



Critical Thinking, Creativity, Innovation and Organizational Culture to Improve Sustainable Performance in Food and Beverage Sector MSMEs in Surakarta City

Eni Minarni¹, Sarsiti Sarsiti², Mokhammad Eldon³

^{1,3}Faculty of Economics, Universitas Tulungagung

²Faculty of Economics, Universitas Surakarta

Corresponding Author: Sarsiti Sarsiti sitiunsa76@gmail.com

ARTICLE INFO

Keywords: Critical Thinking, Creativity, Innovation, Organizational Culture, Sustainable Performance

Received: 23 January

Revised: 23 February

Accepted: 25 March

©2025 Minarni, Sarsiti, Eldon: This is an open-access article distributed under the terms of the [Creative Commons Attribution 4.0 International](#).

ABSTRACT

This research investigates how critical thinking, creativity, and innovation influence organizational culture and how this, in turn, contributes to enhancing the sustainable performance of MSMEs in Surakarta's food and beverage industry. The study population includes all 4,062 culinary MSMEs in Surakarta, from which 99 were purposively selected as the sample. Employing a quantitative methodology, the data were analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS). The findings reveal that critical thinking, creativity, and innovation significantly shape organizational culture. Furthermore, organizational culture has a substantial impact on sustainable performance and serves as an effective mediating factor. The distinct contribution of this study lies in its exploration of organizational culture as a mediating variable.

INTRODUCTION

Sustainable development aims to ensure that business decisions incorporate considerations such as fundamental human needs, environmental sustainability, community empowerment, efficient resource use, and fairness across generations (Blackburn, 2000, p. 17). It represents an integrated approach that connects environmental, economic, and social aspects with the involvement of governments, civil society, businesses, science, and policymaking (DESA, 2013). As noted by Busaya (2015), the business sector is expected to play a key role in addressing global challenges due to its resources and influence (George, Howard-Grenville, Joshi, & Tihanyi, 2016). Achieving sustainable development remains a critical concern for micro, small, and medium enterprises (MSMEs), as highlighted by De Sousa Jabbour et al. (2020). In Indonesia, MSMEs are vital contributors to the national economy, not only fostering economic growth and generating employment but also helping to distribute the benefits and outcomes of development more equitably (Amankwah-Amoah et al., 2021; Bouwman et al., 2019; Paik, Kim, & Park, 2017; Prasetyo & Kistanti, 2020; Pu et al., 2021; Ramli et al., 2019; Tiago et al., 2020; Putri, 2020).

The sustainability of MSMEs in Indonesia continues to face significant challenges, particularly following the global health crisis brought about by the COVID-19 pandemic, which severely disrupted their economic activities. According to data from the Ministry of Cooperatives and MSMEs, nearly 47% of these enterprises were forced to shut down due to the pandemic's impact (Tempo Bisniscom, 2020). Several regions, including Central Java, also experienced considerable strain. As reported by *semarang.bisnis.com*, the Head of the Central Java Cooperatives and SME Office, Emma Rahmawati (2020), stated that around 3,000 MSMEs and 420 cooperatives in the region were affected due to disruptions in both raw material supply and marketing channels (Suwiknyo, 2020). In total, Central Java had approximately 4.17 million MSME units active during the pandemic, with 26,568 at risk of bankruptcy. Survey findings revealed that about 7.16% of MSMEs especially in the food and beverage sector suffered sustainability issues, with 75% of them experiencing sharp declines in sales (Rizqi, 2020).

Data from the Ministry of Industry in 2020 also highlighted the importance of the culinary sector, which emerged as the top contributor to Indonesia's non-oil and gas manufacturing GDP, accounting for 7.02%. Additionally, the food and beverage industry led in export value, reaching IDR 27.59 billion between January and November 2020. The COVID-19 outbreak caused a severe economic downturn, prompting business owners to develop and implement adaptive strategies to maintain operations and improve sales performance (K. Eunike & L. Utama, 2021). A significant body of research, including that of Blackburn, Hart, and Wainwright (2013), has aimed to explore key factors influencing the success of small businesses, with the goal of supporting business owners in sustaining and scaling their operations.

As reported by *Solopos.com*, culinary MSMEs in Solo are recognized as a vital driver of local economic development. The MSME sector demonstrated notable resilience throughout the challenges of the COVID-19 pandemic in 2020

and has continued to endure the economic strain caused by government-imposed social restrictions. Solo City, particularly in the culinary domain, holds significant MSME potential and is anticipated to experience growth in line with the restoration of public mobility and increased consumer spending compared to the previous year. According to Joglosemarnews.com, Astri Widayani, a young entrepreneur and member of HIPMI Solo, has taken the initiative to elevate MSMEs through the “Solo 2023 MSME Champion” program. This initiative aims to support the advancement of 100 MSMEs with funding access of up to IDR 100 million, enhancing their visibility and competitiveness. Such efforts are expected to not only strengthen Solo’s economy but also reinforce its identity (Wulandari, R., Pardi, Astuning Saharsini, & Era Trianita Saputra, 2023).

Despite their significance, the performance of MSMEs in Indonesia remains suboptimal, largely due to business owners lacking the essential skills required for enterprise development (Hasan et al., 2020). Organizational performance can be assessed by examining how well specific actions or policies align with and achieve the strategic goals, mission, and vision set by the organization. Organizational success is closely linked to how well a company manages its human capital (Musa et al., 2019). As highlighted by Rosmadi (2021), sustaining MSME operations requires not only financial resources but also competent and well-developed human resources. The quality of human capital commonly referred to as HR plays a critical role in shaping a business’s financial outcomes, as human involvement forms the foundation of operational effectiveness. Since business performance is influenced by those who are actively involved in its operations, MSME growth must go hand-in-hand with human resource development to enhance financial results (Wahyudiati & Isroah, 2020).

