

Absorptive Capacity and Sustainable Competitive Advantage through Market Orientation and Dynamic Capability in MSMEs

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Abstract

Purpose: This study examines the direct and mediating effects of market orientation, dynamic capability, and absorptive capacity on sustainable competitive advantage among Micro, Small, Medium-Sized Enterprises (MSMEs).

Research Methodology: Employing a quantitative explanatory approach, this study analyzes data from 280 purposively selected MSMEs using structured questionnaires and Partial Least Squares Structural Equation Modeling (PLS-SEM).

Results: The findings indicate that market orientation significantly enhances absorptive capacity by improving firms' ability to acquire, assimilate, and utilize external knowledge. Market orientation and dynamic capability also positively affect sustainable competitive advantage, while absorptive capacity partially mediates these relationships.

Conclusions: MSMEs need to strengthen market knowledge, organizational flexibility, and knowledge management capabilities to maintain long-term competitiveness.

Limitations: The cross-sectional design and industry-specific context may limit the generalizability of the findings across different sectors and regions.

Contributions: This study contributes to the Knowledge-Based View (KBV) and Dynamic Capability Theory (DCT) by explaining how knowledge utilization and adaptive capabilities generate sustainable competitive advantage. It also provides practical implications for MSME managers in improving strategic responsiveness and organizational adaptability.

Keywords: *Absorptive Capacity, Dynamic Capability, Market Orientation, Sustainable Competitive Advantage*

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1. Introduction

International business operations have become more complex due to globalization, digitization, and disruptive technologies (Coetzee, 2018; Chang et al., 2019). As such, businesses must adopt and

implement sustainable change. In these circumstances, a company's competitive position is reliant as heavily on its resource-holding capabilities as on its information possession and the competence in its effective use ([Dukhaykh & Alangri, 2026](#); [Reuter et al., 2010](#); [Bari et al., 2022](#)). Micro, Small, and Medium-Sized Enterprises (MSMEs), which represent the bedrock of the economy, find it difficult to sustain a competitive advantage due to limited resources and capacity to create new knowledge ([Sinaga et al., 2022](#); [Tufan & Mert, 2023](#)). A capability-based approach, especially Absorptive Capacity (AC), enables firms to detect, integrate, and utilize external information, thereby improving their competitive advantage ([Awwad et al., 2025](#); [Dogbe et al., 2021](#)).

In the era of the knowledge economy, the success and high performance of enterprises are increasingly dependent on their ability to learn from the outside, absorb external knowledge, and utilize it to maintain competitiveness and drive innovation ([Li et al., 2019](#); [Liao et al., 2017](#)). As such, both AC and dynamic capability have been demonstrated as important determinants of firms' competitive advantage in such an environment ([Ridwan et al., 2026](#); [Najafi-Tavani et al., 2016](#)). Numerous prior studies have revealed the importance of AC on knowledge usage and innovativeness and of Dynamic Capabilities (DC) on enabling firms to reorganize their resources with the changes in environment in order to fit better. Nevertheless, AC is an organisational capacity which provides a framework for the absorption and utilisation of external knowledge resources and the transfer of knowledge within the organisation which has gained popularity in recent decades with an ability to create new ideas, provide competitive advantages on a sustainable basis and boost organizational performance ([Chuang et al., 2016](#); [Liao et al., 2017](#); [Wu et al., 2020](#)), although there have been mixed empirical results concerning the impact of AC on Competitive Advantage (CA), including its direct impact, as well as indirect impacts mediated by variables such as the use of knowledge or by mechanisms such as DC or organisational ambidexterity ([Wang & Benny, 2025](#); [Zhang et al., 2018](#)).

In theorizing strategy development, Market Orientation (MO) and DC are seen as strategic drivers that enhance AC and sustain the firm's CA ([Najafi-Tavani et al., 2016](#); [Zhou & Li, 2010](#)). The DC helps the firm to adapt the asset and capability into the dynamic environment, and also the Market Orientation assist the firm to prepare itself for customer needs ([Hussain et al., 2024](#); [Salisu & Abu Bakar, 2020](#)). Market Orientation, for instance is a method that customer desires and requirements are made into an axis of a business in running a business. Study by [Bavarsad et al. \(2015\)](#) and [Kumar et al. \(2011\)](#), have examined on the relationship between MO and marketing performance and sustainable competitive advantage where it concluded that MO influences on the performances of business actors to a certain extent. Meanwhile, studies have empirically concluded that dynamic capabilities enhances performance and creativities of the company by enhancing knowledge sharing and learning process ([Koentjoro & Gunawan, 2020](#); [Peng & Lin, 2021](#)).

However, from the study review, significant weaknesses are evident. Previous findings have repeatedly show a mixture of results regarding the direct relation between absorptive capacity and sustained competitive advantage. Many studies on this area has argued, whether this relationship direct or is moderated by a mediator variable ([Peng & Lin, 2021](#); [Puspitowati & Royhard, 2024](#); [Delmas et al., 2011](#)). In addition, many of the studies have still only taken into account part correlations between variables. Thus, it has not been adequately explained how these variables work simultaneously to achieve a sustainable competitive advantage ([Daniel & Huang, 2019](#); [Peng & Lin, 2021](#)). Finally, it has been the advantage of cross-sectional method and specific case of research setting for the generalization and capturing the dynamism in a complex business setting.

