

**IMPACT OF SOCIAL MEDIA USAGE ON SUSTAINABLE PERFORMANCE OF SMEs: THE ROLE OF DIGITAL LEADERSHIP, INNOVATION CAPABILITIES AND ORGANIZATIONAL COMMITMENT****Yasin Awwab<sup>1</sup>, Avanti Fontana<sup>2</sup>**<sup>1</sup>Universitas Indonesia, yasin.awwab@ui.ac.id<sup>2</sup>Universtias Indonesia, avanti.fontana@ui.ac.id

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**ABSTRACT**

*The development of the world of technology has made the increasing use of social media in carrying out the operational role of small and medium-sized businesses (SMEs) as well as has triggered a major transformation in the role of corporate social technology in SMEs. Social media is often used in companies for work and non-work purposes, which is then influenced by the existing digital leadership. Existing research on the use of social media, innovation capabilities, organizational commitment and performance generated by SMEs, and the role of digital leadership is quite sparse, especially in research in developing countries. This study explores the relationship between the use of social media and the role of digital leadership on innovation capabilities and organizational commitment to improving the sustainable performance of SMEs. To do this, a total of 127 samples of survey results were obtained from managers who manage SMEs in Indonesia. This study uses Partial least squares structural equation modeling (PLS-SEM), with results showing that the use of social media moderated by digital leadership can increase innovation which then affects the sustainable performance of SMEs. This study outlines the theoretical contributions and practical implications.*

**Keywords:** Digital Leadership, Social Media Usage, Small and Medium-Sized Enterprise (SME), Innovation Capabilities, Organizational Commitment

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**1. Introduction**

Social media such as WhatsApp, Discord, and Slack have transformed the way individuals in an organization connect and communicate with each other (Pavithra & Deepak, 2021). The use of social media in an organization can contribute to internal knowledge management, social interaction, and the level of performance of the organization (Pavithra & Deepak, 2021). The use of social media as operational tools is increasing, especially in companies implementing telecommuting systems that require operational communication tools in the form of social media. Using social media is a viable option for getting updated and reliable information online (Sigala & Chalkiti, 2014). Social media enables organizations to share information more quickly and organizations to share knowledge more efficiently (Hur et al., 2017).

So far, the use of social media in business operations is not limited to large organizations, but small and medium enterprises (SMEs) have also used social media to run their businesses. What's more, SMEs are a type of business that is able to make a significant contribution to the economic development of a country and is able to open up new jobs and even carry out export activities and innovation activities (Arshad et al., 2020). Therefore, the existence of SMEs is very important for the country, especially for developing countries. One of the main goals of SMEs is to maintain a good level of performance in a sustainable manner to stay in business (Borah et al., 2022). By using social media, organizations are believed to be able to create and accelerate sustainable performance (Borah et al., 2022). The ease of

communication offered by social media is able to produce two-way communication between experts, stakeholders, and consumers who are full of information in it (Mention et al., 2019). More effective and efficient information dissemination with the use of social media promotes business alliances by enabling faster information collaboration and knowledge sharing and improving business performance (Borah et al., 2022).

Organizations can achieve or maintain sustainable performance if they can be involved in creating innovations to provide business performance solutions and opportunities for business continuity (Rogers & Shoemaker, 1971). Continuing to Innovate The ability of an organization to continue to innovate is critical to its ability to continue to function well. Companies that make extensive use of social media can develop strategies that emphasize the continuity between innovation and resources, share visions and goals, and provide a framework for innovation (Hitchen et al., 2017).

SMEs that use social media also apply web and mobile-based technologies that are used by organizations as interactive communication tools with the aim of increasing employee engagement in their organizations (Zhang et al., 2019). With the latest technological developments, the use of social media has been able to create efficient communication access that can affect work and organizational engagement (van Zoonen et al., 2017). SMEs that are able to use social media effectively and efficiently, of course, also have been influenced by its organizational leadership in it. Leaders who have a digital mindset can show better abilities in managing members' online activities, such as managing customer relationships, product marketing, problem-solving, and even making decisions regarding the company's online needs (Meier et al., 2017). This means that the relationship between digital leadership and the use of social media and innovation skills is unavoidable (Borah et al., 2022). In addition, many companies today use social media instead of traditional methods to foster social relationships (Scuotto et al., 2016).

