

## DEVELOPMENT OF ONLINE-BASED ENTREPRENEURIAL COMPETENCE ON PERFORMANCE BEHAVIOR IN SMALL AND MEDIUM ENTERPRISES

---

<sup>1</sup>Azaluddin, <sup>2</sup>John Isaac Ibanga, <sup>3</sup>Dewi Mahmuda, <sup>4</sup>Sahida

<sup>1</sup>azaluddinjuni@gmail.com

<sup>1,3,4</sup>Universitas Muhammadiyah Buton

Jl. Betoambari No.36, Lanto, Kota Bau-Bau, Sulawesi Tenggara, Indonesia

<sup>2</sup>Modibbo Adama University of Technology

Sangerei Girei, Yola, Adamawa, Nigeria

*received: 1/3/25; revised: 10/12/25; approved: 15/12/25*

### **Abstract**

*A lack of technological understanding and limited assistance in applying acquired knowledge has caused many Small and Medium Enterprises (SMEs) to struggle in adopting modern and competitive business strategies. Therefore, this study aims to develop online-based entrepreneurial competencies and analyze their influence on performance behavior among SMEs in Baubau City. This research employs a mixed-methods approach combining quantitative and qualitative techniques supported by meta-analysis. Quantitative data were collected through questionnaires to obtain objective and measurable evidence of the relationship between online-based entrepreneurial competencies and SME performance behavior. Qualitative data were gathered through in-depth interviews to support and enrich the quantitative findings. In addition, meta-analysis was used to provide deeper insight into the consistency of findings from previous studies. The results show that online-based entrepreneurial competencies significantly improve SME performance behavior in Baubau City, despite limited individual digital effects.*

**Keywords:** *competency development; online-based entrepreneurship; performance behavior; business community; small and medium enterprises*

### **INTRODUCTION**

Online-based entrepreneurial competency development is an increasingly relevant strategy in improving the performance behavior of Small and Medium Enterprises (SMEs). With the advancement of digital technology, various training, courses, and entrepreneurial resources can now be accessed online, allowing entrepreneurs to improve their managerial, marketing, and product innovation skills without being limited by space and time (Pham, 2023; Fiernaningsih et al., 2023; Moshi & Matotola, 2023). This approach makes it easier for SMEs to understand business trends, digital marketing strategies, and more effective financial management. Thus, they can be more adaptive in facing increasingly competitive and dynamic market competition. Online-based competency development also contributes to changes in performance behavior in SMEs, especially in terms of work efficiency and more data-based decision-making (Li, 2023). Through e-learning platforms and digital communities, entrepreneurs can share experiences, gain new insights, and apply more innovative business strategies. The ability to access information quickly and flexibly allows them to be more responsive to market needs and increase business productivity (U. A. Ibrahim &

Adamu, 2020). With increasing online entrepreneurial competency, SMEs can not only survive but also grow faster in this digital era.

Financial management issues are also often a challenge for small and medium-sized businesses (Abu-Rumman et al., 2020). Many business owners do not have an adequate understanding of cash management, budget planning, or proper expense tracking (Malik et al., 2022). As a result, they may have difficulty managing cash flow, paying bills on time, or obtaining sufficient funds to develop their businesses (Saputera & Wiguna, 2023). In addition, limitations in managerial capacity can also be an obstacle to the growth of SMEs businesses (Banu & Uddin, 2022). Overcoming the problem of unemployment is supported by the ability to open up your own job opportunities, meaning overcoming unemployment, one of which is by instilling an entrepreneurial spirit so that you do not depend on existing and limited job opportunities (Mayanja et al., 2021).

The inability to network can also be an obstacle to the performance behavior of small and medium-sized businesses in Baubau City. Limited access to professional networks or business communities can feel isolated and make it difficult to collaborate with other businesses or learn from other people's experiences. Thus, an analysis of online-based entrepreneurial competencies is needed to improve the performance behavior of small and medium-sized businesses in Baubau City. Given the rapid progress of sophisticated information and communication technology, MSME marketing must be able to utilize online-based marketing (Abbas et al., 2024). This includes opening online stores, using online sales and promotion tools, and promoting MSME products on social media sites so that they can function as a medium for products (Sari et al., 2023).

The gap in the development of online-based entrepreneurial competencies towards performance behavior in SMEs in Baubau City lies in the level of digital literacy and limited access to technology. Many SMEs are not yet familiar with digital platforms to develop their entrepreneurial skills, both in terms of marketing, financial management, and product innovation. In addition, the availability of digital infrastructure that is not evenly distributed in various regions causes some SMEs to have difficulty accessing online-based training, so that they are left behind compared to business actors who are more technologically literate. The main problem that arises due to this gap is the low effectiveness of online-based entrepreneurship training in improving the performance behavior of SMEs. Lack of understanding of technology and minimal assistance in applying the knowledge gained cause many SMEs to have difficulty implementing more modern and competitive business strategies. In addition, the lack of direct interaction in online training often reduces the effectiveness of learning, because SMEs cannot discuss intensively or get more contextual solutions to their business problems.

The online-based entrepreneurial problem-solving approach to the development of SME community performance behavior involves strategies to help SMEs utilize digital technology in managing and developing their businesses. This includes building or using platforms connected to online markets, providing support and consultation, facilitating access to digital financial services, building online communities, encouraging product and service innovation, and analyzing data to identify opportunities for small and medium enterprises in Baubau City. This approach helps SMEs in Baubau City improve their competitiveness and sustainability in the digital era.