Based on this study, it will strengthen the existing literature as it integrates three existing elements into a single construct, as well as explains its interconnected causal relationship, which has been a matter of continuous controversy and debate. The study's overall purpose was to evaluate the effects of market orientation and dynamic capability on the long-run sustainable competitive advantage of MSMEs through the mediating effect of absorptive capacity. This study will contribute the domain of strategic management science through an analysis based on a knowledge-based view and dynamic capabilities. Actually, MSMEs can use the results of this study to prepare a knowledge base and an innovative

strategy to improve long-term competitive advantage amidst a dynamic, complex business environment.

2. Literature Review and Hypotheses Development

2.1 Market Orientation, Absorptive Capacity, and Sustainable Competitive Advantage

Market orientation is defined as a dynamic competence within a company that enables it to collect, share, and respond to market information to produce greater value ([Ridwan, Govindaraju, & Andriani, 2026](#); [Dogbe, Bamfo, & Pomegbe, 2021](#); [Lichtenthaler, 2016](#)). In terms of knowledge, some studies claim that Market Orientation (MO) is a function of internal factors such as AC rather than performance itself ([Dukhaykh, & Alangri, 2026](#); [Zhang, & Thurasamy, 2025](#)). It has been suggested that absorptive capacity enhances the relationship between market orientation and product innovation performance ([Najafi-Tavani, Sharifi, & Najafi-Tavani, 2016](#); [Puspitowati, & Royhard, 2024](#)). Indicating that absorptive capacity is an important means of transforming market information into innovation. Meanwhile, Market Orientation (both actively and passively) can also influence AC by utilizing of external knowledge and organizational learning ([Ismail, Samsudin, Othman, & Hamid, 2023](#); [Song, Hossin, Yin, & Hosain, 2021](#); [Sudirman, Sinaga, Julyanthry, & Grace, 2024](#)). There are several contradictory studies showing that market orientation may not lead to higher performance without additional competence such as marketing and creativity ([Julyanthry, Putri, Lie, & Sudirman, 2021](#); [Sutapa, Mulyana, & Wasitowati, 2017](#)).

Nowadays, absorptive capacity is a bridge between market orientation and the long-term value creation ([Wang, & Benny, 2025](#); [Kim, Seo, & Kim, 2025](#)). As observed in recently, knowledge-based capabilities, including the absorptive capacity, may have a moderating and mediating effect on the relationship between the strategy competence and long-term advantage in technology-intensive environments which rapidly change ([Hoang, & Thi-Thuy, 2025](#); [Chao, Lin, Cheng, & Liao, 2011](#)). On top of that, the green market orientation concept helps to expand and improve market orientation theory with an emphasis on information assimilation for obtaining a competitive advantage ([Zhang, 2024](#); [Hodgkinson, Hughes, & Hughes, 2012](#)). However, there exists a gap in research on testing the combined relationship of MO-AC-SCA (Sustainable Competitive Advantage) as a whole, particularly in the context of developing countries and MSMEs as existing literature emphasizes short-term advantage or innovation performance only. This highlights the need to develop research that comprehensively explores the effect of AC on explaining SCA. Hence, the following hypothesis is put forward:

H₁: Market orientation positively influences absorptive capacity

H₃: Market orientation positively influences sustainable competitive advantage

2.2 Dynamic Capability, Absorptive Capacity, and Sustainable Competitive Advantage

Dynamic Capability (DC) means an organization can integrate, nurture, and reorganize resources while adapting to a changing external environment. Dynamic capability can provide a unique basis for building up long-term competitive advantages for the enterprise ([Dukhaykh & Alangri, 2026](#); [Bari et al., 2024](#); [Prabowo et al., 2021](#)). Various empirical studies also have demonstrated that dynamic capability can effectively enhance organizations' ability to learn and achieve innovative performance and improve the Absorptive Capacity (AC) ([Sánchez-Rodríguez et al., 2025](#); [Abourokbah et al., 2023](#)). There is empirical evidence showing that certain elements of dynamic capability, like sensing, seizing, and reconfiguring, have a positive effect on the efforts of R&D and innovation, and others suggested that the development of absorptive capacity, a subsequent capability in knowledge gaining and usage, is stimulated by dynamic capability ([Teece, 2017](#); [Liu et al., 2019](#); [Alves et al., 2016](#)). It remains controversial to understand the transmission path, some scholars consider absorptive capacity as an outgrowth of dynamic capability and others see that they complement each other in enhancing organizational performance ([Senivongse et al., 2019](#); [Schilke & Helfat, 2025](#)). It is probably because of the interactions between dynamic capability and absorptive capacity, influenced by organizations and their environment.