This study is important because it seeks to sustainably determine the role of digital leadership, innovation capabilities, organizational involvement, and relationships with the use of social media in SME performance. Social media research in companies has mostly focused on two aspects, namely exploring the influencing factors of the use of social media and examining the consequences of using social media in companies, including job satisfaction and performance (Borah et al., 2022). It is important to investigate the various purposes of using social media and their impact on organizational performance. Most studies have only studied the intensity or frequency of using social media for work.

**2. Literature Review**

The resource-based view (RBV) that has been developed by Borah et al. (2022) from Barney (1991) research supports the theoretical foundation of this research. In addition, organizational commitment is added to see how the relationship between the use of social media as operational and communication of a sense of responsibility owned by employees.

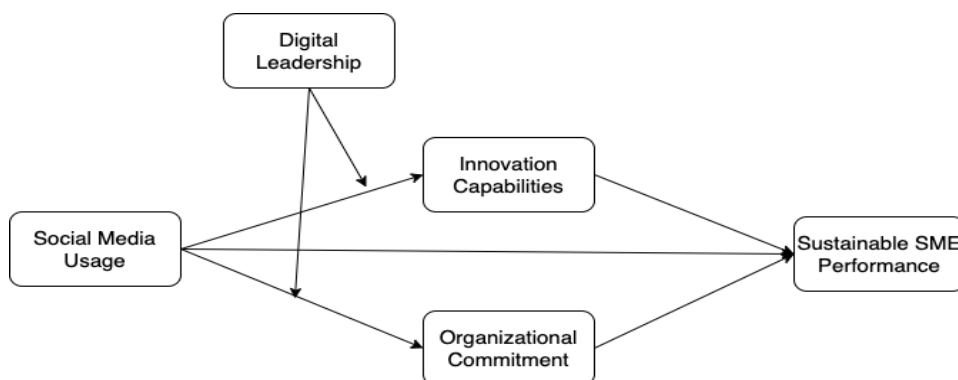


Figure 1. Research framework  
(Source: Researcher)

## 2.1 Social Media Usage

The use of social media carried out by companies can be categorized into several types of activities, for example, as a corporate social networking platform, marketplace application, information sharing, communication, instant messaging, question and answer, and so on online (Schweidel & Moe, 2014). This shows that social media is a diverse and dynamic market that offers opportunities for growth, creativity, and innovation. Several publications reveal that the use of social media is an effective innovation approach. These companies can encourage innovation by engaging customers with innovative products that are used to develop and research ideas, test products, and promote products through social networks (Mount & Martinez, 2014). In its operational process, a company can create innovations that come from external sources by communicating with customers or experts through social media. In addition, previous research has proven that the use of professional social media such as Kalibrr and the like in SMEs can generate valuable insights from outside experts to encourage new business innovation (Ram & Liu, 2018).

In addition, social media used for professional and social purposes in organizations can contribute to information accessibility and effective communication, which will lead to high engagement. To the work and organization of its members. (Zhang, Ma, and Xu, 2019). Small and medium businesses use social media to communicate with their stakeholders in the most efficient and effective way possible. This will affect business performance, as previous research has demonstrated that an SME's use of social media has a positive relationship with sustainability performance. Therefore, this study proposes the following hypothesis:

*H1. Social media usage has a positive effect on innovation capabilities.*

*H2. Social media usage has a positive effect on organizational commitment.*

*H3. Social media usage has a positive effect on the sustainable performance of SMEs.*

## 2.2 Innovation Capabilities

Innovation capability is defined as the talent the company has in order to continue to innovate ideas and manage information into new mechanisms, goods, and procedures for the company's sustainability (Lawson & Samson, 2001). This encourages companies to build innovations to deal with changing market situations (Slater et al., 2010). The ability to innovate needs to be integrated with each other through company systems and policies. Therefore, with the existence of social media, it is hoped that companies will get better input, information, and communication to help encourage the formation of innovation (Borah et al., 2022). In previous studies, it was also stated that the ability to innovate has a positive effect on the company's sustainable performance (Fang et al., 2021). Therefore, this study proposes the following hypothesis:

