

Performance and Business Sustainability of Food MSMEs in Kudus, Central Java

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Abstract

Keywords:
Performance;
Business sustainability;
Leadership style;
Financial literacy

Total food and beverage MSMEs in Kudus is currently experiencing a decline. Therefore, this study analysed the role of leadership style and financial literacy in enhancing business performance and promoting sustainable development in the food MSMEs in Kudus, Central Java. A purposive sampling was used to choose 150 respondents, and data were analysed using the SEM-PLS method. The results showed leadership style and financial literacy impact positively and ly on business sustainability. Furthermore, leadership style and financial literacy positively and ly affected performance. Improved performance had a positive impact on sustainability, and served as a mediating factor in this study. To support sustainable practices, MSMEs leaders should integrate sustainability goals into their strategic planning, as both leadership style and financial literacy are essential in this effort. This could include applying eco-friendly practices, lowering waste, or investing in sustainable materials, all of which could improve brand image and attract conscious consumers.

Abstrak

Kata kunci:
Kinerja;
Keberlanjutan bisnis;
Gaya kepemimpinan;
Literasi keuangan

Masalah yang tengah dihadapi adalah menurunnya jumlah UMKM makanan dan minuman di Kudus. Analisis ini mengkaji peran gaya kepemimpinan dan literasi keuangan pada peningkatan kinerja usaha dan pengembangan usaha berkelanjutan pada UMKM makanan di Kudus, Jawa Tengah. Ada 150 responden yang dipilih sebagai sampel menggunakan Purposive sampling. Metode analisis data yang digunakan adalah SEM-PLS. Berdasarkan hasil analisis, gaya kepemimpinan berpengaruh positif dan signifikan terhadap pengembangan usaha berkelanjutan, literasi keuangan berpengaruh positif dan signifikan terhadap pengembangan usaha berkelanjutan, gaya kepemimpinan berpengaruh positif dan signifikan terhadap peningkatan kinerja usaha, literasi keuangan berpengaruh positif dan signifikan terhadap peningkatan kinerja usaha, dan peningkatan kinerja usaha berpengaruh positif signifikan terhadap pengembangan usaha berkelanjutan, dimana kinerja usaha memediasi penelitian ini. Implikasi gaya kepemimpinan dan literasi keuangan berkontribusi signifikan terhadap praktik bisnis berkelanjutan maka para pelaku UMKM perlu mengintegrasikan tujuan keberlanjutan ke dalam perencanaan strategis. Ini dapat mencakup penerapan praktik ramah lingkungan, mengurangi limbah, atau berinvestasi pada bahan berkelanjutan, akan mengembangkan citra merek dan daya tarik konsumen yang sadar lingkungan.

1. Introduction

Micro, Small, and Medium Enterprises (MSMEs) are alternative solutions for labour absorption in lowering unemployment in Indonesia. MSMEs face fierce competition and need to implement productive and efficient management processes as well as produce products or services that correlate with market preferences and meet better quality standards than competitors (Setiyanto et al., 2024). In this context, MSMEs are crucial in improving Indonesia's economic growth rate (Kementerian Koordinator Bidang Perekonomian Republik Indonesia, 2021). The total number of MSMEs in Indonesia has reached 64.19 million, accounting for more than 99% of actors in the country, with a workforce of 119

million people (97% of the total workforce in the business sector). Economic growth can be achieved through sustainability, where human resources are an essential factor (Saleh et al., 2020), with people acting as interactive agents, where everyone can contribute cause and effect to their motivation and environment. In this reciprocal cause-and-effect model, actions, cognition, emotions, and other personal factors interact with the environment in a reciprocal way (Lusianti & Fachrunnisa, 2024).

Leadership is the activity of influencing behavior or guiding human resources, individually and in groups (Sutrisno, 2016). It can occur anytime and anywhere because it relies on the ability to influence the attitudes and actions of others to achieve goals. Meanwhile, performance refers to the achievement of results or degree of accomplishment, which shows how well an organization meets its established goals (Mukarom & Laksana, 2015).

Financial literacy includes skills, knowledge, and beliefs that affect attitudes and behaviors to increase decision-making and financial management, ultimately leading to financial well-being. A complete data collection by BPS Kudus in 2022 found an increase of about 50% in the number of MSMEs, with 17,182 businesses of various types as of November 2022. This showed that the pandemic contributed to the MSMEs growth in Kudus, where the number of actors reached tens of thousands of business units, which can be seen in Table 1.