Innovation, creativity, and willingness to take risks are interconnected elements that significantly affect the performance of small and medium-sized enterprises (J. Ferreira, A. Coelho, & L. Moutinho, 2020; G. Wiwoho, 2019). These capabilities are essential for MSMEs to design and offer products or services that align with evolving consumer preferences (C. Wu, 2016; E. Ardyan et al., 2017; K. Kiyabo & N. Isaga, 2020; A. Purwati et al., 2021; M. Wasim et al., 2022). Moreover, they serve as differentiators that allow MSMEs to outperform competitors and secure a strategic edge (Ardyan et al., 2017; Purnomo, 2013). Innovation and creativity further improve internal business operations, leading to enhanced efficiency and profitability (E. Ardian, 2017; N. M. Purnomo, 2013; N. M. D. Satyawati, 2019). Studies such as those by Evant Andi Aenurohman (2020) and Rika Devi Kurniasari (2018) underscore the positive effects of innovation on business performance and productivity. Similar findings by Puji Mustofa Arifudin (2016) revealed that innovation significantly boosted performance in Wi-Fi-enabled coffee shops in Wates.

In today’s challenging environment, entrepreneurs are expected to employ both critical and creative thinking in launching and managing home-based ventures that cater to high consumer demand (Cerchione et al., 2016; Kumar & Kalse, 2021; Rakshit et al., 2021). Critical thinking is a vital asset for entrepreneurs aiming to effectively market their products and generate profits, especially when companies need to implement transformative solutions to survive (Pu et al.,

2021). Creative thinking involves the synthesis of existing components to generate entirely new ideas, often leading to innovative products previously unseen in the marketplace (Ramli et al., 2019). This forward-looking mindset helps entrepreneurs envision future business conditions that cannot be anticipated through past trends alone (Ramli et al., 2019). Prior research also supports the notion that creativity enhances business strategy and helps identify new market opportunities (Adam & Alarifi, 2021; Amankwah-Amoah et al., 2021; Kumar & Kalse, 2021). As such, creativity becomes crucial for maintaining the resilience and sustainability of MSMEs during crises like the COVID-19 pandemic (Amankwah-Amoah et al., 2021).

The study conducted by Mujanah et al. (2023) demonstrates that both critical and creative thinking significantly influence the performance of MSMEs in Indonesia. These findings reinforce earlier research by Amankwah-Amoah et al. (2021), Prasetyo and Kristanti (2020), and Rakshit et al. (2021), which found that strong critical thinking abilities help entrepreneurs in identifying, evaluating, and addressing challenges, as well as in developing alternative strategies to ensure business continuity under varying conditions. Through the practice of critical thinking, business owners can devise effective approaches to maintain operations even during reduced activity levels. This research also introduces a novel element by incorporating organizational culture as a mediating variable, as previously recommended by Mujanah et al. (2023). Organizational culture is recognized by several scholars Pamungkas et al. (2023), Wang and Huang (2023), Galpin et al. (2015), Linnenluecke and Griffiths (2010), and Baumgartner (2014) as a key driver for promoting sustainable development within firms.

LITERATURE REVIEW

Sustainable Performance

Sustainable development represents a comprehensive integration of environmental, economic, and social goals, involving collaboration among governments, civil society, businesses, and academia to influence policies and actions (DESA, 2013). Busaya (2015) argues that the business sector, with its influence and resources, holds a vital role in addressing global issues (George, Howard-Grenville, Joshi, & Tihanyi, 2016). Sustainable performance is defined as an organization's responsibility to transparently communicate how its activities affect sustainable development, whether positively or negatively (Spallini et al., 2021). For MSMEs, achieving sustainability is a significant concern (De Sousa, 2020). In Indonesia, MSMEs are considered fundamental contributors to the national economy, not only in terms of growth and employment but also in facilitating equitable development (Amankwah-Amoah, 2021; Bouwman, 2019; Paik et al., 2017; Prasetyo & Kistanti, 2020; Pu, 2021; Ramli, 2019; Tiago, 2020; Sarsiti, 2024).

Critical Thinking

According to Facione (2015), critical thinking involves the processes of interpretation, analysis, evaluation, inference, and explanation based on evidence, standards, and contextual understanding – skills essential for informed decision-making. It can also be seen as the analytical capacity to identify, process,

and draw reasoned conclusions from gathered information. In this study, critical thinking is assessed through seven dimensions: truth-seeking, open-mindedness, analytical ability, systematic thinking, self-confidence, curiosity, and maturity. Creative thinking, in contrast, refers to synthesizing existing components into new, innovative ideas with the goal of developing unique products (Ramli et al., 2019). This type of thinking supports value creation and the identification of new business prospects (Desouza & Awazu, 2006), and is essential for envisioning future business scenarios that go beyond current trends (Ramli et al., 2019).

Creativity

Creativity is the capacity to generate original ideas and convert problems into opportunities (Zimmerer et al., 2008). A lack of creativity among entrepreneurs often hinders performance improvement (Ahlin et al., 2014). This study applies Torrance's (1974) framework, which defines creativity as the ability to recognize new connections or perspectives and combine multiple ideas into innovative concepts. According to Pesout and Netfield (2021) and Yoon (2017), creativity is demonstrated through fluency, flexibility, originality, problem sensitivity, and elaboration. Munandar also describes creativity as the ability to produce novel ideas that solve problems or reveal unseen relationships between elements.

Fostering creativity in business leaders is crucial, as it enhances their capacity for innovation and enables faster identification of market opportunities (Bouwman et al., 2019; Viswanathan & Telukdarie, 2021). Prior research confirms the positive link between creativity and strategic effectiveness in discovering new ventures (Adam & Alarifi, 2021; Amankwah-Amoah et al., 2021; Kumar & Kalse, 2021). Thus, creative thinking remains essential to ensuring the long-term viability and adaptability of MSMEs, particularly in the face of disruptions such as the COVID-19 pandemic (Amankwah-Amoah et al., 2021).