*H4. Innovation capabilities have a positive effect on the sustainable performance of SMEs.*

*H5. Innovation capabilities positively mediate the relationship between the use of social media and the sustainable performance of SMEs.*

## 2.3 Organizational Commitment

Organizational commitment is a personal desire to be part of the organization, which can be largely due to attachment to the organization and based on the employee's belief that he has a responsibility to the organization (Kwantes 2003). Previous research has suggested that employee relationships with organizations can simultaneously reflect varying degrees of affective, continuance, and normative commitment that support sustainable performance (Eliyana et al., 2019). The existence of social media supports a communication process that is not limited by space and time, thereby fostering stronger employee involvement (van Zoonen et al., 2017). Therefore, this study proposes the following hypothesis:

*H6. Organizational commitment has a positive effect on the sustainable performance of SMEs.*

*H7. Organizational commitment positively mediates the relationship between the use of social media and the sustainable performance of SMEs.*

## 2.4 Digital Leadership

In the context of leadership, digital leadership refers to core competencies in communication, content, and computing as a contribution to the knowledge society (Goethals et al., 2002). Digital leadership is dynamic and central to driving digital transformation (Oberer & Erkollar, 2018), integrating culture and competence in optimizing digital technology to create value (Mihardjo & Rukmana, 2018). Leadership traits in the digital era include (Toduk & Gande, 2016): entrepreneurship is related to creativity and innovation, digital

skills to make a competitive difference with technology and strengthen the value of personal knowledge, apply digital technology to create strong domestic and global networks and enable collaboration, and inspire loyal participation in the overall vision. Another study found five similar characteristics: being creative and constantly looking for ways to make a difference, participating in a global vision to drive change and collaboration, remaining curious to learn and adapt to change, and acquiring in-depth knowledge and competence (Zhu, 2015). However, other studies also found that leaders are required not only to be creative and innovative but also to be able to collaborate to seize opportunities (Ahmed et al., 2018). Digital leaders do not direct public attention through rules but focus on sharing information, coaching, achieving success, and increasing incentives (Narbona, 2016). Furthermore, digital leadership is also closely linked with enhanced creativity (Hasanli, 2021). As expected, this leadership style has evolved with the growth of Internet usage. This study suggests that:

*H8. Digital leadership moderates the relationship between social media usage and innovation ability positively.*

*H9. Digital leadership moderates the relationship between social media usage and organizational commitment positively.*

**3. Research Method**

The present study employs a single cross-sectional design research concept used to collect information from respondents once over a period. This study used primary data obtained from 127 respondents by completing an online survey. The questionnaire used applies a 5-point Likert scale to determine how responsive consumers are to certain statements.

This study uses a targeted sampling technique with criteria for men and women aged 21-40 who work as managers of an SME in Indonesia. The resulting data is then processed by SmartPLS tools that apply Partial Squared Structural Equation Modeling (PLS-SEM) technique to see the relationships between variables. PLS-SEM is a causal modeling method that aims to maximize the explained variance of the latent dependent variable (Hair et al., 2011). PLS-SEM in this study was used to predict and identify key variables and test extensions of existing structural theories (Hair et al., 2011). PLS-SEM can measure factors (often referred to as latent variables/latent structure) based on measured variables to distinguish them from other methods (Hair, 2014).

**4. Results and Discussion**

This study uses data that has been sorted by respondents' data which will then be used for further data processing. Descriptive statistics from the data obtained can be seen in Table 1.