Studies of empirical investigations on SCA indicate that DC plays a positive role on SCA in a direct way and indirectly through intermediary effects like OL and CI ([Bari et al., 2024](#); [Koentjoro & Gunawan, 2020](#)). Recent researches argue that the direct impact of DC is closely correlated to SCA in the long-term and has a remarkable influence on SCA both through technological and non-technological innovation ([Hussain et al., 2024](#); [Mariam et al., 2023](#)). Furthermore, research on MSMEs state that the process of gaining the SCA through other strategy capabilities can be influenced by AC ([Tufan & Mert, 2023](#); [Ferreira et al., 2020](#)). Nevertheless, a research gap exists, as few studies investigate the DC-AC-SCA nexus simultaneously within an individual model, particularly in developing countries. In addition, the complex and abstract nature of empirically assessing DC makes it difficult to produce consistent evidence ([Schilke & Helfat, 2025](#)). Therefore, the following hypothesis is proposed:

H₂: Dynamic capability positively influences absorptive capacity

H₄: Dynamic capability positively influences sustainable competitive advantage

2.3 Absorptive Capacity and Sustainable Competitive Advantage

Absorptive Capacity (AC) involves the processes of recognizing, acquiring, and assimilating external knowledge for business purposes ([Senivongse et al., 2019](#); [Alves et al., 2016](#)). Therefore, it's the foundation for establishing a sustainable competitive advantage. An accumulation of empirical evidence shows that absorptive capacity has positive effects on innovation and business performance, thereby leading to competitive advantage ([Awwad et al., 2025](#); [Dogbe et al., 2021](#)). From the perspective of long-term observation, [Awwad et al. \(2025\)](#) and [Zhang & Thurasamy \(2025\)](#), found the absorptive capacity significantly influences new idea creation and financial performance. Nevertheless, the relation of absorption capability towards innovation is complex due to the mediator role of innovation, it is expected that the absorption capability affect business performance positively through mediating innovation creation. Existing studies show AC plays crucial role to nurture innovation and open innovation strategies, eventually it contribute to competitive advantage in MSMEs ([Wang & Benny, 2025](#); [Peng & Lin, 2021](#)). Conversely, other research identified absorptive capacity influences certain innovative activities, especially green innovations, depending on the organization specific factors like the internal knowledge management and technological resources ([Chuang et al., 2016](#); [Rua, 2019](#); [Purba et al., 2022](#)).

In conclusion, based on former literature, the effect of a firm's absorptive capacity on organizational capability is empirically supported and applied to firm's knowledge transfer process to realize sustained competitive advantage by many researchers ([Bossaghzadeh et al., 2023](#); [Wu et al., 2020](#)). In addition, recent studies demonstrate that absorptive capability has strong effect on organizational capability and long term competitive advantage in a dynamic context ([Hoang et al., 2025](#); [Pangarso et al., 2020](#)). Additionally, numerous related studies show that integrating absorptive capability with innovation and organizational learning can achieve long-term competitive advantage for the firm ([Chang et al., 2019](#); [Liao et al., 2017](#)). Inconsistency in the role of absorptive capacity as both a mediating and an independent variable, along with limited studies that analyze the direct relationship between absorptive capacity and sustained competitive advantage without mediators, indicate significant research gaps yet to be identified and explored. Besides that, integrative research are also needed to study the mechanism of absorptive capacity in creating sustained competitive advantage since the context of developing country and the MSMEs sector has yet to be extensively studied. Therefore, the following hypothesis is proposed:

H₅: Absorptive capacity positively influences sustainable competitive advantage

H₆: Absorptive capacity positively mediates the relationship between market orientation and sustainable competitive advantage

H₇: Absorptive capacity positively mediates the relationship between dynamic capability and sustainable competitive advantage

3. Research Methodology

The research methodology employed is a quantitative study with an explanatory design, in which the purpose is to test the cause-and-effect relationships among the key constructs of market orientation, dynamic capability, absorptive capacity, and sustainable competitive advantage ([Sekaran & Bougie, 2010](#)). This design is selected because it provides empirical evidence on the relationships between the direct and indirect influences of a set of variables within a theory grounded in the knowledge-based view and dynamic capability theory. The population of this research comprises active Micro, Small, and Medium Enterprises (MSMEs) across all industrial sectors. Purposive sampling is chosen as a sampling technique, and MSMEs owners/managers who are experienced in business management and strategic decision-making in firm activities are the sampling criteria of respondents. With the size 280 respondents is large enough for the requirements of the latent-variable-based statistical analysis and can increase generalizability, also it considered of the research model is complex with more than one construct and indicators, and then is suitable sample for research for complex models ([Sarstedt et al., 2020](#)).

