Charting sustainable routes: Navigating uncertainty in the supply chain for lasting loyalty

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A B S T R A C T

This study investigates the dynamics of literacy, trust, awareness, loyalty, and corporate sustainability among Social Security Management Agency (BPJS) of Employment. *Social Security Management Agency (BPJS) of Employment* in West Java, Banten, and Lampung Province, Indonesia. Employing structural equation modeling, the study reveals significant relationships and mediating effects. Literacy emerges as a key factor, positively impacting loyalty and corporate sustainability. Trust is found to directly influence corporate sustainability but not loyalty. Awareness significantly affects both loyalty and corporate sustainability. Notably, loyalty plays a mediating role in the relationships between literacy, awareness, and corporate sustainability. These findings contribute to literacy and engagement models, sustainability frameworks, and mediating models in organizational literature. Practical implications include the recommendation for literacy enhancement programs, multifaceted trust-building strategies, proactive communication campaigns, and loyalty-building initiatives. Future research recommendations encompass longitudinal studies, diverse organizational settings, mixed-methods approaches, exploration of moderating variables, and intervention studies. The research contributes to a nuanced understanding of participant engagement and sustainability perceptions, offering actionable insights for organizations, particularly those in the public sector like *Social Security Management Agency (BPJS) of Employment*.

1. Introduction

In the era of globalization and technological advancement, modern businesses increasingly recognize the significance of literacy, trust, and awareness as key elements in fostering customer loyalty (Kumar et al., 2013). Literacy, in this context, encompasses individuals' understanding and skills related to products, services, and the value added by the company (F. Ahmad et al., 2020). Trust serves as the fundamental foundation in customer-company relationships, where a strong sense of trust can establish long-term loyalty (Kumar & Kaushik, 2017). Awareness, on the other hand, involves customers' understanding of a company's sustainability initiatives and social responsibilities, influencing their perceptions of the brand and products (Muniz et al., 2019; Olšanová et al., 2022). Within this framework, the research will investigate the extent to which levels of literacy, trust, and awareness among customers can influence their loyalty towards a company. Additionally, the study will explore the impact of customer loyalty on corporate sustainability, considering economic, social, and environmental perspectives. By delving into these aspects, this research is expected to provide strategic insights for companies to enhance customer literacy, trust, and awareness, subsequently positively impacting loyalty and contributing to the holistic sustainability of the company. This research holds high significance in the context of business and corporate sustainability.

Firstly, it contributes significantly to understanding key factors influencing customer loyalty—namely, literacy, trust, and awareness. Investigating the relationship between these three factors can provide profound insights for companies to develop more effective strategies in building and maintaining a loyal customer base. Secondly, this research is relevant in the context of corporate sustainability. By analyzing the implications of customer loyalty on sustainability, the research can help companies understand the positive impact of responsible business practices on economic, social, and environmental aspects. This has practical implications for designing and implementing sustainable business strategies.

The primary motivation for this research is to bridge existing knowledge gaps in the literature regarding the complex interaction between literacy, trust, awareness, and customer loyalty in the context of corporate sustainability. Through this research, we aim to explore the underlying dynamics of these relationships and identify key elements that shape sustainable consumer behavior. The main objectives of this research are: 1) To investigate the relationship between literacy, trust, and awareness with customer loyalty; 2) To analyze the implications of customer loyalty on corporate sustainability, including economic, social, and environmental aspects; 3) To provide strategic recommendations for companies to enhance customer literacy, trust, and awareness to achieve holistic sustainability. By achieving these objectives, this research is expected to offer valuable guidance for business practitioners, researchers, and other stakeholders in developing sustainable business practices and building strong relationships with customers.

2. Literature review and hypothesis development

2.1 Literacy, Loyalty, and Corporate Sustainability

Wirtz et al. (2013) defines that literacy refers to the level of understanding and knowledge that customers have regarding the products, services, and added value offered by a company. It encompasses customers' ability to comprehend information provided by the company, whether through literature, social media, or direct experiences. The level of customer literacy can influence loyalty, as a strong understanding of a company's products and values can create emotional connections and customer satisfaction, thereby increasing the likelihood of repeat purchases (Komunda & Osarenkhoe, 2012; Ramanathan et al., 2017; Saleem et al., 2016). Customer literacy can also affect their perception of a company's sustainability initiatives (Karaosmanoglu et al., 2016; Korschun et al., 2014; Viererbl & Koch, 2022). Companies that transparently communicate their sustainability efforts can build positive understanding among customers and garner support for responsible business practices (Dyllick & Muff, 2015; Fernando et al., 2019). By understanding the interplay between literacy, loyalty, and corporate sustainability, organizations can develop holistic strategies that promote understanding, enhance loyalty, and support their sustainability goals.

H$_{1a}$: *Literacy impacts on Loyalty.*
H$_{1b}$: *Literacy impacts on Corporate Sustainability.*

2.2 Trust, Loyalty, and Corporate Sustainability

Weitzl et al. (2017) state that trust refers to the confidence and reliance that customers place in a company, believing in its integrity, honesty, and commitment to fulfilling promises. Trust is crucial in establishing and maintaining strong relationships between a company and its customers (Damberg et al., 2022; Tyler & Stanley, 2007). Trust is a foundational element in building customer loyalty. When customers trust a company, they are more likely to remain loyal over the long term (Bilgihan, 2016; Lee et al., 2015; Martínez & Rodríguez del Bosque, 2013). Trustworthiness influences the emotional connection customers have with a brand, fostering loyalty through repeated interactions (Chung & Cho, 2017; Jun & Yi, 2020). Farooq et al. (2014) assert that trust is closely tied to a company's commitment to sustainability. Transparent communication and consistent actions in sustainable practices build trust among customers, as they see the company as responsible and environmentally conscious (Chun et al., 2021). Understanding the intricate relationships between trust, loyalty, and corporate sustainability is essential for businesses aiming to cultivate enduring customer relationships while contributing positively to societal and environmental well-being.

H$_{2a}$: *Trust impacts on Loyalty.*
H$_{2b}$: *Trust impacts on Corporate Sustainability.*

2.3 Awareness, Loyalty, and Corporate Sustainability

According to Hutter et al. (2013), awareness refers to the level of understanding and consciousness that customers have about a brand or company, its products, values, and initiatives. It involves customers being informed and knowledgeable about the existence and characteristics of a particular business entity. Higher awareness often leads to increased customer loyalty (Iqbal et al., 2021; Panchal et al., 2012). When customers are well-informed about a brand's values, products, and initiatives, they are more likely to develop a sense of connection and commitment, fostering loyalty over time (Hollebeek & Macky, 2019). Awareness plays a crucial role in the success of corporate sustainability initiatives (González-Rodríguez & Díaz-Fernández, 2020; Luthra et al., 2018; Polas et al., 2023). Companies that effectively communicate their commitment to sustainability can raise awareness among customers, influencing purchasing decisions and building support for environmentally and socially responsible practices (Bharati, 2017; Contini et al., 2020). In summary, awareness, loyalty, and corporate sustainability are interconnected elements. Heightened awareness can foster loyalty and support for sustainable practices, while loyal customers,

in turn, contribute to the success of a company's sustainability initiatives. Companies that effectively integrate these elements into their strategies can create a more sustainable and loyal customer base.

H3a: *Awareness impacts on Loyalty.*
H3b: *Awareness impacts on Corporate Sustainability.*

2.4 Loyalty and Corporate Sustainability

Anatolevena Anisimova (2007) assess that loyalty in a business context refers to the consistent and enduring preference that customers demonstrate toward a particular brand or company. It involves a strong and positive emotional connection, leading to repeated purchases, positive word-of-mouth, and a reluctance to switch to competing brands. According to Baumgartner & Rauter (2017), corporate sustainability encompasses a business's commitment to managing its operations in a manner that addresses environmental, social, and economic considerations. It involves responsible business practices that aim to create long-term value not only for shareholders but also for society and the environment. Islam et al. (2021) assert that loyal customers contribute to a company's economic sustainability by making repeat purchases. This consistent revenue stream allows the company to invest in sustainable practices, innovation, and growth without solely relying on short-term gains (Ortiz-de-Mandojana & Bansal, 2016). Loyal customers can become advocates for a company's socially responsible initiatives (Cha et al., 2015). They are more likely to support and promote a brand that aligns with their values, contributing positively to the company's social sustainability efforts (Hawn & Ioannou, 2016). Companies with loyal customers have the opportunity to influence consumer behavior toward environmentally sustainable choices (Kuchinka et al., 2018). Loyal customers are often more receptive to eco-friendly product options and may support a company's efforts to minimize its environmental impact (Oluwajana et al., 2022). Demonstrating a commitment to corporate sustainability can enhance customer loyalty. Customers are increasingly valuing businesses that prioritize ethical and sustainable practices, and aligning with such values can strengthen the emotional bond between the brand and its customers. In essence, the relationship between loyalty and corporate sustainability is symbiotic. Loyal customers contribute to a company's overall sustainability by providing the necessary support for responsible business practices, while a commitment to sustainability can, in turn, foster and strengthen customer loyalty. This connection underscores the importance of integrating sustainable practices into a company's core values and customer engagement strategies.