Table 1. Frequency Distribution

		Freq.	%			Freq.	%
Gender	Female	67	52.75%	Domicile	Surabaya	41	32.28%
	Male	60	47.24%		Jakarta	34	26.77%
Age	21-25	12	9.44%	Sidoarjo	22	17.32%	
	26-30	33	25.98%	Depok	12	9.44%	
	31-35	38	29.92%	Solo	10	7.87%	
	36-40	44	34.64%	Semarang	8	6.29%	
				Industry	Retail	33	25.98%
					Service	27	21.25%
					Technology	21	16.53%
					Others	46	36.22%

Source: Statistical Software used by researcher

From the results of testing the research model, the first approach is to test the reliability scale; the results are that all variables have Cronbach's alpha values greater than 0.7 (Hair et al., 2010). In addition, the results of the Composite Confidence (CR) value also show that all variables are always above the

threshold of 0.7 (Hair et al., 2010). And finally, examine the value of the mean extracted variance (AVE) for all variables greater than 0.5 (Hair et al., 2013). This shows that all variables are reliable, as can be seen in Table 3. However, based on the test of confirmatory factor analysis (CFA), some variables do not meet the factor loading threshold, which must exceed 0.5 (Hair 2014). After calculating the weighting factor, there are two factors that must be removed because they do not reach the specified threshold, namely DL4, SMU4, and SMU5. While other items exceed the recommended threshold and are listed in Table 2.

Table 2. Measurement model

Construct	Item	Factor Loading	AVE	CR	Cronbach Alpha
Social Media Usage (SMU)	SMU1	0,883	0,770	0,909	0,850
	SMU2	0,827			
	SMU3	0,919			
Innovation Capabilities (IC)	IC1	0,832	0,683	0,866	0,767
	IC2	0,78			
	IC3	0,865			
Organizational Commitment (OC)	OC1	0,866	0,649	0,845	0,722
	OC2	0,885			
	OC3	0,644			
Sustainable Performance (SP)	SP1	0,889	0,749	0,899	0,833
	SP2	0,848			
	SP3	0,858			
Digital Leadership (DL)	DL1	0,811	0,710	0,880	0,796
	DL2	0,859			
	DL3	0,858			

Source: Statistical Software used by researcher

Discriminant Validity test was also carried out using the heterotrait-monotrait ratio of Correlations (HTMT). HTMT is an alternative approach to measure discriminant validity. HTMT is also better and more suitable to use than other approaches when using variance-based structural equation modeling (Henseler et al., 2014). The threshold value of HTMT must be below 0.9 (Bagozzi et al., 1991). The results of the HTMT test are listed in Table 3.

Table 3. Discriminant validity of the measure

	DL	IC	OC	SMU	SP
DL	-				
IC	0,899	-			
OC	0,821	0,892	-		
SMU	0,825	0,895	0,892	-	
SP	0,637	0,725	0,730	0,636	-

Source: Statistical Software used by researcher

A Confirmatory Factor Analysis test was also conducted to test the validity and reliability of the measurement model. Validity test Then, a multicollinearity test between indicators was carried out using the Variance Inflation Factor (VIF). VIF is used to detect a linear relationship between two or more

independent variables (Salmerón Gómez et al., 2016). Apart from PU, all VIF test results are listed in Table 4 and the results are significant because they are lower than 3.3 (Petter et al., 2007).

Table 4. Multicollinearity of the measure

	DL	IC	OC	SMU	SP
DL	-	2,139	2,139	-	-
IC	-	-	-	-	2,346
OC	-	-	-	-	2,225
SMU	-	2,809	2,805	-	2,591
SP	-	-	-	-	-

Source: Statistical Software used by researcher

The main evaluation criteria when using PLS-SEM for the structural model is that the  $R^2$  size of 0.2 is considered high in value (Hair et al., 2011). As shown in Table 5, this model allocates 63% of the variance for Innovation Capabilities, 55.8% of the variant of Organizational Commitment, and 40.6% of the variant for Sustainable Performance. Therefore, it can be concluded that the value of  $R^2$  is statistically significant as in Table 5.

Table 5. Structural model evaluation

Construct	$R^2$	$R^2$ Adjusted	$Q^2$
Innovation Capabilities (IC)	0,630	0,621	0.416
Organizational Commitment (OC)	0,558	0,548	0.309
Sustainable Performance (SP)	0,406	0,391	0.275

Source: Statistical Software used by researcher

To test the fit of the model, it was measured using the Standardized Root Mean Square Residual (SRMR). SRMR was chosen because it can provide a statistical fit test and its value can be interpreted substantively (Shi et al., 2018). The recommended SRMR value is less than 0.1. The results of this study indicate a good fit as in Table 6.