Regular evaluation of the effectiveness of training and mentoring is essential to ensure that the programs run truly provide benefits to SMEs. The government and training providers can use surveys, interviews, or case studies to measure the development of participant competencies. With a data-based approach, learning modules can be continuously adjusted to be more relevant and targeted, so that SMEs can feel the real impact in business management. Increasing digital literacy for SMEs must be supported by policies that encourage the adoption of technology in their business activities. Incentives, such as internet access subsidies, free training, or technology assistance, can be a stimulus for SMEs to be more active in adapting to the digital ecosystem. With policies that favor small business actors, it is hoped that they can be more confident in utilizing technology, increasing operational efficiency, and expanding their markets more widely and competitively.

Challenges and solutions in improving digital literacy for SMEs before participating in online-based entrepreneurship training. With comprehensive research, factors that hinder the adoption of technology by SMEs and their specific needs in digital learning can be identified. The results of this study can be the basis for designing more effective training programs that are in accordance with the conditions and level of understanding of participants. Research on this title can also help measure the effectiveness of learning methods that have been implemented, either through interactive modules, hybrid mentoring, or collaboration with various parties. With in-depth data and analysis, training organizers and other stakeholders can adjust strategies so that the impact of digital literacy on SME development is more optimal. This study can also provide insight into how SMEs can be more adaptive to changes in technology and market trends in the digital era.

## METHODS

This study is a mixed methods study between qualitative and quantitative based on meta-analysis (Malik et al., 2022). The use of this method can provide objective quantitative research related to the development of online-based entrepreneurial competencies on the performance behavior of small and medium-sized business communities in Baubau City by providing questionnaires so that the research data is accurate, while qualitative research to obtain research data by providing interviews to support quantitative data, and based on meta-analysis provides in-depth insight into the consistency of research findings from various existing studies (M. Ibrahim et al., 2022).

Determination of data sources for research is based on the ability and skills of researchers in trying to uncover a subjective event and determine respondents according to the terms and conditions so that the data needed by researchers is truly in accordance with nature or concrete facts (Gregory, 2023). Determination of data sources in this study is based on the researcher's efforts to uncover subjective events as possible so that the determination of data respondents in this study is the result of questionnaires and interviews that have in-depth knowledge and understanding of online-based entrepreneurship on performance behavior in small and medium-sized business communities in Baubau City. The subjects in this study were carried out using probability sampling (Sigey et al., 2023). Thus, the determination of simple random sampling with a total of 45 small and medium business actors in Baubau City. To obtain probability sampling, the first step is to identify the total population of MSMEs in Baubau City, which can be obtained from official data from the Cooperatives and MSMEs Service. After that, it is calculated with the sample size using the Slovin formula, which considers the total population, confidence level, and margin of error. The MSME population is 900 and a margin of 5%. Furthermore, select samples randomly using techniques such as simple random sampling, stratified random sampling, or systematic sampling, so that each member of the population has an equal chance of being selected. With this approach, the samples taken will be representative and the research results can be generalized to all MSME actors in Baubau City.

Data collection in this study used a mixed method, namely primary data and secondary data. Primary data were obtained through questionnaires distributed to SMEs in Baubau City to measure their online-based entrepreneurial competencies and performance behavior. In addition, in-depth interviews were conducted to explore the views and experiences of SMEs in implementing online-based training. Direct observation was also used to see how online technology is applied in business operations. Secondary data were collected from government reports, articles, and documents related to SMEs in Baubau City to support the research results.

Data analysis in this study uses a mix methods approach to combine quantitative and qualitative data to obtain more comprehensive results. Quantitative data are analyzed using descriptive statistics to describe the characteristics of respondents and regression analysis to test the relationship between online-based entrepreneurial competencies and the performance behavior of SME actors (Akpan & Okwudu, 2022). In the development of online-based entrepreneurial competencies, a one group pre-test-post-test design is used. This study is divided into two variables, namely: dependent variable (X) development of online-based entrepreneurial competencies, and independent variable (Y)

performance behavior in small and medium business communities in Baubau City. Quantitative research data is carried out by testing hypotheses using the Polymer Search application (Hafeez et al., 2024). Furthermore, qualitative methods are carried out by analyzing data through data reduction (Avdullahi & Hoti, 2020). Reducing data means summarizing, choosing the main things, focusing on the important things (Baharsyah et al., 2023). Thus, the data that has been reduced will provide a clearer picture, and make it easier for researchers to collect further data (Anggraini & Asnah, 2021). So, it can conduct a meta-analysis that combines several studies on questionnaire questions and interviews (Makbul & Fathaniyah, 2023; Thu & Xuan, 2023; Astarinaya et al., 2024). The data analysis used is SPSS and R value, Polymer Search which can be utilized as an effective artificial intelligence (AI)-based tool to process data in a more interactive and intuitive way. Polymer Search allows researchers to upload questionnaire data in a simple format (Kadeni, 2022). This tool is also able to quickly recognize patterns in data, such as the distribution of respondent values or relationships between variables, thus helping to explain the relationship between online-based entrepreneurial competencies and the performance behavior of MSME actors (Leuhery, 2022). With Polymer Search, the quantitative data analysis process can be carried out efficiently without requiring complex statistical technical skills (Wedayanti et al., 2024). In addition, this tool supports the mix methods approach by providing analytical features that can be combined with qualitative data. For example, interview results can be coded manually, then linked to quantitative data visualizations from Polymer Search to provide a deeper understanding (Leatemala, 2023). With this integration, Polymer Search becomes a practical and innovative alternative for researchers who do not use traditional statistical software such as SPSS.