H4: *Loyalty impacts on Corporate Sustainability.*

2.5 Loyalty as mediator

In examining the intricate dynamics between awareness, loyalty, and corporate sustainability, loyalty emerges as a crucial mediator that significantly influences the relationship between awareness and a company's sustainable practices. As customers become more aware of a company's values, products, and initiatives, their loyalty tends to be heightened (Iglesias et al., 2020). This allegiance, in turn, plays a pivotal role in shaping the company's overall commitment to sustainability (Ahmad, 2015). The mediating role of loyalty becomes evident as it acts as a bridge, explaining how heightened awareness directly impacts the sustainability practices of the company. By investigating the mediating effect of loyalty, businesses can gain a nuanced understanding of the interconnectedness between customer awareness and corporate sustainability. This insight is invaluable for formulating strategies that not only enhance customer loyalty but also contribute to the long-term sustainability goals of the company, creating a symbiotic relationship between awareness, loyalty, and corporate sustainability.

H5a: *Loyalty mediates the relationship between Literacy and Corporate Sustainability.*
H5b: *Loyalty mediates the relationship between Trust and Corporate Sustainability.*
H5c: *Loyalty mediates the relationship between Awareness and Corporate Sustainability.*
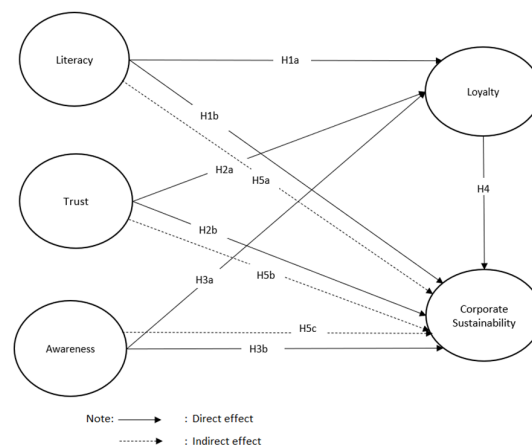
Fig. 1. Conceptual Model

3. Methodology

3.1 Research Design, Population, and Sample

In this study, a quantitative research approach will be employed to meticulously analyze the intricate relationships between literacy, trust, awareness, loyalty, and corporate sustainability within The Social Security Administrative Body for Employment (*Social Security Management Agency (BPJS) of Employment*). The research design centers around the use of a carefully crafted and structured questionnaire as the primary instrument for data collection. The research will encompass the customer base of *Social Security Management Agency (BPJS) of Employment* situated in the provinces of West Java, Banten, and Lampung. From this population, a sample size of 393 respondents will be randomly selected, ensuring a representative cross-section of active customers from *Social Security Management Agency (BPJS) of Employment* in these regions.

3.2 Instrument Variables

The data collection instrument for this study will take the form of a meticulously designed questionnaire, incorporating a Likert scale ranging from 1 to 5. This scale allows respondents to express their opinions on a continuum, with 1 representing strongly disagree and 5 indicating strongly agree. The questionnaire will be intricately structured to comprehensively capture various dimensions, namely literacy, trust, awareness, loyalty, and perceptions of corporate sustainability. Special consideration will be given to customizing questions to align with the distinctive services provided by *Social Security Management Agency (BPJS) of Employment*. By utilizing the Likert scale, the research aims to garner nuanced insights into respondents' perspectives, providing a quantitative measure of their attitudes and perceptions regarding the specified variables in the context of *Social Security Management Agency (BPJS) of Employment* 's services. The identified variables are as follows:

- Independent Variables: **Literacy:** This pertains to the extent of customers' understanding of the services provided by *Social Security Management Agency (BPJS) of Employment*; **Trust:** This measures the level of trust customers place in *Social Security Management Agency (BPJS) of Employment*; **Awareness:** It gauges customers' awareness of the products and initiatives undertaken by *Social Security Management Agency (BPJS) of Employment*.
- Mediating Variable: **Loyalty**: This variable reflects the degree of customers' loyalty to *Social Security Management Agency (BPJS) of Employment*.
- Dependent Variable: **Corporate Sustainability**: This assesses customers' perceptions of *Social Security Management Agency (BPJS) of Employment* 's sustainability practices.

3.3 Data Collection and Analysis

The questionnaire distribution process will be versatile, utilizing both online survey platforms and direct interviews. This approach is flexible and adaptable, catering to the preferences and availability of the respondents. Whether participants choose the convenience of online surveys or opt for direct interviews, the aim is to ensure a diverse and comprehensive collection of responses. In order to capture a comprehensive dataset, careful attention will be devoted to spanning various payment cycles and gaining insights into the sustainability practices of *Social Security Management Agency (BPJS) of Employment* . This inclusive approach aims to account for potential variations in participant experiences and perceptions across different periods, contributing to a more holistic understanding of the studied variables. Once the data is collected, advanced statistical methodologies will be employed, encompassing regression and mediation analyses. These analytical techniques will be instrumental in scrutinizing and quantifying the intricate relationships among the researched variables. The objective is to derive meaningful insights and statistically significant findings that contribute to a robust understanding of how literacy, trust, awareness, loyalty, and corporate sustainability interconnect within the context of *Social Security Management Agency (BPJS) of Employment*.

3.4 Ethical Considerations and Timeline

Ethical considerations will be paramount throughout the research process, emphasizing a strict adherence to ethical principles. To safeguard the integrity of the study, necessary permissions will be diligently sought from *Social Security Management Agency (BPJS) of Employment*, demonstrating a commitment to ethical research practices. Additionally, a robust confidentiality protocol will be implemented to ensure the utmost protection of respondent data. The research is slated to span a period of two months, commencing in October and concluding in November 2023, allowing for a comprehensive and thorough exploration of the identified variables within the specified timeframe.

Table 1
Variable Measurement

Variable	Abbrev.	Indicator	Source
Literacy	LITE1	I have a good understanding of various programs and benefits offered by *Social Security Management Agency (BPJS) of Employment*	Komunda & Osarenkhoe (2012); Ramanathan et al. (2017); Saleem et al. (2016)
	LITE2	I can clearly explain my rights and obligations as a participant of *Social Security Management Agency (BPJS) of Employment*	
	LITE3	I can easily comprehend written information from *Social Security Management Agency (BPJS) of Employment*, such as brochures and guides	
	LITE4	I can identify the types of employment risks covered by *Social Security Management Agency (BPJS) of Employment*	
	LITE5	I understand the terms and conditions related to claims or benefits that I can request from *Social Security Management Agency (BPJS) of Employment*	
Trust	TRUS1	I trust that *Social Security Management Agency (BPJS) of Employment* will fulfill its commitments to provide reliable social security services	Damberg et al. (2022); Tyler & Stanley (2007)
	TRUS2	I believe that *Social Security Management Agency (BPJS) of Employment* operates with transparency in its policies and procedures	
	TRUS3	I have confidence in the accuracy of information provided by *Social Security Management Agency (BPJS) of Employment* regarding my social security benefits	
	TRUS4	I feel secure in the knowledge that *Social Security Management Agency (BPJS) of Employment* prioritizes the well-being and interests of its participants	
	TRUS5	I trust that *Social Security Management Agency (BPJS) of Employment* will handle my personal information responsibly and confidentially	
Awareness	AWAR1	I am well-informed about the various services offered by *Social Security Management Agency (BPJS) of Employment*	Iqbal et al. (2021); Panchal et al. (2012)
	AWAR2	I am aware of the specific benefits and coverage provided by *Social Security Management Agency (BPJS) of Employment*	
	AWAR3	I stay updated on the latest initiatives and programs introduced by *Social Security Management Agency (BPJS) of Employment*	
	AWAR4	I actively seek information regarding changes or updates in *Social Security Management Agency (BPJS) of Employment* policies	
	AWAR5	I have a clear understanding of my rights and responsibilities as a participant in *Social Security Management Agency (BPJS) of Employment*	
Loyalty	LOYA1	I am committed to continuing my affiliation with *Social Security Management Agency (BPJS) of Employment* for the long term	Islam et al. (2021); Ortiz-de-Mandojana & Bansal (2016)
	LOYA2	I would recommend *Social Security Management Agency (BPJS) of Employment* to others due to my positive experiences	
	LOYA3	I feel a strong sense of loyalty toward *Social Security Management Agency (BPJS) of Employment* as my chosen social security provider	
	LOYA4	Despite alternative options, I prefer to maintain my membership with *Social Security Management Agency (BPJS) of Employment*	
	LOYA5	I am willing to actively participate in programs or initiatives introduced by *Social Security Management Agency (BPJS) of Employment*	
Corporate Sustainability	COPR1	I believe that *Social Security Management Agency (BPJS) of Employment* demonstrates a commitment to environmentally sustainable practices	Hawn & Ioannou (2016); Kuchinka et al. (2018)
	COPR2	I perceive *Social Security Management Agency (BPJS) of Employment* as actively contributing to the social well-being of the community	
	COPR3	I think *Social Security Management Agency (BPJS) of Employment* implements ethical business practices in its operations	
	COPR4	I am confident that *Social Security Management Agency (BPJS) of Employment* prioritizes fair and equitable treatment of all stakeholders	
	COPR5	I believe *Social Security Management Agency (BPJS) of Employment* takes steps to minimize its ecological footprint and impact on the environment	