Data is gathered through administration of a structured questionnaire on a 5-point Likert scale from “Strongly disagree” to “Strongly agree” reflecting the respondents' perceptions of variables being investigated. Data are collected using a questionnaire which was adapted from earlier empirical studies had already proved the validity and reliability then were tailored to MSMEs contexts, and collected using face-to-face interviews and online. Data analysis is done using Partial Least Squares (PLS)-based Structural Equation Modeling (SEM) to examine several relationships simultaneously among the constructs, including a mediating effect. First, outer model testing assesses the convergent, discriminant, and reliability validities of the construct, and second, inner model testing assesses the structural model path relationships and tests the hypotheses. The conceptual and operational definitions of each construct along with indicators to measure each construct are presented in the Table 1.

Table 1. Variable operational definition

Variables	Code	Dimension/Item	Reference
Market Orientation	MO1	Customer Orientation	Narver and Slater (2012)
Market Orientation	MO2	Competitor Orientation	Narver and Slater (2012)
Market Orientation	MO3	Interfunctional Coordination in Sharing Market Information	Narver and Slater (2012)
Market Orientation	MO4	Interfunctional Coordination in Responding to Customer Needs	Narver and Slater (2012)
Dynamic Capability	DC1	Sensing Capability	Teece (2017)
Dynamic Capability	DC2	Seizing Capability	Teece (2017)
Dynamic Capability	DC3	Reconfiguring Capability	(Teece, 2017)
Absorptive Capacity	AC1	Acquisition	Lasisi et al. (2019)
Absorptive Capacity	AC2	Assimilation	Lasisi et al. (2019)
Absorptive Capacity	AC3	Transformation	Lasisi et al. (2019)
Absorptive Capacity	AC4	Exploitation	Lasisi et al. (2019)
Sustainable Competitive Advantage	SCA1	Valuable Resources	Barney et al. (2011)

Variables	Code	Dimension/Item	Reference
Sustainable Competitive Advantage	SCA2	Rare Resources	Barney et al. (2011)
Sustainable Competitive Advantage	SCA3	Inimitable Resources	Barney et al. (2011)

4. Results and Discussions

Description demographic characteristics of respondents as part of research in quantitative research because in this section can provide a brief outline of the description of characteristics research subjects as the source of primary data/empirical data. For MSMEs actors, demographic mapping as a step in determining the background of MSME actors through age, gender, education level, years of business and type of business sector, this is used to find out a descriptive portrait and differences between respondents who may influence perception and practices in market orientation, dynamic capability and absorptive capacity to achieve sustainable competitive advantage. For more details regarding the demographic distribution of respondents in this study, as can be seen in Table 2.

Table 2. Demographics of research respondents

Category	Item	Frequency	Percentage (%)
Gender	Male	93	33.2
	Female	187	66.8
Age (Years)	20–30	82	29.3
	31–40	108	38.6
	41–50	60	21.4
	>50	30	10.7
Education Level	Junior High School	47	16.8
	Senior High School	133	47.5
	Diploma	35	12.5
	Bachelor Degree	55	19.6
	Master Degree	10	3.6
Years in Business	<1	32	11.4
	1–5	78	27.9
	6–10	96	34.3
	11–15	64	22.9
	>15	10	3.6
Business Type/Sector	Trading	85	30.4
	Manufacturing	32	11.4
	Creative/Digital	68	24.3
	Service	75	26.8
	Other	20	7.1

Based on Table 2, the demographic profile of respondents indicated that female entrepreneurs accounted for 187 respondents (66.8%) in the sample, whereas male entrepreneurs accounted for 93 respondents (33.2%). This data would suggest that women play a greater role in the management of MSMEs, especially in micro-scale entrepreneurial activity. Age - Most respondents were of working age. The largest group of age was in the age range of 31-40 years (108 respondents, 38.6%), followed by the age range of 20-30 years (82 respondents, 29.3%), then 41-50 years old (60 respondents, 21.4%), and >50 years (30 respondents, 10.7%). Age The chart on age indicates most of the MSMEs owners were at a fairly stable, adult stage in their working careers, thus are experienced enough for better planning decisions to make for MSMEs business strategy. Education According to the table

most of the respondents obtained Senior High School qualification (133 respondents, 47.5%), Bachelor degree holders (55 respondents, 19.6%), Junior High School degree (47 respondents, 16.8%), diploma holder (35 respondents, 12.5%) and last Masters degree holders (10 respondents, 3.6%). This will imply most of the MSMEs owners having education qualifications from High School, impacting on their managerial ability and willingness to adopt knowledge-based practices in MSMEs business.

The analysis on the duration of business operations for respondents shows the majority have operated for 6-10 years (96 respondents, 34.3%), then followed by 1-5 years (78 respondents, 27.9%) and 11-15 years (64 respondents, 22.9%) with some respondents of <1 years (32 respondents, 11.4%) and >15 years (10 respondents, 3.6%). This indicates that most respondents have been in business for quite some time and know the market and other factors for taking action. Business sector - Respondents come from various types of business sectors. The highest sector is trading with 85 respondents (30.4%), which is closely followed by service (75 respondents, 26.8%), creative/digital sector (68 respondents, 24.3%), manufacturing sector (32 respondents, 11.4%), and the rest from other sectors (20 respondents, 7.1%). This data shows that the samples include representatives from various business sectors, thereby reflecting the overall MSMEs characteristics that can take any actions.