Table 1. Total food MSMEs in Kudus as of 2023

Year	Result
2022	3,750
2023	1,844

Source: Disnakerperinkopukm Kudus (2023)

The phenomenon described in this study can be observed in the data in Table 1, which shows a decrease in food MSMEs, from 3,750 in 2022 to 1,844 in 2023. Based on an interview conducted with Mrs Siti Makhmudah, SP, of the Kudus Directorate of Inkopukm, who spoke to actors in Kudus, this decline can be attributed to a lack of understanding among actors regarding financial literacy and their choice of leadership styles, both of which impact business performance and development.

In running a business, various competencies are needed, including knowledge of leadership and financial literacy. By incorporating leadership style and financial literacy as independent variables, this study provided a more comprehensive understanding of the factors that influenced MSMEs performance and sustainability. This study captured how these two variables when used together can maximize performance. Effective leadership without financial literacy may lead to unsustainable strategies, while strong financial literacy without proper leadership could result in underutilized human potential.

Effective leadership style and financial literacy are complementary in enhancing business growth. Leadership style directly impacts organizational culture, employee motivation, and strategic direction, while financial literacy ensures efficient use of resources and financially sound decisions. Also, by examining leadership style and financial literacy,

this study captured a fuller picture of the factors influencing performance, providing a foundation for sustainable practices. Every business strives to achieve its goals and maintain sustainability. This sustainability is an organization's ability to manage its limited resources to effectively meet long-term goals (Alshehhi et al., 2018). The business development plan is crucial, and leadership style plays a key role in this process because it relates to the level of business sustainability achieved. In addition, leadership style affects organizational management, shapes work culture, and brings various benefits (Szczepańska-Woszczyzna & Kurowska-Pysz, 2016).

This study builds on previous investigations, Haekal Yunus et al. (2022) found financial literacy positively impacted business performance, while another analysis Naufal and Purwanto (2022) obtained financial literacy did not affect business performance. Similarly, Made Astrama and Made Darsana (2023) found that leadership style positively affected business sustainability, whereas Pauceanu et al. (2021) found leadership style does not affect business sustainability. According to Pandey et al. (2022), financial literacy positively influence sustainability, while (Naufal & Purwanto, 2022) reported no influence.

Saleh et al. (2020) showed leadership style has impacts on performance, while Mwakajila and Nyello (2021) found that leadership style does not have an influence, which is a critical factor in overall business performance. Yusuf et al. (2024) revealed that leadership style positively affected business performance. However, Yanti et al. (2022) stated that leadership style does not impact ly on employees performance, which is among the determinants of business performance. Therefore, this analysis minimizes the inconsistencies in previous investigations by focusing specifically on the food sector in Kudus Regency, thereby providing a unique and current study object.

The primary problem in this study was the decline in the number of MSMEs in Kudus from 2022 to 2023. This emphasized the importance and necessity of conducting an in-depth examination of business performance and sustainability. In this context, the decline is a major challenge, and by analyzing factors such as leadership style and financial literacy, this study aimed to identify the causes and offer solutions to support MSMEs development in the future. The study questions are as follows,

- a. Does leadership style affect business performance in food MSMEs in Kudus?
- b. Does financial literacy affect business performance in food MSMEs in Kudus?
- c. Does leadership style impact business sustainability in food MSMEs in Kudus?
- d. Does financial literacy affect business sustainability in food MSMEs in Kudus?
- e. Does business performance affect business sustainability in food MSMEs in Kudus?
- f. Does business performance mediate the correlation between leadership style and business sustainability in MSMEs in the food sector in Kudus?
- g. Does business performance mediate the correlation between financial literacy and business sustainability in MSMEs in the food sector in Kudus?

This analysis investigates the impact of leadership style and financial literacy on improving business performance, leadership style and financial literacy on business sustainability, and business sustainability on improving performance of food MSMEs. The novelty lies in its local and practical policy implications and by focusing on Kudus, the study

has the potential to provide evidence-based policy recommendations for local decision-makers and practitioners in the business sector. This focus represents a novel contribution, as the recommendations are rooted in specific regional and sector data rather than national or global generalizations. Additionally, Kudus, as a district with the highest income level in Central Java, could serve as a model or prototype for other regions.