Organisational Culture

Garet R. Jones and Jennifer M. George (2003, p. 348) define organizational culture as a collection of shared values, norms, behavioral standards, and expectations that guide how individuals and teams interact within the organization to accomplish its objectives. Similarly, Gibson et al. (2006, p. 31) describe it as a framework of foundational assumptions that have been developed, discovered, or established by groups as effective strategies for dealing with internal cohesion and external adaptation challenges – strategies considered valid and, thus, passed on to new members as appropriate ways to interpret, think, and behave within the organization.

According to Edison (2016, p. 233), organizational culture consists of longstanding habits that shape workplace activities and serve as a key factor in enhancing employee and managerial performance. It represents a shared pattern among members, encompassing behaviors, attitudes, norms, values, and assumptions that support individual integration in their roles. Operationally, Denison (2006, p. 5) measures organizational culture through several dimensions, including empowerment, collaboration, consensus-building, coordination, customer orientation, and clarity of organizational mission.

Innovation

According to Saud (2014), innovation involves the process of creating and applying new ideas by combining various elements. Miles (1973) describes innovation as a specific and novel change, introduced intentionally through a structured program, and directed at achieving specific objectives within a defined system. Based on its novelty, Henderson and Clark (1990) categorize innovation into four types: incremental, architectural, modular, and radical. Innovation refers to the creation of new and distinctive outputs that differ from existing ones. Through creative processes and innovative thinking, novel products, services, procedures, concepts, or methods can be developed. MSME actors are encouraged to cultivate innovation in order to enhance productivity, develop unique offerings, and reduce operational costs by leveraging technology for profitability.

The Link between Critical Thinking and Organisational Culture

A study by Mujanah et al. (2023) reveals that critical thinking significantly influences the performance of MSMEs in Indonesia. These findings align with those of Amankwah-Amoah et al. (2021), Prasetyo and Kristanti (2020), and Rakshit et al. (2021), which assert that critical thinking skills play a vital role in diagnosing problems, evaluating potential risks, and generating alternative solutions that enable businesses to remain resilient under various circumstances. Jones and George (2003: 348) define organisational culture as a system of shared values, norms, behavioral standards, and expectations that shape how individuals and groups within an organisation interact and work towards achieving goals.

Hypothesis Development

1. Critical Thinking and Organisational Culture

According to Jones and George (2003: 348), organisational culture encompasses a collection of shared values, norms, behavior standards, and expectations that govern interpersonal and group dynamics within the organisation to realize common objectives. Gibson et al. (2006: 31) view organisational culture as a set of fundamental assumptions developed or discovered by a group to effectively address internal integration and external adaptation, which are considered valid and thus passed on to new members as appropriate ways to perceive, think, and respond to organisational challenges. Mujanah et al. (2023) provide evidence of the significant impact of critical thinking on MSME performance, reaffirming earlier studies (Amankwah-Amoah et al., 2021; Prasetyo & Kristanti, 2020; Rakshit et al., 2021) that demonstrate how critical thinking fosters problem assessment and solution generation in volatile business environments.

H1: Critical thinking positively influences organisational culture.

2. Creativity and Organisational Culture

Creativity entails transforming an existing domain into something new (Kenworthy & Mullan, 2018). Ballor and Claar (2019) argue that creativity

involves formulating original ideas, exploring innovative approaches to problems, and exploiting emerging opportunities. According to Barnard and Herbst (2018), a management team's creativity determines its ability to address challenges and leverage potential. Entrepreneurial creativity is influenced by both psychological factors such as motivation and intelligence and external factors such as environmental conditions. Keshishyan and Boghosian (2020) found that creativity significantly contributes to fostering a productive corporate climate. Similarly, Qin et al. (2022) conclude that creativity enhances SME competitiveness. Creativity is essential for innovation, which in turn drives organisational success (Barroso-Tanoira, 2017). Amankwah-Amoah et al. (2021) emphasize that creative thinking is crucial for the continuity of MSMEs, especially during crises like the COVID-19 pandemic.

H2: Creativity significantly affects organisational culture.

3. Innovation and Organisational Culture

The absence of innovation in MSMEs may hinder the realisation of efficiency and cost-effectiveness (Abbas et al., 2020). Innovation is a core trait of entrepreneurs and a critical determinant of business success (Afriyie et al., 2019). The capacity to introduce new offerings or enhance existing ones exemplifies entrepreneurial spirit (Akram et al., 2019). Research by Anwar (2018) and Anwar & Ali Shah (2022) confirms the positive influence of creativity and innovation on MSME success. Bagheri (2017) also found that process innovation substantially impacts MSME operational performance.

H3: Innovation has a significant influence on organisational culture.

4. Organisational Culture and Sustainability Performance

Sharma and Henriques (2005) define corporate culture as a foundational set of beliefs and values that shape business behavior and operations. Culture, as noted by Fiol (1991) and Kayworth & Leidner (2004), serves as an intangible strategic resource. While culture may not always directly offer competitive advantage per the Resource-Based View (Barney, 1991), it can support sustainable performance (Zhang et al., 2017). Studies by Pamungkas et al. (2023), Wang & Huang (2023), Galpin et al. (2015), Linnenluecke & Griffiths (2010), and Baumgartner (2014) indicate that organisational culture fosters sustainable development. Work innovation and continuous improvement, embedded in corporate culture, significantly correlate with employee and organisational performance (Musa et al., 2022). Firms that prioritize performance-oriented cultures generally achieve superior financial outcomes compared to those that lack such focus. The reciprocal relationship between continuous improvement, innovation, and work culture underlines their collective influence on workforce productivity.

Research by Wang & Huang (2022) further explores how cultural elements of flexibility and control impact sustainability performance by enhancing innovation capabilities, moderated by leadership styles (transformational vs. transactional). Data from Chinese SMEs revealed that flexible culture boosts innovation, while control culture impedes it. Transformational leadership

enhances the positive effects of flexibility, while transactional leadership reinforces innovation under control cultures.

