

THE INFLUENCE OF DIGITAL MARKETING ON BUSINESS PERFORMANCE THROUGH SUPPLY CHAIN INTEGRATIONS AS A MEDIATOR IN MSMEs IN SAMARINDA

¹Erik Syahputra,²Istimaroh,³Vera Anitra

^{1,2,3}Management, Faculty of Economic Business and Political, Universitas Muhammadiyah Kalimantan Timur, Samarinda, Indonesia

Author's email:

¹2011102431269@umkt.ac.id; ²iis.istimaroh@gmail.com; ³va674@umkt.ac.id

Corresponding author: iis.istimaroh@gmail.com

Abstract. *This study investigates the mediating role of supply chain integrations (SCI) in the relationship between digital marketing and business performance among small and medium enterprises (MSMEs) in Samarinda. MSMEs face increasing challenges in adapting to rapidly evolving digital landscapes while maintaining efficient supply chain processes. This research aims to determine how digital marketing strategies influence business performance and whether SCI serves as a critical mechanism in enhancing this impact. The study employs a quantitative research approach, utilising a structured survey distributed to MSMEs in Samarinda. Data were analyzed using Smart-PLS to evaluate the direct and indirect relationships among the variables. Results indicate that digital marketing positively impacts both SCI and business performance. Furthermore, SCI significantly mediates the relationship between digital marketing and business performance, highlighting its strategic importance in optimizing outcomes. These findings emphasize the necessity for MSMEs to adopt robust digital marketing practices while strengthening supply chain integrations to achieve sustainable business growth. The study contributes to the existing literature by offering empirical evidence on the synergistic effects of digital marketing and SCI in the MSMEs context.*

Keywords: *Business Performance, Digital Marketing, MSMEs, Supply Chain Integrations.*

1. INTRODUCTION

Activities carried out by businesses aim to improve the welfare and quality of life of the community. Accelerating the pace of economic expansion can meet people's needs. Providing employment opportunities that maximize the use of natural resources is essential to achieving this goal (Gultom et al, 2022). Although Indonesia is rich in natural resources, the country has yet to fully utilize the potential that these resources hold.

Micro, Small, and Medium Enterprises (MSMEs) significantly contribute to the Indonesian economy. The important role of MSMEs can be seen from the number of businesses spread across various sectors and their ability to create jobs for the community. MSMEs, which include micro, small, and medium-sized enterprises, are the backbone of the national economy, providing employment opportunities and supporting economic growth at the local and national levels. The term MSMEs refers to business activities formed by citizens, either in the form of personal businesses or business entities (Wilantara, 2016)

The fast expansion of digital technology has had some effects on the marketing strategies of all businesses, including those in the creative industries in Indonesia, which have been influenced by the changes in product and service marketing tactics. Conventional and offline marketing activities are gradually being turned into modern internet marketing, which is more commonly referred to as digital marketing. This

transformation is taking place in a gradual manner from the beginning. The influence of technological innovation that is carried out regularly and consistently by every business in the industrial environment has been demonstrated via empirical evidence to be the enhancement of digital technology (Munizu et al., 2024).

We are aware that in actuality, business operations that are based on e-technology have been accepted and applied to all of the functions and business lines that are contained inside a corporation. For instance, in the global of marketing, a number of creative sectors have adopted digital marketing for the purpose of carrying out advertise activities, managing their brands, and distributing their products and services to clients. According to (Busalim et al., 2019), digital marketing is a broad term that encompasses websites, social media marketing, and e-commerce apps. The primary objective of digital marketing is to expand consumer access to a company's products and broaden the geographic reach of product marketing. The widespread adoption and utilization of digital marketing have enabled businesses to more effectively monitor and address customer needs and preferences. On the other hand, customers are able to look for and locate data and information regarding the items and services that are offered by the firms in a more straightforward manner. According to Hikmawati et al., (2018), the engagement of customers in the provision of certain proposals is an essential component which contributes to the creation of both competitiveness and sustainable creative industry performance.