Table 6. Model fit

	Saturated Model	Estimated Model
SRMR	0,074	0,093
d_ULS	0,658	1,048
d_G	0,359	0,346
Chi-Square	265,511	229,270
NFI	0,765	0,797

Source: Statistical Software used by researcher

All tests in this study were performed using SmartPLS 3 to run the PLS-SEM and bootstrap algorithms. Bootstrapping is a non-parametric procedure that allows to check the statistical significance of various PLS-SEM results such as path coefficients, Cronbach's alpha values, HTMT and  $R^2$  (Hair et al., 2017). In addition, structural models are also evaluated to see how well the model predicts certain behaviors. Measurements were taken to see the predicted fit with the Stone Geisser  $Q^2$  benchmark (Fornell and Larcker, 1981). To measure the model's predictive goodness-of-fit, cross-provision is used (Hair et al., 2011). Therefore, if the  $Q^2$  value of an endogenous latent variable is greater than zero, then the latent variable shows predictive relevance. As seen in Table 5 shows the value of  $Q^2$  is greater than zero (Chin, 1998). The  $Q^2$  value is obtained by doing a blindfolding process with an omission distance (D) value of 7. A D value of 7 implies that every seventh data point of the target construction indicator is eliminated in one round of blindfolding (Hair et al., 2011).

Path coefficients and levels of significance are shown in Table 6 to see the positive or negative relationship between variables to answer the hypothesis. Then, to obtain standard errors of hypothesis testing, PLS-SEM uses bootstrap consisting of random and repeated sampling with substitution from the original sample to generate a bootstrap sample (Hair et al., 2011). This study runs a starter program with a subsample of 5000 (Hair et al., 2011). In bootstrap, a subsample is created with observations drawn at random (with substitution) from the original data set. Then, to ensure the stability of the results obtained, the number of subsamples used must be large (Hair et al., 2011). For an initial evaluation, one can use a small number of bootstrap sub-examples such as 500. For the preparation of results, it is appropriate to use many sub-examples of bootstrap such as 5000.

Table 7. Path coefficient and hypotheses testing

Hypothesis	Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation	T Statistics ( O/STDEV )	P Values	Supported
H1	SMU → IC	0,315	0,307	0,091	3,458	0,001	Yes
H2	SMU → OC	0,386	0,372	0,114	3,390	0,001	Yes
H3	SMU → SP	0,137	0,136	0,137	0,998	0,318	No
H4	IC → SP	0,310	0,307	0,125	2,491	0,013	Yes
H5	SMU → IC → SP	0,098	0,091	0,044	2,240	0,025	Yes
H6	OC → SP	0,263	0,260	0,109	2,411	0,016	Yes
H7	SMU → OC → SP	0,101	0,096	0,051	1,980	0,048	Yes
H8	SMU*DL → IC	0,112	0,120	0,046	2,438	0,112	Yes
H9	SMU*DL → OC	0,109	0,118	0,058	1,890	0,109	No

Source: Statistical Software used by researcher

In this study, the proposed hypothesis will be supported with the condition that the resulting relationship is a positive relationship with a path coefficient of more than 0. In addition, the T-Value obtained by the PLS-SEM process must be greater than 1.96 or can see the P-value. The value must be less than 0.05. In accordance with Table 7, the findings obtained in this study are social media usage has a positive effect on innovation capabilities with details of SMU → IC ( $\beta$  0.315,  $t$  = 3.458), so that H1 in this study is supported. A positive relationship between social media usage was also found in organizational commitment indicated with SMU → OC ( $\beta$  0.386,  $t$  = 3.390) so that H2 was also supported. Meanwhile, social media usage has an insignificant relationship with the sustainable performance of SMEs. Therefore, H3 is not supported in this study indicated with SMU → SP ( $\beta$  = 0,137,  $t$  = 0,998). This study also shows that innovation capabilities have a positive effect on sustainable performance of SMEs IC → SP ( $\beta$  = 0.310,  $t$  = 2,491) and found that innovation ability has a positive mediating relationship between social media use and sustainable performance of SMEs as indicated by SMU → IC → SP ( $\beta$  = 0.098  $t$  = 2.240), so H4 and H5 are supported. In addition, organizational commitment has a positive effect on sustainable SME performance OC → SP ( $\beta$  = 0.263,  $t$  = 2.411) and found that organizational commitment has a positive mediating relationship between social media use and sustainable SME performance indicated with SMU → OC → SP ( $\beta$  = 0.101  $t$  = 1.980), so H6 and H7 are supported. And finally, shows that digital leadership has a positive moderating relationship with social media usage and innovation capabilities indicated with SMU\*DL → IC ( $\beta$  = 0.112,  $t$  = 2,438) so that H8 is supported. However, the findings do not support H9. The results of the study show that the moderation of digital leadership on the relationship between social media usage and organizational commitment is not significantly indicated with SMU\*DL → OC ( $\beta$  = 0.109,  $t$  = 1.890).