## RESULTS

The digital competence of SMEs in Baubau City is already at a good level, especially in the use of digital devices, understanding of e-commerce, and managing business social media. The majority of SMEs have sufficient skills to utilize digital technology in developing their businesses, although there are still a few who have limitations in certain aspects. To increase the competitiveness of SMEs more evenly, more intensive training and mentoring are needed, especially for those who are still lacking in mastering digital technology, so that all business actors can optimize digital platforms to increase marketing and business growth.

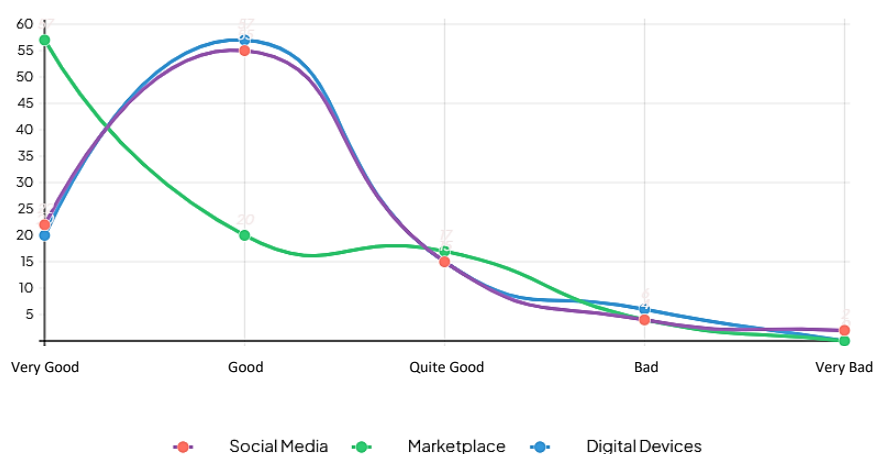


Figure 1. Level of Digital Competence of SMEs in Baubau City

Digital skills are an important factor in supporting the development of SMEs in the digital era. The majority of SMEs in Baubau City have quite good skills in using digital devices such as smartphones, computers, and the internet. From Figure 1, it can be seen that 57.78% of SMEs have good skills, while 20% are classified as very good. However, there are still 6.67% who are not good at using digital devices, which indicates the need for further training to improve digital competence

evenly. SMEs' understanding of e-commerce and marketplaces is also a crucial aspect that shows that as many as 57.78% of SMEs have a very good understanding of e-commerce platforms such as Shopee, Tokopedia, and Bukalapak. This indicates that the majority of SMEs in Baubau City have realized the importance of digital platforms in expanding market reach. However, there are still around 4.44% who are not good at understanding e-commerce, so a more intensive education strategy is needed so that all SMEs can take full advantage of digital technology. Managing business social media accounts is also one of the important digital competencies in improving SME marketing. Based on the results of the study, 55.56% of SME actors have good skills in managing social media accounts such as Instagram, Facebook, and TikTok, while 22.22% are classified as very good. However, there are still around 6.66% who are not good or do not have the skills to manage their business social media. This shows the need for further training so that SMEs can be more optimal in using social media as an effective marketing tool.

Digital marketing strategies play an important role in increasing customer interaction and promotion effectiveness. The response to customers through online platforms has been quite good, with most customers feeling satisfied. However, in terms of frequency and consistency of digital marketing, there is still room for improvement so that the strategies implemented are more structured and sustainable. This shows that even though digital marketing is already running, improvements are still needed in terms of continuity so that the impact is more optimal. Overall, a good digital marketing strategy must include responsive service, consistency in marketing, and more creative use of social media in order to increase competitiveness and business growth in the digital era (Figure 2).

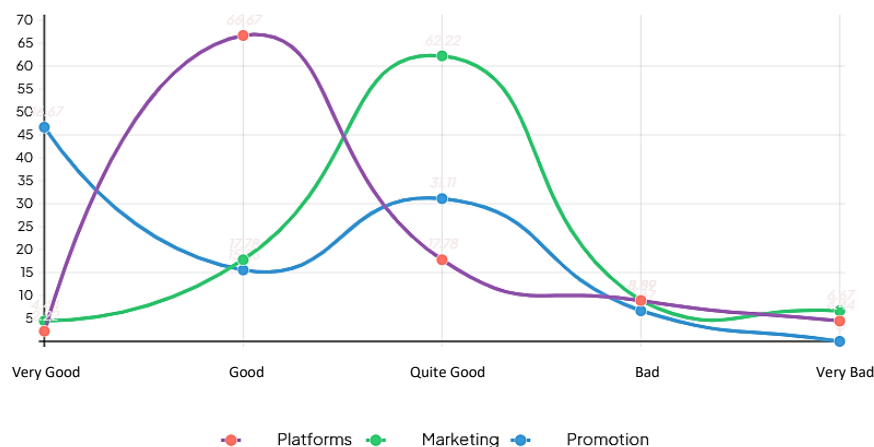


Figure 2. Digital Marketing Strategy Levels

Digital marketing strategy is a company's effort to utilize digital technology to increase customer visibility, engagement, and conversion. Based on the data, the response to customers through online platforms was mostly considered very good (46.67%) and good (15.56%), indicating the effectiveness of digital interactions in building relationships with customers. However, in terms of frequency and consistency of digital marketing, the majority of respondents considered it quite good (62.22%), indicating the need for improvement in the sustainability of marketing strategies. Meanwhile, the use of social media for promotion was considered good by the majority of respondents (66.67%), confirming that social media is an effective means of increasing business exposure.