According to Munizu et al., (2024), digital marketing are among the most significant aspects of effective strategy and operational management. These qualities have the potential to influence both the competitiveness of an organization and its overall performance. digital marketing is comprised of a number of traits and resources that are available to the firm in order to improve business performance. As a result, the endeavor to enhance the digital of marketing is an essential component in the process of enhancing both the competitiveness and the performance of the firm. According to the findings of a number of earlier research Prihandono et al., (2024) digital marketing was shown to have a significant impact on both competitiveness and performance across the board in the corporate world. Measurement of the role of competitiveness as an intervening variable in the model of digital marketing, supply chain integrations, and business performance impact toward creative industry performance is still very limited, particularly in the context of Indonesia, according to a review of the relevant literature and some studies that were conducted in the past. As a result, this research was carried out with the intention of elucidating the role that supply chain integrations plays in mediating the effect of digital marketing, and business performance on the performance of the creative business.

2. LITERATURE REVIEW

2.1 Digital Marketing

Recently, the use of digital marketing in business has grown increasingly popular and widespread inside company organizations as a strategy and instrument to boost product sales, expand markets, and enhance marketing performance. This trend has been expanding in popularity and magnitude. Branding using different electronic-based media such as websites, social media marketing, and e-commerce platforms that enable active contact between product producers, distributors, and customers through online systems is an example of digital marketing, which refers to marketing activities that are based on digital platforms. According to Afrina Yasmin et al., (2015), e-based marketing activity, also known as digital marketing, is also associated with the promotion of products through online media by making use of a variety of media platforms, including the Internet and social media networks. The purpose of digital marketing is to attract current and prospective consumers and markets.

Several forms of digital marketing, such as mobile marketing, e-billboards, and e-based advertising, are well-known for their ability to boost sales of products and service.

The use of digital marketing has a number of benefits, including the speed with which information may be disseminated, its vast reach, its efficacy, and its role as a

medium for the development of a company's brand Doreen et al., (2017) previous research (Kawira et al., 2019; Tarsakoo & Charoensukmongkol, 2019) has demonstrated that the utilization of digital marketing in an organization's marketing activities has an effect on both the competitiveness and performance of the organization. The use of social media marketing, which is a sort of digital marketing, plays a significant part in the enhancement of the performances of businesses. According to Giantari et al., (2022) Facebook, Instagram, and TikTok are examples of social media marketing strategies that are extensively utilized and well-liked in the corporate sector.

2.2 Supply Chain Integrations

Three primary flows—material, information, and financial—are involved in the management of a company's business activities. These flows can go upstream or downstream, with the goal of adding value for consumers and all parties involved in the supply chain Jacobs, (2019) when properly managed, strategic collaboration across supply chain system members may increase operational efficiency, profitability, value creation, and happiness for all parties involved (Chopra, S., & Meindl, 2019). This is known as integration.

The degree to which the whole manufacturing process is integrated into a single system, beginning with suppliers and ending with consumers, is called supply chain integration Piprani et al., (2020), the study may use this approach as a plan to boost its company's success in all areas. Both internal and external integration procedures are part of the supply chain. Cooperation, coordination, communication, and collaboration across functional areas are all part of internal integration, which aims to make sure the organization runs smoothly. On the other hand, external integration is all about coordinating with vendors and consumers. Supply chain integrations are crucial for boosting organizational performance and increasing competitive advantage, according to many empirical research (Mentzer et al., 2001; Munizu et al., 2024).

2.3 Business Performance

A comparison of actual performance with planned performance or standard expenses is the primary focus of the conventional method, which places an emphasis on the achievement of financial results. On the other hand, the modern method takes a more holistic approach by employing business operations as the foundation for performance evaluation. According to Schaltegger & Burritt, (2010), it encompasses a variety of facets, including marketing, operations, internal company procedures, and fulfilling the requirements of existing customers. The researchers have found a variety of indicators that may be used to measure the success of businesses. For example, Tarsakoo & Charoensukmongkol, (2019) examines the success of a firm by utilizing three dimensions: financial performance, operational performance, and product quality. This evaluation is based on the literature on strategic management, marketing, and operations management. Sales, earnings, market share, return on investment, staff productivity, and customer happiness are some of the measures that Khuong et al., (2020), use to evaluate the performance of a firm. In a similar vein Munizu et al., (2024) explain the success of businesses by taking into account both financial and non-financial elements. Furthermore, the picture that follows is a conceptual framework model that depicts the pattern of linkages and impacts among variables based on both empirical and theoretical investigations. This model is presented in the following image. The conceptual model in Figure 1, that was shown earlier provides a full description of the impact that exists between variables that are produced based on meticulous scientific procedures. Following is how create a hypothesis:

H₁: *Digital Marketing has a positive and significant effect on Business performance in MSMEs in Samarinda.*

H₂: *Digital Marketing has a positive and significant effect on Supply Chain Integrations in MSMEs in Samarinda.*

- H₃:** *Supply Chain Integrations have a positive and significant effect on Business Performance in MSMEs in Samarinda.*
- H₄:** *Digital Marketing has a positive and significant effect on Business Performance through Supply Chain Integrations in MSMEs in Samarinda.*

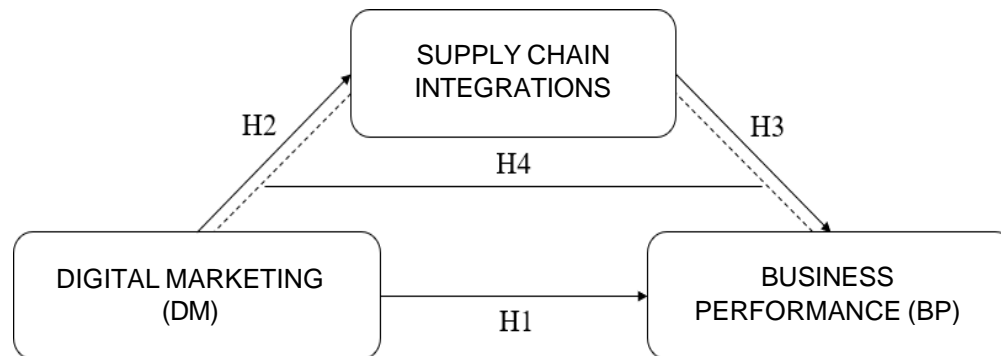


Figure 1. Research conceptual model

3. RESEARCH METHODS

The method of surveying was utilized in this research project in order to collect both primary and secondary data. The unit of analysis consists of micro, small, and medium-sized enterprises (MSMEs) that are active in the following five industries: culinary, crafts, processing, commerce, and services. The research was carried out at Samarinda City, which is located in East Kalimantan. The sample size for the micro, small, and medium-sized enterprises (MSMEs) was 299, and the respondents included firm owners, managers, and supervisors. There are two types of factors that are included in the research: exogenous variables, which are digital marketing, and endogenous variables, which are company performance and supply chain integrations. The Likert scale, which ranges from 1 to 5, was used to quantify the respondents' perceptions of the questionnaire characteristics.

A study of empirical studies and the validation of questionnaire instruments led to the conclusion that the digital marketing variable (X) is the most important component in this investigation in terms of its significance. The three indicators that indicate the mediating variable, supply chain integrations (M), are as follows: effective coordination between internal and external operations, effective collaboration with supply chain partners, and efficient feedback and follow-up systems. Increased sales, increased market share growth, better profitability, and enhanced operational productivity are the four indicators that are used to assess the third variable, which is the company performance variable (Y). The information required for this investigation was gathered through the use of field surveys. The findings of the survey were collated, processed, and evaluated with the use of Smart-PLS and descriptive statistical methods. For the purpose of analyzing the connections between the variables X (digital marketing), M (supply chain integrations), and Y (business performance), structural equation modeling was utilized.

Both direct and indirect impacts are taken into consideration in the analysis. In addition to this, the Sobel test was utilized in order to evaluate the significance of indirect effects that occurred between variables (Hair et al., 2017).

4. RESULTS AND DISCUSSION

4.1. Results

4.1.1 Description of Respondents

The results showed that of 299 respondents, 51.2% (153) were male, and 48.8% (146) were female. The majority (51.5%, 154) were aged 26–30, followed by 20–25 (12.4%, 37), 31–35 (21.1%, 63), and above 36 (15.1%, 45). This highlights that

most MSMEs owners in Samarinda are young adults aged 26–30, reflecting youth-driven business innovation. The culinary sector dominated with 62.5% (187 participants), followed by trading (16.1%, 48), craft (11.0%, 33), service units (5.7%, 17), and processing (4.7%, 14). This indicates the culinary sector's prominence among respondents.