2. Literature Review

2.1. Leadership Style, Business Performance and Business Sustainability

Leadership style includes leading, influencing, and guiding others to achieve expected performance results (Sutrisno, 2016). It is the leader's skill to impact employee performance (Terry, 2014). Previous analysis has shown that leadership styles ly affect business performance by shaping employee motivation, engagement, and adaptability to change. Moreover, leadership style is a strong predictor of business success as it facilitates a positive work environment that enhances productivity and overall performance. It also impacts business sustainability (Made Astrama & Made Darsana, 2023). When a business unit chooses the right leadership style, it contributes to long-term business sustainability. A leadership style that corresponds with all aspects of the business unit can positively affect the business' sustainable development. It is crucial in shaping sustainable business practices, with leadership processes integral to developing sustainable business models by correlating organizational goals with social and environmental responsibilities. The leadership style adopted by executives strongly correlates with the sustainability strategies implemented within companies, underscoring that effective leadership style is essential for achieving sustainable performance over time. There is an interplay between leadership style and business sustainability, where appropriate leadership styles can enhance financial performance and mitigate risks associated with business failure. This multifaceted relationship underscores the need for leaders to adopt styles that enhance performance and promote sustainable practices that correlate with broader societal goals.

The ability to lead, plan, organize, and manage a business is important in business development efforts (Haryani & Setiyowati, 2018). Cultivating leadership and determining a suitable leadership style for each business directly impacts the success of business development. Leadership styles should be chosen according to employees' readiness to adapt (Rezeki, 2022). Selecting a leadership style that is appropriate and acceptable to employees can ly contribute to a business unit's goals. There is a connection between leadership style and business performance (Harjadi & Fatmasari, 2015). When a business unit employs a leadership style suitable for all aspects of the business, it improves performance. Conversely, when a leadership style is contrary to these aspects, it can reduce business performance. According to this explanation, this study has the following hypotheses:

H1: Leadership style positively affects business performance.

H2: Leadership style positively affects business sustainability.

2.2. Financial Literacy, Business Performance, and Business Sustainability

Financial literacy is the knowledge and skill to manage personal and business finances and it is essential for individuals and groups to avoid financial problems (Desiyanti,

2020). Financial literacy is essential for business sustainability (Sriyono, 2023). A solid foundation in financial literacy supports sustainability, while a lack of it can make it challenging for a business to stay sustainable. This includes the knowledge and skills that are very important for informed financial decision-making, and directly impacts a business operational efficiency and sustainability. Knowledge management capabilities play a role in connecting financial literacy to organizational performance, indicating that these factors work together to support business success.

To build MSMEs with a strong foundation, it is crucial to know about the importance of financial literacy (Herdinata & Pranatasari, 2020). OJK stated that MSMEs that properly understood and applied financial literacy were better positioned for business development. Financial literacy influenced business performance (Purwanto & Anwar, 2021) because businesses with good financial literacy skills can directly enhance performance, while those without it may struggle to identify and improve key areas.

Business performance is a crucial indicator of measuring the success of a business unit (Ismanto, 2019) and when evaluating the success of a business performance, considering the financial literacy factor is needed because a business unit with good financial literacy can affect a company's source of funding, thereby making performance improvement the main goal. Financial literacy impacts business performance as entrepreneurs who produce better financial statements often achieve higher profitability (Sriyono, 2023). Financial literacy equips business owners with the necessary skills needed for informed financial decision-making, which in turn promotes operational efficiency and sustainable practices. As businesses face increasing challenges in a competitive landscape, fostering financial literacy among entrepreneurs is critical for ensuring long-term success and sustainability. Based on these explanations, this study hypothesizes:

H3: Financial literacy positively affects business performance.

H4: Financial literacy positively affects business sustainability.

2.3. Performance and Business Sustainability

Business performance is the result of collective efforts within an organization, measured over a specific period and tied to individual performance standards (Andreas & Wibowo, 2023). It includes the results achieved by individuals or groups in performing assigned tasks appropriate to skill, experience, dedication, and time (Hasibuan, 2017).