The adoption rate of digital financial technology in Baubau City is quite good, especially in the use of digital payment methods and financial recording. However, the majority of people are still in the "Quite Good" category, which shows that there is room for improvement in terms of understanding and using this technology more optimally. Meanwhile, understanding of prices and discounts tends to be higher than other aspects, indicating that people are more familiar with shopping strategies than digital recording or transactions (Figure 3).

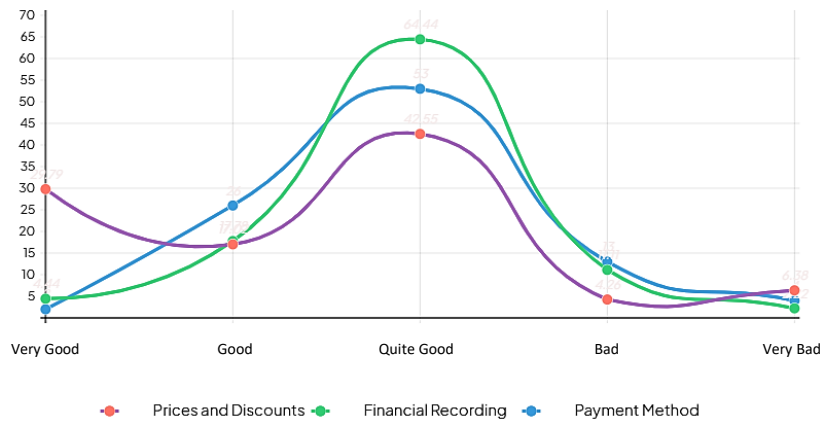


Figure 3. Digital Financial Management Levels

The use of digital payment methods in Baubau City shows a positive trend, although it is still dominated by the "Quite Good" category with a percentage of 53.33%. Only a small portion of the public rated the use of methods such as QRIS, e-wallet, and bank transfer in the "Very Good" category (2.22%). This indicates that although digital payment technology is quite commonly used, there are still obstacles in its implementation, such as limited access, lack of understanding, or preference for cash transactions. In terms of digital financial recording, the majority of respondents (64.44%) rated the use of Excel, financial applications, or accounting software in the "Quite Good" category. This shows that many people are familiar with digital recording, but have not fully optimized its benefits. There are still 11.11% who feel their recording is "Not Good" and 2.22% who rate it "Not Good," which indicates the need for further education regarding the importance of neat and efficient financial recording to support financial stability. Meanwhile, the public's understanding of prices and discounts is fairly good, with 46.81% of respondents rating themselves in the "Good" and "Very Good" categories. This percentage is higher than the previous two aspects, indicating that people are quite aware of pricing and discount strategies in their transactions. However, there are still 10.64% who feel they do not understand this concept, which can be overcome with further education related to price comparisons, promotional strategies, and the use of digital technology to access price information more easily.

Innovation and adaptation of technology in Baubau City show diverse developments in the business world. Although the application of new technology in business development still faces various challenges, the digitalization trend has received a more positive response from business actors. This can be seen from the increasing number of business actors who are starting to adapt to digital trends and the increasing digital-based services that have received quite good appreciation from the public. Although there are still obstacles in accessing and implementing technology, this development shows great potential for digital transformation in Baubau City if supported by the right policies and increasing technological literacy for business actors.

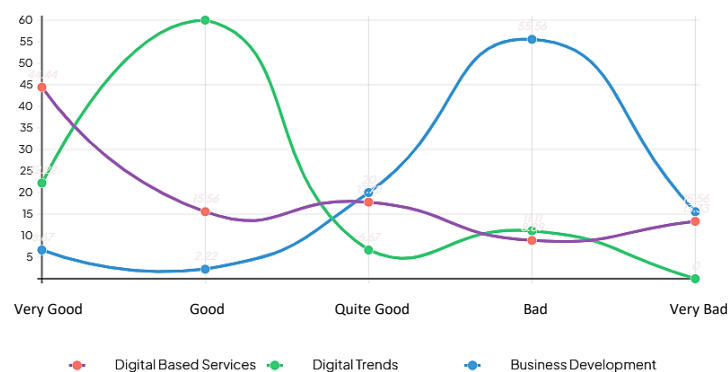


Figure 4. Level of Technology Innovation and Adaptation



Innovation and adaptation of technology in Baubau City show diverse dynamics in the business world. Data shows that the use of new technology in business development still faces major challenges, with the majority of respondents (55.56%) rating it as "Less Good" and only 6.67% rating it as "Very Good". This indicates that there are still obstacles in the application of technology, both in terms of access, understanding, and readiness of business actors in adopting technological innovation. On the other hand, adaptation to digital trends in the business world received a more positive response. As many as 60% of respondents rated this adaptation in the "Good" category, and 22.22% rated it as "Very Good". Only 11.11% rated it as "Less Good", while none considered it "Not Good". This data shows that business actors in Baubau City are increasingly aware of the importance of digitalization in their business operations, although challenges in implementing technology still exist. Digital-based services also receive quite good appreciation from the public. As many as 44.44% of respondents rated this service as "Very Good", and 15.56% rated it as "Good", although there are still 13.33% who rated it as "Not Good". This reflects that digital transformation has begun to be implemented in various business services, although there is still a need for improvement in quality and accessibility. Overall, although the use of technology in business development is still a challenge, the trend of digitalization and digital-based services in Baubau City shows quite significant progress (Figure 4).

