



Entrepreneurial Competence and Entrepreneur Profile for MSME Empowerment Program in Sukoharjo Regency

Agung Wijanarko¹, and Joko Suryono^{2*}

¹ Universitas Amikom Yogyakarta, Indonesia

² Universitas Veteran Bangun Nusantara Sukoharjo, Indonesia

* Corresponding author: jokowignyo@gmail.com

KEYWORDS

*Entrepreneur
Entrepreneurial
Competence
Sustainable Business*

SUBMITTED: 21/09/2023

REVISED: 30/11/2023

ACCEPTED: 15/12/2024

ABSTRACT: In the information age, most MSMEs in Sukoharjo Regency face increasingly competitive business conditions. Information disclosure is both an opportunity and a challenge for the sustainability of their businesses. Many of their businesses are still in the pilot stage, and only a few can upgrade. This is because there are still many obstacles faced by entrepreneurs, such as (1) a weak understanding of business vision and mission planning, (2) a weak understanding of measuring the achievement of goals and objectives, (3) a weak understanding of the importance of self-capacity building and sustainable business development strategies. This empowerment is carried out by providing practical knowledge and strengthening entrepreneurial competencies. The empowerment outcomes are as follows: (1) strengthening understanding of business vision and mission planning, (2) strengthening understanding and ability to set and measure the achievement of business goals and objectives, (3) strengthening self-competence and guiding participants to design a blueprint for sustainable business strategies.

© The Author(s) 2024.

1. INTRODUCTION

In the context of an increasingly competitive global economy, the role of entrepreneurs, especially in the Micro, Small, and Medium Enterprises (MSMEs) sector (Endris, 2022), is becoming increasingly crucial. MSMEs in Indonesia, including in Sukoharjo Regency, contribute around 61.1% to the national Gross Domestic Product (GDP) and absorb 97% of the workforce, according to data from the Ministry of Cooperatives, Small and Medium Enterprises (KUKM) in 2018. However, many of these MSMEs are still struggling with limited competence and resources in facing increasingly complex business challenges (Nursini, 2020; Wahyuni, 2020). In Sukoharjo Regency, MSMEs face obstacles including weak understanding of business planning and sustainable strategy development (Bocken, 2020; Muafi, 2022). This is exacerbated by a highly competitive business environment. Previous research showed that entrepreneurial competence significantly affects the ability to create growth strategies and business performance (Serrano et al., 2024; Suzuki & Kino, 2021). In line with that, Kuratko and Morris (2014), and Zahra and Neubaum (2001), emphasized the importance of mastering entrepreneurial competence to achieve business growth.

The empowerment approach implemented by Empretec, a program under UNCTAD, has shown success in improving entrepreneurial competencies in various developing countries (Ibidunni, 2021; Tehseen, 2020). Empretec's methodology, based on the research of Professor David McClelland of Harvard University, emphasizes the development of ten core entrepreneurial competencies divided into three clusters: Planning, Achievement, and Self-Power (Rahman, 2015; Tehseen, 2019). The program helps entrepreneurs to identify opportunities, plan effectively, and improve competitiveness. With the conceptual basis of Empretec, this empowerment program aims to improve the entrepreneurial competence of MSME actors in Sukoharjo Regency. Based on data from 2019 to 2021, Sukoharjo Regency has great potential in developing entrepreneurship. This study uses a participatory action research method and involves 30 MSME actors to measure the effectiveness of the empowerment program in improving entrepreneurial competence (Muñoz, 2021; Prakash, 2021).

Based on the facts in the field, the empowerment program implemented in Sukoharjo Regency has proven effective, where 80% of participants experienced an increase in understanding in formulating a business vision and mission, 75% of participants understood how to measure the achievement of goals, and 85% of participants were able to design sustainable business strategies. However, the challenge ahead is to ensure the sustainable implementation of this strategy to face the ever-changing market dynamics. One of the main gaps in improving entrepreneurial competency is weak business planning skills (Botha, 2021; Pranowo, 2020). Research shows that many MSMEs in Indonesia (Widigdo, 2024), including in Sukoharjo, face difficulties in preparing effective business plans. This finding is in line with research, which indicates that the lack of training and practical guidance is the main cause of weak business planning (Dunne et al., 2022; Gurzawska, 2021). The second gap is the lack of understanding of performance measurement.

According to Pratama and Setiawan (2021), most MSMEs still use traditional methods in measuring business performance (Mujanah, 2022), which are often inaccurate and irrelevant to current market conditions. Also emphasize the need for a more modern and data-driven approach to measuring business performance to improve accuracy and relevance (Johnson & Murty, 2023; Rahaman et al., 2021). Finally, challenges in developing self-capacity are still a major obstacle for MSME entrepreneurs (Braun et al., 2006; Cathala et al., 2023; Stenalt, 2021). Nugraha and Rahmawati (2020) reported that many entrepreneurs have not realized the importance of improving self-competence as the main capital in competing in an increasingly competitive market. Similar research emphasized the importance of continuous training and mentoring in developing self-capacity (Braun et al., 2006; Mossenson et al., 2020; Stenalt, 2021). Addressing this gap with a participatory action research-based approach is expected to improve the sustainability of MSME businesses in Sukoharjo (Damayanti, 2024; Fiona, 2024; Manee, 2023).

2. METHOD

Considering the above problems, the competency and capability profiling method in the field of entrepreneurship of empowerment participants is a crucial step (Digan et al., 2019; Santos et al., 2019; Susilo et al., 2024; Wakarmamu, 2017). This aims to map their strengths and weaknesses so that the training and mentoring programs can be personalized and maximized in effectiveness. By knowing the competencies and capabilities of each participant, the mentoring or empowerment facilitator can adjust the training materials and mentoring strategies to suit their needs and level of understanding (Corvite & Hui, 2024; Franz et al., 2024). The following is a further explanation of the research methods used in this program.

2.1 Research Process Design

This study uses a participatory action research design that allows researchers and participants to collaborate in designing and implementing empowerment programs (Damari & Ehsani Chimeh, 2017; Vizeshfar et al., 2021). The flow of this research can be described in several main stages, which are listed in the following table: This study uses a participatory action research design that allows researchers and participants to collaborate in designing and implementing empowerment programs. The flow of this research can be explained in several main stages, which are listed in the following table.

Table 1: Research Stages

Research Stages	Description
1. Identify Needs	Through initial interviews and observations, it was conducted to identify the needs and challenges faced by MSME participants.
2. Program Planning	Design training materials and mentoring sessions based on the results of needs identification.
3. Program Implementation	Implementation of training and mentoring sessions designed in a participatory manner.
4. Evaluation and Reflection	Using interviews and observations to evaluate program effectiveness and reflect with participants.