4. Result And Findings

4.1 Latent Variable Descriptives

Table 2 presents the statistical analysis of five constructs, namely Literacy, Trust, Awareness, Loyalty, and Corporate Sustainability, based on **393 observations**. For the Literacy construct, the mean value is 0.00, with a median of 0.022. The minimum literacy score is -4.458, while the maximum is 0.972, resulting in a standard deviation of 1.00. The excess kurtosis is 4.617, indicating a relatively high level of peaked Ness in the distribution, and the skewness is -1.658, suggesting a leftward skew. In the case of Trust, the mean value is 0.00, and the median is -0.089. The minimum trust score is -3.692, and the maximum is 1.218, resulting in a standard deviation of 1.00. The excess kurtosis is 2.300, indicating a moderate level of peaked ness, and the skewness is -1.141, suggesting a leftward skew. Similarly, for Awareness, the mean value is 0.00, with a

median of -0.192. The minimum awareness score is -3.629, and the maximum is 1.188, resulting in a standard deviation of 1.00. The excess kurtosis is 1.595, indicating a moderately peaked distribution, and the skewness is -0.844, suggesting a leftward skew.

Regarding Loyalty, the mean value is 0.00, with a median of -0.589. The minimum loyalty score is -3.682, and the maximum is 1.346, resulting in a standard deviation of 1.00. The excess kurtosis is 1.170, indicating a moderately peaked distribution, and the skewness is -0.512, suggesting a leftward skew. Lastly, for Corporate Sustainability, the mean value is 0.00, with a median of -0.056. The minimum sustainability score is -3.901, and the maximum is 1.331, resulting in a standard deviation of 1.00. The excess kurtosis is 3.551, indicating a relatively high level of peaked ness, and the skewness is -1.412, suggesting a leftward skew.

Table 2
Latent Variable Descriptives

Construct	No of Obs.	Mean	Median	Min	Max	Std. Dev.	Excess Kurtosis	Skewness
Literacy	393	0.00	0.022	-4.458	0.972	1.00	4.617	-1.658
Trust	393	0.00	-0.089	-3.692	1.218	1.00	2.300	-1.141
Awareness	393	0.00	-0.192	-3.629	1.188	1.00	1.595	-0.844
Loyalty	393	0.00	-0.589	-3.682	1.346	1.00	1.170	-0.512
Corporate Sustainability	393	0.00	-0.056	-3.901	1.331	1.00	3.551	-1.412

4.2 Validity and Reliability

Table 3 and Fig. 2 presents a detailed analysis of the measurement model for five constructs: Literacy, Trust, Awareness, Loyalty, and Corporate Sustainability. Each construct consists of multiple items, and various metrics are employed to assess the reliability and validity of the measurement model. For the Literacy construct, consisting of five items (LITE1 to LITE5), the outer loading values range from 0.853 to 0.950, indicating a strong relationship between each item and the latent construct. The Cronbach's Alpha coefficient, which measures internal consistency, is 0.955, surpassing the recommended threshold of 0.7. The rho_A coefficient, an alternative reliability measure, is also 0.955. The Composite Reliability (CR) is 0.965, exceeding the acceptable threshold of 0.7, and the Average Variance Extracted (AVE) is 0.847, indicating convergent validity. Similarly, for the Trust construct (TRUS1 to TRUS5), the outer loading values range from 0.840 to 0.933, suggesting strong relationships with the latent construct. The Cronbach's Alpha is 0.943, the rho_A is 0.953, CR is 0.956, and AVE is 0.814, all meeting the standard criteria for reliability and validity.

The Awareness construct (AWAR1 to AWAR5) demonstrates outer loading values ranging from 0.908 to 0.952, with Cronbach's Alpha, rho_A, CR, and AVE values of 0.958, 0.958, 0.968, and 0.857, respectively, indicating robust reliability and convergent validity. For the Loyalty construct (LOYA1 to LOYA5), the outer loading values range from 0.866 to 0.910, and the reliability and validity metrics—Cronbach's Alpha (0.936), rho_A (0.937), CR (0.951), and AVE (0.797)—are all satisfactory. Finally, the Corporate Sustainability construct (CORP1 to CORP5) shows outer loading values ranging from 0.755 to 0.883. The reliability and validity metrics for this construct are Cronbach's Alpha (0.904), rho_A (0.909), CR (0.929), and AVE (0.724), meeting the criteria for sound measurement. In summary, the analysis indicates that all constructs exhibit strong reliability and validity, providing confidence in the measurement model's robustness.
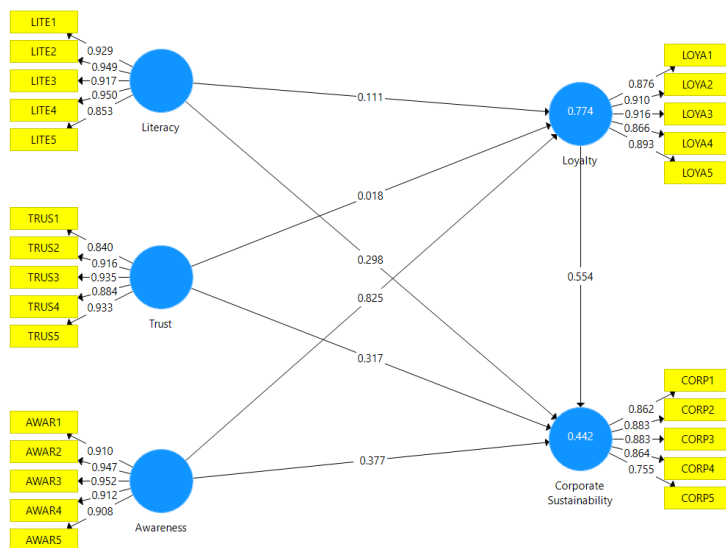

Fig. 2. PLS Algorithm

Table 3
Confirmatory Factor Analysis

Construct	Items	Outer Loading	Cronbach's Alpha	rho_A	CR	AVE
Literacy	LITE1	0.929	0.955	0.955	0.965	0.847
	LITE2	0.949				
	LITE3	0.917				
	LITE4	0.950				
	LITE5	0.853				
Trust	TRUS1	0.840	0.943	0.953	0.956	0.814
	TRUS2	0.916				
	TRUS3	0.935				
	TRUS4	0.884				
	TRUS5	0.933				
Awareness	AWAR1	0.910	0.958	0.958	0.968	0.857
	AWAR2	0.947				
	AWAR3	0.952				
	AWAR4	0.912				
	AWAR5	0.908				
Loyalty	LOYA1	0.876	0.936	0.937	0.951	0.797
	LOYA2	0.910				
	LOYA3	0.916				
	LOYA4	0.866				
	LOYA5	0.893				
Corporate Sustainability	CORP1	0.862	0.904	0.909	0.929	0.724
	CORP2	0.883				
	CORP3	0.883				
	CORP4	0.864				
	CORP5	0.755				

4.3 Direct Testing

Table 4 and Figure 3 presents the results of hypothesis testing related to the relationships between different constructs— Literacy (LITE), Trust (TRUS), Awareness (AWAR), Loyalty (LOYA), and Corporate Sustainability (CORP). The analysis involves the original sample, standard deviation (STDEV), T statistics, P values, and the ultimate result of each hypothesis. Hypothesis H1a suggests a positive relationship between Literacy (LITE) and Loyalty (LOYA). The result indicates a T statistic of 2.854 with a P value of 0.004, meeting the threshold for significance. Therefore, Hypothesis H1a is accepted, suggesting a significant positive relationship between Literacy and Loyalty. Hypothesis H1b proposes a positive association between Literacy (LITE) and Corporate Sustainability (CORP). The analysis reveals a T statistic of 3.875 with a P value of 0.000, meeting the significance criterion. Consequently, Hypothesis H1b is accepted, indicating a significant positive relationship between Literacy and Corporate Sustainability.

Table 4
Path Analysis

Hypothesis	Construct*)	Original Sample	STDEV	T Statistics	P Values	Result
H1a	LITE → LOYA	0.111	0.039	2.854	0.004	Accepted
H1b	LITE→ CORP	0.298	0.077	3.875	0.000	Accepted
H2a	TRUS → LOYA	0.018	0.032	0.557	0.578	Rejected
H2b	TRUS → CORP	0.317	0.069	4.594	0.000	Accepted
H3a	AWAR → LOYA	0.825	0.045	18.535	0.000	Accepted
H3b	AWAR → CORP	0.377	0.098	3.848	0.000	Accepted
H4	LOYA → CORP	0.554	0.114	4.851	0.000	Accepted

*) LITE=Literacy; TRUS=Trust; AWAR=Awareness; LOYA=Loyalty; CORP=Corporate Sustainability

For Hypothesis H2a, which posits a positive relationship between Trust (TRUS) and Loyalty (LOYA), the T statistic is 0.557 with a P value of 0.578, falling short of the significance level. Hence, Hypothesis H2a is rejected, suggesting that there is no significant relationship between Trust and Loyalty. However, Hypothesis H2b proposes a positive link between Trust (TRUS) and Corporate Sustainability (CORP). The analysis yields a T statistic of 4.594 with a P value of 0.000, surpassing the significance threshold. Consequently, Hypothesis H2b is accepted, indicating a significant positive relationship between Trust and Corporate Sustainability.

