Customer Brand Engagement and Value Co-Creation for Green Product During the COVID-19

Agus Utomo¹, Yosephine Angelina Yulia², Yenni Khristiana³ and Lukman Ahmad Imron Pahlawi⁴

Abstract

Global warming that is happening today is the effect of extreme climate change. This is a concern for companies to issue environmentally friendly products. The Covid-19 pandemic has forced many businesses to change their processes to adapt to the new normal. Due to the fear of contamination caused by the COVID-19 pandemic, consumers are starting to shop from home rather than going out, as they perceive it as low risk. Therefore, there has been a change in consumer attitudes and behaviour, and this pandemic has changed consumer buying behaviour. Brands are advised to continue to carry out genuine communication with the public through various social media to build stronger bonds (solid bonds) with potential consumers to create shared value creations, especially during the COVID-19 pandemic, which adopts the new normal and stays at home. Aim: This study aims to understand better the nature of engagement that creates value co-creation during the COVID-19 period and in the future for green products. Method: This paper conducted an online survey with 130 adult subjects. This paper used structural equation modelling was used to test research hypotheses. Result: The results analysis revealed that customer experience has a significant effect on individual customer brand engagement and community customer brand engagement. In addition, individual customer brand engagement significantly impacts value co-creation. This paper contributes to consumer buying behaviour for green products during the COVID-19 pandemic.

Keywords: Consumer Behaviour and Experience, Customer Brand Engagement, Value Co-Creation, Green Product, Covid-19.

INTRODUCTION

Today, global warming is one of the issues of environmental damage that is most discussed by the worldwide community due to the effects of extreme climate change. Therefore, global warming caused by the greenhouse effect hurts the environment such as forest fires and extreme transition seasons, causing crop failures and various natural disasters such as storms, flash floods and so on (Lili Zhao et al., 2023; Linhao Zhao et al., 2023). Awareness of the environment has become a critical issue in this era of globalization. Many things, such as pollution and plastic waste, cause environmental pollution. This ecological issue causes consumers to be more careful in choosing products and brands that are more environmentally friendly. In response to the 1992 Rio Earth Summit and, more recently, the COP 21 Paris Agreement, global companies are seeking to innovate and develop products that reduce environmental impacts and risks (Chen, 2023). This is a concern for companies to issue environmentally friendly products namely green products.

Economic activities carried out by producers are increasingly moving towards green economy criteria because it was accelerated by the Covid-19 pandemic, which has made consumers increasingly want green products through reduced activities and motor vehicle traffic flow, which reduce fuel energy consumption levels and reduce air pollution, especially CO₂ gas emissions cause a greenhouse effect (Lî, 2023; Wang et al., 2023). The Covid-19 pandemic has forced many businesses and societies to change their processes to adapt to the new normal (Marhaeni et al., 2023; Werikhe, 2022). Due to the fear of contamination caused by the COVID-19 pandemic, consumers are starting to shop from home rather than going out, as they perceive it as a low risk. Therefore, there has been a change in consumer attitudes and behaviour, and this pandemic has changed consumer buying behaviour (Sapsanganboon & Faijaidee, 2024). Because of the health and safety benefits companies provide, many people choose e-retail channels in their buying behaviour to avoid leaving their homes. It has been found that consumer online channel selection is primarily determined by situational effects.
(Marhaeni et al., 2023). (Collins & Welsh, 2022) stated that the COVID-19 pandemic, one of the situational factors, effectively changed consumer intentions into online food ordering behaviour.

This phenomenon requires concerted action by governments, businesses, institutions and people at the national and international levels (Demiralay et al., 2023; Wei et al., 2020). To manage a crisis during a pandemic, there must be a smooth flow of information between different stakeholders to take appropriate action (Doern et al., 2019). In addition, it is essential to design efficient processes facing market problems to find sustainable solutions for companies and customers (Barbier, 2020). Finding innovative ways to improve the service experience is a challenge that companies face to remain competitive (Chen, 2023; Spence et al., 2024).

