An Empirical Study on the Impact of Organizational Culture and Information Technology on SMEs' Competitive Advantage and Performance

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Abstract. This quantitative study examines the impact of organizational culture and information technology (IT) on competitive advantage and performance among 431 small and medium enterprises (SMEs) in the food and beverage sector across three cities in East Java, Indonesia. Data was collected through a survey questionnaire and analyzed using structural equation modelling (SEM). The findings show that both organizational culture and IT significantly influence SME performance directly. However, competitive advantage mediates the relationship between IT and performance, not organizational culture and performance. The results emphasize the importance of fostering a positive organizational culture aligned with company strategy to improve SME performance directly. Additionally, effective IT implementation creates competitive advantages that drive long-term performance improvements. This study provides practical implications on how SMEs can optimize organizational culture and IT capacity to improve competitiveness.

Keywords: Organizational culture, information technology, competitive advantage, SME performance

1. Introduction

The continuous changes in the business environment, both internally and externally, have dramatically transformed the competitive landscape. Every company, including Small and Medium Enterprises (SMEs), must maintain high responsiveness. Assumptions that may have worked in the past for successful business planning need to be reevaluated in era of globalization due to factors such as global competition, corporate culture dynamics, and rapid technological changes. Therefore, companies must have strong adaptability and effective strategies to remain relevant and perform well (Vernon-Wortzel & Wortzel, 1997).

The future companies are innovative, adaptive, and responsive to change (Chattell, 1995). Hence, developing a good strategy is crucial for Small and Medium Enterprises (SMEs) to thrive and excel in the competitive business environment. Furthermore, SMEs must be able to influence their respective industries and create future markets, even becoming pioneers (Hamel & Prahalad, 1996). To achieve these objectives, human resources with the ability to formulate the company's vision and mission are the key to building a resilient company in the face of globalization.

SMEs use strategies to achieve economic benefits and improve company performance. Porter (1998) identified three common strategies such as: cost leadership, differentiation, and focus, to gain a competitive advantage and secure profits. Organizational culture and information technology can improve the link between competitive advantage and performance. By investigating how organizational culture influences adaptation and innovation and assessing how information technology impacts SME efficiency and responsiveness, this study aims to provide knowledge for improving SME performance, driving economic growth, and creating jobs.

SMEs are vital contributors to Indonesia's economy: 61% of the GDP (approximately IDR 9,243.78 trillion) and 97% of the country's workforce (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2022). East Java hosts significant food and beverage SME clusters, particularly Surabaya, Malang, Kediri, and nearby areas. This study focuses on the food and beverage SME clusters in Surabaya City and the cities and districts of Malang, Kediri, and surrounding areas.

Strategic management is described as the art and science of creating, executing, and evaluating crossfunctional decisions that enable a company to achieve its goals (David, 2002). An organization is a group effort to unite diverse interests to achieve various aims and objectives. The increasingly complicated work environment forces company to adapt to social interests quickly. Organizational transformation is distinguished by efficiency, sophistication, and complexity. Humans have constantly strived to improve productivity, efficiency, and effectiveness in cost control and production by building organizations throughout history.

To establish the existence of SMEs in Java Timur, a competitive advantage that leverages suitable internal skills, such as information technology and organizational culture, is required. This strategy will have a favorable impact on the company's performance. In organizational existence, organizational culture plays a critical role. As a result, organizational culture is linked to business strategy and is associated with performance. Several studies, like those conducted by (Kraśnicka et al., 2018), (Kim & Chang, 2019), and (Aboramadan et al., 2020), have discovered substantial correlations between organizational culture and firm performance. This means that organizational culture drives marketing and technological innovation, influencing performance improvement. Other scholars, such as (Mavondo & Farrell, 2003) and (McGuinness & Morgan, 2005) have different perspectives. As a result, a thorough investigation is required to link organizational culture, information technology, competitive advantage, and SME success.