4.1 Outer Model Measurement

Measurement quality was examined through a set of validity and reliability tests in the context of this study, focusing on the measurement model (outer model). Regarding validity, convergence was assessed using factor loadings of indicators to their respective constructs. An indicator is considered valid if the loading factor exceeds 0.7. Furthermore, validity is supported by the Average Variance Extracted (AVE), which must exceed the minimum threshold of 0.5 to indicate that the construct adequately explains the variance of its indicators ([Sarstedt et al., 2020](#)). The second step involved model reliability testing, in which the instrument's internal consistency was assessed. For the assessment of reliability, we used Cronbach alpha and Composite Reliability (CR). The instruments could be considered reliable when the above-mentioned threshold values are above 0.7, in which case the indicators within the constructs exhibit a high degree of similarity ([Sarstedt et al., 2020](#)). Table 3 below provides a detailed outline of the outer model measurement results.

Table 3. Outer model measurement results

Constructs/items	Outer Loading	Cronbach Alpha	CR	AVE
Market Orientation		0.988	0.991	0.966
MO1	0.986			
MO2	0.981			
MO3	0.970			
MO4	0.993			
Dynamic Capability		0.893	0.934	0.826
DC1	0.953			
DC2	0.834			
DC3	0.935			
Absorptive Capacity		0.839	0.892	0.675
AC1	0.857			
AC2	0.851			
AC3	0.773			
AC4	0.803			
Sustainable Competitive Advantage		0.911	0.944	0.850

Constructs/items	Outer Loading	Cronbach Alpha	CR	AVE
SCA1	0.958			
SCA2	0.842			
SCA3	0.961			

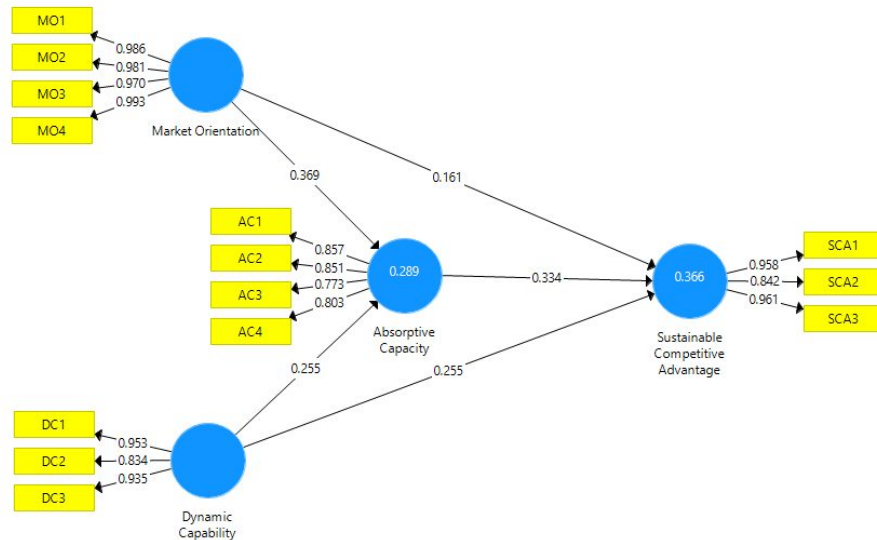


Figure 1. Outer model results

From the results of the outer model evaluation shown in Table 3 and Figure 1, all indicators had outer loadings exceeding the criterion of 0.70, and indicating convergent validity. For example, the outer loadings for the construct Market Orientation ranged from 0.970 to 0.993, indicating that the indicators load well onto the latent construct. The outer loadings for indicators of Dynamic Capability, Absorptive Capacity, and Sustainable Competitive Advantage were all above the threshold of 0.70. Regarding the reliability test, all constructs have Cronbach's Alpha and Composite Reliability (CR) above 0.70, indicating high internal consistency. The AVE values of the constructs are also higher than the threshold criterion 0.50 which means that each construct explains more than half of the variation of its indicator. These indicate that the convergent validity and internal reliability tests of the measurement models fulfilled the criterion for PLS-SEM analysis. Afterward, Discriminant validity was analyzed by using the Fornell-Larcker criterion by comparing the square root of AVE for each construct and inter-construct correlations.

Table 4. Discriminant validity result

	Absorptive Capacity	Dynamic Capability	Market Orientation	Sustainable Competitive Advantage
Absorptive Capacity	0.822			
Dynamic Capability	0.428	0.909		
Market Orientation	0.488	0.468	0.983	
Sustainable Competitive Advantage	0.522	0.473	0.444	0.922

As shown in Table 4, the square root of AVE value for each construct (presented diagonally in the Fornell-Larcker matrix) is higher than its correlation to any of the other constructs. For instance, square root of AVE for absorptive capacity (0.822) is higher than its correlations with dynamic

capability (0.428), market orientation (0.488) and sustainable competitive advantage (0.522). Similarly, for the construct Market Orientation (with AVE = 0.966, the square root of AVE is 0.822, higher than its correlation with other latent constructs: dynamic capability = 0.503, Absorptive Capacity = 0.488, and Sustainable Competitive Advantage=0.556. Thus, this criterion indicates adequate discriminant validity. Therefore, the outer model assessment shows the validity and reliability of the measurement instrument is satisfactory to be utilized in structural model assessment.