The following flowchart illustrates the process flow of this research:

[Start] --> [Needs Identification] --> [Program Design] --> [Program Implementation] --> [Evaluation and Reflection] --> [Finish]

3.2 Competency and Capability Profiling

The competency profiling process is carried out to obtain a detailed picture of the participants' competencies and capabilities. The following is a table explaining the methods used:

Table 2: explaining the methods

Method	Description	Number of Instruments
Open Question Form	A list of open-ended questions designed to explore participants' knowledge and attitudes about business management.	10 questions
In-depth Interview	A question and answer process conducted personally to explore participants' understanding of business processes.	30 participants
Participatory Observation	Observation of participant interactions and discussions in groups to synthesize interview results and forms.	5 discussion sessions

The steps in table 3.2 above are explained in the following paragraphs:

3.2.1 Competency and Capability Profiling

Profiling participants' competencies and capabilities in entrepreneurship is an essential first step in developing an effective and relevant training program (Morris & Kuratko, 2014; Pennetta, 2024). This process begins with data collection using questionnaires or in-depth interviews to assess participants' experiences, knowledge, and attitudes towards entrepreneurship (Notley et al., 2023; Poulain et al., 2021). In addition, participants' self-assessments can be conducted to gain a deeper understanding of their perceptions of their own capabilities (Fitzpatrick et al., 2019; Brändle et al., 2023). The collected data is then analyzed to identify strengths and weaknesses, for example, some participants may have strengths in marketing but need improvement in financial management. This mapping is important because it helps in determining which areas need further development and which are already strong enough (Nurmawati et al., 2022; Rajan et al., 2021).

The next step is to design a training program that is in accordance with the results of the profiling. This program must be flexible, able to adapt to the specific needs of participants, and use a variety of teaching methods such as case studies, simulations, and group discussions to ensure the active involvement of each participant (Colloff et al., 2020; Wentzel et al., 2024). Mentoring by mentors who provide guidance and constructive feedback is also an important element to support participant development. With this personalized approach, it is hoped that participants can develop their entrepreneurial competencies

optimally and be ready to face challenges in the business world (Jlifi et al., 2023; Yasir et al., 2020).

3.3 Qualitative and Quantitative Data Analysis

Data analysis was conducted in three main stages to ensure the accuracy and relevance of the research results:

Table 3: Level of Analysis

Level of Analysis	Description
Data Reduction	Selecting and simplifying data to focus on research objectives.
Data Presentation	Presenting data in the form of tables and graphs to facilitate interpretation.
Drawing Conclusions	Summarize research results and provide recommendations.

Research by Pratama and Setiawan (2021) supports the importance of a systematic approach in data analysis to increase the accuracy of research results.

3.4 Implementation and Evaluation

The program implementation is carried out in stages with a focus on skills development and ongoing mentoring:

Table 4: Implementation and Evaluation

Component	Description
Entrepreneurship Training	Training sessions designed to develop planning, performance measurement and self-development skills.
Intensive Mentoring	Personal guidance by experienced mentors to support the application of knowledge in practice.

With this research approach, it is expected to provide a significant contribution to improving the entrepreneurial competence of participants and strengthening the sustainability of MSME businesses in Sukoharjo Regency.

4. Results and Discussion

4.1 Research Design and Process

This research was designed using a participatory action research method involving 30 MSME actors in the Sukoharjo Regency. The research process follows a structured flow of stages, starting from identifying needs, designing programs, and implementing, to evaluating and reflecting. The following flowchart illustrates the flow of the research process:

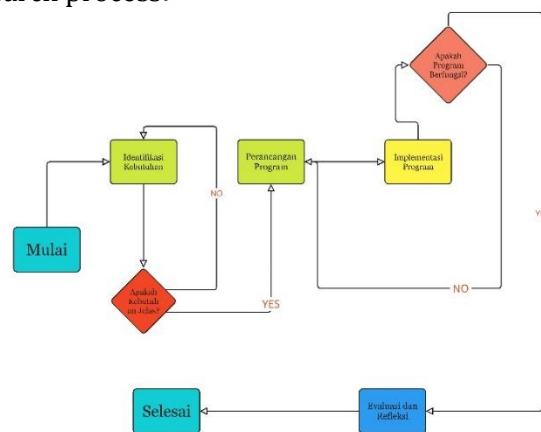


Figure 1 Illustrates of the research process

In the needs identification stage, interviews and group discussions were conducted to collect data on the challenges and needs of the participants. This process is important to understand the situation at hand, as well as to create appropriate solutions. The results of this service will be explained in several sub-paragraphs that describe the findings and recommendations obtained.

4.1.1 Needs Identification Stage

This study began with a needs identification stage aimed at understanding the challenges and needs of participants regarding business management (Coppola et al., 2016; Pradarelli et al., 2016). In this stage, interviews and focus groups were used as the primary methods for collecting data. Interviews were conducted in person to obtain individual views from participants, while focus groups helped in identifying common issues and emerging patterns among participants.

4.1.2 Research Instruments

To explore participants' knowledge and experience in business management, an instrument in the form of an open-ended question form was used. These questions were designed to explore participants' understanding of various aspects of business management, including:

Table 5: Research Instruments

No	Topic	Description
1	Basic Understanding of Business Management	Measures participants' basic knowledge of business management concepts.
2	Main Functions of Management	Explore participants' knowledge of management functions such as planning, organizing, directing, and controlling.
3	The Importance of SWOT Analysis	Assess participants' understanding of the use of SWOT analysis in business decision making.
4	Business Strategy Experience	Gain participants' practical experience in implementing business strategies.
5	Management Challenges and Solutions	Explore participants' insights into management challenges and their abilities to solve them.
6	Measuring Success	Assess participants' understanding of performance indicators and evaluation in business management.
7	The Importance of Communication	Explore participants' views on the relationship between communication and team effectiveness.
8	Motivation Techniques	Deepen participants' knowledge of motivation in the context of human resource management.
9	Conflict Management	Assess participants' skills in managing conflict and interpersonal skills.
10	Operational Efficiency	Explore participants' creative ideas to improve the operational efficiency of the organization.

4.1.3 Interview

Personal interviews are conducted to deepen participants' understanding of the business processes being carried out. This process not only focuses on gathering basic information but also seeks to understand the unique perspectives and experiences of each participant (Koss et al., 2021; Nkadameng & Ankievicz, 2022). The personal approach in the interview allows the facilitator to create a comfortable and open atmosphere, so that participants are freer to share their views and thoughts. In addition, this interview also identifies areas that need improvement, by asking specific questions that lead participants to reflect on the challenges or obstacles faced in their business processes (Ludbrook, 2019; Schou et al., 2022).

4.1.4 Observation

Observations were conducted to complement the data obtained from interviews and forms. The facilitator observed the participants' interactions during the group discussions, which helped in synthesizing the information that had been collected. These observations provided a more comprehensive picture of the participants' competencies and skills in the context of the business processes being carried out. By understanding the dynamics of the group, the facilitator was able to identify how participants collaborated, shared ideas, and solved problems collectively. In addition, observations allowed the

identification of certain patterns or trends that might not have been revealed in the interviews, so that this information could be used to formulate more targeted recommendations and development strategies (Agrawal, 2022; Bui et al., 2023).

4.1.5 Data Analysis

Data collected from interviews, observations, and forms were analyzed both qualitatively and quantitatively. The data reduction process was carried out to simplify and focus the data on the research objectives, such as planning skills, performance measurement, and self-capacity development. Irrelevant data were eliminated to reduce the complexity of the analysis and identify the main themes that emerged. Data presentation was done in the form of tables and graphs to facilitate interpretation and drawing conclusions.