Technology enables economic development and supports entrepreneurs to improve productivity and efficiency. By integrating novel components, entrepreneurs who capitalize on opportunities can create innovative products, manufacturing techniques, and new markets. (Noori, 1990) suggests that this can result

in developing strategies to improve organizational efficiency. Technology in an organization includes the information, equipment, procedures, and processes that transform inputs into outputs. (Porter, 1998) argues that technology has the potential to reshape competition by influencing industry structure. The selection of technology, whether on a small, big, or long-term scale, is part of the organizational strategy related to planning and control functions.

Information technology helps businesses reduce costs by decreasing transaction and agency expenses within a corporation (Laudon & Laudon, 2017). Information technology, including computers and the internet, has the potential to significantly transform work practices in private and public organizations by offering enhanced speed, accuracy, capacity, and interactivity. Egorova et al.,(2021) found that organizations that utilize information technology to enhance their operations experience enhanced efficiency and effectiveness, leading to improved company performance. While information technology has been shown to affect organizational performance, its investment does not always correspond to improved organizational performance (Venkatraman, 1994).

Several studies have investigated organizational culture, information technology, competitive advantage, and company performance based on the description above. However, the researchers conducting these studies have different perspectives. As a result, a more in-depth study is required to comprehend the relationship between organizational culture, information technology, competitive advantage, and corporate performance. (Fang & Wang, 2006) previously studied how organizational learning and organizational culture influence a company's competitive advantage. A conceptual framework is developed based on previous studies to support this study. This study is special because of the factors connected to information technology and its relationship with company performance and competitive advantage. Furthermore, this study completely connects information technology, organizational culture characteristics, competitive advantage, and SME performance. Researchers have never conducted this before, as evidenced by the research ideas.

2. Literature Review

This research develops Robbins' theory in Organization Theory and Porter's theory in competitive advantage. According to (Robbins, 1990), organizational theory can be studied from the organizational structure, which includes strategy, technology, organizational size, environment and control. Product-driven should focus on organizational culture, thus, there is a link between organizational culture, technology, and company strategy. (Porter, 1998) also said organizational culture is closely related to corporate strategy. Organizational culture can only shape an organization into a learning organization by learning how to develop corporate strategy. According to (Schein, 1991), Organizational culture can be conceptualized as a set of fundamental beliefs that are identified, formed, or evolved by a specific collective in facilitating the ability of the company to effectively address challenges arising from external adaption and internal integration processes. It is imperative to instruct new members in the proper approach to comprehending, analyzing, and familiarizing themselves with these problems.

The previous literature review found various perspectives regarding the interplay between organizational culture, information technology, competitive advantage, and company performance. Aboramadan et al. (2020) showed a significant relationship between organizational culture and company performance. Organizational culture is believed to have the potential to improve marketing and technological innovation, ultimately leading to positive company performance. AlShehhi et al.'s (2021) supported the relationship between employee engagement, commitment, and improved company performance. In contrast, Asif and Sajjad (2018) argued that the relationship between organizational culture and company performance is insignificant. They assert that improving company performance requires internal improvements and strategic alignment with internal and external stakeholder needs rather than

quick fixes or shortcuts.

In information technology, this study highlighted its essential role in driving business development. Information technology has the potential to recreate industrial structures by reducing operational costs. McLeod and Schell (2007) and Egorova et al. (2021) concur that leveraging information technology can streamline company operations, enhance efficiency and effectiveness, and improve overall performance. Moreover, Qammach (2016) emphasized the significant influence of information technology on company performance. Advanced information technology fosters innovative thinking, contributing to heightened innovation performance.