The performance behavior of SMEs in Baubau City generally shows positive results, especially in terms of productivity and entrepreneurship which have reached very good levels. This reflects the ability of SMEs to maintain production efficiency and take advantage of business opportunities well. However, there is still room for improvement in terms of collaboration and customer service, which are at fairly good and good levels. Increasing cooperation between business actors and improving the quality of customer service can be the main strategy in strengthening the competitiveness of SMEs in Baubau City to be more sustainable and develop in the future (Figure 5).

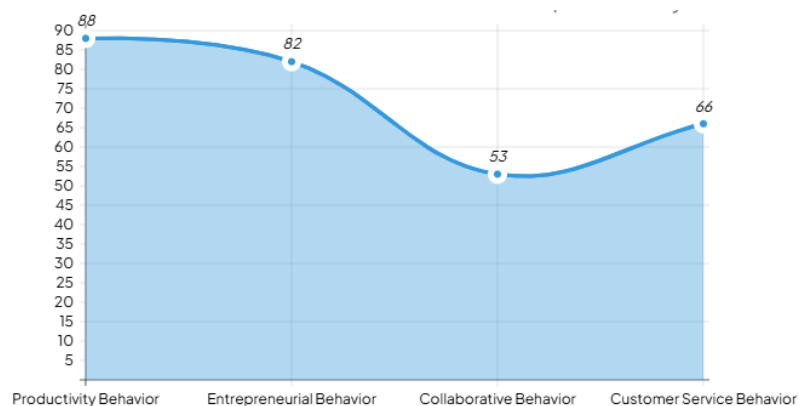


Figure 5. Performance Behavior in Small and Medium Enterprises Society

The performance behavior of SMEs in Baubau City shows positive results, especially in terms of productivity and entrepreneurship. Based on existing data, productivity behavior is at a very good level with a percentage of 88.89%, which shows that the majority of SMEs in Baubau City are able to produce products or services efficiently and with quality. In addition, entrepreneurial behavior is also recorded as very good with a percentage of 82.23%, which reflects the high spirit of innovation and the ability to take advantage of business opportunities amidst the various challenges faced. However, there are several other aspects that show performance that needs to be improved, such as collaborative behavior and customer service. Collaborative behavior, which shows how well SMEs work together in a business network or community, is recorded as quite good with a percentage of 53.33%. This indicates the potential to improve relationships between business actors for more sustainable growth. Meanwhile, customer service behavior is still at a good level with a percentage of 66.67%, which requires SMEs to focus more on service quality and customer satisfaction in order to strengthen their competitiveness in the market.

The analysis technique used in this study is multiple linear regression. From the classical assumption test, it can be concluded that the data is normally distributed and there is no multicollinearity, autocorrelation, and heteroscedasticity. Thus, it meets the requirements for conducting multiple linear regression analysis in order to test the hypothesis of this study analyzing the development of Online-based Entrepreneurial Competence on Performance behavior in Small and Medium Enterprises. Table 1 shows the results of the Multiple Linear Regression equation.

Table 1. Multiple Linear Regression Test Results

Model	Coefficients <sup>a</sup>				
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-.065	.024		-2.210	.027
DCSME	.003	.011	.439	3,868	.001
DMS	.005	.012	.120	1.012	.328
DFM	.003	.011	-.039	-.280	.762
TIA	.003	.022	.132	.122	.675

a. Dependent Variable: Performance Behavior

Table 1 presents the results of multiple linear regression tests that examine the influence of independent variables on performance behavior in SMEs in Baubau City. Based on the results of the analysis, the Digital Competence of Small and Medium Enterprises (DCSME) variable has a significant influence on performance behavior, indicating that increasing digital competence in MSMEs can improve their performance behavior. In contrast, the variables Digital Marketing Strategy (DMS), Digital Financial Management (DFM), and Technology Innovation and Adaptation (TIA) do not show a significant influence on performance behavior. This implies that although digital competence plays an important role, but digital marketing strategies, digital financial management, and technological innovation have not been proven to directly influence the performance behavior of MSMEs in Baubau.

Multiple linear regression equation can be obtained:

$$\text{Performance} = -0,065 + 0,003 \text{ DCSME} + 0,005 \text{ DMS} + 0,003 \text{ DFM} + 0,003 \text{ TIA} (-0,001 \text{ PB}) + e \dots (1)$$

The coefficient of determination can be seen in the Table 2.

Table 2. Results of the Determination Coefficient Test (R<sup>2</sup>)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.415 <sup>a</sup>	.124	.148	.01511

a. Performance Behavior: (Constant), DCSME, DMS, DFM, TIA

Table 3 shows the results of the F test research.

Table 3. Simultaneous Test Results (F Test)

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	.000	4	.000	6,289	.000a
Residual	.002	128	.000		
Total	.003	132			

a. Predictors: (Constant), DCSME, DMS, DFM, TIA

b. Dependent Variable: Performance Behavior



## DISCUSSION

This study shows that the development of online-based entrepreneurial competencies has a significant impact on improving the performance behavior of SMEs in Baubau City. The confidence of SMEs increases due to a better understanding of market trends and more effective business management strategies. These results indicate that digitalization of entrepreneurship training can be a strategic solution in increasing the competitiveness of SMEs in the modern era. The digital competency of SMEs in Baubau City is quite good, especially in the use of digital devices, understanding e-commerce, and managing business social media. Most SMEs have mastered digital technology in their business operations, although there is a small segment that still experiences limitations. To overcome this gap, more intensive training and mentoring are needed, especially for those who still have difficulty managing social media and utilizing digital platforms optimally. With an increase in digital competency that is evenly distributed, SMEs can be more optimal in utilizing technology to expand market reach and improve operational efficiency.