In Indonesia, to maintain relevance in these unprecedented times, businesses are considering new approaches to engaging their customers and new theoretical perspectives that can provide an underlying structure for a better understanding of the engagement phenomenon in this context. First, market share is built through brand awareness and brand image. Second, the last usage reflects the market share because it is the most purchased. Third, future intention implies consumer loyalty to a brand. On the other hand, top brands are built through three strategies: quality before price, innovation before cost, and engagement before sales. Quality before price means that a top brand must be built on a higher price because quality is much more critical. Innovation before cost means that great companies are always focused on innovation. Excellent companies think about cost-cutting and efficiency and focus on innovation. Engagement before sales is rightly practised in the digital era. Many startups are successful because they create engagement before sales (Bubnovskaia et al., 2024; Liu et al., 2022).

The intelligent public and critical consumers must be managed wisely because the feud of a brand with only one consumer can cause very diverse public responses or reactions and can spread quickly without being prevented. Brands are advised to continue to carry out genuine communication with the public through various social media to build stronger bonds (solid bonds) with potential consumers to create shared value creation, especially for brands that are oriented towards environmentally friendly products, which in the long run can reduce environmental damage.

The purpose of this study is to understand better the nature of engagement that creates value in co-creation during the COVID-19 period on environmentally friendly products. In this study, researchers used a customer experience (CE) view of ecologically friendly brands during the COVID-19 pandemic due to changes in experience during the new normal and referring to customer brand engagement. The customer experience view is critical as we focus on the customer's experience with the seller and the consumer-centred view, where the consumer takes over. An engaged customer is an asset for any brand (Bucak, 2023; Chen, 2023). Thus, the consumer experience of green brands involving customers aims to increase their engagement with the company, leading to value creation and two-way relationships in green products.

**METHOD**

**Green Economy and Green Product in Pandemic Covid-19**

Various tragedies and environmental crises on Earth have finally made humanity aware of the importance of preserving and sustaining the environment. The coronavirus pandemic could lead to a better understanding of the relationships that bind us globally. A complete health system is critical to protecting us from threats to health security, including climate change. Climate change has made conditions more favourable for the spread of various infectious diseases (Zhong et al., 2024). To limit the risk of contagious diseases, it is necessary to significantly reduce greenhouse gas emissions and limit global warming to 1.5 degrees. That is, to implement the Paris Agreement and step up green financing for economic development. The emergence of various terms as derivatives from an ecological perspective in multiple fields, including the terms green economy, green culture, green government, eco-city, green product, green design and so on. Global public awareness of environmental sustainability and sustainability also encourages the emergence of a green lifestyle.

In the baseline post-pandemic development scenario, considered by experts at the World Economic Forum, the essential prerequisites for normalizing activities include investments in long-term human health, the
environment and a green economy such as low-carbon electricity technologies, electric cars, solar energy, and renewable energy with reward in the form of various incentives such as free-in tariffs and tax incentive programs (Kormishkina et al., 2022; Zhang, 2023). The green focus of post-pandemic economic recovery will increase society's resilience to pandemics and other emergencies, including climate change (Wang et al., 2023). Even small changes in the behaviour of people, companies, and governments can significantly impact the green economy.

**Consumer Behavior in The New Normal**

Among the consequences of the Covid-19 pandemic, we have seen the closure of stores and other businesses for months. Consumers have avoided public places, shops, and cultural events, even when they are open. As a result, consumers begin to change their buying behaviour and habits on an ongoing basis.

Changes in consumer behaviour today, of course, occur because of the encouragement of changing conditions that force them to adapt to these conditions. However, current consumer behaviour may persist for quite a long time. Consumers also need time to readjust to their old habits and behaviours. Consumers, of course, are now accustomed to shopping or doing activities with minimal physical contact and carrying out health protocols anytime and anywhere because they still don't feel safe since this pandemic (da Fonseca et al., 2023).