Previous research has also focused on the development of competitive advantage. Porter (1998) outlined cost leadership, product differentiation, and focus as relevant strategy types. Nevertheless, some researchers argue that combining these fundamental strategies can contribute to a company's competitive advantage. Achieving a competitive advantage is essential for companies to secure a strong position in the market, as emphasized by Suandi et al. (2022), Islami et al. (2020), and Kaur et al. (2019). However, Nayak et al. (2022) and Sigalas & Papadakis (2018) caution that a competitive advantage does not necessarily guarantee improved performance, as external factors can also impact a company's performance.

Based on the explanation above, the conceptual framework and hypotheses can be formulated as follows:



Fig.1: Research Conceptual Framework

The hypotheses for this study are as follows:

- H1: Organizational culture has a significant influence on competitive advantage.
- H2: Information technology has a significant influence on competitive advantage.
- H3: Organizational culture has a significant influence on SME performance.
- H4: Information technology has a significant influence on SME performance.
- H5: Competitive advantage has a significant influence on SME performance.
- H6: Competitive advantage mediates the relationship between organizational culture and SME performance.
- H7: Competitive advantage mediates the relationship between information technology and SME performance.

3. Research Method

The study examined organizational culture, information technology, competitive advantage, and corporate performance variables. This study used a quantitative method based on the issues under examination and the research objectives. Quantitative methodology is suitable for precisely measuring relationships between the variables under investigation and identifying potential patterns within a larger population through numerical analysis. This study aimed to clarify interrelationships and impacts among organizational culture, information technology, competitive advantage, and company performance, specifically within the domain of Small and Medium Enterprises (SMEs).

The study is conducted in East Java, which was selected because of its significant number of SMEs, totalling 13,657 units (East Java Provincial Department of Industry and Trade, 2020). The presence of 3,915 prominent small and medium-sized enterprises (SMEs) within 22 business clusters in East Java is a further consideration. These clusters include various sectors such as food and beverage, garment, embroidery, weaving and hand-drawn batik, woodworking, brassware, gold and silver, agriculture, and fisheries (Bank Indonesia Surabaya, 2022).

This study examines the food and beverage industry cluster. The Department of Industry and Trade (2022) states that 1,658 small and medium-sized enterprises (SMEs) are involved in producing processed food and beverage products in East Java. The sample consists of three districts/cities, namely Surabaya, Malang, and Kediri, with the highest concentration of small and medium-sized enterprises (SMEs) in the processed food and beverage sector. The total number of SMEs included in the sample is 633.

This study uses probability sampling, which ensures equal chances for all population elements to be selected as sample members. The sample size in each research area is determined using the sample size table calculated based on the formula by Issac and Michael (1981), with a margin of error (e) of 5% and a confidence level (q) of 95%.

$$n = \frac{N}{(1+N.e^2)*e^2}$$

Based on the sample size calculation at a 5% margin of error for each region, a total of 431 SMEs is selected, distributed across the three cities: Surabaya, Kediri, and Malang. A concise summary is presented in Table 1 below:

No	City	population (N)	Sampel (n)
1.	Surabaya	272	170
2.	Kediri	158	119
3.	Malang	203	142
Total		633	431

Table 1. Research Sample Size

Source: Primary data processed (2022)

The mediation analysis of variables was conducted using multivariate analysis, specifically the Structural Equation Model (SEM) with AMOS 24 software. Structural Equation Modeling (SEM) was chosen as the methodology because it enables the analysis of complex relationships among variables. SEM can assess models that involve latent (unobserved) variables and identify both direct and indirect relationships through concepts of mediation or moderation. SEM is appropriate for testing the proposed hypotheses since this study has several interrelated variables and aims to analyze the mediation mechanisms between variables. The SEM analysis involves conducting assumption tests and model fit assessments. These assessments include Confirmatory Factor Analysis (CFA) to evaluate the validity of the outer model (loading factors), tests for reliability, tests for normality and model fit. All tests must meet the criteria in

order to proceed with the mediation analysis (Ghozali, 2014).

This study examines four variables: organizational culture (Bititci et al., 2006), information technology (Kearns & Lederer, 2001), competitive advantage (Porter, 1998), and company performance (Hansson, 2007).