A study by Badruzaman and Hanapia (2023) confirms that corporate culture mediates the relationship between innovation, continuous improvement, and employee performance in the footwear sector of PT Changshin Reksa Jaya. Using path analysis and survey data, the findings demonstrate the mediating role of culture in amplifying the positive effects of improvement and innovation on performance.

H₄: Organisational Culture has a significant effect on Sustainable Performance

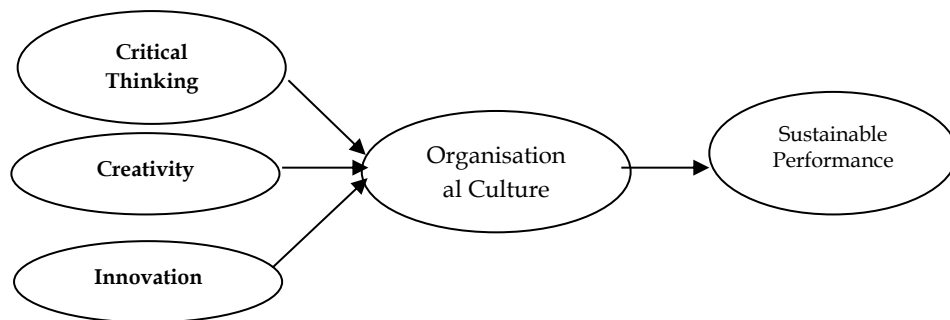


Figure 1. Conceptual Framework

METHODOLOGY

This type of research is quantitative research where the data analysis process uses statistical testing to test the truth of the hypothesis proposed. This research took place in Surakarta City, while the object of research was Food and Beverage Micro and Medium Enterprises (MSMEs) in Surakarta City. The population in this study were all Food and Beverage MSMEs in Surakarta City. The total population of Food and Beverage MSMEs in Surakarta according to data from the Surakarta Industry SME Cooperative Office (2023) is 4,062 MSMEs (dinkop.surakarta.go.id).

This study uses a sample to be used as a respondent of 99 MSMEs. This study uses primary data, data collected through questionnaires using a 5-point Likert Scale assessment. Data analysis using SEM-PLS. In this study, quantitative techniques were used, as well as explanatory research methods that explain the relationship between variables. Data were collected by questionnaires given to culinary MSMEs in Surakarta. Each question was scored from 1 to 5, with 1 representing strongly disagree and 5 representing strongly agree referring to the 1-5 Likert scale. Data analysis was carried out using the Partial Least Square (PLS) method using SmartPLS software version 3.

Measurement of Variables, critical thinking in this study is divided into seven indicators adopted from Facione (2015), Creativity in this study is based on Torrance's theory (1974), Organisational culture is adopted from Denison, (2006: 5) and for innovation is adopted from Siyuan Wang and Linglan Huang, (2022).

RESEARCH RESULT

Respondents in this study are owners of culinary MSMEs in Surakarta. a. Age of Respondents Respondents' characteristics based on age are described as shown in the following table:

Table 1. Umur Respondents

Age	Number	%
< 20	9	9,09
21 - 30	32	32,32
31 - 40	22	22,22
41 - 50	25	25,25
>50	11	11,12
Total	99	100

Source: Primary Data Processed, 2024.

Based on the table above, it can be explained that most of the respondents of Culinary MSMEs are between 21 and 30 years old. This shows that MSME entrepreneurs in Surakarta are still at a productive age.

Table 2. Gender of Respondents

Gender	Number	%
Male	58	58,8
Female	41	41,2
Total	99	100

Source: Primary Data Processed, 2024

Outer Model Evaluation

Outer Model Evaluation aims to test the validity and reliability of constructs in the proposed model. The validity test uses the factor loading value on the latent variable with its indicators where the outer loading is > 0.7 and by looking at the AVE (Average Variance Extracted) value which is greater than 0.5.

Inner Model Evaluation

Path Coefficients Test

In the path coefficients test, it is used to show how strong the effect or influence of the independent variable is on the dependent variable. Based on the inner model scheme, it can be explained that the path coefficients shown pada tabel dibawah ini:

Table 3. Uji Hipotesis

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values

Critical Thinking -> Organisational Culture	0,526	0,510	0,128	4,111	0,000
Creativity -> Organisational Culture	0,413	0,421	0,142	2,918	0,004
Innovation -> Organisational Culture	-0,287	-0,271	0,134	2,136	0,033
Organisational Culture -> Sustainable Performance	0,618	0,621	0,075	8,240	0,000

Source: Primary Data Processed, 2024

DISCUSSION

Hypothesis 1: The Influence of Critical Thinking on Organisational Culture

The first hypothesis examines whether critical thinking significantly influences organisational culture. The statistical analysis yields a t-value of 4.111 and a p-value of 0.000, indicating that the result is statistically significant ($t = 4.111 > 1.96$; $p < 0.05$). Therefore, the hypothesis is supported, demonstrating that critical thinking exerts a positive and significant effect on organisational culture.

Jones and George (2003) define organisational culture as a system of shared values, norms, behavior standards, and expectations that guide how individuals and groups within an organisation interact and collaborate to achieve goals. Similarly, Gibson et al. (2006) describe it as a pattern of basic assumptions developed and shared by a group as a solution to internal integration and external adaptation challenges, which, having proven effective, are passed on to new members as the proper way to perceive, think, and feel in organisational contexts.

The implication is that higher levels of critical thinking enable MSME actors to assess business-related information more critically and objectively, which enhances their capacity to solve internal and external challenges effectively. Consequently, they are more likely to make informed decisions that contribute positively to sustainable business performance. This aligns with previous findings by Mujanah et al. (2023), as well as studies by Amankwah-Amoah et al. (2021), Prasetyo and Kristanti (2020), and Rakshit et al. (2021), all of which confirm the significant role of critical thinking in driving MSME performance and sustainability.