Digital marketing strategy is one of the important aspects in supporting the growth of SME businesses. The results of the study show that interaction with customers through online platforms is quite good, although improvements are still needed in terms of consistency and frequency of digital marketing (Mardhiyaturrositaningsih, 2023). The use of social media for promotion has shown high effectiveness, but some business actors still face challenges in attracting audience attention more creatively. Therefore, an optimal digital marketing strategy must include high customer responsiveness, marketing sustainability, and innovation in utilizing social media to increase business competitiveness. In terms of digital financial management, the adoption rate of digital payment methods and financial recording shows a positive trend. However, the majority of SME actors are still in the "Quite Good" category, which indicates the need for further education regarding digital financial literacy. The main challenges in implementing digital financial technology include limited access, lack of understanding, and preference for cash transactions (Resi Erwinda, Terrensia, 2024). Therefore, socialization about the importance of neat financial recording and the use of digital technology in financial management needs to be improved so that SMEs can manage their finances more efficiently.

The results of statistical analysis using multiple linear regression show that digital competence of SMEs (DCSME) has a significant influence on the performance behavior of SMEs in Baubau City. This means that the higher the digital competence of SME actors, the better their performance behavior. However, other variables such as digital marketing strategy, digital financial management, and technological innovation did not show a significant influence on performance behavior. This indicates that although these aspects are important in SME operations, other factors outside the research model are likely more dominant in influencing overall SME performance. In addition, the results of the simultaneous regression test (F Test) show that the DCSME, DMS, DFM, and TIA variables have a significant influence on SME performance behavior simultaneously, which confirms that digitalization in various aspects of business can be a supporting factor for SME growth.

The analysis of the coefficient of determination shows that the variables in this study are able to explain 12.4% of the variation in SME performance behavior. This shows that although digitalization is an important element, there are still many other aspects such as business capital, government policies, and other external factors that affect SME performance. The results of the t-test also strengthen this finding, where only the digital competence variable has a significant effect on SME performance behavior, while the other variables do not have a strong enough effect individually. Therefore, to improve SME performance more comprehensively, not only digitalization needs to be considered, but also other factors such as access to capital, supportive government policies, and increased business cooperation and innovation at the local and national levels.

## CONCLUSIONS

Based on the research results, it can be concluded that the development of online-based entrepreneurial competencies contributes significantly to improving the performance behavior of SMEs in Baubau City. Good digital competency allows SMEs to be more effective in utilizing digital devices, understanding e-commerce, and managing social media as a marketing tool. Although the majority of SMEs already have quite good digital skills, there are still a small number who face limitations in managing social media and utilizing technology optimally. Therefore, more intensive training and mentoring are needed so that digitalization can be adopted more evenly among SMEs. In addition, digital marketing strategies, digital financial management, and technological innovation also play an important role in business development, although they have not been proven to significantly improve SME performance behavior directly based on statistical analysis. Multiple linear regression analysis shows that digital competency has a significant influence on SME performance behavior, while other variables, such as digital marketing strategy, digital financial management, and technological innovation, do not have a significant influence individually. However, the simultaneous regression test indicates that, these variables still have an impact on SME performance behavior. The coefficient of determination shows that there are still many other factors outside the research model that influence SME performance, such as access to capital, government policies, and innovation and collaboration between business actors. Therefore, a more comprehensive approach is needed to improve the competitiveness of SMEs in the digital era, including better policy support, sustainable entrepreneurship education, and increased access to resources and technology to encourage more sustainable SME growth.

## REFERENCES

- Abbas, M. A. Y., Wahyuti, S., Sugiarto, S., Ayu, N. P. S., & Syafrullah, S. (2024). *Dampak Literasi Keuangan terhadap Kinerja Keuangan pada Usaha Mikro Kecil dan Menengah di Samarinda. In ABDISOSHUM: Jurnal Pengabdian Masyarakat Bidang Sosial dan Humaniora (Vol. 3, Issue 2, pp. 121–127). Yayasan Literasi Sains Indonesia.* <https://doi.org/10.55123/abdisoshum.v3i2.3990>
- Abu-Rumman, A., Al-Shra'ah, A. E. M., Al-Madi, F., & Alfalah, T. (2020). Entrepreneurial Networks, Entrepreneurial Orientation, and Performance of Small and Medium Enterprises: Are Dynamic Capabilities the Missing Link? *Research Square Platform LLC.* <https://doi.org/10.21203/rs.3.rs-129772/v1>
- Akpan, A. P., & Okwudu, A. A. (2022). Exploring Entrepreneurial Orientation (EO) and Performance among Small and Medium Scale Enterprises (SMEs) In Nigeria. *In Journal of Economics, Management and Trade (pp. 1–10). Sciencedomain International.* <https://doi.org/10.9734/jemt/2022/v28i830425>
- Anggraini, S. P. A., & Asnah, A. (2021). *Penerapan Teknologi Tepat Guna Terhadap Kinerja Usaha Mikro Kecil Menengah Siomay untuk Peningkatan Pendapatan Keluarga. In JAST: Jurnal Aplikasi Sains dan Teknologi (Vol. 5, Issue 1, pp. 1–11). Unitri Press.* <https://doi.org/10.33366/jast.v5i1.2075>
- Ashraf, S. F. (2021). SmartPLS Mediation Moderation Model: Integrated The Entrepreneurial Performance of Textile-Based Small-Medium Enterprises. *In ILMA Journal of Social Sciences & Economics (Vol. 2, Issue 1). ILMA University.* <https://doi.org/10.46745/ilma.ijsse.2021.02.01.05>
- Astarinaya, N. K. D., Padnyawati, K. D., & Wati, N. W. A. E. (2024). *Pengaruh Kompetensi Sumber Daya Manusia dan Pengelolaan Keuangan Terhadap Kinerja Usaha Mikro Kecil dan Menengah (UMKM) Sektor Kuliner Se-Kota Denpasar. In Hita Akuntansi dan Keuangan (Vol. 5, Issue 1, pp. 176–182). Universitas Hindu Indonesia.* <https://doi.org/10.32795/hak.v5i1.4529>