For this reason, companies need to identify current behaviours that will determine the customer experience shortly. They must ensure these opportunities align with their business strategy and capabilities. The three priorities will define customer experience in the post-pandemic era: digital excellence, secure and contactless engagement, and dynamic customer insights (Feng & Chen, 2024). Each company will pursue these priorities differently based on the type of industry, its starting point, and competitive landscape. Many companies have already demonstrated their understanding of what matters to consumers and innovative ways to meet their old and new expectations.

**Consumer Experience/CE**

Consumer Experience (CE) is a psychological sensation manifested in response to the subjective or total perception accompanying service delivery (Sapsanguanboon & Faijaidee, 2024). Furthermore, the study understands CE as a combination of consumption, product, service and shopping experiences that are sourced from customer-brand interactions (Ojiaku et al., 2024). CE includes customer and non-customer experiences and is embodied as a broad experience construct (Nysveen et al., 2013). In addition, (Trivellas et al., 2020) describes CE as "consumers' perceptions, at all times of contact they have with a brand, whether it is in the brand image offered in an advertisement, during the first personal contact, or the level of quality about the personal treatment they receive". Many studies suggest that CE is generated during the customer's purchasing decision process, including information seeking, buying, acceptance and consumption of products or services. The impression of CE on consumer memory is more lasting than product features or benefits (Marhaeni et al., 2023).

These days, most companies are pursuing services by adding online channels and especially transitioning offline strategies to emerging technologies (Chen, 2023). This approach increases the point of contact by providing multiple channels for customer convenience, as well as providing additional services. According to Kwon and Lennon (2009), the synergy between offline and online services is generated by the seamless integration between the two channels that enriches CE. Similarly, unsatisfactory CE in one context can affect other contexts. In particular, the Internet has changed how services are delivered and created new forms of customer-enterprise interaction. Thus, the fundamental interpersonal interactions, generally associated with offline service failures and recovery situations, are also replicated through various technological aspects, of which social media appears to be at the forefront (Georgiou et al., 2024; Zhong et al., 2024).

In the current COVID-19 pandemic situation, CE has shifted from a normal situation to a new normal situation where online services dominate during this pandemic. The changes that occur also make the perceived CE different. Everywhere, there is a decline in consumer spending, and shopping behaviour has shifted from direct shopping to online shopping. Staying safe – always safe, stay healthy – always healthy and protected from the COVID-19 virus has become a top priority for companies and consumers. Consumer experiences vary
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depending on the industry sector. When companies can identify trends in customer behaviour and take appropriate action, they make suitable investments to build engagement with consumers through their experiences. These experiences occur in a series of context-dependent conditions that result in different levels of customer engagement (Sakaya, 2023). Consumer involvement with the company can be seen individually or through the community. Marhaeni et al., (2023) suggest that interactive and co-created customer experiences through the community can be considered as "interesting" performances. By engaging, customers demonstrate behaviour beyond one-way transactions and consumption and engage in two-way company interactions. Therefore, during the new normal, the following hypothesis can be formulated:

H1: New average consumer experience significantly influences individual co-brand engagement.

H2: Consumer experiences in the new normal significantly influence brand engagement through the community.

Customer Brand Engagement

The concept of "engagement" can have several meanings. According to The Free Dictionary, the most common sense of engagement refers to a couple's promise to marry. Thus, the critical element of engagement is the alliance between the two parties that binds them to a two-way social relationship. Another crucial engagement component stemming from the same source is participating, sharing, and having the other party's attention, thoughts, or energy. These conceptions highlight some crucial notions of engagement but also demonstrate the versatility and breadth of the phenomenon.

From an in-depth review of the marketing literature, the authors draw on Swartz et al., (2024), who identified three main engagement dimensions: cognitive, emotional, and behavioural. Cognitive-related activities include an individual's concentration level and attachment to the brand, while emotional may be represented by a customer's level of brand-related inspiration and pride. Furthermore, activities related to customer behaviour can be expressed through the level of energy the customer exerts in interacting with the brand (Sakaya, 2023).