Thus, data analysis not only simplified the information but also improved the overall quality of the research. From the data that has been analyzed, conclusions are drawn to provide a clear picture of the competency profile of participants in entrepreneurship (Wakarmamu, 2017; Wójcik-Karpacz, 2021). These conclusions help in identifying areas that require further intervention, as well as providing insight into the effectiveness of the empowerment program. These conclusions are also used to provide recommendations to program organizers or other stakeholders for future program improvement and development. Thus, drawing conclusions ensures that the results of the study are not only academically beneficial but also provide real contributions to improving entrepreneurial competency in Sukoharjo Regency. Based on these results, a training and mentoring program was designed that was tailored to the competency profile of the participants. The program implementation involved intensive training sessions and personal mentoring, while evaluation was conducted using quantitative and qualitative methods to assess the achievement of program objectives (Tarantino et al., 2013).

4.2 Improved Understanding of Business Planning (New)

Improving the understanding of business planning is one of the main focuses of this empowerment program. Based on data analysis, there has been a significant increase in participants' understanding of the preparation of a business plan, which includes the vision and mission, strategic objectives, and operational steps needed to achieve these objectives. The following is a more in-depth explanation of this improvement.

4.2.1 Understanding Vision and Mission

Understanding the company's vision and mission is a crucial component of effective business planning. Vision and mission are not just formal statements included in company documents, but strategic guidelines that determine the long-term direction and goals of an organization. Before this training program, only 60% of participants had a deep understanding of the importance of vision and mission in providing clear direction for their company. This indicates a gap in participants' understanding of how vision and mission can be used as a tool to motivate teams and align their efforts toward common goals. Through intensive training, participants are encouraged to formulate a vision and mission that is not only clear but also inspiring (Morales, 2016; Prayudi, 2023). This process begins by helping participants understand the difference between a vision and a mission; where the vision describes what the company wants to achieve in the future (Nurhakim et al., 2024), while the mission establishes the company's reason for existence and how to achieve that vision. Participants are invited to explore the core values believed by their company and how these values can be translated into strong vision and mission statements. With guidance from the facilitator, participants learn to set a vision, and mission that can provide inspiration and motivation not only for themselves but also for the entire team within the company.

The results of this training showed a significant increase in participants' ability to develop a vision and mission that is aligned with their company's long-term values and goals. After the program, 80% of participants were able to formulate a vision and mission that not only describes future aspirations but also motivates the team and guides strategic decision-making. This improvement confirms that with the right guidance, business actors can develop a better understanding of how vision and mission can be used as strategic tools. With a clear vision and mission, participants are now better prepared to face business

challenges and direct their companies towards sustainable growth (Edwards, 2021; Schoneveld, 2020). This is also expected to create a positive impact on the local economy (Rendtorff, 2019), with MSMEs in Sukoharjo Regency being more competitive and highly competitive.

4.2.2 Preparation of Business Plan

Prior to participating in the program, only 55% of participants felt comfortable in developing a comprehensive business plan. This indicates an urgent need to strengthen business planning skills among MSMEs in Sukoharjo Regency. Many of them admitted that business planning is often considered a mere formality (Muafi, 2022), without understanding the strategic benefits that can be generated from the process. A business plan is not just a static document, but a dynamic tool that can guide daily business decisions and actions (Kumar, 2022; Simarasl, 2021). The inability to develop a good plan often makes it difficult for business actors to set priorities, allocate resources efficiently, and anticipate challenges that may arise in the future.

Through the training sessions held, participants were taught how to create a business plan that not only includes short-term goals but also a more holistic long-term strategy. The SMART method (Specific, Measurable, Attainable, Relevant, and Time-bound) was introduced as an effective framework for setting clearer and more measurable goals. This approach helped participants understand the importance of setting goals that can be evaluated and achieved, thus motivating them to stay focused on the desired results. During the training, participants were also given simulations and case studies that allowed them to apply the SMART method in realistic scenarios so that they could more easily integrate this concept into their respective businesses. By practicing the preparation of a business plan based on this method, participants were encouraged to think strategically and creatively in planning their business growth (Utama, 2024). After the training, there was a significant improvement in participants' ability to develop a realistic and effective business plan, with 75% of them showing clear progress. This shows that the training provided successfully improved their understanding and skills in business planning. The ability to develop a good business plan provides a significant competitive advantage, as a well-structured plan facilitates operational and strategic success. In addition, a comprehensive business plan can also attract investors and strategic partners, as it shows that the business has a clear direct

4.2.3 Integration of SWOT Analysis

SWOT analysis is a strategic tool used to understand a business's position and guide better decision-making. In this training, participants are taught how to identify the internal strengths and weaknesses and external opportunities and threats facing their business. Before the training, many participants felt that SWOT analysis was merely a formality and lacked an understanding of how to use it for strategic advantage. Through structured guidance, participants learn to identify the positive aspects of their business, such as unique resources or competitive advantages, and address weaknesses such as resource shortages or operational limitations. With this understanding, participants can capitalize on their strengths and find ways to turn weaknesses into opportunities.

After gaining a basic understanding, participants are invited to look at external opportunities and threats that can affect their business. Opportunities may come in the form of new market trends, technological changes, or supportive government policies, while threats can be increasing competition, changing consumer preferences, or economic instability. Participants are encouraged to think critically and creatively in exploring how these opportunities can be utilized for business growth (Fayaz et al., 2022), as well as designing mitigation strategies to reduce the impact of threats. Through group discussions and case studies, they learn to relate SWOT analysis findings to concrete business strategies, such as product diversification or market expansion.

The results of the training showed a significant increase in participants' ability to integrate SWOT analysis into their business planning. With a better understanding, participants are now able to develop more targeted and adaptive strategies, allowing them to respond to market changes more effectively. SWOT analysis is the basis for designing proactive and long-term strategies, helping MSMEs in Sukoharjo Regency to improve their competitiveness and business sustainability. Thus, this training not only improves the individual competencies of participants but also contributes to strengthening the local business ecosystem as a whole.

4.2.4 Implementation and Evaluation of the Plan

The implementation and evaluation of business plans are crucial components taught in this empowerment program. The implementation of this service can be seen in the following Figure:



Figure 2 The implementation and evaluation of business plans

The implementation of community service has been carried out and proven in the documentation in the image above where participants are taught not to stop at just preparing a plan, but also to emphasize the importance of effective implementation. Implementing a good business plan requires a deep understanding of the steps to be taken and the timeliness of execution. Participants are trained to identify the resources needed, allocate the responsibilities of each team member, and set a realistic implementation schedule. This aims to ensure that every aspect of the business plan can be implemented efficiently and on time. By understanding the detailed implementation process, participants are better prepared to face challenges that may arise during the execution of the plan, such as operational constraints or changes in market needs.

After implementation, business plan evaluation is the next important step (Hopp, 2018; Sun, 2021). Periodic evaluations enable participants to measure their business performance against pre-determined indicators. In this training, participants are taught to set relevant and specific Key Performance Indicators (KPIs), which will be used as a measure of success. This evaluation helps in identifying areas that need improvement as well as aspects that have developed as expected. Participants are encouraged to adopt a systematic approach to evaluation, which involves regular data collection and in-depth analysis of the results. This way, they can assess the effectiveness of the strategies implemented and make more informed decisions based on the available data. Comprehensive evaluations also enable participants to respond to changes in the business environment more quickly and appropriately.

The results of the focus on business plan implementation and evaluation showed a significant increase in participants' adaptability to market dynamics. After the training, participants became more consistent in monitoring their business progress and making necessary strategic adjustments. This awareness encouraged them to be more responsive to market changes and quicker in identifying opportunities and addressing threats. With these skills, participants were not only able to maintain business stability but also pursue more aggressive growth (Cheng et al., 2023; Smith et al., 2024). The ability to effectively execute business plans and critically evaluate them provides significant competitive advantages for MSMEs in Sukoharjo Regency, which ultimately contributes to sustainable local economic development (Ahmed, 2022; Kihombo, 2021).