Business sustainability is an organization's skill to effectively manage its limited resources to meet long-term goals (Alshehhi et al., 2018). It involves business development, growth and methods to ensure ongoing business operations. Hastuti et al. (2022) reported that business performance influenced business sustainability, as strong business performance facilitates the growth of sustainable business units. However, poor business performance can make business sustainability difficult to achieve. Proper management of business units by improving performance is essential for optimal business development. Therefore, continuous recovery activities and training programs are necessary (Suncaka, 2023). Based on this explanation, the hypothesis:

H5: Business performance positively affects business sustainability.

3. Method

This study was conducted to examine the relationship between variables. Descriptive statistics were applied to profile the sample data before utilizing statistical analysis techniques to test the hypotheses. Furthermore, data collection method included qualitative techniques with instrumental tests (validity and reliability), classical assumption tests, and hypothesis testing. A code was given for each answer to obtain quantitative data to be processed by regression and analysis applying the SEM-PLS program (Ghozali & Latan, 2020).

The study used quantitative data, which involved numerical measurements assessed through statistical tools to conclude the problem. The sources of data included both primary (questionnaires) and secondary (records from the Kudus Regency MSMEs office (Aglis, 2020)). The population consisted of 458 food MSMEs in the Kudus sub-district. A sample size of 150 respondents was selected, following the theory that the total samples should be appropriate to the total indicators multiplied by 5-10 (Hair et al., 2019).

The indicators used were as follows, leadership style variables included indicators of decision-making, communication, controlling subordinates, and managing emotions (Kartono, 2016). Financial literacy variables included indicators such as basic financial knowledge, savings or loans, investments, and communication about financial concepts (Hikmah & Rustam, 2020; Rustandi Kartawinata & Ikhwan Mubaraq, 2018). Business performance variables were measured by indicators of effectiveness, efficiency, economy, and increased sales (Ekaputri et al., 2018; Mukarom & Laksana, 2015). Furthermore, business sustainability was assessed through indicators of financial assistance from the government, staffing, improvement of labour competence, and increased production volume (Budiarto, 2015; Malay, 2021).

Instrument testing included both outer and inner model tests, with the outer model evaluated through convergent and discriminant validity, as well as composite reliability (Cronbach's alpha). Approximate relationships between latent variables or constructs appropriate to theoretical foundations (Ghozali & Latan, 2020). The inner model served as a structural model to predict causal relationships between latent variables. From the data presentation, the outer loading values were valid and appropriate for further analysis, as they exceeded 0.7. Composite reliability and Cronbach's alpha values >0.6, showing that all variables had good internal consistency and were suitable for further analysis.

4. Result and Discussion

Based on the data obtained on duration of business operations, it was observed that the more dominant businesses had been in operation between three to five years, where the number of businesses operating for more than five years was 112 MSMEs (74.6%). Meanwhile, the number of businesses aged three to five years was only 38 (25.4%). From the data dissemination, the majority of food MSMEs in Kudus District have been in operation for more than five years, showing that MSMEs in the District need a strategy to achieve business sustainability. This study also produced an R-square value of 74.3% for the business sustainability variable, showing that it was influenced by the variables of leadership style and financial literacy. The R-square value of 58.7% for the variable of business performance

improvement showed that it was also influenced by leadership style and financial literacy. The results are shown in **Figure 1**.

The results in **Table 2** showed that the direct influence of financial literacy on business sustainability was 0.507, while the direct influence of leadership style on business sustainability was 0.367. Therefore, financial literacy affect directly on improving business performance by 0.405 and leadership style affect directly on improving business performance by 0.394. The improvement in business performance directly affected business sustainability by 0.310. Additionally, the indirect influence of leadership style on business sustainability through business performance had a positive effect, with a *p-value* of $0.011 < 0.05$, showing that business performance could mediate the influence of leadership style on business sustainability. The indirect influence of financial literacy on business sustainability through business performance had a positive effect of 0.002, also less than 0.05, showing that business performance could mediate the financial literacy effect on business sustainability. This analysis was determined to have a perfect fit model with a basic SRMR value of 0.060, which is less than 0.08.