Hypothesis 2: The Influence of Creativity on Organisational Culture

The second hypothesis tests the relationship between creativity and organisational culture. The analysis produces a t-value of 2.918 and a p-value of 0.004, indicating statistical significance ($t = 2.918 > 1.96$; $p < 0.05$). Thus, the hypothesis is accepted, confirming that creativity significantly influences organisational culture.

Kotter and Heskett (1992), in a decade-long study involving 14 high-performing American companies, concluded that strong corporate culture correlates with superior long-term performance. Their research of 207 randomly selected firms demonstrated that organisations with robust cultures tend to perform better over a 12-year period. These findings underscore the strategic importance of managing organisational activities, including human capital, through a culture-focused approach to gain competitive advantage.

Hypothesis 3: The Influence of Innovation on Organisational Culture

The third hypothesis investigates whether innovation has a significant effect on organisational culture. The results show a t-value of 2.136 and a p-value of 0.033, meeting the threshold for statistical significance ($t = 2.136 > 1.96$; $p < 0.05$). Therefore, the hypothesis is accepted, indicating that innovation has a positive and significant effect on organisational culture. Innovation is deeply linked with organisational motivation and adaptability. Robbins (2003) asserts that a strong organisational culture is based on two key assumptions: first, that employee values influence behavior in the workplace, and second, that internal alignment and positive behavioral outcomes such as productivity and commitment foster innovation. This implies that innovative ideas emerge more readily in environments where employees are empowered and culturally aligned with the organisation's goals.

Hypothesis 4: The Influence of Organisational Culture on MSME Performance

The fourth hypothesis assesses the impact of organisational culture on the sustainable performance of MSMEs. The results indicate a t-value of 8.240 and a p-value of 0.000, confirming high statistical significance ($t = 8.240 > 1.96$; $p < 0.05$). Hence, the hypothesis is supported, showing that organisational culture significantly affects MSME performance.

A strong organisational culture serves as a strategic tool for achieving business goals. It supports competitiveness and sustainable growth, especially in an increasingly globalised market where regional boundaries are diminishing. Rather than serving as a retrospective explanation for success, organisational culture is now proactively viewed as a driver of future progress. A well-developed culture fosters empowerment, teamwork, continuous improvement, adaptability, and goal alignment.

This finding suggests that the stronger the corporate culture, the more capable MSME leaders are in communicating the company's vision and mission to employees, resulting in greater organisational commitment and better performance outcomes. Strong cultures are characterized by consistent performance, employee development, adaptability, and mission-driven execution. These insights support prior studies by Pamungkas et al. (2023), Wang and Huang (2023), Galpin et al. (2015), Linnenluecke and Griffiths (2010), and Baumgartner (2014), all of which affirm that corporate culture is a key determinant of sustainability performance.

Conclusions and Recommendations

The results of the study lead to the following conclusions:

1. **Critical thinking** has a significant and positive impact on the organisational culture of food and beverage MSMEs in Surakarta.
2. **Creativity** significantly and positively influences the organisational culture of MSMEs in this sector.
3. **Innovation** also demonstrates a significant and positive effect on organisational culture.
4. **Organisational culture**, in turn, has a strong and significant effect on the sustainable performance of MSMEs.

These findings highlight the importance of cultivating critical thinking, creativity, and innovation as strategic inputs for strengthening corporate culture, which ultimately enhances sustainability performance. MSMEs are encouraged to foster a dynamic internal culture that promotes knowledge sharing, adaptability, and goal alignment to achieve long-term success.

ADVANCED RESEARCH

The sample is limited to Food and Beverage MSMEs in Surakarta, the determinant factors of MSME business performance are limited to critical thinking, creativity, innovation and corporate culture so that these results cannot be generalized. Further research is recommended using other research objects with a larger sample size. In addition, it is recommended to examine the determinant factors of MSME business performance in other sectors and explore previous findings by including moderating variables.

ACKNOWLEDGMENT

I would like to extend my sincere gratitude to my colleagues who provided invaluable suggestions and feedback throughout the development of this paper.. Their insights significantly improved the quality of this research. I also wish to express my appreciation for was crucial in completing this research. Their contributions have been instrumental in the successful completion of this study.