4.2.5 Collaboration and Networking

Collaboration and networking are not only integral to effective business planning but also essential components in developing sustainable business strategies. In this empowerment program, participants are taught the importance of building strategic partnerships and actively utilizing existing networks. Before joining the program, collaboration between MSMEs in Sukoharjo Regency was still limited, and many participants were not yet aware of the great potential that could be gained from collaboration and networking. This program facilitates a new understanding that sharing resources and ideas can strengthen their competitiveness, both locally and regionally. The training encouraged participants to be more active in establishing partnerships with other business actors, both in the same sector and different sectors. Through group discussions and case studies, participants were shown how effective collaboration can open access to new markets, reduce operational costs, and facilitate product or service innovation. They were also encouraged to build a wider network by utilizing various platforms, such as social media and business forums, which can help them connect with other business actors, mentors, and investors. Thus, participants not only learned about the importance of collaboration and networking, but also how to implement it practically in everyday activities (Buarki & Sung, 2024; Dash et al., 2022).

The results of this focus on collaboration and networking showed a significant improvement in participants' ability to work together and share knowledge. After the training, many participants reported an increase in sales and operational efficiency as a result of the new partnerships they had formed. They were also better able to exchange information on market trends, challenges, and effective solutions, allowing them to respond to changes more quickly and appropriately. These successes demonstrate that strengthened collaboration can provide significant competitive advantages, helping MSMEs in Sukoharjo to grow faster and more sustainably. Thus, the program not only improved the individual competencies of participants but also contributed to strengthening the local business ecosystem as a whole (Bertassini, 2021; Ma, 2022). Through effective collaboration, participants are now better prepared to face changing market dynamics and seize greater growth opportunities. Overall, the increased understanding of business planning among participants indicates that the empowerment program has been successful in improving their competencies. With a deeper understanding of vision and mission, business plan preparation, SWOT analysis integration, and effective implementation and evaluation, participants are now better prepared to face complex business challenges (Elmustapha, 2020; Sultan, 2020). In addition, strengthening collaboration and networking is also expected to have a long-term impact on the growth and sustainability of their businesses. This improvement not only provides direct benefits to participants, but is also expected to contribute to the development of the local economy in Sukoharjo Regency.

4.3 Ability to Measure Goal Achievement

Participants' ability to measure the achievement of business goals also increased, with 75% of participants understanding how to set and measure relevant KPIs. The program emphasizes the importance of regular performance evaluation to adjust business strategies according to the results obtained.

Table 6: Ability to Measure Goal Achievement

Indicator	Before the Program	After the Program
Understanding Performance Measurement	50%	75%
KPI Determination	45%	70%

A study by Aldrich and Zimmer (1986) showed that entrepreneurs who are able to measure the achievement of goals appropriately tend to be more successful in the long term, in line with the results of this program. The results in table 3 show that the ability of participants to measure the achievement of business goals has increased significantly after participating in this empowerment program. Before the program began, only about 50% of participants had a basic understanding of performance measurement and only 45% were able to set relevant Key Performance Indicators (KPIs). However, after the training, this percentage increased to 75% for understanding performance measurement and 70% for setting KPIs. This increase indicates that the program has succeeded in providing the necessary provisions for participants to

assess and evaluate their businesses more effectively. With a better understanding of performance measurement, participants can identify areas that need improvement and optimize their business strategies to achieve better results (Wardana, 2022; Wesseling, 2015) .

The training process emphasizes the importance of performance measurement in business management, which involves setting clear goals and measurable indicators. Through interactive learning methods, participants are given an understanding of how KPIs can be used as a tool to monitor progress and evaluate the effectiveness of implemented strategies. In addition, participants are also taught how to interpret performance data to make more appropriate and strategic decisions. This is in line with the findings of Aldrich and Zimmer (1986) which show that entrepreneurs who are able to measure goal achievement appropriately tend to be more successful in the long term. The ability to set and measure the right KPIs gives participants a competitive advantage in managing their businesses more efficiently and effectively (Hristov, 2019; Morar, 2017).

In addition to improving KPI setting and measurement, the program also encourages participants to adopt performance evaluation as an integral part of the decision-making process (Anand, 2015; Hristov, 2019). Systematic evaluation enables participants to identify positive and negative trends in their business operations and design more adaptive strategies to address market changes. With this capability, participants can quickly adjust their business strategies to capitalize on new opportunities or address emerging threats. This approach not only improves operational effectiveness but also improves customer satisfaction and overall financial performance. Thus, the program not only improves individual competencies of participants but also contributes to the sustainability and growth of the local economy in Sukoharjo Regency.

4.4 Sustainable Business Strategy Development

As many as 85% of participants were able to design sustainable business strategies after the program. The training emphasized the importance of integrating sustainability into business, including efficient use of resources and environmentally friendly practices.

Table 7: Sustainable Business Strategy Development

Indicators	Before Program	After Program
Understanding Sustainable Strategy	60%	85%
Implementation of Environmentally Friendly Practices	50%	80%

UNCTAD confirms that sustainable business strategies provide long-term operational benefits, as evidenced by the increased competency of participants in this program. The results shown in Table 4 indicate that this empowerment program aims to improve the understanding and implementation of sustainable business strategies among MSMEs in Sukoharjo Regency. Based on data before the program began, only 60% of participants had an understanding of sustainable strategies, and 50% implemented environmentally friendly practices in their business operations. After participating in the training, there was a significant increase with 85% of participants understanding sustainable business strategies and 80% starting to implement environmentally friendly practices. This increase indicates that the training successfully provided the necessary insights and skills for participants to integrate sustainability into their business strategies. Participants were taught the importance of efficient use of resources, better waste management, and how environmentally friendly practices can improve business image and attract more environmentally conscious consumers.

The training emphasizes that sustainable business strategies not only have a positive impact on the environment but also provide long-term operational benefits (Brehmer, 2018; Lozano, 2018). By adopting environmentally friendly practices, companies can reduce operational costs through energy efficiency and better resource management. In addition, businesses that are committed to sustainability often receive greater support from governments and communities and are more attractive to investors seeking positive impact investments (Cosenz, 2020; Godina, 2020). The program also introduces participants to the concept

of the circular economy, where waste from one process is used as an input for another process, reducing environmental impact and increasing operational efficiency. With this understanding, participants can design business strategies that are not only economically profitable but also socially and environmentally responsible.

The results of the increased understanding and implementation of sustainable strategies have confirmed the position of Sukoharjo MSMEs as adaptive and innovative business actors. According to UNCTAD, sustainable business strategies provide long-term operational benefits, which are reflected in the increased competence of participants in this program. With sustainable strategies, MSMEs in Sukoharjo are not only able to compete in the local market but also open up opportunities for expansion to a wider market. This program also facilitates the creation of a collaborative network between business actors, allowing them to share experiences and best practices in implementing sustainability. Thus, this program not only strengthens the individual capacity of participants but also contributes to sustainable and inclusive local economic development, creating a positive impact on the surrounding community and environment.

4.5 Challenges and Opportunities

Although the program was successful, there were challenges such as limited time and resources. However, the program opened up opportunities for collaboration between entrepreneurs, which strengthened networks and support.