Individual Customer Brand Engagement in the New Normal

Brand-consumer involvement in the context of social media in the new normal during the COVID-19 pandemic as cognitive, emotional, and behavioural activities related to consumer brands that have positive valence during or related to consumer interactions with brands. An analysis of the existing literature reveals a discussion of the concept of value co-creation, which, in turn, results in the related idea of brand co-creation. Co-creation on brands can be articulated in two ways: when customers and firms exchange information and form connections and when customers experience brands (da Fonseca et al., 2023; Kozinets et al., 2021). The relationship between brand engagement and value creation is further recognized by Prahalad and Ramaswamy (2004), who stated that "companies cannot create anything of value without the involvement of individuals." Brand engagement is a solid foundation for the creation of shared brand value (Ramaswamy & Ozcan, 2016). Therefore, the following hypothesis can be formulated:

H3: The involvement of individual consumer brands significantly affects the value of co-creation.

Brand Engagement Community Customers in the New Normal

Social communities provide and maintain a valuable space for building brand communities that companies and their fans can create, share, and co-create with brand-related content. This brand community can improve the relationship between community members and the brand. Although engagement has been applied to studying online brand communities, consumer engagement occurs mainly in brands (Zare & Mahmoudi, 2021)). However, several studies highlight the importance of community engagement analysis by considering the object of engagement of the brand community and community members (Collins & Welsh, 2022). According to Jahn and Kunz (2012), engagement, which differs from pure usage intensity, reflects the intention of individuals' voluntary and active participation in the brand community to create value for themselves and others/companies. Therefore, the following hypothesis can be formulated:

H4: The involvement of community consumer brands significantly affects the value of co-creation.
Value Co-Creation

Co-creation value implies that consumers play an active role as actors in brand experience and brand value creation rather than being passive recipients of brand-related information and brand buyers (Prahalad & Ramaswamy, 2004). Especially with the emergence of customer-centric logic combined with service-dominant, consumers are considered co-creators of brand value when they engage in brand interaction activities, with a brand value which is regarded as one of the essential sources of company competitive advantage (Abbasi & Erdebilli, 2023).

Co-creation value is also created when consumers directly or indirectly share their brand experiences with other consumers, both when collaborating in new product development processes to develop new product ideas or when creating joint product designs (Tajvidi et al., 2020). In this case, co-creation allows consumers to become active partners working with brands, thus playing an essential role in determining brand success.

The fabric of engagement and shared value creation supports the argument that customer brand engagement positively affects consumer-brand relationships, empirically supported by research findings showing that engagement is a relational antecedent with a direct effect on the tendency of consumers to co-create, reinforce the consumer's perceived brand value (Tajvidi et al., 2020). Seen in this way, the value of co-creation can be a force for participation and democratization that creates meaning for all stakeholders, namely consumers and companies. This is significant capital for companies so that consumers stay connected with the company through involvement, especially during this COVID-19 pandemic.

Framework

Figure 1 shows a conceptual model that was developed based on insights derived from the literature described above about consumer experience in the new normal towards consumer brand involvement and the value of co-creation; this study considers four constructs, namely the dimensions of consumer experience and consumer brand involvement (independent variable), and the dimension of co-creation value (dependent variable).

![Figure 1. Conceptual Model](image)

METHODOLOGY

Measurement

The researcher adapted the relevant construction items from previous studies to measure the modelled constructs. Items are measured on a 7-point Likert-type scale. All respondents are buyers of green products both offline and online in Indonesia. The sample in this study was determined by the non-probability sampling method, which is a sampling technique that does not provide equal opportunities or opportunities for each member of the population to be a sample. The process of distributing research questionnaires was carried out
through field surveys via Google Forms. Participants who know the research object are expected to be able to judge well. The number of samples in this study ranged from 130 samples. In this study, the number of indicators is 24, so by calculating five times the indicator, the number of samples needed is 120 respondents. For better results, Hair et al. (2006) stated that to get a measurement that is considered reasonable is 5 to 10 times the number of indicators.