This study uses the Likert scale, which consists of a standard scale ranging from 1 to 5. The Likert scale is a measurement tool that includes five levels of agreement: strongly disagree (1), disagree (2), neutral (3), agree (4), and strongly agree (5). This assessment is used to quantify variables and their corresponding indicators. A higher indicator score corresponds to the respondents' stronger perception of the variable.

The study uses a structural equation model to examine the relationships between variables.

- 1. $Y_1 = b_1 X_1 + b_2 X_2 + \zeta$
- 2. $Y_2 = b_1 X_1 + b_2 X_2 + b_3 Y_1 \zeta$

The mediating impact of competitive advantage in the relationship between organizational culture and information technology on the performance of food and beverage SMEs is tested using the Sobel test calculation method. The formula for the Sobel test calculation is as follows:

$$Sab = \sqrt{b^2 sa^2 + a^2 sb^2 + sa^2 sb^2}$$
.....(1) $t = \frac{ab}{sab}$(2)

With the provided explanations:

Sab: Magnitude of the standard error of the indirect effect a: Path coefficient from the independent variable to the intervening variable b: Path coefficient from the intervening variable to the dependent variable sa: Standard error of coefficient a sb: Standard error of coefficient b

The first step in the Sobel test is to calculate the magnitude of the direct effect's standard error. Next, compute the t-value for the coefficient and compare it with the critical t-value from the table. If the calculated t-value is greater than the critical t-value, it can be inferred that a mediating effect exists.

4. Result

The participants in this study are owners of food and beverage SMEs. The descriptive analysis of the study is summarized in Table 2, Based on the number of employees and sales revenue. Subsequently, validity tests, normality tests, linearity tests, and goodness of fit assessments are conducted before proceeding to hypothesis testing.

Table 2. Respondent Profile					
Re	spondent Demographics	Frequency	Percentage		
	5-10 Employees	182	42,3		
Number of	11-15 Employees	114	26,4		
employees	16-20 Employees	62	14,3		
	>20 Employees	73	17		
Sales Revenue	IDR 300.000.000 - 1.000.000.000	213	49,5		

Respondent Demographics	Frequency	Percentage
> IDR 1.000.000-1.700.000.000	105	24,3
> IDR 1.700.000.000 – 2.400.000.000	82	19
> IDR 2.400.000.000	31	7,1

Validity testing in this study uses Confirmatory Factor Analysis (CFA). Validity testing is crucial in SEM analysis to determine whether indicators are valid for measuring a variable. In SEM analysis, the minimum threshold for indicator validity is considered met if the CFA value for an indicator is above 0.5. The results of the CFA analysis in this study are summarized in Figures 2, 3, 4, and 5.



Fig.2: CFA Test of Organizational Culture Variable

Figure 2 shows the results of the Confirmatory Factor Analysis (CFA) or loading factor on the organizational culture variable with three indicators: support, task, and humanity. All three indicators have values above 0.5, meaning that these indicators are valid and can be used as benchmarks for the organizational culture variable.



Fig.3: CFA Test of Information Technology Variable

Figure 3 shows the results of the Confirmatory Factor Analysis (CFA) or loading factor on the information technology variable with two indicators: business plan and business strategy. Both indicators have values above 0.5, meaning that these indicators are valid and can be used as benchmarks for the information technology variable.



Fig.4: CFA Test of Competitive Advantage Variable

Figure 4 shows the results of the Confirmatory Factor Analysis (CFA) or loading factor on the competitive advantage variable with three indicators: cost, differentiation, and focus. All three indicators have values above 0.5, meaning that these indicators are valid and can be used as reference points for the competitive advantage variable.