Table 1. Respondent profile

No (%)	Description	Frequency	Percentage
2	Business type:		
	a. Culinary	187	62.5
	b. Crafts	14	4.7
	c. Diligence	33	11.0
	d. Trade	48	17.1
	e. Services	17	5.7
	Age of business (years):		
	a. 1-5	85	28.4
	b. 6-10	65	21.7
	c. > 10	149	49.8
	Locations of Business		
	a. Samarinda	298	99.7
3	b. Luar Samarinda	1	0.3

Based on Table 1 provides an overview of respondent profiles categorized by business type, age, and location. Most respondents (62.5%) are engaged in culinary businesses, followed by trade (17.1%), diligence (11.0%), services (5.7%), and crafts (4.7%). Regarding the age of businesses, nearly half (49.8%) have been operating for over 10 years, while 28.4% have been running for 1–5 years, and 21.7% for 6–10 years. Almost all businesses (99.7%) are located in Samarinda, with only 0.3% outside the city, reflecting a concentration of respondents in this area and a strong presence of well-established culinary enterprises.

4.1.2 Description of Variable Characteristics

The results of descriptive statistical analysis and confirmatory factor analysis have the potential to provide an overview of the features of the variables. The following is a concise summary of the features of the variables and indicators based on the mean, loading factor, and goodness of fit index.

Table 2. Variable characteristics based on mean, and loading factor

No	Variable	Mean	Loading Factor
2	Digital Marketing (X)		
	X1.1	4.157	0.765
	X1.2	4.097	0.749
	X1.3	4.231	0.739
	X1.4	4.167	0.715
	X1.5	4.144	0.712
	X1.6	4.100	0.738
	X1.7	4.231	0.784
3	Supply Chain Integrations (M)		
	M1.1	4.241	0.780
	M2.2	4.080	0.729
	M3.3	4.064	0.787
	M4.4	4.164	0.823
	M5.5	4.110	0.737
	M6.6	4.077	0.713
	M7.7	4.197	0.759
	Business Performance (Y)		

Y1.1	4.227	0.810
Y2.2	4.084	0.732
Y3.3	4.114	0.793
Y4.4	4.137	0.740
Y5.5	4.107	0.749
Y6.6	4.157	0.744
Y7.7	4.167	0.804

The findings of an investigation that involved three primary factors are presented in the table that can be seen on Table 2. These variables are Digital Marketing (X), Supply Chain Integrations (M), and Business Performance (Y). Every variable is dissected into a number of indicators, and the mean and loading factor respectively are assigned values that correspond to these indications. On the other hand, the loading factors reflect the degree to which each indicator contributes to its particular variable, while the mean values represent the average scores for each indicator.

The four variables that make up Digital Marketing (X) have mean values that vary from 4.097 to 4.231, and their loading factors range from 0.712 to 0.784. It can be deduced from this that each of the indicators has a substantial contribution to the digital marketing variable. However, the indicator X1.7 (loading factor 0.784) has the most significant effect, while the indicator X1.4 (loading factor 0.712) has the least significant influence. The fact that the mean values are quite high suggests that people have a favorable impression of the digital marketing activities.

There are seven indicators that make up Supply Chain Integrations (M), and their mean values range from 4.064 to 4.241, and their loading factors range from 0.713 to 0.823. With a loading factor of 0.823, indicator M4.4 has the largest loading factor, which reflects the significant influence it has on the supply chain integration variable. Similar to the previous example, Business Performance (Y) is comprised of seven indicators, each of which has a mean value ranging from 4.084 to 4.227 and a loading factor that falls somewhere between 0.732 and 0.810. The relevance of the indicator Y1.1 in terms of explaining company performance is demonstrated by the fact that it has the largest contribution (loading factor 0.810) overall. The findings, taken as a whole, provide light on the significance of these factors and the indicators that correspond to them when it comes to evaluating company operations.

4.1.3 Result of Stuctural Equation Modeling

Testing the hypothesis is expressed by the value of the path coefficient, which demonstrates the degree of significance required. The value of the t-statistic and the p-values are necessary in order to calculate the path coefficient. According to Hair et al. (2017), the t-statistic value must be larger than 1.96 for a two-tailed hypothesis, and it must be greater than 1.64 for a one-tailed hypothesis, with a p-value that is less than 0.05. Through the use of SmartPLS 4.1.0.9 and the bootstrapping approach, this study investigated the testing of mediation through special and indirect effects.