4.2 Inner Model Measurement

Inner-model testing using the Partial Least Squares–Structural Equation Modelling (PLS-SEM) approach is conducted to evaluate the structural relationships among the latent constructs formulated in the research conceptual model. This stage aims to assess the strength and direction of the influence between variables, as well as the model's ability to explain endogenous variables. Inner model evaluation includes analysis of path coefficients, coefficient of determination (R^2), and parameter significance testing through a bootstrapping procedure. This stage determines the extent to which exogenous constructs explain variations in endogenous constructs, while simultaneously testing the theoretically developed research hypotheses ([Sarstedt et al., 2020](#)). Thus, inner model testing is a crucial step in ensuring the structural validity and predictive power of the research model.

Table 5. Calculation results of the R-Square value

Notes	R Square	R Square Adjusted
Absorptive Capacity	0.289	0.284
Sustainable Competitive Advantage	0.366	0.359

Based on Table 5, the R-Square value is 0.289, and the adjusted R-Square is 0.284, indicating that approximately 28.4% of the variation in absorptive capacity is explained by the independent variables in the model, namely market orientation and dynamic capability. Meanwhile, the sustainable competitive advantage variable has an R Square of 0.366 and an Adjusted R Square of 0.359, indicating that 35.9% of the variation in sustainable competitive advantage is explained by the variables tested in this study. Overall, these values indicate that the model explains the two dependent variables at a moderate level, suggesting that other factors outside the model may still influence them.

4.3 Research Hypotheses Testing

Hypotheses testing methodology in order to test the hypotheses on the structural relationship between variables simultaneously on the research model, this research adopts the method of Structural Equation Modeling by Partial Least Squares (SEM-PLS). The testing approach to hypothesize are implemented by analyzing the internal model, which consists of assessment of path coefficients, the values of t-statistics, and p-values obtained from the bootstrapping analysis. A significant value (significance level) has been established to assist with the decision-making for accepting the hypothesized outcome. If the t-statistics value is greater than 1.96 at a 5% significance level and the p-value is less than 0.05, then the hypothesis is accepted ([Sarstedt et al., 2020](#)). Therefore, based on this testing, the impact strength and the impact direction between the variables, or latent variables, included in the research models will be empirically determined to determine whether the hypothesis was accepted or rejected.

Table 6. Hypotheses Test Results

Path Between Variables	Coefficient	t-count	P-Value	Conclusion
Market Orientation → Absorptive Capacity	0.369	5.615	0.000	Accepted
Dynamic Capability → Absorptive Capacity	0.255	4.742	0.000	Accepted

Path Between Variables	Coefficient	t-count	P-Value	Conclusion
Market Orientation → Sustainable Competitive Advantage	0.161	2.808	0.005	Accepted
Dynamic Capability → Sustainable Competitive Advantage	0.255	4.704	0.000	Accepted
Absorptive Capacity → Sustainable Competitive Advantage	0.334	4.657	0.000	Accepted