**Analysis Techniques**

In this study, researchers used the Structural Equation Modeling (SEM) technique using AMOS 22 software. According to Hair et al. (2006), SEM is described as an analysis that combines factor analysis approaches, structural models and path analysis. Methods The analysis is carried out to interpret and draw conclusions from the collected data.

**RESULT**

**Measure Validation**

The estimated model fit, internal consistency, and validity are determined through confirmatory factor analysis (CFA) (Hair et al., 2014). Our CFA results suggest the model's good fit to the data: CMIN/df = 0.64, CFI = 0.97, IFI = 0.97, NFI = 0.94, GFI = 0.98, and RMSEA = 0.045. We inspected the factor loadings, Cronbach’s alphas, and composite reliability statistics to assess internal consistency. We found each factor loading to exceed the critical value 0.70 (Hair et al., 2014). In addition, all Cronbach’s alphas and composite reliability values for each construct exceeded the required threshold of 0.70. Finally, the square root of the average variance extracted (AVE) values was more significant than 0.05. Therefore, our results explicitly support our proposed measurement model (Table 1).

<table>
<thead>
<tr>
<th>Construct</th>
<th>Mean</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer Experience (CE)</td>
<td>2.89</td>
<td>0.92</td>
<td>0.62</td>
</tr>
<tr>
<td>Individual CBE (ICBE)</td>
<td>3.34</td>
<td>0.88</td>
<td>0.77</td>
</tr>
<tr>
<td>Community CBE (CCBE)</td>
<td>3.57</td>
<td>0.89</td>
<td>0.67</td>
</tr>
<tr>
<td>Value Co-Creation (VCC)</td>
<td>3.26</td>
<td>0.88</td>
<td>0.71</td>
</tr>
</tbody>
</table>

**Structural Model Result**

We found CE to exert a significant, positive effects on ICBE (p = 0.000), CCBE (p=0.000), thus supporting H1–2. Next, the impact of ICBE on VCC was also significant (p=0.000), supporting H3. However, the effect of CCBE on VCC was insignificant (p=0.390) (fig 3).
DISCUSSION

Key Findings

This study aims to investigate how consumer experiences through the involvement of individuals and communities can create co-creation value in the context of green products. In this study, we examine the effect of consumer experience on customer brand engagement in individuals and communities on green products. Our findings suggest consumer experience influences consumer brand engagement in green products in both individual and community contexts. This implies that it is the customer's brand experience that develops an emotional attachment to both individual and community customer brand engagement. These findings support the argument that consumers are more likely to engage individually and as a community if they share experiences and recommendations with others and perceive a higher value level.

In addition, we also examine the effect of individual and community brand engagement on the value of co-creation of green products. The results show that the involvement of individual consumer brands affects the value of co-creation. However, community co-brand engagement has no effect on co-creation value in the context of green products. In addition, increased individual engagement will encourage consumers to create brand value on green products jointly, but not with the engagement of the community. The theoretical and practical implications of the findings are discussed below.

Theoretical Implication

A green economy is a low-carbon economic model that aims to achieve low energy consumption in economic development with very minimal impacts on emissions and pollution (Lili Zhao et al., 2023). The results of our research carry theoretical implications, among others. First, our study expands the co-value creation literature on green products by exploring brand engagement and empirically testing its antecedents and their impact on co-value creation. Previous research studies have yet to attempt to examine how consumer brand involvement can create shared value in green products individually or in communities. Therefore, our research findings can advance our understanding of the shared value creation phenomenon by providing some preliminary insights into brand engagement from the consumer experience. These findings are valuable for studies to understand how shared value creation can facilitate various consumer behaviours, especially on green products, and thus provide further insight into the application of shared value creation to green products for green stimulus during the COVID-19 pandemic. Therefore, our results demonstrate the critical role of consumer brand engagement in driving shared value creation (France et al., 2018; Tajvidi et al., 2020).

