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The Contribution of Digital Entrepreneurial Competence to the Business Growth of Women-Owned SMEs in the Fashion Industry

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Abstract

Digital competence and entrepreneurial ecosystems are constantly changing as a result of digital technology's continued rapid growth. The purpose of this study is to analyze the contribution of digital entrepreneurial competence in the growth of women owned small and medium enterprises (SMEs) in the fashion industry in Yogyakarta, Indonesia. The research method implemented is quantitative with the data obtained in the study from 120 women entrepreneurs of fashion SMEs who are consumers of the study. Digital entrepreneurial competence is split into four areas: digital literacy, digital innovation, online networking and digital tools utilization, and business growth is evaluated by sales growth, customer growth and brand awareness. According to multiple regression analysis, all the dimensions of digital entrepreneurial competence are positively and significantly associated with the growth of a business. Digitization tools usage and digital literacy prove to be the best predictors for SME growth, signifying the strategic relevance of being capable to put instruments into digital use and understanding the digital world. This study is novel in its multidimensional investigation into the case of digital entrepreneurship in the context of female entrepreneurs' fashion SMEs in a developing economy. The results are valuable not only for digital entrepreneurship literature, but also for practice for policy makers and stakeholders (SME development institutions) to design digital capacity-building programs for women entrepreneurs.

INTRODUCTION

Digital transformation has become a game-changer for this modern business ecosystem, impacting how companies value, engage with customers, and remain competitive in technology-focused markets. Digitalization is not just a field of innovation for small and medium-sized enterprises (SMEs) anymore but has become an integral part of their structural development in order to survive and grow (Raihan, 2024). By leveraging digital technologies, SMEs can enhance operational efficiency, broaden market reach, deepen customer connections, and create flexible business models to address the evolving needs and expectations of their customers and

markets, as well as the dynamic nature of consumer behavior (Xia et al., 2024; Yaqub & Alsabban, 2023). In this dynamic environment, entrepreneurial capabilities in leveraging digital technologies have become a key factor that distinguishes businesses and organizations in terms of their performance and resilience (Oyeyemi et al., 2024; Teng et al., 2022).

In creative industries like fashion, market responsiveness, visual communication, consumer interaction and the ability to brand are closely linked to business competitiveness and the increasing importance of digitalization. With the advent of social media platforms, e-commerce, and digital marketing infrastructures, the conventional fashion value chain has been reshaped to allow companies to connect directly with customers, tailor communication strategies, and fast-track the product's visibility in larger markets (Gupta et al., 2024; Hernando Velasco et al., 2024). The digital platforms have also enabled new ways of cultural representation and creative storytelling, enabling fashion entrepreneurs to create creative and innovative ways of combining the local with the global market trend. In the fashion industry, therefore, it is becoming more and more critical for the SMEs to be able to combine creativity with digital (Huynh, 2022; Varra, 2021; Syarkani, 2025).

In developing countries, SMEs remain as significant actors in economic growth, job creation and social cohesion. SMEs are an important part of economic activity in Indonesia, and their strategic role in improving the local economy cannot be separated from the local economies in Indonesia (Fitriadi et al., 2024; Kurniadi et al., 2024). In this area, women entrepreneurs are becoming more and more important players, especially in creative and culturally bound sectors like fashion. Women entrepreneurs in the fashion SME sector in Yogyakarta play a role in the local economic development, and also in the preservation and commercialisation of cultural heritage by incorporating traditional aesthetics such as batik and local textile identities into the contemporary fashion products (Hui et al., 2024; Utami et al., 2026; Urip et al., 2025). This combination of cultural creativity and digital market expansion produces a unique entrepreneurial context worth a scholarly investigation.

Although women entrepreneurs' business involvement is increasing in terms of economic value, there are still structural and institutional barriers which restrict the potential for women's businesses to grow. Other research has highlighted some of the obstacles women entrepreneurs face, including access to financial resources, lack of access to formal business networks, gender disparities in access to technology and continued gender disparities in entrepreneurial ecosystems (Akoh, 2020; Massa et al., 2023). Digital technologies are often seen as potential tools that can mitigate these constraints by making markets more accessible, offering flexible methods of business operation and providing consumers and commercial networks with increased access (Telukdarie et al., 2023; Opoku et al., 2024). The successful implementation of digital transformation to enhance SME performance is not merely dependent on the adoption of digital technology, but also on how the entrepreneur can strategically use, understand and incorporate digital resources into business activities.

It has thus spurred academic engagement with the digital entrepreneurial competency concept. Digital entrepreneurial competence is the integration of knowledge, technical skills, strategic capability, and entrepreneurial attitudes necessary to recognize opportunities and create value and maintain the performance of businesses using digital technologies (Singh & Dwivedi, 2022; Lam et al., 2025). Digital entrepreneurial competence is a multi-dimensional concept in the existing literature, comprising of four dimensions of Digital entrepreneurial competence namely Digital entrepreneurial literacy, Digital entrepreneurial innovation capability, Digital entrepreneurial networking competence, and Digital entrepreneurial

operational and marketing competence (Ikenga & Egbule, 2024; Diawati, 2024). Such abilities can help entrepreneurs deal with technological changes, customers' changing behavior, and digitally mediated business environments.