- Avdullahi, A., & Hoti, A. (2020). The Search for Determinants of Kosovan Small and Medium Enterprises performance. In *International Journal of Economic Sciences* (Vol. 9, Issue 2, pp. 1–22). International Institute of Social and Economic Sciences. <https://doi.org/10.20472/es.2020.9.2.001>
- Baharsyah, S., Nurhasan, N., & Hasanudin, H. (2023). *Pelatihan Manajemen Pemasaran untuk Peningkatan Kualitas Pelayanan dan Promosi pada Usaha Mikro Kecil dan Menengah*. In *Prima Abdika: Jurnal Pengabdian Masyarakat* (Vol. 3, Issue 3, pp. 298–307). Lembaga Penelitian dan Pengabdian Masyarakat Universitas Flores. <https://doi.org/10.37478/abdika.v3i3.3180>
- Banu, S., & Uddin, M. M. (2022). Entrepreneurial Perception about the Factors Affecting Innovation in the Bangladeshi Small and Medium Enterprises: A Study on the Jute Diversified Products Industry. In *Dhaka University Journal of Management* (Vol. 14, Issue 1). University of Dhaka. <https://doi.org/10.57240/dujm140102>
- Fiernaningsih, N., Herijanto, P., Widayani, A., Maskur, & Poernamawati, D. E. (2023). How Does The Entrepreneurial Behavior Intention of Small and Medium Enterprises (SMEs) in Indonesia grow-up? In *Problems and Perspectives in Management* (Vol. 21, Issue 1, pp. 438–447). LLC CPC Business Perspectives. [https://doi.org/10.21511/ppm.21\(1\).2023.37](https://doi.org/10.21511/ppm.21(1).2023.37)
- Gregory, A. N. W. (2023). Impact Entrepreneurial Networking Structural Dimensions and Growth of Small and Medium Enterprises in Kenya. In *International Journal of Science and Research (IJSR)* (Vol. 12, Issue 7, pp. 320–327). International Journal of Science and Research. <https://doi.org/10.21275/sr23630184717>
- Hafeez, K., Ashraf, A. A., Bajwa, T., & Shafiq, M. (2024). Examining the Influence of Innovation, Entrepreneurial Initiatives, and Proactive Strategies on the Business Performance of Small and Medium Enterprises. In *International Journal of Entrepreneurial Venturing* (Vol. 16, Issue 2). Inderscience Publishers. <https://doi.org/10.1504/ijev.2024.10065364>
- Ibrahim, M., Saputra, J., Adam, M., & Yunus, M. (2022). The Moderating Role of Financial Accessibility in Relationship between Resource Competence, Entrepreneurial Leadership, Good Governance and Performance of Micro Small Medium Enterprises in Batam, Indonesia. In *Wseas Transactions On Business And Economics* (Vol. 19, pp. 86–93). World Scientific and Engineering Academy and Society (WSEAS). <https://doi.org/10.37394/23207.2022.19.9>
- Ibrahim, U. A., & Adamu, S. (2020). Effect of Strategic Management on the Development of Entrepreneurial Competence in Nigeria: A Perspective from Selected Small and Medium Enterprises (SMEs). In *The International Journal of Business & Management* (Vol. 8, Issue 1). International Journal of Innovative Research & Development (GlobeEdu). <https://doi.org/10.24940/theijbm/2020/v8/i1/bm2001-048>
- Kadeni, K. (2022). *Pengaruh Kecerdasan Emosional Terhadap Kinerja Usaha Mikro Kecil dan Menengah (UMKM)*. In *Briliant: Jurnal Riset dan Konseptual* (Vol. 7, Issue 3, p. 615). Universitas Nahdlatul Ulama Blitar. <https://doi.org/10.28926/briliant.v7i3.1019>
- Leatemia, S. Y. (2023). *Pengaruh Literasi Keuangan dan Inklusi Keuangan Terhadap Kinerja Usaha Mikro, Kecil, dan Menengah (UMKM)*. In *Ekonomi, Keuangan, Investasi dan Syariah (EKUITAS)* (Vol. 4, Issue 4, pp. 1152–1159). Forum Kerjasama Pendidikan Tinggi (FKPT). <https://doi.org/10.47065/ekuitas.v4i4.3221>
- Leuhery, F. (2022). *Analisis Pengaruh Lingkungan Usaha dan Motivasi Terhadap Kinerja Pelaku Usaha Mikro Kecil dan Menengah Binaan Dinas Perindustrian dan Perdagangan Provinsi Maluku*. In *JUEB: Jurnal Ekonomi dan Bisnis* (Vol. 1, Issue 2, pp. 44–51). Jompa Research and Development. <https://doi.org/10.55784/jueb.v1i2.115>
- Makbul, M., & Fathaniyah, L. (2023). *Upaya Peningkatan Kesadaran Hukum Melalui Pendaftaran Merek Bagi Pelaku Usaha Kecil Menengah Berbasis Mahasiswa*. In *Jurnal Literasi Pengabdian dan Pemberdayaan Masyarakat* (Vol. 2, Issue 1, pp. 47–55). Litera Inti Aksara. <https://doi.org/10.61813/jlppm.v2i1.33>