Table 3. Results of research hypothesis test

Hypothesis	Variables	Original Sample	T-Statistic	P-Valeu	Conclusion
1.	DM > BP	0,649	7,064	0,000	H1, Supported
2.	DM > SCI	0,500	6,738	0,000	H2, Supported
3.	SCI > BP	0,415	4,470	0,000	H3, Supported
4.	DM>SCI>BP	0,207	3,624	0,000	H4, Supported

Based on Table 3 presents the hypothesis testing results on the relationships between Digital Marketing (DM), Supply Chain Integration (SCI), and Business Performance (BP). Hypothesis 1 (H1) confirms a strong direct effect of DM on BP, with an original sample value of 0.649, a T-statistic of 7.064, and a P-value of 0.000, making it statistically significant. Hypothesis 2 (H2) demonstrates a moderate direct effect of DM on SCI, with an original sample value of 0.500, a T-statistic of 6.738, and a P-value of 0.000, showing significance. Hypothesis 3 (H3) shows a moderate positive effect of SCI on BP, with an original sample value of 0.415, a T-statistic of 4.470, and a P-value of 0.000, confirming significance. Lastly, Hypothesis 4 (H4) tests the mediating role of SCI in the relationship between DM and BP, showing a weaker but significant indirect effect with an original sample value of 0.207, a T-statistic of 3.624, and a P-value of 0.000. All hypotheses are supported, indicating significant direct and mediating effects.

4.2 DISCUSSION

The findings highlight several key insights into the dynamics of MSMEs in Samarinda. The majority of respondents are young adults, reflecting the significant role of youth in driving business innovation. The culinary sector dominates as the primary business type, indicating its prominence in the local economy, supported by well-established enterprises operating for over a decade. (Mehralian & Khazaee, 2022), most businesses are concentrated in Samarinda, showcasing the city's importance as a business hub. In terms of variable characteristics, digital marketing, supply chain integrations, and business performance are strongly influenced by specific indicators, with certain elements contributing more significantly to each variable. The structural equation modeling analysis confirms that digital marketing has a strong direct impact on business performance and a moderate effect on supply chain integration, which in turn significantly influences business performance. Additionally, supply chain integrations mediates the relationship between digital marketing and business performance, underscoring its critical role in enhancing the overall impact of marketing strategies. These findings emphasize the need for businesses to focus on integrating digital marketing with supply chain strategies to optimize their performance and maintain competitiveness in the market.

This study aligns with the findings of Mehralian and Khazaee (2022), who underscore the pivotal role of digital marketing in enhancing MSME performance, particularly in centralized hubs such as Samarinda. Similarly, Lee et al., (2020), emphasize that supply chain integrations significantly strengthens business resilience and performance, especially when supported by advanced marketing strategies. However, Chen and Huang (2018), present a contrasting perspective, arguing that the impact of digital marketing on supply chain integration can be overstated, as its efficacy is largely contingent upon technological infrastructure and managerial capacity. These divergent findings underscore the importance of adopting a balanced approach tailored to specific business contexts.

CONCLUSION

The findings of this study have demonstrated that supply chain integration may operate as a mediator between digital marketing and business performance of the MSMEs creative sector. The outcomes of this study demonstrated that supply chain integrations plays a role in mediating of digital marketing and on creative industry performance, while also playing a role in partial mediating the impact of business performance on creative industry performance. The supply chain of Integrations and digital marketing have a major impact on the performance of creative industries and the competitiveness of the creative industries. It follows that is possible for management and business actors to make a variety of efforts to enhance the performance of the creative sector. These efforts may be carried out through a number of strategies, policies, programs, and activities that concentrate on enhancing cost efficiency, competitive pricing, quality goods, and real-time product delivery. The intensity of digital marketing

utilizing, the presence of a supply chain integrations system, and business performance may have a major influence on the performance of creative industries. This is the case when parts of the company's competitiveness are enhanced in a consistent, continuous, and sustainable manner.

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