REFERENCES

- A. Purwati, B. Budiyanto, S. Suhermin, and M. Hamzah, "The effect of innovation capability on business performance: The role of social capital and entrepreneurial leadership on SMEs in Indonesia," *Accounting*, vol. 7, no. 2, pp. 323–330, 2021.
- A. Y. Rahayu, "Pengaruh literasi keuangan terhadap kinerja dan keberlanjutan UMKM di kota Surabaya," *J. ilmu Manaj.*, vol. 5, no. 3, 2017.]
- Amankwah-Amoah, J., Khan, Z., & Wood, G. (2021). COVID-19 and business failures: The paradoxes of experience, scale, and scope for theory and practice. *European Management Journal*, 39(2), 179–184. <https://doi.org/10.1016/j.emj.2020.09.002>.
- Baumgartner, R.J. Managing Corporate Sustainability and CSR: A Conceptual Framework Combining Values, Strategies and Instruments Contributing to Sustainable Development. *Corp. Soc. Responsib. Environ. Manag.* 2014, 21, 258–271.
- Blackburn, J. B. (2000), "Stakeholders and sustainable development", in Schmandt, J. and Ward, C. H. (Eds.), *Sustainable Development: The Challenge of Transition*, Cambridge University Press, Cambridge, UK, pp. 175-220.
- Bodlaj, M., & Čater, B. (2022). Responsive and proactive market orientation in relation to SMEs' export venture performance: The mediating role of marketing capabilities. *Journal of Business Research*, 138, 256–265. <https://doi.org/10.1016/j.jbusres.2021.09.034>
- Bouwman, H., Nikou, S., & de Reuver, M. (2019). Digitalization, business models, and SMEs: How do business model innovation practices improve performance of digitalizing SMEs? *Telecommunications Policy*, 43(9). <https://doi.org/10.1016/j.telpol.2019.101828>
- Busaya Virakul (2015), Global challenges, sustainable development, and their implications for organizational performance", *European Business Review*, Vol. 27 Iss 4 pp. Permanent link to this document: <http://dx.doi.org/10.1108/EBR-02-2014-0018>
- C. Wu, "Entrepreneurial leadership, organizational creativity, and firm performance in Chinese SMEs context." University of Nottingham, 2016.
- Canhoto, A. I., Quinton, S., Pera, R., Molinillo, S., & Simkin, L. (2021). Digital strategy aligning in SMEs: A dynamic capabilities perspective. *Journal of Strategic Information Systems*, 30(3). <https://doi.org/10.1016/j.jsis.2021.101682>.
- Cao, X., & Ali, A. (2018). Enhancing team creative performance through social media and transactive memory system. *International Journal of Information Management*, 39, 69–79. <https://doi.org/10.1016/j.ijinfomgt.2017.11.009>.
- Cerchione, R., Esposito, E., & Spadaro, M. R. (2016). A literature review on knowledge management in SMEs. *Knowledge Management Research and Practice*, 14(2), 169–177. <https://doi.org/10.1057/kmrp.2015.12>.
- Colovic, A. (2021). Leadership and business model innovation in late internationalizing SMEs. *Long Range Planning*, 102083. <https://doi.org/10.1016/j.lrp.2021.102083>.

- Coviello, N. (2015). Re-thinking research on born globals. *Journal of International Business Studies*, 46(1), 17–26. <https://doi.org/10.1057/jibs.2014.59>.
- Coyte, R., Ricceri, F., & Guthrie, J. (2012). The management of knowledge resources in SMEs: An Australian case study. *Journal of Knowledge Management*, 16(5), 789–807. <https://doi.org/10.1108/13673271211262817>.
- Crovini, C., Ossola, G., & Britzelmaier, B. (2021). How to reconsider risk management in SMEs? An Advanced, Reasoned and Organised Literature Review. *European Management Journal*, 39(1), 118–134. <https://doi.org/10.1016/j.emj.2020.11.002>
- Dahlan, Yana Priyana dan Rahmawati Syam, 2023. The Influence of Innovation, Creativity, and Risk-Taking on Entrepreneurial Growth and SMEs Performance in Sukabumi City. *West Science Business and Management*. Vol. 1, No. 02, March 2023, pp. 50~60
- Department of Economics and Social Development [DESA]. (2013), “Challenges to sustainable development”, 21 March, available at <http://www.un.org/en/development/desa/financialcrisis/challenges.shtml> (accessed 21 March 2013).
- Desouza, K. C., & Awazu, Y. (2006). Knowledge management at SMEs: Five peculiarities. *Journal of Knowledge Management*, 10(1), 32–43. <https://doi.org/10.1108/13673270610650085>.
- E. Ardyan, A. Nurtantiono, B. Istiyanto, and G. Rahmawan (2017), “Green innovation capability as driver of sustainable competitive advantages and smes marketing performance,” *technology*, vol. 8, no. 8, pp. 1114–1122, 2017.
- Facione, P. A. (2015). Critical thinking: What it is and why it counts. *Insight Assessment*, 1(30).
- Fianto, A. Y. A. (2018). Antecedents of customer satisfaction for small medium enterprises product in Indonesia. *International Journal of Civil Engineering and Technology*, 9(11).
- Fong, P. S. W., Men, C., Luo, J., & Jia, R. (2018). Knowledge hiding and team creativity: the contingent role of task interdependence. *Management Decision*, 56(2), 329–343. <https://doi.org/10.1108/MD-11-2016-0778>
- G. Wiwoho, “Orientasi Pasar Dan Inovasi Produk, Serta Pengaruhnya Terhadap Keunggulan Bersaing Dan Kinerja Perusahaan Pada Umkm: Sebuah Agenda Penelitian,” *Fokus Bisnis Media Pengkaj. Manaj. Dan Akunt.*, Vol. 18, No. 2, Pp. 29–38, 2019.
- Galpin, T.; Whittington, J.L.; Bell, G. Is your sustainability strategy sustainable? *Creating a culture of sustainability. Corp. Gov.* 2015, 15, 1–17.
- George, Howardgrenville, Joshi, & Tihanyi, 2016. Understanding And Tackling Societal Grand Challenges Through Management Research. *Academy Of Management Journal* 2016, Vol. 59, No. 6, 1880–1895. <Http://Dx.Doi.Org/10.5465/Amj.2016.4007>
- Ginson, Ivancevich, Donnely, Konopaske, *Organizations Behavior Structure Processes*, McGraw - Hall Companies Inc, Philippines, 2006.
- Hadiyati, Ernani. (2012). Kreativitas Dan Inovasi Pengaruhnya Terhadap Pemasaran Kewirausahaan Pada Usaha Kecil. *Jurnal Inovasi dan Kewirausahaan*. Volume 1 No. 3, September 2012 Halaman 135-151)