Fig.5: CFA Test of Company Performance Variable

Figure 5 shows the results of the Confirmatory Factor Analysis (CFA) or loading factor on the SME performance variable with two indicators: sales and profitability. Both indicators have values above 0.5, showing that these indicators are valid and can serve as benchmarks for the SME performance variable. Next, the reliability test results are summarized in Table 3.

Table 5. Renability test				
Variabel	CR	VE		
Budaya Organisasi	0,786	0,721		
Teknologi Informasi	0,812	0,806		
Competitive Advantage	0,824	0,812		
Kinerja UKM	0,827	0,819		

Table 2 Daliability test

The reliability test results show that all variables' Composite Reliability (CR) values are higher than 0.700, and the Variance Extracted (VE) values exceed 0.500. Therefore, all variables demonstrate reliability and suitability for further testing. Following the reliability test, the next step involves the normality assessment is summarized in Table 4.

Table 4. Normality Test						
Variable	min	max	skew	c.r.	kurtosis	c.r.
Y2.2	2.000	5.000	351	-1.704	444	-1.077
Y2.1	1.000	5.000	409	-1.984	.060	.146
Y1.3	2.000	5.000	.496	2.402	.254	.616
Y1.2	3.000	5.000	029	141	1.861	4.511
Y1.1	1.000	5.000	334	-1.620	370	896
X2.1	2.000	5.000	484	-2.348	302	731
X2.2	2.000	5.000	679	-2.291	221	537
X1.1	2.000	5.000	205	995	1.404	3.404
X1.2	3.000	5.000	046	225	.265	.642
X1.3	2.000	5.000	082	395	122	295

The normality test evaluates the normal data distribution for a given indicator or variable. The normality

test in the AMOS software involves comparing the Critical Ratio (CR) skew and kurtosis values to a critical value of \pm 2.58 to assess normality. Table 3 shows that the CR skew and kurtosis values for each indicator in every variable are below \pm 2.58. In conclusion, the data distribution is normal.

After confirming that the data is normally distributed, the next step in hypothesis testing is to evaluate the level of agreement between the model and the data. Various coefficients of fit are employed to assess the appropriateness of the model for the given data. Table 5 shows the results of the goodness of fit test.

criteria	Cut-of value	result of model	Description
Khi Kuadrat	Kecil	85,162	Good Model
p-value	\geq 0,05	0,384	
CMIN/DF	$\leq 2,00$	1,039	Good Model
GFI	≥ 0,90	0,928	Good Model
AGFI	≥ 0,90	0,995	Good Model
TLI	≥ 0,95	0,996	Good Model
CFI	≥ 0,95	0,994	Good Model
RMSEA	\leq 0,08	0,017	Good Model

Table 5. The results of the goodness of fit test.

Table 5 shows a good model fit as it is higher than the threshold values. Therefore, the next step involves hypothesis testing, specifically analyzing the direct relationships between variables and the indirect relationships (mediation). The results of the SEM test are summarized in Figure 6.



Fig.6: Direct Effects SEM Test Results

The SEM analysis results in Figure 6 on SME performance, show the important findings related to the variables under investigation. Organizational culture significantly and directly impacts SME performance, meaning that investments and efforts to cultivate a positive organizational culture, such as fostering innovation, collaboration, and efficiency, can positively influence SME performance. The results emphasize the significance of information technology in improving SME performance. The efficient utilization of information technology has the potential to augment efficiency, productivity, and customer service, all of which collectively contribute to the improved outcomes.

Moreover, SEM analysis results confirm that information technology has a direct and positive impact on the competitive advantage of SMEs, strengthening their market position. While no significant direct influence between organizational culture and competitive advantage was found, the emphasis on cultivating a positive organizational culture, effective use of information technology, and the creation and utilization of competitive advantages can assist SMEs in improving their performance and competing more effectively in the competitive market. These findings provide valuable guidance for SME owners and decision-makers in planning strategic steps for the success of their businesses.

Furthermore, the results of the indirect effects analysis or mediation using the Sobel test are summarized in Table 6.