Table 8: Program Challenges and Opportunities

Challenge	Opportunity
Time Limitation	Enhanced Collaboration
Limited Resources	Network Strengthening and Support

Sarwoko (2016) showed that collaboration improves business competence and performance, which is also reflected in this program. The results in Table 5 show that the empowerment program aimed at improving the entrepreneurial competence of MSMEs in Sukoharjo Regency faces various challenges, but also opens up many opportunities. One of the main challenges is time constraints. In implementing this program, participants often have to divide their time between attending training and running their daily businesses. This time constraint can hinder the effectiveness of learning, especially for participants who have busy business schedules. In addition, limited time can also limit the duration and depth of material that can be delivered in training sessions. Therefore, a more flexible and adaptive approach is needed to ensure that participants can make the most of the training without disrupting their business operations. For example, the program can consider training sessions that are conducted outside of normal working hours or provide online training materials that can be accessed by participants at any time.

In addition to time constraints, the program is also faced with the challenge of limited resources. The resources referred to are not only limited to financial aspects, but also include limitations in terms of facilities, experts, and training materials. In many cases, limited resources can hinder the optimal implementation of the program, given that effective entrepreneurship training often requires significant investment in the form of quality mentors, comprehensive training materials, and adequate supporting infrastructure (Blimpo, 2021; Singh, 2024). To overcome this challenge, the program can explore partnerships with educational institutions, the government, and the private sector to obtain additional support in the form of funds, facilities, or experts. Thus, limited resources can be overcome through synergy and collaboration between various stakeholders. Despite the challenges, the program also opens up significant opportunities for participants. One of the main opportunities is increased collaboration between entrepreneurs.

The program facilitates interaction and exchange of ideas between entrepreneurs, which in turn can create a strong collaborative network. This collaboration not only improves the individual competencies of participants but also strengthens the position of MSMEs as a solid and mutually supportive community (Muafi, 2022; Susanti, 2024). In addition, through collaboration, participants can access resources and information that may be difficult to obtain individually, such as new technologies, market trends, or funding opportunities. With a wider network and stronger support, participants are better prepared to face dynamic market challenges and take advantage of greater growth opportunities (Halverson et al., 1997; Mawdsley, 2021). Sarwoko (2016) emphasized that this kind of collaboration can improve overall business performance, and the results of this program show that a collaborative approach can be an effective strategy for sustainable business development. Overall, this program has succeeded in improving the entrepreneurial competence of MSMEs in Sukoharjo Regency and has made a real contribution to strengthening the sustainable local economy.

4. CONCLUSION

The conclusion of this study shows that empowering MSMEs through improving entrepreneurial competency has a significant positive impact on business sustainability in Sukoharjo Regency. By strengthening the understanding of the vision, mission, and strategy of sustainable business, entrepreneurs can be better prepared to face challenges in the information era. This program provides real benefits with an average increase in participant competency of 80%. In addition, this study recommends that similar programs be adopted by other local governments to support the development of MSMEs more broadly, with a focus on training and skills development that are relevant to local needs. The involvement of academics and business practitioners in the preparation of the training curriculum is also recommended so that the material presented is more applicable and in accordance with dynamic market conditions.

5. REFERENCES

- Agrawal, R. (2022). Attaining sustainable development goals (SDGs) through supply chain practices and business strategies: A systematic review with bibliometric and network analyses. *Business Strategy and the Environment*, 31(7), 3669–3687. <https://doi.org/10.1002/bse.3057>
- Ahmed, Z. (2022). Economic growth, renewable energy consumption, and ecological footprint: Exploring the role of environmental regulations and democracy in sustainable development. *Sustainable Development*, 30(4), 595–605. <https://doi.org/10.1002/sd.2251>
- Anand, N. (2015). Measuring retail supply chain performance: Theoretical model using key performance indicators (KPIs). *Benchmarking*, 22(1), 135–166. <https://doi.org/10.1108/BIJ-05-2012-0034>
- Bertassini, A. C. (2021). Circular Business Ecosystem Innovation: A guide for mapping stakeholders, capturing values, and finding new opportunities. *Sustainable Production and Consumption*, 27, 436–448. <https://doi.org/10.1016/j.spc.2020.12.004>
- Blimpo, M. P. (2021). Entrepreneurship education and teacher training in Rwanda. *Journal of Development Economics*, 149. <https://doi.org/10.1016/j.jdeveco.2020.102583>
- Bocken, N. M. P. (2020). Barriers and drivers to sustainable business model innovation: Organization design and dynamic capabilities. *Long Range Planning*, 53(4). <https://doi.org/10.1016/j.lrp.2019.101950>
- Botha, M. (2021). Exploring the Entrepreneurial Intention-Competency Model for Nascent Entrepreneurs: Insights From a Developing Country Context. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.516120>
- Brändle, M., Sotiriadou, C., & Zinn, B. (2023). Self-assessments, attitudes, and motivational orientations towards the use of digital media in teaching a comparison between student teachers of different subject clusters. *Heliyon*, 9(9). <https://doi.org/10.1016/j.heliyon.2023.e19516>
- Braun, K. L., Tsark, J. U., Santos, L., Aitaoto, N., & Chong, C. (2006). Building Native Hawaiian capacity in cancer research and programming: A legacy of 'Imi Hale. *Cancer*, 107(8 SUPPL.), 2082 – 2090. <https://doi.org/10.1002/cncr.22157>
- Brehmer, M. (2018). Sustainable business models as boundary-spanning systems of value transfers. *Journal of Cleaner Production*, 172, 4514–4531. <https://doi.org/10.1016/j.jclepro.2017.11.083>
- Buarki, H., & Sung, H.-Y. (2024). Use of social media by LIS students in Kuwait and Taiwan: A comparative analysis. *Information Services and Use*, 44(2), 107 – 119. <https://doi.org/10.3233/ISU-240228>