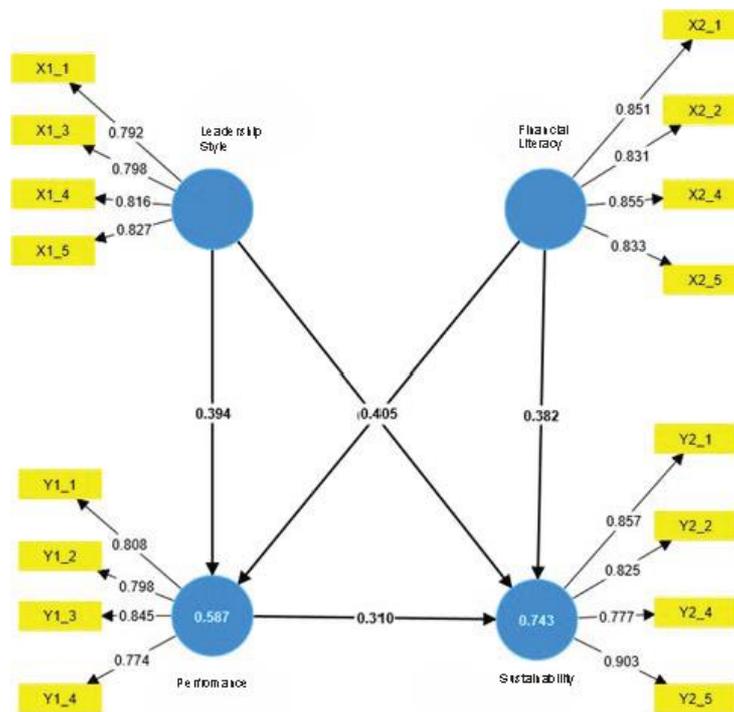


Figure 1. Results

Source: Primary Data Processed, 2024

Table 2. Hypothesis test

Variables	Total effects	Result
Leadership Style -> Business Performance	0.394	H1 Accepted
Leadership Style -> Sustainability	0.367	H2 Accepted
Financial Literacy -> Business Performance	0.405	H3 Accepted
Financial Literacy -> Sustainability	0.507	H4 Accepted
Business Performance -> Sustainability	0.310	H5 Accepted

Source: Primary Data Processed, 2024

The data processing results showed leadership style affect positively and ly on business sustainability, with a *p-value* of 0.001, and a *t-value* of 3.287, which was more than 1.64. Financial literacy also positively and ly affected business sustainability, as shown by a *p-value* of 0.000, and a *t-value* of 4.253>1.64. Leadership style had a positive and effect on improving business performance, with a *p-value* of 0.000<0.05, and a *t-value* of 4.259. Financial literacy positively and ly improved business performance, with a *p-value* of 0.000<0.05, and a *t-value* of 4.022. The improvement in business performance affect positively and ly on business sustainability, as the *p-value* of 0.000 was less than 0.05, and the *t-value* of 3.827 was more than 1.64. These results showed all hypotheses were accepted, and business performance served as a mediator between leadership style and business sustainability, as well as financial literacy and business sustainability.

Leadership style positively affects business sustainability, meaning that the more appropriate the leadership style applied to MSMEs, the more opportunities there are for business sustainability to increase. This study was in accordance with [Made Astrama and Made Darsana \(2023\)](#), who stated that leadership style influenced business sustainability. When a business unit chooses the right leadership style, it impacts sustainability as shown by [Ainaya Alfatihah et al. \(2022\)](#), who showed leadership style affected business sustainability.

Leadership style significantly shaped business sustainability by influencing employee engagement, ethical practices, and organizational performance. It has been obtained as a driver of sustainable practices in organizations, as it fosters an environment that promotes innovation, employee engagement, and commitment to long-term goals, which are essential for sustainability ([Naharuddin & Mohamad Mokhtar, 2023](#); [Paudel, 2020](#)). The results revealed that there was a positive impact of leadership style on the sustainable performance of MSMEs by increasing operational efficiency and adaptability to market changes. Leadership style impacted business sustainability, as it affects how leaders decide, motivate workers, and deal with challenges. Leaders that have a well defined goal who can communicate it well to the team tend to be more successful in maintaining sustainability. Hence, those with a visionary leadership style can guide the team to focus on long-term goals and motivate employees to work in a direction that correlates with the company's vision.