Relationship	t observed	t table	Significant
Organizational Culture \rightarrow Competitive Advantage \rightarrow SME	0.340	1.960	0.733
Performance			
Information Technology →Competitive Advantage→SME	2.109	1.960	0.034
Performance			

Table 6. Mediation Analysis Using Sobel Test

The results of Sobel test analysis in Table 6 show two important findings related to mediation in the context of the relationship between organizational culture, information technology, and SME performance. The first finding indicates that competitive advantage does not mediate the relationship between organizational culture and SME performance. This means that, although there is a direct relationship between the organizational culture implemented in SMEs and their performance, this relationship is not explained by the presence of competitive advantage as a mediator. Furthermore, the second finding shows that competitive advantage does play a mediating role in the relationship between information technology and SME performance. This implies that information technology positively impacts SME performance, and one of the reasons for this impact can be explained through the competitive advantage it generates. In other words, effectively used information technology in SME operations helps create a competitive advantage, positively influencing their business performance.

5. Discusion

This study analyzed the direct impact of organizational culture, information technology, and competitive advantage on Small and Medium-sized Enterprises (SMEs) performance. This study examined the indirect effects or mediation of competitive advantage in the relationship between organizational culture, technology, and SME performance. The SEM results presented in Figure 6 shows that the analysis of organizational culture's direct impact on competitive advantage shows that organizational culture does not significantly affect competitive advantage (H1 = rejected). This suggests that competitors may easily

imitate certain aspects of organizational culture perceived as competitive advantages. Competitors can replicate similar practices and values if a company has a culture of supporting employees and promoting innovation and creativity. Consequently, the expected competitive advantage such as culture might not be sustainable. It may also be challenging for SMEs to associate specific cultural elements with better performance than their competitors. This finding contrasts with the study by (Joseph & Kibera, 2019), which stated a significant impact of organizational culture on competitive advantage. Their research found that a strong culture aligned with organizational strategy and structure is a dominant source of sustainable competitive advantage. These findings do not align with the theory proposed by (Porter, 1998) on competitive advantage, which states a close relationship between organizational culture and corporate strategy.

The direct impact of information technology on competitive advantage demonstrates that information technology significantly affects competitive advantage (H2 = accepted). This suggests that better implementation of information technology leads to a stronger competitive advantage for SMEs. Information technology can support business strategies and plans, leading to optimal efficiency and effectiveness. Information technology enables SMEs to rapidly and accurately collect, store, and analyze data, facilitating better and more timely decision-making. This finding aligns with the research by (Awamleh & Ertugan, 2021), emphasizing the significant impact of information technology on competitive advantage. The crucial impact of information technology on competitive advantage depends on the organization's ability to exploit market opportunities and neutralize threats (Marinagi et al., 2014), thereby contributing to achieving competitive advantages. This finding is in line with theory (Argyres, 1999), which states that information systems help direct coordination by making information processing cheaper. As well, improved information processing can make project governance more efficient.

The direct impact of organizational culture on SME performance shows that organizational culture significantly affects SME performance (H3 = accepted). This implies that a better organizational culture leads to improved SME performance. Organizational culture that aligns with the company's business strategy and is built and maintained in line with its vision and mission contributes directly to the improved company performance. Leadership plays a significant role in shaping and promoting organizational culture, acting as role models for employees and influencing culture adoption within the company environment. This finding aligns with the study by (AlShehhi et al., 2021), emphasizing employee engagement and commitment to the organization in improving performance. However, it differs from the research by (Kim & Chang, 2019), which suggested that an organization's culture, supported by business strategies and change initiatives collectively, poorly impacts employee innovation and, consequently, company performance. These findings show the significance in creating a distinctive organizational culture, specifically emphasizing key cultural aspects such as support, task orientation, and a human-centric approach, all of which directly influence performance. These findings support the theory (Schein, 1991), which explains organizational culture as a pattern of assumptions created or developed by a particular group with the intention that the organization learns to overcome existing problems.