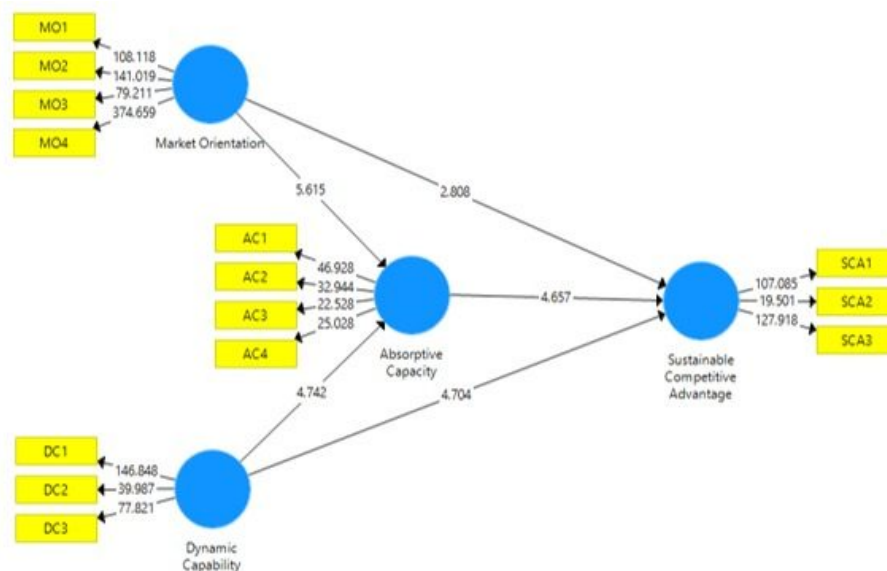


Figure 2. Hypotheses testing results

Table 6 and Figure 2 summarizes the results of the hypothesis test. In the results, all associations in the study model are significant and all the hypotheses have been accepted. Market orientation has a significant and positive effect on absorptive capacity (with a coefficient 0.369; $t = 5.615$; $p < 0.001$). This result suggests that a higher level of market orientation is associated with greater absorptive capacity to incorporate external knowledge and use it effectively. Dynamic capability have also a positive and significant effect on absorptive capacity (with a coefficient 0.255; $t = 4.742$; $p < 0.001$), suggesting that the organization capability to reconfigure their resources enhances its capability to learn and adapt knowledge. Additionally, market orientation (with coefficient 0.161; $t = 2.808$; $p = 0.005$) and dynamic capacity (with coefficient 0.255; $t = 4.704$; $p < 0.001$) has also significant effect directly on sustained competitive advantage. Also, absorptive capacity have positive and significant effect on sustained competitive advantage (with coefficient 0.334; $t = 4.657$; $p < 0.001$). This result means that management knowledge capacity is one of critical factors in achieving competitive advantage.

Thus, this study is in line with previous studies that found that the capability to learn new knowledge (absorptive capacity) act not only as the dependent variable, but it is also a mediating mechanism to make a strong relationship between the two capability strategies and the competitive advantages. In conclusion, absorptive capacity mediate significantly and positively between the relationship between

strategic capabilities (market orientation and dynamic capability) and sustainable competitive advantage. Therefore, we found strong evidence to suggest that market orientation and dynamic capability by using absorptive capacity, may improve the competitiveness of SMEs.

4.4 Testing the Mediation Effect

Mediation analysis aims to determine whether the indirect effect operating through the mediator variable significantly contributes to the relationship between the constructs in the research model. This test is conducted using a bootstrapping procedure to obtain the indirect path coefficient, t-statistics value, and p-values as a basis for decision-making. The criteria for testing the mediation effect are based on the significance of the indirect effect: a mediation effect is declared significant if the t-statistics value is greater than the critical value such as 1.96 at a 5% significance level and the p-value is less than 0.05. In addition, the type of mediation can be identified as full or partial, depending on the significance of the direct and indirect effects in the model.

Table 7. Mediation test results

Path Between Variables	Coefficient	t-count	P-Value	Conclusion
Market Orientation → Absorptive Capacity → Sustainable Competitive Advantage	0.123	3,484	0.001	Accepted
Dynamic Capability → Absorptive Capacity → Sustainable Competitive Advantage	0.085	3,004	0.003	Accepted

According to the mediation test results in Table 7, absorptive capacity plays an important mediating role in the relationship between market orientation and dynamic capability and sustained competitive advantage. Through absorptive capacity, the direct influence of market orientation on sustained competitive advantage are statistically significant indirect relation of 0.123 and a t-value is 3.484 with $P=0.001$, and absorptive capacity also have a statistically significant indirect relation between dynamic capability and sustained competitive advantage, with a coefficient is 0.085, and the t-value is 3.004 with $p=0.003$. So, it appears that the company need to strengthen its ability to absorb and use outside information with increased market orientation and dynamic capability so that could support the sustainability of its competitive advantage.

4.5 Discussion

This implies that market orientation leads to absorptive capacity. The study's findings are consistent with the knowledge-based view, which argues that market knowledge is a source of organizational learning. Furthermore, this finding aligns with that of [Najafi-Tavani, Sharifi, and Najafi-Tavani \(2016\)](#), who demonstrated that market orientation improves learning capacity. According to the mechanical perspective of the study's findings, the market-focused orientation is the main reason businesses actively search for and process market information to accumulate internal knowledge resources, making that knowledge available and exploitable. The result that the dynamic capability impacts on the absorptive capacity implies that the organization has the capacity to reconfigure and reshape the internal and external resources of the organization's resources to enhance learning and adaptation capabilities. This finding is supported by the dynamic capability theory of [Teece \(2017\)](#) which suggests dynamic capability facilitates firms adapt the dynamic environmental change. [Ismail, Samsudin, Othman, and Hamid \(2023\)](#) and [Song, Hossin, Yin, and Hosain \(2021\)](#), also verified that dynamic capabilities can promote firms' innovative capacity by enhancing their learning capacity.

Hence, in our case, the dynamic capabilities improve the way the companies learn and apply knowledge resources from the environment.

The present study also found that market orientation has a direct influence on sustainable competitive advantage. This suggests that, a deep knowledge of customers' requirements and the ability to react promptly to market changes might leads to developing a unique and better value proposition that cannot be easily copied by any other competing firm. This finding is consistent with previous strategic marketing studies, which state that market orientation provides a sustainable competitive advantage by enabling a firm to deliver customer value ([Hoang, & Thi-Thuy, 2025](#); [Kim, Seo, & Kim, 2025](#)). Yet, it is not solely the market orientation's influence, but need to be fortified by certain internal company capabilities. Dynamic capability directly influence sustainable competitive advantage, meaning that the ability to adapt and reorganize its assets are critical for firm's long-term competitiveness. These findings are consistent with the idea that sustained competitive advantage requires the organization's capabilities to address dynamic environments ([Teece, 2017](#)). From mechanism perspective, the dynamic capability can lead to anticipating change, learning, innovation, adapting, and positioning a firm in relevant new markets ([Bari, Chimhundu, & Chan, 2024](#); [Koentjoro, & Gunawan, 2020](#)).