Hypothesis H3a predicts a positive relationship between Awareness (AWAR) and Loyalty (LOYA). The analysis reveals a substantial T statistic of 18.535 with a P value of 0.000, meeting the significance criterion. Hence, Hypothesis H3a is accepted, suggesting a significant positive relationship between Awareness and Loyalty. Similarly, Hypothesis H3b suggests a positive association between Awareness (AWAR) and Corporate Sustainability (CORP). The analysis shows a T statistic of 3.848 with

a P value of 0.000, surpassing the significance threshold. Therefore, Hypothesis H3b is accepted, indicating a significant positive relationship between Awareness and Corporate Sustainability.

Lastly, Hypothesis H4 proposes a positive relationship between Loyalty (LOYA) and Corporate Sustainability (CORP). The analysis yields a T statistic of 4.851 with a P value of 0.000, surpassing the significance threshold. Consequently, Hypothesis H4 is accepted, suggesting a significant positive relationship between Loyalty and Corporate Sustainability.
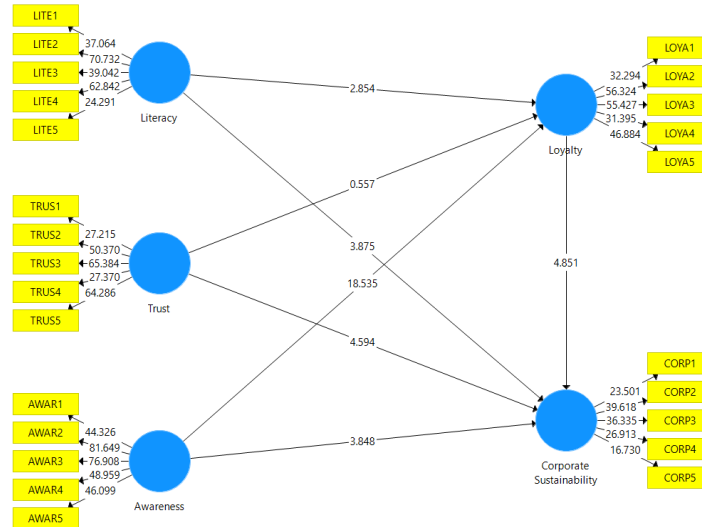

Fig. 3. Path Analysis

4.4 Indirect Testing

Table 5 presents the results of mediation analysis, focusing on the sequential relationships among Literacy (LITE), Trust (TRUS), Awareness (AWAR), Loyalty (LOYA), and Corporate Sustainability (CORP). The analysis includes the original sample, standard deviation (STDEV), T statistics, P values, and the final conclusion for each hypothesis. Hypothesis H5a proposes a mediation relationship from Literacy (LITE) to Loyalty (LOYA) and subsequently to Corporate Sustainability (CORP). The analysis reveals a T statistic of 2.623 with a P value of 0.009, surpassing the significance threshold. Therefore, Hypothesis H5a is accepted, indicating loyalty have a significant mediation relationship between Literacy and Corporate Sustainability. Conversely, Hypothesis H5b suggests a mediation relationship from Trust (TRUS) to Loyalty (LOYA) and then to Corporate Sustainability (CORP). The analysis yields a T statistic of 0.538 with a P value of 0.591, falling short of the significance level. As a result, Hypothesis H5b is rejected, suggesting that loyalty have no significant mediation relationship between Trust and Corporate Sustainability. Finally, Hypothesis H5c posits a mediation relationship from Awareness (AWAR) to Loyalty (LOYA) and subsequently to Corporate Sustainability (CORP). The analysis indicates a robust T statistic of 4.446 with a P value of 0.000, meeting the significance criterion. Therefore, Hypothesis H5c is accepted, indicating loyalty have a significant mediation relationship between Awareness and Corporate Sustainability. In summary, the mediation analysis provides insights into the sequential relationships among the constructs, revealing that Literacy and Awareness exhibit significant mediation effects on both Loyalty and Corporate Sustainability, while Trust does not demonstrate a significant mediation impact on these constructs.

Table 5
Mediation Test

Hypothesis	Construct*)	Original Sample	STDEV	T Statistics	P Values	Result
H5a	LITE → LOYA → CORP	0.062	0.024	2.623	0.009	Accepted
H5b	TRUS → LOYA → CORP	0.01	0.018	0.538	0.591	Rejected
H5c	AWAR → LOYA → CORP	0.457	0.103	4.446	0.000	Accepted

*) LITE=Literacy; TRUS=Trust; AWAR=Awareness; LOYA=Loyalty; CORP=Corporate Sustainability

5. Discussion

The acceptance of Hypothesis H1a, which posits that Literacy impacts Loyalty, and Hypothesis H1b, suggesting that Literacy impacts Corporate Sustainability, provides meaningful insights into the dynamics between literacy levels among *Social Security Management Agency (BPJS) of Employment* participants and two crucial outcomes. This outcome aligns with theoretical perspectives emphasizing the role of literacy in shaping individuals' perceptions, understanding, and engagement with organizational processes. The positive impact of literacy on Loyalty implies that participants with higher literacy levels

are more likely to develop a stronger bond with *Social Security Management Agency (BPJS) of Employment* (Alexandro & Basrowi, 2024b; Kittie & Basrowi, 2024; Nuryanto et al., 2019; Yusuf et al., 2024). This may be attributed to their enhanced comprehension of the organization's services, benefits, and policies, fostering a sense of trust and commitment. The theoretical underpinning of this relationship can be linked to cognitive theories, suggesting that individuals with higher literacy levels are better equipped to process and understand complex information, leading to more informed decision-making and increased loyalty (Komunda & Osarenkhoe, 2012; Ramanathan et al., 2017; Saleem et al., 2016). Similarly, the acceptance of H1b, indicating that Literacy impacts Corporate Sustainability, aligns with theories emphasizing the importance of literacy in promoting sustainable practices within organizations (Dyllick & Muff, 2015; Fernando et al., 2019). Participants with higher literacy levels may be more aware of the ecological and social implications of their engagement with *Social Security Management Agency (BPJS) of Employment* (Alexandro & Basrowi, 2024a; Junaidi, Masdar, et al., 2024; Miar et al., 2024; Mulyani & Basrowi, 2024). This heightened awareness, reflected in the impact on Corporate Sustainability, suggests that literacy serves as a catalyst for participants to support and perceive positively the organization's sustainability initiatives (Hadi et al., 2019; Hamdan & Basrowi, 2024; Junaidi, Basrowi, et al., 2024; Purwaningsih et al., 2024).

From a managerial perspective, these findings hold significant implications for *Social Security Management Agency (BPJS) of Employment*. Investing in literacy improvement programs for participants not only contributes to increased loyalty but also positively influences perceptions of the organization's commitment to sustainability. Managers can consider developing educational initiatives, workshops, or communication strategies that cater to diverse literacy levels among participants. Such efforts can empower participants to make informed decisions, understand the importance of sustainability, and contribute to the overall well-being of the organization. In summary, acknowledging and addressing literacy as a critical factor in shaping participant loyalty and perceptions of corporate sustainability can guide strategic initiatives at *Social Security Management Agency (BPJS) of Employment* (Basrowi & Utami, 2023; Suwarno Basrowi, 2020), promoting a more informed, engaged, and sustainably conscious participant base.

The results of the hypothesis testing provide insightful implications for *Social Security Management Agency (BPJS) of Employment*, particularly in understanding the relationships between Trust and two critical outcomes, Loyalty and Corporate Sustainability. While Hypothesis H2b, proposing that Trust impacts Corporate Sustainability, was accepted with a substantial T statistic of 4.594 and a P value of 0.000, Hypothesis H2a, suggesting that Trust impacts Loyalty, did not yield a significant result with a T statistic of 0.557 and a P value of 0.578. The acceptance of H2b aligns with established theories emphasizing the fundamental role of trust in fostering sustainable practices within organizations. Trust serves as a cornerstone for positive stakeholder relationships, and in the context of *Social Security Management Agency (BPJS) of Employment* (Basrowi & Utami, 2023; Marwanto et al., 2020a, 2020b; Soenyono & Basrowi, 2020), the positive impact of trust on Corporate Sustainability suggests that participants who trust the organization are more likely to perceive its sustainability efforts positively (Chun et al., 2021). This finding resonates with existing literature highlighting the importance of trust as a catalyst for encouraging sustainable behaviors among stakeholders. Conversely, the rejection of H2a implies that there might be a nuanced relationship between trust and loyalty among *Social Security Management Agency (BPJS) of Employment* participants or that other unexplored factors may influence participants' loyalty. This emphasizes the need for a more comprehensive examination of the dynamics between trust and loyalty and the consideration of additional variables in future research.