From a positive perspective, the COVID-19 pandemic caused world oil prices to decline sharply due to low demand and excess supply due to restrictions on the activities of people, goods and services. This opens up opportunities for investors to invest capital in the renewable energy sector, the largest energy sector that has not yet been taken seriously, such as solar energy, electric batteries, fuel cells, winds and water energies, biofuel, geothermal colour and others (Demiralay et al., 2023; Wei et al., 2020)). However, a successful transition from fossil energy to various renewable energies that aim to protect the environment, health and humanity requires fiscal policy support such as subsidies for electric vehicles, subsidies for passengers who switch to mass cars, and various incentives aimed at reducing energy use fossil (Linhao Zhao et al., 2023).

Second, consumer experience is identified as an antecedent of brand involvement in the context of green products. These results show that consumer experience is significant and has become a reference for brand engagement management activities during the COVID-19 pandemic, where direct interaction with sellers is limited. The Covid-19 pandemic has encouraged massive digital transactions. Besides encouraging efficiency, digitalization also correlates with energy consumption and the environment. Digitalization reduces the flow of motor vehicle traffic much more than the electricity used to support digital services, thereby reducing energy consumption and protecting the environment from further damage. The digital economic revolution is also increasingly strengthened by fiscal policies such as environmental taxes and various incentives that support the use of renewable energy to achieve carbon neutrality (Zhong et al., 2024). Thus, this research can advance our understanding of CBE by leveraging consumer experience. In particular, the consumer experience needs to create a sense of social support and value. It also needs to empower consumers to share commercial information...
with others. In particular, one interesting finding is that consumer experience is positively related to individual and community brand engagement. This shows that consumers share their experiences with others, individually and in the community, about engaging with green product brands.

Third, our findings refine the concept of co-creation and its importance in brand building. Consumers contribute to brand building by sharing their opinions and experiences with company involvement, explaining that co-creation intent is only possible with solid engagement with the brand. This study confirms the results of previous conceptual studies that brand engagement is a prerequisite and indicator of shared value creation in brands (France et al., 2018). This study describes shared value creation and brand engagement on green products in individual and community contexts. It reveals that these two concepts are rarely studied empirically on green products in personal and community contexts. In our findings, the customer brand engagement community does not affect shared value creation. This is likely to happen because, during the COVID-19 pandemic, the formed brand community was small and could only represent some consumers in creating shared value.

Practical Implications

Environmental issues caused by global warming and reinforced by the COVID-19 pandemic have made consumers increasingly aware and encouraged to buy and recommend green products without additional chemicals, whose production uses high technology to meet energy efficiency and reduce pollution and packaged products. Using recyclable materials (Kormishkina et al., 2022; Sapsanguanboon & Faijaidee, 2024). Given that our results demonstrate how consumer experiences can be used to drive brand engagement and co-creation with consumers, these results offer managers a better understanding of applying consumer experiences to business practices and achieving competitive advantage. Brand engagement is essential for businesses to promote products/services and enhance word-of-mouth promotion, and managers should strive to engage effectively with customers by implementing the consumer experience. Thus, our results provide strong empirical evidence to clarify how companies can take advantage of consumer experiences and increase consumer brand engagement and co-creation of value in the context of green products. Green products are a stimulus for the green economy to prevent climate change that can damage our environment (Jinru et al., 2022).

Companies can carry out brand engagement and co-creation of value by presenting themselves as clean companies. Clean companies that produce green products have characteristics, including the production process of a product using renewable energy sources such as solar energy, electricity driven by wind or water, biofuel, etc. Apart from that, product packaging does not use plastic materials which are very difficult to decompose and uses renewable materials which can be degraded naturally by bacteria and other microorganisms in nature (Shang et al., 2023).

Limitation and Future Study

This study, along with other research projects, has several recognized limitations. This study only focuses on one country and given that cultural variation does play a role in green consumption of green, future research should apply the model in different cultural settings.

REFERENCES