- Hair, J. F., & Sarstedt, M. (2021). Explanation Plus Prediction – The Logical Focus of Project Management Research. *Project Management Journal*, 52(4), 319–322. <https://doi.org/10.1177/8756972821999945>.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2018). *Multivariate Data Analysis* (8th Editio). Cengage.
- J. Ferreira, A. Coelho, and L. Moutinho, "Dynamic capabilities, creativity, and innovation capability and their impact on competitive advantage and firm performance: The moderating role of entrepreneurial orientation," *Technovation*, vol. 92, p. 102061, 2020.
- Jones, Gareth R, Jenifer, M George, *Contemporary Management*, McGraw – Hill Irwin, New York, 2003.
- K. Eunike and L. Utama, 2021 "Faktor-Faktor Yang Mempengaruhi Kinerja UMKM Bidang Kuliner Pada Masa Pandemi COVID-19," *Jurnal Manajerial Dan Kewirausahaan*, vol. 3, no. 3, pp. 771781, 2021.
- K. Kiyabo and N. Isaga, "Entrepreneurial orientation, competitive advantage, and SMEs' performance: application of firm growth and personal wealth measures," *J. Innov. Entrep.*, vol. 9, no. 1, pp. 1–15, 2020.
- Kekezi, O. (2021). Diversity of experience and labor productivity in creative industries. *Journal for Labour Market Research*, 55(1). <https://doi.org/10.1186/s12651-021-00302-3>.
- Kumar, A., & Kalse, A. (2021). Usage and adoption of artificial intelligence in SMEs. *Materials Today: Proceedings*. <https://doi.org/10.1016/j.matpr.2021.01.595>
- Lam, L., Phuong Nguyen, Nga Le & Khoa Tran, 2021. The Relation among Organizational Culture, Knowledge Management, and Innovation Capability: Its Implication for Open Innovation. *J. Open Innov. Technol. Mark. Complex.* 2021, 7, 66. <https://doi.org/10.3390/joitmc7010066>
- Linnenluecke, M.K.; Griffiths, A. Corporate sustainability and organizational culture. *J. World Bus.* 2010, 45, 357–366.
- M. Wasim, S. Ahmed, T. Kalsoom, M. S. Khan, and P. M. Rafi-Ul-Shan, "Market orientation and SME performance: Moderating role of IoT and mediating role of creativity," *J. Small Bus. Manag.*, pp. 1–28, 2022.
- Malhotra, N. K., Nunan, D., & Birks, D. F. (2017). *Marketing Research-An Applied Approach* (6th Editio). Pearson Education Limited.
- Melnyk, S. A., Schoenherr, T., Verter, V., Evans, C., & Shanley, C. (2021). The pandemic and SME supply chains: Learning from early experiences of SME suppliers in the U.S. defense industry. *Journal of Purchasing and Supply Management*, 27(4). <https://doi.org/10.1016/j.pursup.2021.100714>
- Mujanah, S., I Dewa Ketut Raka Ardiana, Riyadi Nugroho, Candraningrat, Achmad Yanu Alif Fianto and Donny Arif, 2023. Critical thinking and creativity of MSMEs in improving business performance during the covid19 pandemic. *Uncertain Supply Chain Management* 10. 19-28. Doi: 10.5267/j.uscm.2021.10.014.
- Mujanah, S., Ratnawati, T., & Kusmaningtyas, A. (2017). The effect of competence , emotional quotient , and financial quotient on the business performance of small and medium enterprises in Surabaya , Indonesia. *Proceedings of the*

- 16th International Symposium on Management (INSYMA 2019), August 1945.
- N. M. D. Satyawati, "Peran Inovasi Produk dan Orientasi Pasar Dalam Mencapai Keunggulan Bersaing Berkelanjutan Melalui Kinerja Pemasaran Pada UKM di Desa Nagasepaha," *ARTHA SATYA DHARMA*, vol. 12, no. 2, pp. 79–95, 2019.]-[32].
- Paik, J. H., Kim, M. K., & Park, J. H. (2017). The antecedents and consequences of technology standardizations in Korean IT small and medium-sized enterprises. *Information Technology and Management*, 18(4), 293–304. <https://doi.org/10.1007/s10799-016-0268-2>
- Pamungkas. B.,C., Ida Aju Brahmasari, Ida Aju Brahma Ratih (2023). The Effect of Transformational Leadership, Organizational Culture, and Management Control System on Employee Performance with Organizational Commitment as the Intervening Variable at CV Makmur Jaya Abadi Surabaya City. *Journal of Economics, Finance and Management Studies* ISSN (print): 2644-0490, ISSN (online): 2644-0504. Volume 6 Issue 1 January 2023. Article DOI: 10.47191/jefms/v6-i1-48, 429-437.
- Pesout, O., & Nietfeld, J. L. (2021). How creative am I?: Examining judgments and predictors of creative performance. *Thinking Skills and Creativity*, 40, 100836. <https://doi.org/10.1016/J.TSC.2021.100836>
- Poernomo, B., Anita Maulina, Anisa Arizona Bandi, Jana Sandra dan Muhammad Sholeh, (2021). The Importance of Creativity and Innovation in Maintaining Business in the Pandemic Situation: A Case Study of Micro Small and Medium Enterprises (MSME) Managed by Millennial Groups in Jakarta. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)* Volume 4, No 3, August 2021, Page: 6357-6367.
- Prasanna, R. P. I. R., Jayasundara, J. M. S. B., Gamage, S. K. N., Ekanayake, E. M. S., Rajapakshe, P. S. K., & Abeyrathne, G. A. K. N. J. (2019). Sustainability of SMEs in the competition: A systemic review on technological challenges and SME performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 5(4). <https://doi.org/10.3390/joitmc5040100>.
- Prasetyo, P. E., & Kistanti, N. R. (2020). Human capital, institutional economics and entrepreneurship as a driver for quality & sustainable economic growth. *Entrepreneurship and Sustainability Issues*, 7(4), 2575–2589. [https://doi.org/10.9770/jesi.2020.7.4\(1\)](https://doi.org/10.9770/jesi.2020.7.4(1)).
- Pu, G., Qamruzzaman, M., Mehta, A. M., Naqvi, F. N., & Karim, S. (2021). Innovative Finance, Technological Adaptation and SMEs Sustainability: The Mediating Role of Government Support during COVID-19 Pandemic. *Sustainability*, 13(16), 9218. <https://doi.org/10.3390/su13169218>.
- Purnomo, "Resource-Based View dan Keunggulan Bersaing Berkelanjutan: Sebuah Telaah Kritis Terhadap Pemikiran Jay Barney (1991)," *Sustain. Compet. Advant.*, vol. 1, no. 1, 2013
- R. A. Blackburn, M. Hart and T. Wainwright, 2013. "Small business performance: Business, strategy and owner - manager characteristics," *Journal of Small Business and Enterprise Development*, vol. 20(1), pp. 8-27, 2013. 2].
- Rabie, C., Cant, M. C., & Wiid, J. A. (2016). Training and development in SMEs: South Africa's key to survival and success? *Journal of Applied Business*