From a managerial perspective, these findings offer practical insights for *Social Security Management Agency (BPJS) of Employment*. While cultivating trust remains crucial for enhancing perceptions of corporate sustainability, the non-significant impact on loyalty suggests that trust alone may not be the sole driver of participant loyalty. Managers may need to consider additional factors influencing loyalty and tailor strategies that address the multifaceted nature of participant engagement. Moreover, the positive impact of trust on corporate sustainability reinforces the importance of trust-building initiatives as integral components of *Social Security Management Agency (BPJS) of Employment* 's overall strategy to promote sustainable practices and positive stakeholder perceptions. By prioritizing trust-building efforts, the organization can foster a supportive environment for its sustainability initiatives and maintain positive relationships with participants (Purwaningsih, 2020; Purwaningsih & Rahmanto, 2013).

The acceptance of both Hypothesis H3a and H3b, indicating that Awareness impacts Loyalty and Corporate Sustainability, respectively, carries significant implications for *Social Security Management Agency (BPJS) of Employment* (Nuryanto et al., 2024, 2024; Saeri et al., 2024). These findings align with established theories emphasizing the importance of stakeholder awareness in influencing organizational outcomes. Hypothesis H3a suggests that participants' awareness positively impacts their loyalty to *Social Security Management Agency (BPJS) of Employment* (Lisaria et al., 2024; Nuryanto et al., 2024; Shofwa et al., 2024). This aligns with cognitive and behavioral theories that posit individuals with higher awareness levels are more likely to engage actively and positively with organizations (Iqbal et al., 2021; Panchal et al., 2012).. Participants who are well-informed about *Social Security Management Agency (BPJS) of Employment* 's services, benefits, and policies may develop a stronger sense of loyalty, feeling more connected to and supportive of the organization. Moreover, the acceptance of H3b, indicating that Awareness impacts Corporate Sustainability, underscores the critical role of participant awareness in shaping perceptions of *Social Security Management Agency (BPJS) of Employment* 's sustainability initiatives. As participants become more aware of the organization's commitment to sustainability, they are likely to perceive these efforts more positively. This

resonates with stakeholder theory, which emphasizes the impact of organizational practices on stakeholder perceptions and behaviors (Bharati, 2017; Contini et al., 2020).

From a managerial standpoint, these findings highlight the importance of proactive communication and awareness-building strategies at *Social Security Management Agency (BPJS) of Employment* (Himmatul et al., 2024; Himmatul & Junaedi, 2024; Kharis et al., 2024; Nuryanto et al., 2024). Initiatives aimed at enhancing participants' understanding of the organization's services, benefits, and sustainability efforts can contribute not only to increased loyalty but also to a positive perception of corporate sustainability practices. Communication channels, such as educational programs, newsletters, and workshops, can be utilized to disseminate information effectively. Furthermore, these results suggest that *Social Security Management Agency (BPJS) of Employment* can strategically integrate sustainability messaging into their awareness campaigns. By showcasing the organization's commitment to sustainable practices, *Social Security Management Agency (BPJS) of Employment* can not only foster positive stakeholder perceptions but also contribute to the broader societal goal of promoting sustainability. In summary, acknowledging the impact of awareness on both loyalty and corporate sustainability provides actionable insights for *Social Security Management Agency (BPJS) of Employment* (Kharis et al., 2024; Lisaria et al., 2024; Nuryanto et al., 2024). Proactive efforts to enhance participant awareness can serve as a catalyst for building stronger stakeholder relationships and fostering a positive perception of the organization's sustainability initiatives.

The acceptance of Hypothesis H4, indicating that Loyalty impacts Corporate Sustainability, presents insightful implications for *Social Security Management Agency (BPJS) of Employment* and resonates with well-established theories that underscore the interconnectedness of stakeholder loyalty and organizational sustainability. Theoretical frameworks often posit that loyal stakeholders are more likely to support and positively perceive an organization's sustainability initiatives. In the context of *Social Security Management Agency (BPJS) of Employment*, this finding suggests that participants who exhibit a higher degree of loyalty are instrumental in influencing the organization's overall sustainability practices. The result aligns with stakeholder theory, which postulates that stakeholders who are committed and loyal are more likely to actively contribute to the organization's long-term objectives, including sustainability goals (Cha et al., 2015; Oluwajana et al., 2022).

From a managerial perspective, the positive impact of loyalty on corporate sustainability emphasizes the importance of fostering and maintaining strong relationships with *Social Security Management Agency (BPJS) of Employment* participants. Strategies aimed at enhancing participant loyalty, such as providing excellent service, personalized communication, and addressing participant concerns, can have a cascading effect on the organization's sustainability efforts. Managers at *Social Security Management Agency (BPJS) of Employment* may consider loyalty-building initiatives as an integral part of their overall strategy to promote sustainability. This can include targeted communication campaigns that highlight the organization's commitment to sustainability, initiatives that reward and recognize loyal participants, and continuous efforts to enhance the overall participant experience. By investing in strategies that enhance loyalty, *Social Security Management Agency (BPJS) of Employment* can not only strengthen its relationship with participants but also create a more supportive environment for sustainable practices.

Additionally, the positive relationship between loyalty and corporate sustainability implies that loyal participants may be more receptive to sustainability messages and initiatives. Therefore, incorporating sustainability education and engagement into loyalty-building programs may be an effective approach for *Social Security Management Agency (BPJS) of Employment*. In conclusion, the acceptance of H4 underscores the symbiotic relationship between participant loyalty and corporate sustainability at *Social Security Management Agency (BPJS) of Employment*. Strategically integrating loyalty-building initiatives with sustainability goals can contribute to the organization's overall success and foster a positive and sustainable relationship with its participants.

The acceptance of H5a and H5c, signifying that Loyalty mediates the relationship between Literacy and Awareness with Corporate Sustainability, provides valuable insights into the intricate dynamics among these variables at *Social Security Management Agency (BPJS) of Employment*. However, the rejection of H5b, suggesting that Loyalty does not mediate the relationship between Trust and Corporate Sustainability, introduces an interesting nuance into the understanding of how trust influences sustainability outcomes.

The acceptance of H5a aligns with existing theories that propose loyalty as a mediating factor in the relationship between literacy and organizational outcomes. This implies that participants with higher literacy levels are not only more likely to exhibit loyalty to *Social Security Management Agency (BPJS) of Employment* but also that this loyalty plays a pivotal role in shaping their perceptions of corporate sustainability. The mediating effect of loyalty here can be linked to theories emphasizing the cognitive and emotional dimensions of stakeholder engagement. Participants who are both literate and loyal may actively support and advocate for the organization's sustainability initiatives, contributing to a more sustainable corporate landscape. Similarly, the acceptance of H5c, indicating that Loyalty mediates the relationship between Awareness and Corporate Sustainability, is consistent with theories emphasizing the role of loyalty as a bridge between stakeholder awareness and organizational sustainability. Participants who are not only aware of *Social Security Management Agency (BPJS) of Employment* 's initiatives but also loyal are likely to actively support and contribute to the organization's sustainability goals. This result reinforces the idea that informed and committed stakeholders play a vital role in driving sustainable practices within an organization.

The rejection of H5b suggests that, in the case of *Social Security Management Agency (BPJS) of Employment*, loyalty does not mediate the relationship between trust and corporate sustainability. It is finding challenges conventional wisdom and may indicate that trust alone may not be sufficient to drive participant loyalty that, in turn, influences perceptions of sustainability. This nuanced result underscores the need for *Social Security Management Agency (BPJS) of Employment* managers to consider a multifaceted approach in understanding the link between trust, loyalty, and corporate sustainability.

From a managerial perspective, these results highlight the need for tailored strategies at *Social Security Management Agency (BPJS) of Employment*. While literacy and awareness programs may contribute to sustainability outcomes through their impact on loyalty, trust-building initiatives may require additional dimensions to directly influence corporate sustainability. Strategies that integrate trust-building with loyalty-building initiatives may be explored to create a more comprehensive and effective approach. In summary, the acceptance of H5a and H5c sheds light on the mediating role of loyalty in the relationships between literacy, awareness, and corporate sustainability. The nuanced rejection of H5b suggests that trust may have a distinct influence on sustainability outcomes that might not be solely mediated by participant loyalty. These findings offer actionable insights for *Social Security Management Agency (BPJS) of Employment* manager to develop targeted strategies that leverage the interplay between literacy, awareness, trust, loyalty, and corporate sustainability.

6. Conclusion

The results of the hypothesis testing provide valuable insights into the relationships between literacy, trust, awareness, loyalty, and corporate sustainability at *Social Security Management Agency (BPJS) of Employment*. The acceptance of Hypothesis H1a and H1b highlights the significant impact of literacy on both participant loyalty and perceptions of corporate sustainability. Literacy not only fosters a stronger bond with *Social Security Management Agency (BPJS) of Employment* but also acts as a catalyst for participants to support and positively perceive the organization's sustainability initiatives. These findings underscore the importance of investing in literacy improvement programs to enhance participant engagement and contribute to a more sustainably conscious participant base.