A flexible leadership style lets companies handle changes in the market, technology, and rules faster. In this case, leaders who go with the flow are okay with change and let people share ideas, which can help when competition is high and the business world is unpredictable. Participative or transformational leadership can sometimes make employees feel more involved and satisfied. When employees feel valued and have a say, their performance will improve, which can help increase productivity and lower turnover. Leadership styles that support new ideas, like transformational leadership, can be useful for the sustainability of a business. Also, leaders who support new ideas and creativity help organizations solve problems and make products or services that fit market needs, which is key to staying competitive. Leaders who adopt a prudent leadership style and focus on the long-term tend to be better at managing risk, as they consider social, environmental, and economic factors in business decisions that are critical to business sustainability in an era of

increasing concern for sustainability issues. An effective leadership style tailored to the organisation's needs can support business sustainability by ensuring that the organization has a clear vision, motivates employees, has continuous innovation, and the ability to adapt to change and manage risk wisely.

Financial literacy positively affected business sustainability, meaning that when business actors had good financial literacy, there was a greater opportunity for business sustainability. On the other hand, when business actors have low financial literacy, their chances of sustainability are lower. [Sriyono \(2023\)](#) reported that financial literacy affects sustainability. Hence, business units with good financial literacy have a better chance of being sustainable. On the other hand, business units without financial literacy will find it hard to be sustainable. This aligned with [\(Siddik et al., 2023\)](#) that financial literacy positively impacted sustainability.

Financial literacy is a crucial factor to facilitate the sustainability and productivity of a business enterprise [\(Dwyanti, 2024; Zaniarti et al., 2022\)](#). In this regard, it is important to have a strong understanding of financial principles, as it allows business owners to make informed decisions that directly impact operational efficiency and long-term sustainability. The results of this study also revealed that higher levels of financial literacy had a positive relationship with better business performance and sustainability outcomes. Also, financial literacy and business sustainability findings revealed that well-informed financial practices can improve operational outcomes [\(Sudarmi, 2024\)](#). Financial literacy can increase how a business enterprise performs, as well as facilitates better access to resources, which is very important for sustaining operations [\(Hamdana et al., 2021\)](#). The results showed that financial literacy helped entrepreneurs manage risk effectively, which increased long-term sustainability. Hence, bringing financial literacy into daily business practices enhances decision-making and facilitates resilience to market fluctuations.

Leadership style positively affects business performance, meaning that choosing the right leadership style will improve business performance in an MSME. Leadership styles should be selected and applied according to employee readiness to accept them [\(Rezeki, 2022\)](#). A leadership style that correlates with employees expectations contributes greatly to achieving the business unit's goals, including business performance. This corresponded with the study conducted by [Nor-Aishah et al. \(2020\)](#), who reported that choosing the right leadership style impacted business performance.

Leadership style influences business performance improvement by shaping employee motivation, engagement, and overall organizational culture. Leadership is often associated with higher levels of employee motivation and performance, as this style facilitates leaders to inspire and empower employees, fostering an environment conducive to innovation and creativity. Leaders who engage their followers by promoting new ideas and challenging the status quo are likely to increase innovative work behaviour and task performance [\(Gemeda & Lee, 2020\)](#). Leadership has also been associated with increased employee satisfaction and commitment, which are critical for achieving superior organizational performance [\(Magasi, 2021; Virgana & Suradika, 2022\)](#). A leader's ability to articulate a clear vision and act as a role model by contributes to creating a motivated workforce that strives for excellence

(Gemedda & Lee, 2020; Virgana & Suradika, 2022). Moreover, the interaction between leadership style and employee motivation is critical to understanding how leadership impacts business performance, emphasizing the importance of adopting a leadership style that correlates with organizational goals and employee needs.

Financial literacy had a positive effect on improving business performance, meaning that business actors with better financial literacy are more likely to improve business performance. Financial literacy impacted business performance, as good financial literacy directly enhances business performance (Purwanto & Anwar, 2021). A business unit without financial literacy skills will struggle to improve its performance, as it lacks the knowledge to identify areas to be improved. This correlates with the study conducted by Kusuma et al. (2022), who reported that financial literacy positively affected business performance.

Financial literacy affects business performance by giving entrepreneurs the skills to make smart financial decisions. This is especially important for small and medium businesses, where poor financial management can cause failure. In this regard, financial literacy helps improve business performance by allowing better management, as entrepreneurs with good financial skills can understand financial statements, control cash flow, and make smart investments. It also helps business owners judge risk, such as with debt options, which keeps finances stable. It plays a role in strategic decisions too, as financially literate entrepreneurs may use financial technology to increase performance (Obi-Anike et al., 2023). This shows financial literacy supports daily financial management and helps entrepreneurs make choices that lead to long-term growth.

