y).

This model is already good (86.1%). That is why PEV and CV are key, and CCV is not a contribution. However, the results can provide positive suggestions for decision-makers.

CONCLUSION

It can be concluded that Co-creating Customer Value, Value Consciousness, and Perceived Economic Value simultaneously influence Customer Loyalty and together contribute a total of $R^2 = 86.1\%$ to it. This suggests that the combination of these three factors is out of the ordinary as to what factors might explain most of the changes in consumer loyalty behavior. On the other hand, PEV significantly contributed to CL, indicating the importance of perceived economic value in customers' decision to remain loyal. VC also plays a significant role and shows customers' awareness of the value they get (between price and breeders) and quality, and is a key precursor to Loyalty. Although it contributes much less directly, CCV is still relevant in the simultaneous model. It is a supporting element that can strengthen or weaken the customer experience when linked to active

involvement in the value-creation process of the offering.

Value-in-context, within the Service-Dominant Logic framework, emphasizes that value is not inherent in the product or service but created through the interaction of the company and the customer in a specific context relevant to the customer and his/her needs or to a specific experience. From this research, support was found that customer loyalty does not depend on one dimension of value but as a combination of different value dimensions consisting of Co-creating Customer Value, Value Consciousness VC, and Perceived Economic Value that provides a holistic customer experience.

The relevance of value-in-context in customer loyalty highlights the role of co-creation (CCV) in fostering Loyalty by enhancing customer engagement with the value-creation process. While CCV's direct influence on chat loyalty and value creation is minimal, it becomes crucial when customers feel valued for creating value that aligns with their interests. Customer awareness, particularly in balancing price and quality, is a key measure of Loyalty, with value-in-context (VC) helping customers perceive symbolic or less visible aspects of value, particularly in Service-Dominant Logic (SDL). Perceived economic value (PEV) strengthens Loyalty by providing measurable, rational value, ensuring that the resources spent by customers are justified by the benefits received. This research contributes to understanding customer loyalty by offering a multi-dimensional approach to value creation, emphasizing the interplay of CCV, VC, and PEV. It suggests that Loyalty is not based on a single dimension but on the complementary relationship between these dimensions: CCV as the experience element that builds trust, VC as the foundation for subjective evaluation, and PEV as the perceived outcome that guides customer decisions. The study also underscores the importance of a holistic, multi-dimensional approach to Loyalty, where value is seen not as a result but as an ongoing process of co-creation and experience. In practical terms, this concept of value-in-context can guide companies in developing more relevant strategies aligned with customer needs while offering significant theoretical contributions. These include supporting SDL theory, demonstrating the interdependent nature of CCV, VC, and PEV in fostering Loyalty, and expanding the understanding of value co-creation in building business ecosystems. However, the study's focus on a single industry limits its generalizability, and further research is needed to explore the influence of emotional value, hierarchical value, and other market dynamics on customer loyalty. Technology-based models, such as those for digital platforms, could enhance co-creation and valuation processes across industries.

REFERENCES

.

Busser, J. A., & Shulga, L. V. (2018). Co-created value: Multi-dimensional scale and nomological network. Tourism Management, 65, 69-86. doi:10.1016/j.tourman.2017.09.014

Chandler, J. D., & Lusch, R. F. (2015). Service systems: A broadened framework and research agenda on value propositions, engagement, and service experience. Journal of Service Research, 18(1), 6-22. DOI: 10.1177/1094670514537709

Chebat, J. C., Davidow, M., & Borges, A. (2017). More on the role of switching costs in service loyalty: A multi-dimensional perspective. Journal of Retailing and Consumer Services, 35, 94-102. DOI: 10.1016/j.jretconser.2016.12.010.

Chen, X., Wang, Y., & Zhao, H. (2021). The impact of value consciousness on customer loyalty in e-commerce: Evidence from discount-focused platforms. Journal of Business Research, 129, 125–134. DOI: https://doi.org/10.1016/j.jbusres.2021.02.045

Cheng, J. M. S., Chen, L. S., Lin, J. Y. C., & Wang, E. S. T. (2019). The impact of perceived switching value on customer loyalty and satisfaction in mobile services. Telematics and Informatics, 39, 158-169. DOI: 10.1016/j.tele.2019.01.008

Choi, J., & Ok, C. (2018). The effects of consumers' price consciousness and satisfaction on Loyalty in the restaurant industry. International Journal of Hospitality Management, 70, 214–222. DOI: 10.1016/j.ijhm.2017.11.011

Euromonitor International. (2021). Consumer Lifestyles in Indonesia.Gonzalez, C., Esteves, F., & Montero, D. (2020). The role of value consciousness in customer loyalty: Evidence from the retail sector. European Journal of Marketing, 54(7), 1713-1735. DOI: https://doi.org/10.1108/EJM-04-2019-0303

Grönroos, C., & Voima, P. (2013). Critical service logic: Making sense of value creation and co-creation. Journal of the Academy of Marketing Science, 41(2), 133-150. DOI: 10.1007/s11747-012-0308-3

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). Multivariate Data Analysis. Cengage Learning.

Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010). Consumer co-creation in new product development. Journal of Service Research, 13(3), 283-296. DOI: 10.1177/1094670510375604

Hsu, L. C. (2013). Consumer switching behavior in service industries: A model development and test. Service Industries Journal, 33(15-16), 1553–1570. DOI: 10.1080/02642069.2011.624596.

Ind, N., Iglesias, O., & Schultz, M. (2017). Co-creation: New pathways to value. Journal of Brand Management, 24(4), 330–332. DOI: 10.1057/s41262-017-0046-6

Itani, O. S., & Inyang, A. E. (2020). Value Consciousness and Price Perception in Digital Commerce. Journal of Retailing and Consumer Services, 52, 101925. DOI: 10.1016/j.jretconser.2019.101925.

Kaur, H., & Soch, H. (2018). Does perceived switching cost moderate the effect of satisfaction on Loyalty? A study of Indian retail banking sector. Journal of Retailing and Consumer Services, 44, 11-21. DOI: 10.1016/j.jretconser.2018.06.008.

Kaur, P., Dhir, A., & Rajala, R. (2021). Perceived value and loyalty intentions in e-commerce: The moderating role of psychological ownership. Journal of Retailing and Consumer Services, 61, 102562. DOI: https://doi.org/10.1016/j.jretconser.2021.102562

Kotler, P., & Keller, K. L. (2016). Marketing Management (15th ed.). Pearson.

Lee, J., & Chen-Yu, J. H. (2018). Effect of Value Consciousness on Perceived Quality and Purchase Intentions of Private Label Apparel. Journal of Retailing and Consumer Services, 42, 121-130. DOI: 10.1016/j.jretconser.2018.02.011.

Li, X., Zhou, L., & Wang, X. (2022). Value consciousness and brand loyalty: The moderating role of perceived value and satisfaction. Journal of Consumer Behavior, 21(3), 568–582. DOI: https://doi.org/10.1002/cb.2031

Malhotra, N. K. (2015). Marketing Research: An Applied Orientation. Pearson Education.

Marbach, J., Lages, C., Nunan, D., & Ekinci, Y. (2019). Consumer engagement in online brand communities: the moderating role of personal values. European Journal of Marketing, 53(9), 1671-1700. doi:10.1108/ejm10-2017-0721

Mintel (2020). Sustainability and Consumer Behavior Report.

Nielsen. (2021). Global Consumers' Evolving Priorities: The Green Factor.

Pandey, N., & Srivastava, R. K. (2019). Effect of Value Consciousness on Perceived Value in Online Shopping: The Role of Shopping Motivation. Journal of Internet Commerce, 18(1), 41-66. DOI: 10.1080/15332861.2019.1567184.

Ranjan, K. R., & Read, S. (2016). Value co-creation: Concept and measurement. Journal of the Academy of Marketing Science, 44(3), 290-315. DOI: 10.1007/s11747-014-0397-2

Song, H., Cadeaux, J., & Yu, K. (2016). The effects of service supply on perceived value proposition under different levels of customer involvement. Industrial Marketing Management, 54, 116-128. doi:10.1016/j.indmarman.2015.12.003

Vargo, S. L., & Lusch, R. F. (2016). Institutions and axioms: an extension and update of service-dominant logic. Journal of the Academy of Marketing Science, 44(1), 5-23. DOI: 10.1007/s11747-015-0456-3

Wang, Y., Zhou, L., & Li, X. (2022). Enhancing perceived economic value through digital promotions: Evidence from online retail platforms. Journal of Business Research, 139, 891–905.DOI: https://doi.org/10.1016/j.jbusres.2021.10.034

Yi, Y., & Gong, T. (2013). Customer value co-creation behavior: Scale development and validation. Journal of Business Research, 66(9), 1279-1284. DOI: 10.1016/j.jbusres.2012.02.026

Zhang, J. Q., Dixit, A., & Friedmann, R. (2019). Customer loyalty and switching behavior: A replication of the switching costs model. Journal of Business Research, 96, 51–60. DOI: 10.1016/j.jbusres.2018.10.0