The results regarding Hypothesis H2b suggest that trust plays a pivotal role in shaping perceptions of corporate sustainability at *Social Security Management Agency (BPJS) of Employment*. Participants who trust the organization are more likely to perceive its sustainability efforts positively. However, the non-significant impact of trust on loyalty (H2a) implies a nuanced relationship that may require a more comprehensive examination. These findings guide managerial strategies, emphasizing the need for trust-building initiatives as integral components of *Social Security Management Agency (BPJS) of Employment*'s overall strategy to promote sustainable practices and positive stakeholder perceptions. Furthermore, the acceptance of Hypothesis H3a and H3b highlights the significant influence of awareness on both participant loyalty and perceptions of corporate sustainability. Proactive communication and awareness-building strategies are crucial for enhancing participant understanding of the organization's services and sustainability efforts. Integrating sustainability messaging into awareness campaigns can foster positive stakeholder perceptions and contribute to the broader societal goal of promoting sustainability.

The positive impact of loyalty on corporate sustainability, as indicated by the acceptance of Hypothesis H4, emphasizes the need for *Social Security Management Agency (BPJS) of Employment* to foster and maintain strong relationships with participants. Loyalty-building initiatives can contribute to a supportive environment for sustainable practices, and incorporating sustainability education into these programs may enhance participants' receptiveness to sustainability messages. Lastly, the acceptance of Hypotheses H5a and H5c, along with the rejection of H5b, provides nuanced insights into the mediating role of loyalty. Literacy and awareness, when coupled with loyalty, significantly influence perceptions of corporate sustainability. However, trust appears to have a distinct influence on sustainability outcomes that may not be solely mediated by participant loyalty. These findings guide *Social Security Management Agency (BPJS) of Employment* managers to develop targeted strategies that leverage the interplay between literacy, awareness, trust, loyalty, and corporate sustainability for a more informed, engaged, and sustainably conscious participant base.

6.1 Theoretical and Practical Implication

The theoretical implications of the study are substantial, contributing to our understanding of organizational dynamics in various dimensions. Firstly, the research highlights the critical role of literacy in shaping participant loyalty and perceptions of corporate sustainability, suggesting avenues for further exploration in literacy-based models. Additionally, the nuanced relationship between trust, loyalty, and corporate sustainability calls for a more comprehensive understanding of the mechanisms through which trust influences participant behaviors. This finding prompts the refinement of existing trust and sustainability frameworks to capture the distinct impact of trust on sustainability outcomes. The study also underscores the significance of participant awareness, advocating for the further development of theoretical frameworks related to stakeholder awareness. This exploration can shed light on how organizations can strategically leverage awareness as a catalyst for positive participant behaviors and sustainable practices. Lastly, the examination of loyalty as a mediator in relationships between literacy, awareness, and corporate sustainability contributes to the evolving landscape of mediating models in organizational literature. Future research is encouraged to delve deeper into understanding the nuanced role of loyalty and explore additional contextual factors influencing the mediation process.

On a practical level, the study offers actionable insights for organizations, particularly those in the public sector like *Social Security Management Agency (BPJS) of Employment*. Implementing targeted literacy enhancement programs is recommended to improve participant understanding of services and sustainability initiatives. This involves the development of tailored educational initiatives, workshops, and communication strategies to cater to diverse literacy levels among participants. While trust remains crucial for positive perceptions of corporate sustainability, the study suggests that trust alone may not be sufficient to drive participant loyalty. As a result, organizations are advised to develop multifaceted trust-building strategies, considering additional factors influencing loyalty and fostering a more comprehensive approach to participant engagement. Proactive communication and awareness-building initiatives are deemed essential for enhancing participant understanding of organizational services and sustainability efforts. *Social Security Management Agency (BPJS) of Employment* can utilize various communication channels, such as educational programs, newsletters, and workshops, to disseminate information effectively. The strategic integration of sustainability messaging into awareness campaigns is also recommended, showcasing the organization's commitment to sustainable practices and contributing to broader societal goals. Recognizing the positive impact of loyalty on corporate sustainability, organizations are encouraged to consider loyalty-building initiatives, including personalized communication, recognition programs, and efforts to enhance the overall participant experience. Lastly, loyalty programs can be enriched by incorporating sustainability education and engagement components, creating a more supportive environment for sustainable practices. In summary, the study's practical implications provide valuable guidance for organizations to develop targeted strategies leveraging literacy, trust, awareness, and loyalty to promote sustainable practices and positive stakeholder perceptions.

6.2 Limitation and Recommendation

The study has several limitations that warrant consideration. Firstly, the sample specificity, focusing on 393 respondents from *Social Security Management Agency (BPJS) of Employment* in specific provinces, raises concerns about generalizability. Variations in literacy levels, trust dynamics, and awareness across different demographic or organizational settings may impact the applicability of findings. The cross-sectional design of the study limits the establishment of causal relationships. Employing longitudinal designs in future research could provide more robust insights into the temporal dynamics of literacy, trust, awareness, loyalty, and corporate sustainability. Additionally, the reliance on self-reported measures introduces potential response bias, impacting data accuracy. Combining self-reports with objective measures or employing mixed-methods approaches could enhance the validity of the findings. While the study focused on key variables, such as literacy, trust, awareness, loyalty, and corporate sustainability, other influencing factors may exist. Future research should explore additional variables, such as organizational culture or external influences, for a more comprehensive understanding.

For future research, recommendations include the exploration of longitudinal studies to capture dynamic relationships over time, consideration of diverse organizational settings for enhanced generalizability, and the integration of mixed-methods approaches to provide richer insights. Investigating moderating variables, such as organizational size or industry type, can offer tailored understanding, while exploring external influences on trust, like economic conditions, may provide practical insights for organizational strategies. Comparative analyses of different initiatives across organizations can highlight best practices, and intervention studies based on the study's findings can offer actionable insights for organizations like *Social Security Management Agency (BPJS) of Employment*. Lastly, extending research to incorporate external stakeholder perspectives, including the community, regulators, or industry partners, can provide a more holistic view of sustainability efforts. By addressing these limitations and pursuing these recommendations, researchers and organizations can contribute to a more nuanced understanding of participant engagement and perceptions of corporate sustainability.

References

Ahmad, F., Widén, G., & Huvila, I. (2020). The impact of workplace information literacy on organizational innovation: An empirical study. *International Journal of Information Management*, *51*, 102041. https://doi.org/https://doi.org/10.1016/j.ijinfomgt.2019.102041

Ahmad, S. (2015). Green Human Resource Management: Policies and practices. *Cogent Business & Management*, *2*(1), 1030817. https://doi.org/10.1080/23311975.2015.1030817

Alexandro, R., & Basrowi, B. (2024a). Measuring the effectiveness of smart digital organizations on digital technology adoption : An em- pirical study of educational organizations in Indonesia. *International Journal of Data and Network Science*, *8*(1), 139–150. https://doi.org/10.5267/j.ijdns.2023.10.009

Alexandro, R., & Basrowi, B. (2024b). The influence of macroeconomic infrastructure on supply chain smoothness and national competitiveness and its implications on a country ' s economic growth : evidence from BRICS. *Uncertain Supply Chain Management*, *12*(1), 167–180. https://doi.org/10.5267/j.uscm.2023.10.007

Anatolevena Anisimova, T. (2007). The effects of corporate brand attributes on attitudinal and behavioural consumer loyalty. *Journal of Consumer Marketing*, *24*(7), 395–405. https://doi.org/10.1108/07363760710834816

Basrowi, B., & Utami, P. (2023). Development of Market Distribution through Digital Marketing Transformation Trends to Maximize Sales Turnover for Traditional Beverage Products. *Journal of Distribution Science*, *21*(8), 57–68. https://doi.org/10.15722/jds.21.08.202308.57

Baumgartner, R. J., & Rauter, R. (2017). Strategic perspectives of corporate sustainability management to develop a sustainable organization. *Journal of Cleaner Production*, *140*, 81–92. https://doi.org/https://doi.org/10.1016/j.jclepro.2016.04.146

Bharati, R. (2017). Aligning Profitability and Environmental Responsibility: A Study on Sustainable Marketing Strategies. *Eduzone: International Peer Reviewed/Refereed Multidisciplinary Journal*, 6(2 SE-Articles), 7–15.