Absorptive capacity's role in maintaining competitive advantage has implications on emphasizing how the capability of organizations to handle their knowledge represents one source of the competitive advantage that the firms possess. This has been supported by research conducted by [Awwad, Abuhommous, and Adaileh \(2025\)](#) and [Dogbe, Bamfo, and Pomegbe \(2021\)](#), which indicated the effect of knowledge absorptive capacity on the performance of firms and their innovative behavior. The capability of the firms to absorb and use information from external parties is considered to be a unique competitive advantage that contributes to the success of MSMEs in a competitive environment. The mediation testing results reveal that absorptive capacity partially mediate between market orientation and dynamic capability in creating a sustainable competitive advantage. This suggests that although the two variables do influence directly, the company's knowledge capability will assist the firm to be at par from its competitors. The result also agreed that the capability to develop new capabilities through the utilization of market orientation in the context of absorptive capacity will enable a firm generate long-run economic value, particularly the firms of limited resources within the rapidly change market environment like the environment that are faced by the MSMEs.

5. Conclusions

5.1 Conclusion

The findings of this study clearly established that absorptive capacity plays a core mediating role in building up sustainable competitive advantage of MSMEs by the confluence of market orientation and dynamic capabilities. The absorptive capacity allows the firm to understand the customer requirement, adjust the changing business environment, translate market information into strategic knowledge, and enhance organizational learning. In parallel, dynamic capability helps MSMEs to reorganize their internal resources and adapt to environmental uncertainty. Dynamic capability enables MSMEs to take strategic initiatives to address rapid changes in the competitive landscape. The two capabilities effectively contribute to absorptive capacity and further transform knowledge gained from the external market into internal capacity to acquire, assimilate, transform, and utilize it to gain a long-term competitive advantage. Based on these findings, our research also enriches the Knowledge-Based View (KBV) and (Dynamic Capability Theory) DCT theories. They propose that a firm's competitive advantage is derived not merely from a set of fixed resources, but the process through which it manages its resources strategically and adapts continually. Theoretical contributions. This research makes several contributions to strategic management and organizational learning theories by offering an integrative model showing how a market-driven orientation and an organizationally adaptive capability synergize with each other to influence long-term competitive advantage via the intermediation of absorptive capacity. Practical implications. This research presents several practical implications for SME managers, owners and public policies designers. MSMEs should cultivate an entrepreneurial orientation, emphasize customer service, improve their capability to collect and utilize

market information, establish proper and competitive organizational learning mechanisms, and foster organizational dynamic capability to ensure a sustainable competitive advantage.

5.2 Research Limitations

Even though, this research contributes valuable insights of both practical and theoretical importance; it has some limitations that should be taken into account when assessing the findings of the present study. Firstly, the research design utilized cross sectional research approach and this does not enable the detection of causal relationships and changes that may occur on building up of organizational capability over time. In essence, dynamic capability, absorptive capacity, and market orientation are time-varying, evolutionary variables, so longitudinal research on them would help us understand how these variables interact with each other. In addition, in essence, the research sample size is limited to MSMEs in a regional and industrial domain that might limit the generalizability of our conclusions to other contexts like sectors, countries and/or organizations with differing level of institutions, technological advancements or industrial structure.

5.3 Suggestions and Directions for Future Research

The current study allows further extending and elaborating this model, through adding more strategic, technological and environmental variables contributing to clear and enlighten the dynamics defining sustainable competitive advantage of MSMEs. The present study proposes further research to address the dynamism in which these concepts of market orientation, absorptive capacity, and dynamic capabilities unfold in specific situations over time, especially during turbulent periods characterized by the impact of digital transformation and economic insecurity. The implication is that subsequent scholars may explore how the interplay among technological innovation capability, digital transformation readiness, entrepreneurial orientation, organizational culture, leadership styles, and absorptive capacity affects a firm's sustained competitive advantage. Moreover, subsequent scholars can explore the impact of certain mediating variables on the delimitation of absorptive capacity, such as environmental turbulence, technology intensity, government policy, and strategic alliances.

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Author Contributions

OSS proposed the research question, formulated the design of the research, and collected and analyzed the data; he wrote the first draft of the manuscript. CYS participated in formulating research questions, the analysis and interpretation of data; and revision of the manuscript. CSK helped in data collection, review of the relevant literature and validation of instruments. AS supervised the research activities, offered guidance regarding theoretical approach and edited the final manuscript before submission to the publisher. The findings of the study were reviewed by all authors, and they provided valuable help to fulfill the present study, and finally they all approved the final manuscript.

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