- Bui, T.-D., Tseng, J.-W., Tran, T. P. T., Ha, H. M., Tseng, M.-L., & Lim, M. K. (2023). Circular business strategy challenges and opportunities for Industry 4.0: A social media data-driven analysis. *Business Strategy and the Environment*, 32(4), 1765 – 1781. <https://doi.org/10.1002/bse.3217>
- Cathala, X., Ocho, O. N., Mcintosh, N., Watts, P. N., & Moorley, C. (2023). An exploration of social participation in Caribbean student nurses' use of social media in their learning journey. *Journal of Advanced Nursing*, 79(8), 2900 – 2910. <https://doi.org/10.1111/jan.15499>
- Cheng, L.-C., Lu, W.-T., & Yeo, B. (2023). Predicting abnormal trading behavior from internet rumor propagation: a machine learning approach. *Financial Innovation*, 9(1). <https://doi.org/10.1186/s40854-022-00423-9>
- Colloff, M. J., Wise, R. M., Palomo, I., Lavorel, S., & Pascual, U. (2020). Nature's contribution to adaptation: insights from examples of the transformation of social-ecological systems. *Ecosystems and People*, 16(1), 137 – 150. <https://doi.org/10.1080/26395916.2020.1754919>
- Coppola, A., Sasso, L., Bagnasco, A., Giustina, A., & Gazzaruso, C. (2016). The role of patient education in the prevention and management of type 2 diabetes: an overview. *Endocrine*, 53(1), 18 – 27. <https://doi.org/10.1007/s12020-015-0775-7>
- Corvite, S., & Hui, J. (2024). Social Media as a Lens into Careers during a Changing World of Work. *Proceedings of the ACM on Human-Computer Interaction*, 8(CSCW2). <https://doi.org/10.1145/3687053>
- Cosenz, F. (2020). Dynamic business modeling for sustainability: Exploring a system dynamics perspective to develop sustainable business models. *Business Strategy and the Environment*, 29(2), 651–664. <https://doi.org/10.1002/bse.2395>
- Damari, B., & Ehsani Chimeh, E. (2017). Public Health Activist Skills Pyramid: A Model for Implementing Health in All Policies. *Social Work in Public Health*, 32(7), 407 – 420. <https://doi.org/10.1080/19371918.2017.1344600>
- Damayanti, T. W. (2024). Recovery Speed of Micro, Small, and Medium Enterprises (MSMEs) Following the COVID- 19 Pandemic: The Influence of Entrepreneurial Capacity and Characteristics. *International Journal of Sustainable Development and Planning*, 19(3), 1121–1129. <https://doi.org/10.18280/ijstdp.190330>
- Dash, N. R., Hasswan, A. A., Dias, J. M., Abdullah, N., Eladl, M. A., Khalaf, K., Farooq, A., & Guraya, S. Y. (2022). The educational use of social networking sites among medical and health sciences students: a cross campus interventional study. *BMC Medical Education*, 22(1). <https://doi.org/10.1186/s12909-022-03569-3>
- Digan, S. P., Sahi, G. K., Mantok, S., & Patel, P. C. (2019). Women's Perceived Empowerment in Entrepreneurial Efforts: The Role of Bricolage and Psychological Capital. *Journal of Small Business Management*, 57(1), 206 – 229. <https://doi.org/10.1111/jsbm.12402>
- Dunne, H., Rizan, C., Jones, A., Bhutta, M. F., Taylor, T., Barna, S., Taylor, C. J., & Okorie, M. (2022). Effectiveness of an online module: climate-change and sustainability in clinical practice. *BMC Medical Education*, 22(1). <https://doi.org/10.1186/s12909-022-03734-8>
- Edwards, M. G. (2021). The growth paradox, sustainable development, and business strategy. *Business Strategy and the Environment*, 30(7), 3079–3094. <https://doi.org/10.1002/bse.2790>
- Elmustapha, H. (2020). Challenges and opportunities of business models in sustainable transitions: Evidence from solar energy niche development in Lebanon. *Energies*, 13(3). <https://doi.org/10.3390/en13030670>
- Endris, E. (2022). The role of micro, small and medium enterprises (MSMEs) to the sustainable development of sub-Saharan Africa and its challenges: a systematic review of evidence from Ethiopia. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00221-8>
- Fayaz, M., Khan, A., Bilal, M., & Khan, S. U. (2022). Machine learning for fake news classification with optimal feature selection. *Soft Computing*, 26(16), 7763 – 7771. <https://doi.org/10.1007/s00500-022-06773-x>
- Fiona, F. (2024). THE ROLE OF ENTREPRENEURSHIP ORIENTATION IN THE EFFECT OF DIGITAL MARKETING THROUGH SOCIAL MEDIA ON THE PERFORMANCE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs) IN INDONESIA. *Journal of Sustainability Science and Management*, 19(7), 70–94. <https://doi.org/10.46754/jssm.2024.07.005>
- Fitzpatrick, S. A., Haswell, M. R., Williams, M. M., Nathan, S., Meyer, L., Ritchie, J. E., & Jackson Pulver, L. R. (2019). Learning about Aboriginal health and wellbeing at the postgraduate level: Novel application of the Growth and Empowerment Measure. *Rural and Remote Health*, 19(2). <https://doi.org/10.22605/RRH4708>
- Franz, L., Viljoen, M., Askew, S., Brown, M., Dawson, G., Di Martino, J. M., Sapiro, G., Sebolai, K., Seris, N.,

- Shabalala, N., Stahmer, A., Turner, E. L., & de Vries, P. J. (2024). Autism Caregiver Coaching in Africa (ACACIA): Protocol for a type 1-hybrid effectiveness-implementation trial. *PLoS ONE*, 19(1 January). <https://doi.org/10.1371/journal.pone.0291883>
- Godina, R. (2020). Impact assessment of additive manufacturing on sustainable business models in industry 4.0 context. *Sustainability (Switzerland)*, 12(17). <https://doi.org/10.3390/su12177066>
- Gurzawska, A. (2021). Responsible innovation in business: Perceptions, evaluation practices and lessons learnt. *Sustainability (Switzerland)*, 13(4), 1 – 27. <https://doi.org/10.3390/su13041826>
- Halverson, P. K., Mays, G., Kaluzny, A. D., & House, R. M. (1997). Developing leaders in public health: the role of executive training programs. *The Journal of Health Administration Education*, 15(2), 87 – 100. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-0031082951&partnerID=40&md5=886b9000f3ca8bae601b1f29ecafd263>
- Hopp, C. (2018). In Pursuit of Time: Business Plan Sequencing, Duration and Intraentrainment Effects on New Venture Viability. *Journal of Management Studies*, 55(2), 320–351. <https://doi.org/10.1111/joms.12251>
- Hristov, I. (2019). The role of sustainability key performance indicators (KPIs) in implementing sustainable strategies. *Sustainability (Switzerland)*, 11(20). <https://doi.org/10.3390/su11205742>
- Ibidunni, A. S. (2021). Entrepreneurial Competencies and the Performance of Informal SMEs: The Contingent Role of Business Environment. *Journal of African Business*, 22(4), 468–490. <https://doi.org/10.1080/15228916.2021.1874784>
- Jlifi, B., Sakrani, C., & Duvallet, C. (2023). Towards a soft three-level voting model (Soft T-LVM) for fake news detection. *Journal of Intelligent Information Systems*, 61(1), 249 – 269. <https://doi.org/10.1007/s10844-022-00769-7>
- Johnson, S. J., & Murty, M. R. (2023). Machine Learning Approach to Improve Data Connectivity in Text-based Personality Prediction using Multiple Data Sources Mapping. *Journal of Scientific and Industrial Research*, 82(1), 109 – 119. <https://doi.org/10.56042/jsir.v82i1.70218>
- Kihombo, S. (2021). Linking financial development, economic growth, and ecological footprint: what is the role of technological innovation? *Environmental Science and Pollution Research*, 28(43), 61235–61245. <https://doi.org/10.1007/s11356-021-14993-1>
- Koss, J., Rheinlaender, A., Truebel, H., & Bohnet-Joschko, S. (2021). Social media mining in drug development—Fundamentals and use cases. *Drug Discovery Today*, 26(12), 2871 – 2880. <https://doi.org/10.1016/j.drudis.2021.08.012>
- Kumar, V. (2022). Social media in business decisions of MSMEs: Practices and challenges. *International Journal of Decision Support System Technology*, 14(1). <https://doi.org/10.4018/IJDSST.286686>
- Lozano, R. (2018). Sustainable business models: Providing a more holistic perspective. *Business Strategy and the Environment*, 27(8), 1159–1166. <https://doi.org/10.1002/bse.2059>
- Ludbrook, F. (2019). Business models for sustainable innovation in industry 4.0: Smart manufacturing processes, digitalization of production systems, and data-driven decision making. *Journal of Self-Governance and Management Economics*, 7(3), 21–26. <https://doi.org/10.22381/JSME7320193>
- Ma, Z. (2022). Ecosystem-driven business opportunity identification method and web-based tool with a case study of the electric vehicle home charging energy ecosystem in Denmark. *Energy Informatics*, 5. <https://doi.org/10.1186/s42162-022-00238-z>
- Manee, P. (2023). GUIDELINES FOR BUSINESS-TO-GOVERNMENT (B2G) MANAGEMENT SUCCESS PRINCIPLES FOR MICRO, SMALL, AND MEDIUM ENTERPRISES (MSMES). *International Journal of EBusiness and EGovernment Studies*, 15(4), 127–145. <https://doi.org/10.34111/ijebe.2023150407>
- Mawdsley, J. K. (2021). Relational embeddedness, breadth of added value opportunities, and business growth. *Organization Science*, 32(4), 1009–1032. <https://doi.org/10.1287/orsc.2020.1415>
- Morales, J. S. L. (2016). The presence of international expansion in the mission and vision of major Latin American private and state companies. *Estudios Gerenciales*, 32(140), 269–277. <https://doi.org/10.1016/j.estger.2016.06.005>
- Morar, P. S. (2017). Establishing Key performance indicators [KPIs] and their importance for the surgical management of inflammatory bowel disease - Results from a Pan-European, Delphi Consensus Study. *Journal of Crohn's and Colitis*, 11(11), 1362–1368. <https://doi.org/10.1093/ecco-jcc/jjx099>
- Morris, M. H., & Kuratko, D. F. (2014). Building university 21st century entrepreneurship programs that empower and transform. *Advances in the Study of Entrepreneurship, Innovation, and Economic Growth*, 24, 1 – 24. <https://doi.org/10.1108/S1048-473620140000024001>
- Mossenson, A. I., Tuyishime, E., Rawson, D., Mukwesi, C., Whynot, S., Mackinnon, S. P., & Livingston, P. (2020). Promoting anaesthesia providers' non-technical skills through the Vital Anaesthesia Simulation