- Research, 32(4), 1009–1024. <https://doi.org/10.19030/jabr.v32i4.9717>.
- Rakshit, S., Mondal, S., Islam, N., Jasimuddin, S., & Zhang, Z. (2021). Social media and the new product development during COVID-19: An integrated model for SMEs. *Technological Forecasting and Social Change*, 170. <https://doi.org/10.1016/j.techfore.2021.120869>.
- Ramli, Y., Firdaus, I., Arief, H., & Setiawan, M. (2019). Mobile Marketplace As a Medium for Selling Micro Small Medium Enterprise Products. *ICCD*, 2(1), 55–59. <https://doi.org/10.33068/iccd.vol2.iss1.209>.
- Robbins, Stephen C. (2003). *Organizational Behavior, Concept Contropversies and Applications*. Prentice Hall Inc. USA. Terjemahan. Jakarta: P.T. Indeks Kelompok Gramedia.
- Rosmadi, Maskarto Lucky Nara. (2021). Inovasi dan Kreativitas Pelaku Usaha UMKM di Era Covid-19. *Jurnal IKRA-ITH Ekonomika* Vol 4 No 2 Bulan Juli 2021.
- Sarsiti, S. (2024). *Greening MSMEs in Solo Area for Sustainability : in terms of Green Accounting , Corporate Social Responsibility , Financial Performance , and Green Entrepreneurial Orientation*. 2(6), 835–854.
- Scuotto, V., Nicotra, M., Del Giudice, M., Krueger, N., & Gregori, G. L. (2021). A microfoundational perspective on SMEs' growth in the digital transformation era. *Journal of Business Research*, 129, 382–392. <https://doi.org/10.1016/j.jbusres.2021.01.045>.
- Setiawan, Arif, D., Mahmudah, S., Agustina, H., & Martah, V. (2021). The effect of supply chain management on multichannel retailing and business performance. *Uncertain supply Chain Management*, 9(4), 823–830. <https://doi.org/10.5267/j.uscm.2021.8.007>.
- Shiau, W.-L., Sarstedt, M., & Hair, J. F. (2019). Internet Research Using Partial Least Squares Structural Equation Modeling (PLS-SEM). *Internet Research*, 29(3), 398–406. <https://doi.org/10.1108/IntR-10-2018-0447>.
- Sinha, S. K., & Verma, P. (2020). Impact of Sales Promotion's Benefits on Perceived Value: Does Product Category Moderate the Results? *Journal of Retailing and Consumer Services*, 52(July 2019), 101887. <https://doi.org/10.1016/j.jretconser.2019.101887>.
- Tao, J., Ho, C. Y., Luo, S., & Sheng, Y. (2019). Agglomeration economies in creative industries. *Regional Science and Urban Economics*, 77, 141–154. <https://doi.org/10.1016/j.regsciurbeco.2019.04.002>
- Tiago, F., Gil, A., Stemberger, S., & Borges-Tiago, T. (2020). Digital sustainability communication in tourism. *Journal of Innovation and Knowledge*. <https://doi.org/10.1016/j.jik.2019.12.002>.
- Torrance, E. P. (1974). *Norms-Technical Manual: Torrance Tests of Creative Thinking*. Ginn and Co.
- Viswanathan, R., & Telukdarie, A. (2021). A systems dynamics approach to SME digitalization. *Procedia Computer Science*, 180, 816–824. <https://doi.org/10.1016/j.procs.2021.01.331>
- Wahyudiati, D., & Isroah. (2018). Pengaruh Aspek Keuangan Dan Kompetensi Sumber Daya Manusia (Sdm) Terhadap Kinerja Usaha Mikro Kecil Dan Menengah (Umkm) Di Desa Kasongan. *Jurnal Profita*, 2, 1–11.
- Wang, S., and Linglan Huang, 2022. A Study of the Relationship between

- Corporate Culture and Corporate Sustainable Performance: Evidence from Chinese SMEs. *Sustainability* 2022, 14, 7527. <https://doi.org/10.3390/su14137527>
- Weaven, S., Quach, S., Thaichon, P., Frazer, L., Billot, K., & Grace, D. (2021). Surviving an economic downturn: Dynamic capabilities of SMEs. *Journal of Business Research*, 128, 109–123. <https://doi.org/10.1016/j.jbusres.2021.02.009>
- Wulandari, R., Pardi Pardi, Astuning Saharsini dan Era Trianita Saputra, 2023. Determinan Kinerja Keuangan UMKM Kuliner Di Kota Solo. *Jurnal Akuntan Publik*, Vol. 1, No. 3 September 2023. DOI: <https://doi.org/10.59581/jap-widyakarya.v1i3.1034>
- Yoon, C. H. (2017). A validation study of the Torrance Tests of Creative Thinking with a sample of Korean elementary school students. *Thinking Skills and Creativity*, 26, 38–50. <https://doi.org/10.1016/J.TSC.2017.05.004>
- Zhi Yang, Van Thithuy Nguyen, Phong Ba Le, (2018) "Knowledge sharing serves as a mediator between collaborative culture and innovation capability: an empirical research", *Journal of Business & Industrial Marketing*, Vol. 33 Issue: 7, pp.958-969, <https://doi.org/10.1108/JBIM-10-2017-0245>.