Bilgihan, A. (2016). Gen Y customer loyalty in online shopping: An integrated model of trust, user experience and branding. *Computers in Human Behavior*, 61, 103–113. https://doi.org/https://doi.org/10.1016/j.chb.2016.03.014

Cha, M.-K., Yi, Y., & Bagozzi, R. P. (2015). Effects of Customer Participation in Corporate Social Responsibility (CSR) Programs on the CSR-Brand Fit and Brand Loyalty. *Cornell Hospitality Quarterly*, 57(3), 235–249. https://doi.org/10.1177/1938965515620679

Chun, E., Joung, H., Lim, Y. J., & Ko, E. (2021). Business transparency and willingness to act environmentally conscious behavior: Applying the sustainable fashion evaluation system "Higg Index." *Journal of Global Scholars of Marketing Science*, 31(3), 437–452. https://doi.org/10.1080/21639159.2021.1904784

Chung, S., & Cho, H. (2017). Fostering Parasocial Relationships with Celebrities on Social Media: Implications for Celebrity Endorsement. *Psychology & Marketing*, 34(4), 481–495. https://doi.org/https://doi.org/10.1002/mar.21001

Contini, M., Annunziata, E., Rizzi, F., & Frey, M. (2020). Exploring the influence of Corporate Social Responsibility (CSR) domains on consumers' loyalty: An experiment in BRICS countries. *Journal of Cleaner Production*, 247, 119158. https://doi.org/https://doi.org/10.1016/j.jclepro.2019.119158

Damberg, S., Schwaiger, M., & Ringle, C. M. (2022). What's important for relationship management? The mediating roles of relational trust and satisfaction for loyalty of cooperative banks' customers. *Journal of Marketing Analytics*, 10(1), 3–18. https://doi.org/10.1057/s41270-021-00147-2

Dyllick, T., & Muff, K. (2015). Clarifying the Meaning of Sustainable Business: Introducing a Typology From Business-as-Usual to True Business Sustainability. *Organization & Environment*, 29(2), 156–174. https://doi.org/10.1177/1086026615575176

Farooq, O., Payaud, M., Merunka, D., & Valette-Florence, P. (2014). The Impact of Corporate Social Responsibility on Organizational Commitment: Exploring Multiple Mediation Mechanisms. *Journal of Business Ethics*, 125(4), 563–580. https://doi.org/10.1007/s10551-013-1928-3

Fernando, Y., Chiappetta Jabbour, C. J., & Wah, W.-X. (2019). Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: Does service capability matter? *Resources, Conservation and Recycling*, 141, 8–20. https://doi.org/https://doi.org/10.1016/j.resconrec.2018.09.031

González-Rodríguez, M. R., & Díaz-Fernández, M. C. (2020). Customers' corporate social responsibility awareness as antecedent of repeat behaviour intention. *Corporate Social Responsibility and Environmental Management*, 27(3), 1294–1306. https://doi.org/https://doi.org/10.1002/csr.1884

Hadi, R., Shafrani, Y. S., Hilyatin, D. L., Riyadi, S., & Basrowi, B. (2019). Digital zakat management, transparency in zakat reporting, and the zakat payroll system toward zakat management accountability and its implications on zakat growth acceleration. *International Journal of Data and Network Science*, 8(1), 103–108. https://doi.org/10.5267/j.ijdns.2018.12.005

Hamdan, H., & Basrowi, B. (2024). Do community entrepreneurial development shape the sustainability of tourist villages? Hamdana*. *Uncertain Supply Chain Management*, 12(1), 407–422. https://doi.org/10.5267/j.uscm.2023.9.014

Hawn, O., & Ioannou, I. (2016). Mind the gap: The interplay between external and internal actions in the case of corporate social responsibility. *Strategic Management Journal*, 37(13), 2569–2588. https://doi.org/https://doi.org/10.1002/smj.2464

Himmatul, I., & Junaedi, A. (2024). *International Journal of Data and Network Science Understanding Roblox ' s business model and collaborative learning on participation in the deci- sion-making process : implications for enhancing cooperative literacy*. 8, 1247–1260. https://doi.org/10.5267/j.ijdns.2023.11.009

Himmatul, I., Nugroho, I., Mardian, T., Syakina, D., Suryo, A., Sutoto, A., & Junaidi, A. (2024). *Uncertain Supply Chain Management Enhancing company performance and profitability through agile practices : A comprehensive analysis of three key perspectives*. 12, 1205–1224. https://doi.org/10.5267/j.uscm.2023.11.014

Hollebeek, L. D., & Macky, K. (2019). Digital Content Marketing's Role in Fostering Consumer Engagement, Trust, and Value: Framework, Fundamental Propositions, and Implications. *Journal of Interactive Marketing*, 45(1), 27–41. https://doi.org/10.1016/j.intmar.2018.07.003

Hutter, K., Hautz, J., Dennhardt, S., & Füller, J. (2013). The impact of user interactions in social media on brand awareness and purchase intention: the case of MINI on Facebook. *Journal of Product & Brand Management*, 22(5/6), 342–351. https://doi.org/10.1108/JPBM-05-2013-0299

Iglesias, O., Markovic, S., Bagherzadeh, M., & Singh, J. J. (2020). Co-creation: A Key Link Between Corporate Social Responsibility, Customer Trust, and Customer Loyalty. *Journal of Business Ethics*, 163(1), 151–166. https://doi.org/10.1007/s10551-018-4015-y

Iqbal, K., Munawar, H. S., Inam, H., & Qayyum, S. (2021). Promoting Customer Loyalty and Satisfaction in Financial Institutions through Technology Integration: The Roles of Service Quality, Awareness, and Perceptions. In *Sustainability* (Vol. 13, Nomor 23). https://doi.org/10.3390/su132312951

Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. (2021). The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction, and trust. *Sustainable Production and Consumption*, 25, 123–135. https://doi.org/https://doi.org/10.1016/j.spc.2020.07.019

Jun, S., & Yi, J. (2020). What makes followers loyal? The role of influencer interactivity in building influencer brand equity. *Journal of Product & Brand Management*, 29(6), 803–814. https://doi.org/10.1108/JPBM-02-2019-2280

Junaidi, A., Basrowi, B., Sabtohadi, J., Wibowo, A. M., Wiboho, S. S., Asgar, A., Pramono, E. P., & Yenti, E. (2024). The

role of public administration and social media educational socialization in influencing public satisfaction on population services : The mediating role of population literacy awareness. *International Journal of Data and Network Science*, *8*(1), 345–356. https://doi.org/10.5267/j.ijdns.2023.9.019

Junaidi, A., Masdar, A. Zum, Basrowi, B., Robiatun, D., Situmorang, J. W., Lukas, A., Asgar, A., Herlina, L., Manulu, L. P., & Payung, L. (2024). Uncertain Supply Chain Management Enhancing sustainable soybean production in Indonesia : evaluating the environmental and economic benefits of MIGO technology for integrated supply chain sustainability. *Uncertain Supply Chain Managemen*, *12*(1), 221–234. https://doi.org/10.5267/j.uscm.2023.10.003

Karaosmanoglu, E., Altinigne, N., & Isiksal, D. G. (2016). CSR motivation and customer extra-role behavior: Moderation of ethical corporate identity. *Journal of Business Research*, *69*(10), 4161–4167. https://doi.org/https://doi.org/10.1016/j.jbusres.2016.03.035

Kharis, A., Masyhari, A., Suci, W., & Priatnasari, Y. (2024). *Uncertain Supply Chain Management Optimizing state revenue through government-driven supply chain efficiency and fair corporate taxation practices*. *12*, 659–668. https://doi.org/10.5267/j.uscm.2024.1.018

Kittie, S., & Basrowi, B. (2024). Environmental education using SARITHA-Apps to enhance environmentally friendly supply chain efficiency and foster environmental knowledge towards sustainability. *Uncertain Supply Chain Management*, *12*(1), 359–372. https://doi.org/10.5267/j.uscm.2023.9.015

Komunda, M., & Osarenkhoe, A. (2012). Remedy or cure for service failure? . *Business Process Management Journal*, *18*(1), 82–103. https://doi.org/10.1108/14637151211215028

Korschun, D., Bhattacharya, C. B., & Swain, S. D. (2014). Corporate Social Responsibility, Customer Orientation, and the Job Performance of Frontline Employees. *Journal of Marketing*, *78*(3), 20–37. https://doi.org/10.1509/jm.11.0245

Kuchinka, D. G. J., Balazs, S., Gavriletea, M. D., & Djokic, B.-B. (2018). Consumer Attitudes toward Sustainable Development and Risk to Brand Loyalty. In *Sustainability* (Vol. 10, Nomor 4). https://doi.org/10.3390/su10040997

Kumar, V., & Kaushik, A. K. (2017). Achieving destination advocacy and destination loyalty through destination brand identification. *Journal of Travel & Tourism Marketing*, *34*(9), 1247–1260. https://doi.org/10.1080/10548408.2017.1331871

Kumar, V., Sharma, A., Shah, R., & Rajan, B. (2013). Establishing Profitable Customer Loyalty for Multinational Companies in the Emerging Economies: A Conceptual Framework. *Journal of International Marketing*, *21*(1), 57–80. https://doi.org/10.1509/jim.12.0107

Lee, D., Moon, J., Kim, Y. J., & Yi, M. Y. (2015). Antecedents and consequences of mobile phone usability: Linking simplicity and interactivity to satisfaction, trust, and brand loyalty. *Information & Management*, *52*(3), 295–304. https://doi.org/https://doi.org/10.1016/j.im.2014.12.001