- Training (VAST) course in a low-resource setting. *British Journal of Anaesthesia*, 124(2), 206 – 213. <https://doi.org/10.1016/j.bja.2019.10.022>
- Muafi, M. (2022). MSMEs Business Sustainability Models in Indonesia. *International Journal of Sustainable Development and Planning*, 17(1), 207–217. <https://doi.org/10.18280/ijstdp.170120>
- Mujanah, S. (2022). Critical thinking and creativity of msme in improving business performance during the covid-19 pandemic. *Uncertain Supply Chain Management*, 10(1), 19–28. <https://doi.org/10.5267/j.uscm.2021.10.014>
- Muñoz, J. B. S. (2021). Entrepreneurship and innovation: Dimensions for the study of the MSMEs of Azogues-Ecuador. *Revista de Ciencias Sociales*, 27(1), 315–333. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b%5C&scop=85102058341%5C&origin=inward>
- Nkadimeng, M., & Ankievicz, P. (2022). The Affordances of Minecraft Education as a Game-Based Learning Tool for Atomic Structure in Junior High School Science Education. *Journal of Science Education and Technology*, 31(5), 605 – 620. <https://doi.org/10.1007/s10956-022-09981-0>
- Notley, T., Dezuanni, M., Chambers, S., & Park, S. (2023). Using YouTube to seek answers and make decisions: Implications for Australian adult media and information literacy; [Uso de YouTube para buscar respuestas y tomar decisiones: Implicaciones de la alfabetización mediática e informacional en adultos australianos]. *Comunicar*, 31(77). <https://doi.org/10.3916/C77-2023-06>
- Nurhakim, M., Darmayanti, R., & Pongsibanne, M. W. (2024). Indonesian Vs. Thailand: The historicity of Muhammadiyah's" founding idea," what is the vision of Muhammadiyah's mission? *Assyfa Journal of Islamic Studies*, 1.
- Nurmawati, F., Sukarno, & Yulisetiani, S. (2022). Thematic Learning System as the Most Effective Method to Activate Students: A Systematic Literature Review. *Pegem Egitim ve Ogretim Dergisi*, 13(1), 275 – 282. <https://doi.org/10.47750/pegegog.13.01.30>
- Nursini, N. (2020). Micro, small, and medium enterprises (MSMEs) and poverty reduction: empirical evidence from Indonesia. *Development Studies Research*, 7(1), 153–166. <https://doi.org/10.1080/21665095.2020.1823238>
- Pennetta, S. (2024). Navigating through entrepreneurial skills, competencies and capabilities: a systematic literature review and the development of the entrepreneurial ability model. *Journal of Entrepreneurship in Emerging Economies*, 16(4), 1144–1182. <https://doi.org/10.1108/JEEE-09-2022-0257>
- Poulain, T., Meigen, C., Sobek, C., Ober, P., Igel, U., Körner, A., Kiess, W., & Vogel, M. (2021). Loss of childcare and classroom teaching during the Covid-19-related lockdown in spring 2020: A longitudinal study on consequences on leisure behavior and schoolwork at home. *PLoS ONE*, 16(3 March). <https://doi.org/10.1371/journal.pone.0247949>
- Pradarelli, J. C., Jaffe, G. A., Lemak, C. H., Mulholland, M. W., & Dimick, J. B. (2016). A leadership development program for surgeons: First-year participant evaluation. *Surgery (United States)*, 160(2), 255 – 263. <https://doi.org/10.1016/j.surg.2016.03.011>
- Prakash, B. (2021). Barriers and potential solutions for MSMEs in developing economies: Evidence from India. *Problems and Perspectives in Management*, 19(4), 325–337. [https://doi.org/10.21511/ppm.19\(4\).2021.26](https://doi.org/10.21511/ppm.19(4).2021.26)
- Pranowo, A. S. (2020). The entrepreneurial competency, innovation capability, and business success: The case of footwear industry in Indonesia. *Quality - Access to Success*, 21(178), 20–25. <https://www.scopus.com/inward/record.uri?partnerID=HzOxMe3b%5C&scop=85090874168%5C&origin=inward>
- Prayudi, M. A. (2023). DO VISION AND MISSION REALLY MATTER? THE MANAGEMENT CONTROL EXPERIENCES OF REFORMED PUBLIC HOSPITALS IN INDONESIA. *International Journal of Professional Business Review*, 8(3). <https://doi.org/10.26668/businessreview/2023.v8i3.1092>
- Rahaman, A., Kuri, R., Islam, S., Hossain, M. J., & Kabir, M. H. (2021). Sarcasm Detection in Tweets: A Feature-based Approach using Supervised Machine Learning Models. *International Journal of Advanced Computer Science and Applications*, 12(6), 454 – 460. <https://doi.org/10.14569/IJACSA.2021.0120651>
- Rahman, S. A. (2015). Supporting entrepreneurial business success at the base of pyramid through entrepreneurial competencies. *Management Decision*, 53(6), 1203–1223. <https://doi.org/10.1108/MD-08-2014-0531>
- Rajan, D., Pillai, V. G., & Varghese, P. (2021). Educational utility of social media for laparoscopic surgery in india: A cross-sectional survey of popular indian communities on facebook. *Advances in Medical Education and Practice*, 12, 491 – 498. <https://doi.org/10.2147/AMEP.S306680>