#### *Theoretical contributions*

The findings of this study contribute to adding insight into the important role of mediation mechanisms for innovation capabilities and the moderating role of digital leadership to encourage social media usage to realize sustainable performance from the perspective of SMEs. In addition, this study also found a mediation of organizational commitment to social media usage and sustainable performance. However, this study failed to prove that digital leadership can moderate the relationship between social media usage and

organizational commitment. This indicates that although digital leadership controls how employees' online activities and decisions are made regarding online business activities (Meier et al., 2017), this study shows that leadership does not significantly increase employee commitment. This may be due to the use of online communication, which does not have a social effect on employees (Eliyana et al., 2019), but this needs to be studied in further research. This research adds to current knowledge about the use of social media because some SMEs in developing countries have started to implement the use of social media in their company operations, so this research can be used as a reference. This study also shows that in the context of SMEs, social media usage does not directly affect sustainable performance, but social media usage can affect the innovation ability and commitment of employees who will later be able to realize sustainable performance.

#### *Practical implication*

The results of the current study indicate that SMEs should take advantage of the use of social media with the aim of continuously encouraging innovation and increasing organizational commitment to realize sustainable SME performance (Olanrewaju et al., 2020). Social media can foster innovation because social media provides access to communication between consumers and fellow employees more effectively (Mount & Martinez, 2014). This certainly encourages SMEs to produce products or services that are oriented to consumers and market conditions from the information obtained. In addition, social media can create higher work engagement and organization engagement because it is not affected by distance restrictions (van Zoonen et al., 2017). SMEs can effectively communicate with their employees anytime and anywhere and social media reduces the gap in job titles so that employees feel close to managers and increase their commitment. In addition, SME social media usage can produce maximum innovation by means of SME leaders to apply digital leadership. Digital leadership requires leaders to be able to regulate the use of social media in the business sphere such as marketing, consumer relations, and so on related to SME online policies (Narbona, 2016). Therefore, digital leadership will be able to encourage employees to understand more about the use of social media with the company's business orientation. Digital leadership can direct centralized training and management of knowledge sharing on how to take advantage of social media and be able to adopt it to open up innovation opportunities (Borah et al., 2022), such as YouTube, WhatsApp, and Facebook to open innovation opportunities with the aim of improving the sustainable performance of SMEs.

## **5. Conclusion and Implications**

From this discussion, it can be concluded that social media usage can have a direct effect on innovation capabilities and organizational commitment. However, social media usage does not directly affect the creation of sustainable performance. Innovation capabilities are able to mediate social media usage, which then affects sustainable performance. Social media usage can provide wider innovation opportunities so that it can grow innovation capabilities and lead to the creation of sustainable performance. This study shows that social media usage can create better work and organizational engagement so that it can strengthen employee commitment to the organization and lead to sustainable performance. To strengthen the influence of social media usage on innovation capabilities, organizations can apply digital leadership because it is proven to be able to encourage the creation of higher innovation opportunities.

There are some limitations to this study, and it also offers some insights for future research. This study has limitations because it takes the perspective of SMEs in a developing country, Indonesia. In addition, future research can use more respondents and focus on certain industries to get more detailed conclusions. This study also examines the effects of using social media without specifying one type of social media. Meanwhile, there are many types of social media. Therefore, future research can focus on specific types of social media. Some insights that can be applied are applying a study with a longitudinal approach to obtain a causal analysis of the model created.



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