- Malik, A., Hafeez, S., & Ali, B. (2022). Measuring The Entrepreneurial Performance of Textile-Based Small-Medium Enterprises: A Mediation Moderation Model. In *Middle East J. of Management* (Vol. 1, Issue 1, p. 1). Inderscience Publishers. <https://doi.org/10.1504/mejm.2022.10047689>
- Mardhiyaturrositaningsih. (2023). *Pelatihan Perencanaan dan Pencatatan Keuangan Pada Usaha Mikro Kecil dan Menengah Di Tlogosari Wetan*. In *Jurnal Pengabdian Masyarakat STIE Surakarta* (Vol. 1, Issue 2, pp. 44–51). Sekolah Tinggi Ilmu Ekonomi Surakarta. <https://doi.org/10.56456/dimaseta.v1i2.18>
- Mayanja, S., Omeke, M., Tibamwenda, J. V., Mutebi, H., & Mufta, F. (2021). The Mediating Role of The Novelty Ecosystem Between Personality Traits, Entrepreneurial Networks and Entrepreneurial Ambidexterity Among Small and Medium Enterprises. In *Journal of Global Entrepreneurship Research* (Vol. 11, Issue 1, pp. 379–395). Springer Science and Business Media LLC. <https://doi.org/10.1007/s40497-021-00299-6>
- Moshi, R., & Matotola, S. (2023). Entrepreneurial Competence and Small and Medium Enterprises' Profitability: A Case of sunflower oil processing enterprises in Tanzania. In *Cogent Business & Management* (Vol. 10, Issue 2). Informa UK Limited. <https://doi.org/10.1080/23311975.2023.2208431>
- Pham, T. V. A. (2023). The Relationship Between Entrepreneurial Orientation and Performance of Vietnamese Small and Medium Enterprises. In *Journal of Organizational Behavior Research* (Vol. 8, Issue 2, pp. 216–225). Polaris. <https://doi.org/10.51847/uInsqIt236>
- Resi Erwinda, Terrensia, A. (2024). *Pengaruh Penggunaan Sistem Informasi Akuntansi Terhadap Keberhasilan Kinerja Perusahaan Pada Usaha Mikro Kecil dan Menengah (UMKM) di Indonesia*. In *Journal of Sustainability and Science Economics* (Vol. 2, Issue 1, pp. 1–12). CV. Atma Workshop Innovation. <https://doi.org/10.62337/jsse.v2i1.17>
- Saputera, P. M. A., & Wiguna, A. B. (2023). *Pelatihan Penyusunan Rencana Bisnis Usaha Mikro Kecil dan Menengah (UMKM) yang Berbasis Sumber Daya Lokal*. *Bubungan Tinggi: Jurnal Pengabdian Masyarakat* (Vol. 5, Issue 1, p. 399). Center for Journal Management and Publication, Lambung Mangkurat University. <https://doi.org/10.20527/btjpm.v5i1.7148>
- Sari, C. P., Nurhayati, N., & Nirwana, I. (2023). *Pengaruh Kompetensi Dan Karakteristik Wirausaha Terhadap Perkembangan Usaha Mikro Kecil Dan Menengah (UMKM) (Studi Kasus Pelaku Usaha Mikro Kecil dan Menengah (UMKM) di Koto Baru)*. In *Journal of Creative Student Research* (Vol. 1, Issue 1, pp. 55–68). Politeknik Pratama Purwokerto. <https://doi.org/10.55606/jcsrpolitama.v1i1.1036>
- Sigey, R. K., Omwenga, J., & Sije, A. (2023). Entrepreneurial Orientation and Performance of Small and Medium Enterprises in Kenya. In *Journal of Entrepreneurship & Project Management* (Vol. 3, Issue 2, pp. 19–35). EdinBurg Peer Reviewed Journals & Books Publishers. <https://doi.org/10.70619/vol3iss2pp19-35>
- Thu, N. T. P., & Xuan, V. N. (2023). Factors Affecting the Performance of Small and Medium Enterprises Regarding the Sustainable Development Goals—The Case of Foreign Direct Investment Firms in Vietnam. In *Economies* (Vol. 11, Issue 3, p. 72). MDPI AG. <https://doi.org/10.3390/economies11030072>
- Wedayanti, M. D., Siswanto, A., Sundari, E., Kusumawaty, Y., Faiser, A., & Aprilia, A. (2024). *Pengembangan Produksi Produk Usaha Mikro, Kecil, dan Menengah Kerupuk Sagu Berbasis Elektronik*. In *ABDINE: Jurnal Pengabdian Masyarakat* (Vol. 4, Issue 2, pp. 259–266). Jurnal UNITEK, Sekolah Tinggi Teknologi Dumai. <https://doi.org/10.52072/abdine.v4i2.976>