The direct impact of information technology on SME performance shows that information technology significantly affects SME performance (H4 = accepted). This signifies that better information technology implementation leads to improved SME performance. Effective use of information technology, absorption capacity, and dynamic capabilities can result in superior performance for SMEs. Information technology enables companies to acquire knowledge and support business processes, leading to strategic alignment and improved organizational agility, ultimately resulting in overall performance. This aligns with the research by (Cuevas-Vargas et al., 2016), highlighting the significant impact of information technology on company performance. The effective use of information technology along with business strategy enables SMEs to manage global market problems and improve their business performance. This result also supports the

findings by (Egorova et al., 2021), showing the positive impact of information technology on efficiency and effectiveness to improve company performance. As for the results of this study, they differ from the research conducted by Chae et al. in 2014, which stated that there was no significant relationship between information technology and performance.

The direct impact of competitive advantage on SME performance shows that competitive advantage significantly impacts SME performance (H5 = approved). This suggests that greater competitive advantage correlates with improved SME performance. A strong competitive advantage assists businesses in achieving a stronger market position. Companies can attract and maintain new clients by providing distinctive products or services. This strong market position can potentially increase revenue, market share, and business growth. This is in line with research (Wongsansukcharoen & Thaweepaiboonwong, 2023) which states that SMEs can achieve sustainable performance by generating competitive advantages in their business models. Suppose a business can significantly increase customer lifetime value and is difficult to imitate or replace. In that case, it can be considered as unique value proposition that will ensure the achievement of Competitive Advantage and further business growth. Our research results which confirm the positive impact of Competitive Advantage on SME performance are also in line with research conducted by (Ilinova et al., 2021), and (Nguyen et al., 2021). Furthermore, the results differ from research by (Sigalas & Papadakis, 2018) and (Nayak et al., 2022), which states that companies with a competitive advantage cannot experience increased performance.

The mediation analysis shows that competitive advantage does not mediate the relationship between organizational culture and SME performance (H6 = rejected). This suggests that a positive organizational culture can directly enhance company performance without the need for the mediating mechanism of competitive advantage. A culture that promotes cooperation, open communication, and innovation can immediately improve team productivity and performance without requiring a competitive advantage. In this study, the impact of organizational culture on company performance is complex and includes multiple different indicators, resulting in competitive advantage not playing an important role in understanding this relationship. However, competitive advantage mediates the relationship between information technology and SME success (H7 = approved), emphasizing the role of technology in building a distinct competitive advantage that effects long-term performance. This conclusion emphasizes the importance of optimizing both organizational culture and information technology to improve SME performance and competitiveness.

This finding emphasizes that the efficient use of information technology can improve SMEs' performance by creating a strong competitive advantage. This is also under the theory (Porter, 1998) that an indicator of a competitive advantage low costs, with efficient use of technology can reduce costs incurred by the company and the profits received by the company may be more significant.

6. Conclusion

This study examined the impact of organizational culture and information technology on competitive advantage and performance among SMEs in East Java, Indonesia. The findings show that organizational culture and IT directly influence SME performance, underscoring their importance as drivers. However, competitive advantage only mediates the relationship between IT and SME performance, not between organizational culture and performance. This highlights that a positive organizational culture aligned with company strategy can directly enhance performance without requiring competitive advantage as an intermediary. On the other hand, IT creates competitive advantages that drive long-term performance improvements. These results have important theoretical and practical implications. The study contributes to knowledge on the factors impacting SME performance and competitiveness. Furthermore, this study provides insights for SMEs on optimizing their organizational culture and IT capacity to achieve performance gains. Further research could examine the comparative analysis across different sectors and

qualitative studies to enrich the understanding of these relationships. Finally, this study offers valuable guidance for SMEs, policymakers, and researchers by investigating the performance drivers.

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