- Rendtorff, J. D. (2019). Sustainable Development Goals and progressive business models for economic transformation. *Local Economy*, 34(6), 510–524. <https://doi.org/10.1177/0269094219882270>
- Santos, S. C., Neumeyer, X., & Morris, M. H. (2019). Entrepreneurship Education in a Poverty Context: An Empowerment Perspective. *Journal of Small Business Management*, 57(S1), 6 – 32. <https://doi.org/10.1111/jsbm.12485>
- Schoneveld, G. C. (2020). Sustainable business models for inclusive growth: Towards a conceptual foundation of inclusive business. *Journal of Cleaner Production*, 277. <https://doi.org/10.1016/j.jclepro.2020.124062>
- Schou, P. K., Bucher, E., & Waldkirch, M. (2022). Entrepreneurial learning in online communities. *Small Business Economics*, 58(4), 2087 – 2108. <https://doi.org/10.1007/s11187-021-00502-8>
- Serrano, B., Moreno, A., Díez, F., & Igoa-Iraola, E. (2024). Analysis of Brand Positioning in Online Course Companies to Change Consumption Patterns—A Case Study in the Personal Wellbeing Sector. *Sustainability (Switzerland)*, 16(13). <https://doi.org/10.3390/su16135415>
- Simarasl, N. (2021). Antecedents of business location decisions: the case of aspiring immigrant opportunity entrepreneurs. *Journal of Small Business and Enterprise Development*, 28(7), 1075–1094. <https://doi.org/10.1108/JSBED-06-2020-0204>
- Singh, R. (2024). Measuring the impact of digital entrepreneurship training on entrepreneurial intention: the mediating role of entrepreneurial competencies. *Journal of Work-Applied Management*, 16(1), 142–163. <https://doi.org/10.1108/JWAM-11-2022-0076>
- Smith, G., Licata, G., & Rustagi, I. (2024). Empowering Product Teams to Advance Inclusive Language and Mitigate Hateful Speech on Social Media Products. *Business and Professional Communication Quarterly*. <https://doi.org/10.1177/23294906231226211>
- Stenalt, M. H. (2021). Digital student agency: Approaching agency in digital contexts from a critical perspective. *Frontline Learning Research*, 9(3), 52 – 68. <https://doi.org/10.14786/flr.v9i3.697>
- Sultan, S. (2020). Women MSMEs in times of crisis: challenges and opportunities. *Journal of Small Business and Enterprise Development*, 27(7), 1069–1083. <https://doi.org/10.1108/JSBED-06-2020-0226>
- Sun, E. C. (2021). Making a business plan for starting a transitional pain service within the US healthcare system. *Regional Anesthesia and Pain Medicine*, 46(8), 727–731. <https://doi.org/10.1136/rapm-2021-102669>
- Susanti, D. A. (2024). The Influence of Business Model Canvas on Financial Performance of Micro, Small, and Medium Enterprises (MSMEs). *Journal of Ecohumanism*, 3(6), 932–945. <https://doi.org/10.62754/joe.v3i6.4062>
- Susilo, H., Rasyad, A., Zulkarnain, & Hardika. (2024). The Role of the Giri Mulya Learning Community in Empowering Women Through Entrepreneurship Learning. *Journal of Population and Social Studies*, 32, 494 – 514. <https://doi.org/10.25133/JPSSv322024.030>
- Suzuki, H., & Kino, Y. (2021). Exploring the growth process of successors in long-lived small and medium-sized manufacturing companies: A qualitative study. *F1000Research*, 10. <https://doi.org/10.12688/f1000research.52226.3>
- Tarantino, B., Earley, M., Audia, D., D’Adamo, C., & Berman, B. (2013). Qualitative and quantitative evaluation of a pilot integrative coping and resiliency program for healthcare professionals. *Explore: The Journal of Science and Healing*, 9(1), 44 – 47. <https://doi.org/10.1016/j.explore.2012.10.002>
- Tehseen, S. (2019). Entrepreneurial competencies and SMEs’ growth: the mediating role of network competence. *Asia-Pacific Journal of Business Administration*, 11(1), 2–29. <https://doi.org/10.1108/APJBA-05-2018-0084>
- Tehseen, S. (2020). Cultures and entrepreneurial competencies; ethnic propensities and performance in Malaysia. *Journal of Entrepreneurship in Emerging Economies*, 12(5), 643–666. <https://doi.org/10.1108/JEEE-10-2019-0156>
- Utama, S. (2024). Intentional model of MSMEs growth: a tripod-based view and evidence from Indonesia. *Journal of Asia Business Studies*, 18(1), 62–84. <https://doi.org/10.1108/JABS-08-2022-0291>
- Vizeshfar, F., Momennasab, M., Yektatalab, S., & Iman, M. T. (2021). Empowering health volunteer’s through participatory action research in a comprehensive healthcare center. *BMC Public Health*, 21(1). <https://doi.org/10.1186/s12889-021-10878-7>
- Wahyuni, S. (2020). The analysis of e-commerce utilization in Micro, Small and Medium Enterprises (MSMEs) at Jember. *IOP Conference Series: Earth and Environmental Science*, 485(1). <https://doi.org/10.1088/1755-1315/485/1/012037>
- Wakarmamu, T. (2017). Effectiveness of small enterprise empowerment policy in Jayapura City, Papua Indonesia. *International Journal of Economic Research*, 14(20), 31 – 56.

<https://www.scopus.com/inward/record.uri?eid=2-s2.0->

[85041338697&partnerID=40&md5=a2367adda8b5836c5a5a2ff609b3907d](https://www.scopus.com/inward/record.uri?eid=2-s2.0-85041338697&partnerID=40&md5=a2367adda8b5836c5a5a2ff609b3907d)

- Wardana, I. M. (2022). Formulation of Business Strategies to Improve Business Performance by SWOT and SQSPM Approach in Era Pandemic: A Study on Culinary MSMEs. *Quality - Access to Success*, 23(188), 47–55. <https://doi.org/10.47750/QAS/23.188.07>
- Wentzel, A., Levine, L., Dhariwal, V., Fatemi, Z., Bhattacharya, A., Eugenio, B. Di, Rojecki, A., Zheleva, E., & Marai, G. E. (2024). MOTIV: Visual Exploration of Moral Framing in Social Media. *Computer Graphics Forum*, 43(6). <https://doi.org/10.1111/cgf.15072>
- Wesseling, J. H. (2015). Business Strategies of Incumbents in the Market for Electric Vehicles: Opportunities and Incentives for Sustainable Innovation. *Business Strategy and the Environment*, 24(6), 518–531. <https://doi.org/10.1002/bse.1834>
- Widigdo, A. M. N. (2024). KNOWLEDGE AND COMPLIANCE: THE INCREASING INTENTION OF MSME's HALAL CERTIFICATION IN INDONESIA. *International Journal of Business and Society*, 25(1), 128–147. <https://doi.org/10.33736/ijbs.6904.2024>
- Wójcik-Karpacz, A. (2021). The impact of market orientation on the performance of msme's operating in technology parks: The role of market dynamism. *Journal of Entrepreneurship, Management and Innovation*, 17(2), 29–52. <https://doi.org/10.7341/20211722>
- Yasir, M., Afzal, S., Latif, K., Chaudhary, G. M., Malik, N. Y., Shahzad, F., & Song, O.-Y. (2020). An efficient deep learning based model to predict interest rate using twitter sentiment. *Sustainability (Switzerland)*, 12(4). <https://doi.org/10.3390/su12041660>