Lisaria, R., Prapanca, D., Amatul, S., & Arifin, K. (2024). *Uncertain Supply Chain Management Forging a resilient pathway : Uncovering the relationship between the supply chain sustainability and the tax compliance , and the sustainable future of the micro , small , and medium enterprise*. *12*, 1097–1112. https://doi.org/10.5267/j.uscm.2023.11.023

Luthra, S., Mangla, S. K., Shankar, R., Prakash Garg, C., & Jakhar, S. (2018). Modelling critical success factors for sustainability initiatives in supply chains in Indian context using Grey-DEMATEL. *Production Planning & Control*, *29*(9), 705–728. https://doi.org/10.1080/09537287.2018.1448126

Martínez, P., & Rodríguez del Bosque, I. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, *35*, 89–99. https://doi.org/https://doi.org/10.1016/j.ijhm.2013.05.009

Marwanto, I. G. G. H., Basrowi, B., & Suwarno, S. (2020a). The Influence of Culture and Social Structure on Political Behavior in the Election of Mayor of Kediri Indonesia. *International Journal of Advanced Science and Technology*, *29*(05 SE-Articles), 1035–1047. http://sersc.org/journals/index.php/IJAST/article/view/9759

Marwanto, I. G. G. H., Basrowi, & Suwarno. (2020b). The Influence of Culture and Social Structure on Political Behavior in the Election of Mayor of Kediri Indonesia. *International Journal of Advanced Science and Technology*, *29*(05 SE-Articles), 1035–1047. http://sersc.org/journals/index.php/IJAST/article/view/9759

Miar, M., Rizani, A., Pardede, R. L., & Basrowi, B. (2024). Analysis of the effects of capital expenditure and supply chain on economic growth and their implications on the community welfare of districts and cities in central Kalimantan province. *Uncertain Supply Chain Management*, *12*(1), 489–504. https://doi.org/10.5267/j.uscm.2023.9.003

Mulyani, S., & Basrowi, B. (2024). The effect of environmentally oriented leadership and public sector management quality on supply chain performance : The moderating role of public sector environmental policy. *Uncertain Supply Chain Management*, *12*, 471–480. https://doi.org/10.5267/j.uscm.2023.9.005

Muniz, F., Guzmán, F., Paswan, A. K., & Crawford, H. J. (2019). The immediate effect of corporate social responsibility on consumer-based brand equity. *Journal of Product & Brand Management*, *28*(7), 864–879. https://doi.org/10.1108/JPBM-09-2018-2016

Nuryanto, U. W., Basrowi, B., & Quraysin, I. (2019). Big data and IoT adoption in shaping organizational citizenship behavior: The role of innovation organiza- tional predictor in the chemical manufacturing industry. *International Journal of Data and Network Science*, *8*(1), 103–108. https://doi.org/10.5267/j.ijdns.2018.12.005

Nuryanto, U. W., Basrowi, Quraysin, I., & Pratiwi, I. (2024). Environmental management control system, blockchain adoption, cleaner production, and product efficiency on environmental reputation and performance: Empirical evidence from Indonesia. *Sustainable Futures*, *7*, 100190. https://doi.org/https://doi.org/10.1016/j.sftr.2024.100190

Olšanová, K., Escobar Ríos, A., Cook, G., Král, P., & Zlatić, M. (2022). Impact of the awareness of brand-related CSR

activities on purchase intention for luxury brands. *Social Responsibility Journal*, *18*(3), 597–618. https://doi.org/10.1108/SRJ-10-2020-0398

Oluwajana, D., Adeshola, I., & Olowu, G. (2022). Do the customer relationship benefits influence expectation of continuity? Adoption of social customer relationship management to promote eco-friendly products. *Journal of Public Affairs*, *22*(S1), e2701. https://doi.org/https://doi.org/10.1002/pa.2701

Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, *37*(8), 1615–1631. https://doi.org/https://doi.org/10.1002/smj.2410

Panchal, S. K., Khan, B. M., & Ramesh, S. (2012). Importance of 'brand loyalty, brand awareness and perceived quality parameters' in building brand equity in the Indian pharmaceutical industry. *Journal of Medical Marketing*, *12*(2), 81–92. https://doi.org/10.1177/1745790412440569

Polas, M. R. H., Tabash, M. I., Bhattacharjee, A., & Dávila, G. A. (2023). Knowledge management practices and green innovation in SMES: the role of environmental awareness towards environmental sustainability. *International Journal of Organizational Analysis*, *31*(5), 1601–1622. https://doi.org/10.1108/IJOA-03-2021-2671

Purwaningsih, E. (2020). Role of Trademark in Improving Legal and Competitive Awareness. *Law Reform: Jurnal Pembaharuan Hukum*, *16*(1), 1–18. https://doi.org/10.14710/lr.v16i1.30301

Purwaningsih, E., Muslikh, & Chikmawati, N. F. (2019). Promotion of Indonesia's MSMES food products through trademark protection and information technology optimization. *International Journal of Innovation, Creativity and Change*, *9*(7), 224–239.

Purwaningsih, E., Muslikh, M., Suhaeri, S., & Basrowi, B. (2024). Utilizing blockchain technology in enhancing supply chain efficiency and export performance , and its implications on the financial performance of SMEs. *Uncertain Supply Chain Management*, *12*(1), 449–460. https://doi.org/10.5267/j.uscm.2023.9.007

Purwaningsih, E., Muslikh, & Suhaeri. (2022). Innovation and supply chain orientation concerns toward job creation law in micro, small, and medium enterprises export-oriented products. *Uncertain Supply Chain Management*, *10*(1), 69–82. https://doi.org/10.5267/j.uscm.2021.10.009

Purwaningsih, E., & Rahmanto, D. (2013). The empowerment model of indigenous people for legal protection against Indonesian traditional knowledge. *International Journal of Academic Research*, *5*(1), 124–129. https://doi.org/10.7813/2075-4124.2013/5-1/b.21

Ramanathan, U., Subramanian, N., & Parrott, G. (2017). Role of social media in retail network operations and marketing to enhance customer satisfaction. *International Journal of Operations & Production Management*, *37*(1), 105–123. https://doi.org/10.1108/IJOPM-03-2015-0153

Saeri, M., Burhansyah, R., Kilmanun, J. C., & Hanif, Z. (2024). *Strategic resilience : Integrating scheduling , supply chain management , and advanced operations techniques in production risk analysis and technical efficiency of rice farming in flood-prone areas*. *Uncertain Supply Chain Management, 12*, 1065–1082. https://doi.org/10.5267/j.uscm.2023.12.002

Saleem, M. A., Zahra, S., Ahmad, R., & Ismail, H. (2016). Predictors of customer loyalty in the Pakistani banking industry: a moderated-mediation study. *International Journal of Bank Marketing*, *34*(3), 411–430. https://doi.org/10.1108/IJBM-12-2014-0172

Shofwa, Y., Hadi, R., Isna, A., & Amaludin, A. (2024). *Uncertain Supply Chain Management Harmonization of social capital and philanthropic culture : A catalyst for smooth household supply chains and successful economic development. 12*, 1053–1064. https://doi.org/10.5267/j.uscm.2023.12.003

Soenyono, S., & Basrowi, B. (2020). Form and Trend of Violence against Women and the Legal Protection Strategy. *International Journal of Advanced Science and Technology*, *29*(05 SE-Articles), 3165–3174. http://sersc.org/journals/index.php/IJAST/article/view/11636

Suwarno Basrowi, I. G. G. H. M. (2020). Technology of Qualitative Analysis to Understand Community Political Behaviors in Regional Head Election in Wates District, Kediri, Indonesia. *International Journal of Advanced Science and Technology*, *29*(05 SE-Articles), 2624–2635. http://sersc.org/journals/index.php/IJAST/article/view/11159

Tyler, K., & Stanley, E. (2007). The role of trust in financial services business relationships. *Journal of Services Marketing*, *21*(5), 334–344. https://doi.org/10.1108/08876040710773642

Viererbl, B., & Koch, T. (2022). The paradoxical effects of communicating CSR activities: Why CSR communication has both positive and negative effects on the perception of a company's social responsibility. *Public Relations Review*, *48*(1), 102134. https://doi.org/https://doi.org/10.1016/j.pubrev.2021.102134

Weitzl, W., Weitzl, W., & Berg. (2017). *Measuring electronic word-of-mouth effectiveness*. Springer.

Wirtz, J., den Ambtman, A., Bloemer, J., Horváth, C., Ramaseshan, B., van de Klundert, J., Gurhan Canli, Z., & Kandampully, J. (2013). Managing brands and customer engagement in online brand communities. *Journal of Service Management*, *24*(3), 223–244. https://doi.org/10.1108/09564231311326978

Yusuf, Z. F. A., Yusuf, F. A., Nuryanto, U. W., & Basrowi, B. (2024). Assessing organizational commitment and organizational citizenship behavior in ensuring the smoothness of the supply chain for medical hospital needs towards a green hospital : Evidence from Indonesia. *Uncertain Supply Chain Management*, *12*(1), 181–194. https://doi.org/10.5267/j.uscm.2023.10.006