Improving business performance had a positive impact on business sustainability in food MSMEs in Kudus, meaning that the more business performance increases, the greater the opportunity for business sustainability. Business units should be managed well by improving performance to achieve optimal business development (Suncaka, 2023). Therefore, there is a need for interesting recovery activities and continuous training programs, which is supported by Naufal and Purwanto (2022), who stated that improving business performance has a positive effect on business sustainability.

Leadership style had a positive effect on business sustainability through improving business performance. This study showed that leadership style can affect business sustainability in food MSMEs in Kudus, influencing business performance, meaning that selecting and applying an appropriate leadership style will increase opportunities for sustainability through increased performance. Business management is a modern industrial system in a highly competitive global market environment that requires effective supervision, planning, control, coordination, and leadership to improve performance and systems sustainably (Aryawati, 2022). Studies supported the positive influence of leadership style on business sustainability through improving business performance (Gulo & Khoiri, 2022).

Leadership styles played different roles in shaping organizational practices and employee engagement, which is essential for achieving long-term sustainability. Effective leadership fosters an environment supporting innovation and change, which is essential for sustainable business practices. It also facilitates leaders to inspire and motivate employees, promoting a culture of engagement and commitment to the organization's goals. A

transformational thinking leadership style can create a stable environment where employees understand their roles and responsibilities, enabling efficient operations that support sustainable practices. The concise prospects put in place by leaders play a role in influencing performance and productivity, which are very crucial for sustainability of a business in the long-term. Also, leadership style that considers ethical, social, and environmental factors when making a decision is essential for increasing sustainability. This leadership style includes long-term thinking, stakeholder engagement, and the development of a skilled and loyal workforce. In this context, leaders adept at balancing economic performance with social responsibility make sure that their organizations are successful financially and make positive contribution to society.

Financial literacy played an important role in influencing the sustainability of a business, which helped improve performance as well as productivity. This indicates that good financial literacy increases the chance of a business to be sustainable as a result of better performance. [Sriyono \(2023\)](#) revealed that financial literacy affected efforts to improve performance and sustainability, helping with better management and accountability. This study is in accordance with the results of [Haekal Yunus et al. \(2022\)](#), who reported that financial literacy and inclusion improved performance and sustainability in the MSMEs sector.

Financial literacy is very important in the performance and sustainability of a business enterprise because leaders are better equipped to manage costs, make wise investment choices, manage risks, and adapt to economic changes, all of which contribute to improved performance and long-term sustainability. These capabilities are critical to maintaining sustainable growth and ensure that businesses can withstand market fluctuations. Entrepreneurs with good financial literacy have better knowledge of cash management, debt reduction, and sustainable investment. These skills help their businesses to be sustainable in the midst of economic instability. Also, good financial literacy can help MSMEs make better decisions about green financing or new technologies that support sustainability, as well as make smarter choices on capital use, managing debt, and planning taxes. This helps them see market risks and chances, which can improve their performance.

This study concluded that when businesses get better at performing, they can have more chances to think about sustainability. When companies work in ways that make them more efficient and profitable, they might have more resources to put toward things like green technology, saving energy, or getting green certification. This improvement makes MSMEs pay attention to long-term ideas instead of just trying to get by in the short-term.

5. Conclusion

In conclusion, leadership style and financial literacy positively influenced business performance, which subsequently improved sustainability in Kudus' food MSMEs. Business performance was a mediating factor for both leadership style and financial literacy in promoting sustainability.

The managerial implications of these findings suggest that an open and customer-oriented leadership style is needed, with improvement in communication skills, basic

financial knowledge, technical abilities in production volume, as well as work effectiveness. This study used a limited sample size, future investigations should expand the size using calculation formulas such as Slovin or Isaac and Michael, as well as add variables like agendas, organizational culture, planning, business management, and marketing capacity.

Authors' Declaration

Authors' contributions and responsibilities

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

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Availability of data and materials

All data are available from the authors.

Competing interests

The authors declare no competing interest.

Additional information

No additional information from the authors.

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