The positive impact of digital competence on competitiveness, innovation capacity, market expansion and sustainability of SMEs have been shown in several empirical studies (Usman et al., 2024; Omol, 2024). By enabling entrepreneurs to analyze digital information, assess technological opportunities, and enhance decision-making, digital literacy empowers them to stay competitive in the digital age. Digital literacy equips entrepreneurs to navigate digital information, understand digital technology opportunities, and enhance decision-making, ensuring their competitiveness in the digital era. Digital innovation aids business model adaptation and product differentiation, and online networking helps to access information, collaborate, and gain access to market resources (Fatmawati & Garad, 2022; Giordino et al., 2025). Moreover, the use of digital tools like social media, online shopping platforms, and digital payment systems has been found to greatly enhance customer interaction and enterprise visibility, particularly in the creative sector (Gupta et al., 2024; Nasta, 2025; Susanto et al., 2021; Eseagwu & Ekeamadi, 2024; Guspian & Zahri, 2025).

Nevertheless, the existing literature remains fragmented in several important aspects. First, a lot of previous studies have focused on digitalization as a phenomenon within the organization instead of breaking it down into its different dimensions of digital entrepreneurial competence. Consequently, there has been little focus on the question of which components of digital competence have the greatest effect on SME growth. Secondly, empirical studies tend to address SMEs in general and much less research has been conducted on women entrepreneurs in the creative industry that exist in culturally ingrained creative industries. Third, research on digital entrepreneurship in developing countries tends to focus on how widely a technology is adopted instead of on the quality of digital entrepreneurship. Thus, the following digital entrepreneurial competence dimensions and their effects on business development of women entrepreneurs are not well understood.

This research gap becomes more applicable in the case of women-owned fashion SMEs in Yogyakarta. The region is a unique entrepreneurial environment, with a high level of cultural identity, growing digital infrastructure and deepening connections to digital markets. While digital platforms can offer greater access to the market and brand visibility, growth in a digital environment requires more than just technology. Entrepreneurs need to have the strategic ability to convert digital resources into competitive advantages that can be maintained. Hence, it is necessary to investigate the role of the digital entrepreneurial competence in the context of this particular socio-cultural and industrial setting to be able to deepen both theoretical and practical knowledge of SME digitalization.

This study aims to analyze the contribution of digital entrepreneurial competence to the business growth of women-owned SMEs in the fashion industry in Yogyakarta. Specifically, the study investigates the influence of digital literacy, digital innovation, online networking, and digital tools utilization on business growth indicators, including sales growth, customer base expansion, and brand recognition. The novelty of this research lies in its multidimensional examination of digital entrepreneurial competence within the context of women-owned fashion SMEs in a developing economy, an area that remains underexplored in existing scholarship. By integrating multiple dimensions of digital competence into a single analytical framework, this study contributes to the development of digital entrepreneurship literature while also offering practical implications for policymakers, business development institutions, and women entrepreneurs seeking to strengthen competitiveness in the digital economy.

METHODS

Research Design

This study employed a quantitative research design using a cross-sectional survey approach to examine the contribution of digital entrepreneurial competence to the business growth of women-owned SMEs in the fashion industry in Yogyakarta, Indonesia. A quantitative approach was considered appropriate because the study aimed to statistically measure and analyze the relationships between multiple dimensions of digital entrepreneurial competence and business growth indicators through empirical testing. Quantitative research enables researchers to objectively assess causal tendencies among variables and generate findings that can be generalized within a defined population context (Lim, 2025). The cross-sectional design was specifically selected because the study sought to capture the current condition of digital competence and business growth among women entrepreneurs within a particular period.

The conceptual framework of this study positioned digital entrepreneurial competence as the independent variable, consisting of four dimensions: digital literacy, digital innovation, online networking, and digital tools utilization. Business growth served as the dependent variable and was measured through indicators including sales growth, customer base expansion, and brand recognition.

Research Context and Population

The research was conducted in Yogyakarta, Indonesia, a region recognized for its strong creative economy and cultural-based entrepreneurial activities. Yogyakarta has experienced significant digital transformation in recent years, particularly among SMEs operating in the fashion and creative sectors. Women-owned fashion enterprises in the region increasingly utilize digital platforms such as Instagram, TikTok, Shopee, and Tokopedia to market products, engage consumers, and expand commercial networks. This context provides a relevant setting for examining how digital entrepreneurial competence contributes to SME growth within a culturally embedded creative industry.

The population of this study consisted of women entrepreneurs who owned and managed fashion SMEs in Yogyakarta. The study focused specifically on SMEs categorized according to Indonesian MSME criteria based on business scale and operational capacity. Purposive sampling was employed to ensure that respondents met predetermined inclusion criteria relevant to the research objectives (Obilor, 2023). Respondents were selected based on three requirements: they had to be female business owners, operate within the fashion sector, and actively utilize digital technologies or digital platforms in their business activities. A total of 120 respondents participated in the study, which was considered adequate for multiple regression analysis and consistent with recommended sample sizes in quantitative business research (Rahman, 2023).

Data Collection Technique

Primary data were collected through structured questionnaires distributed both directly and online between October and December 2025. The use of questionnaires allowed the researchers to obtain standardized responses and quantitatively measure perceptions related to digital entrepreneurial competence and business growth. The questionnaire consisted of two main sections. The first section captured respondents' demographic and business profiles, including age, business duration, and digital platform usage. The second section measured the research variables using Likert-scale indicators ranging from 1 (strongly disagree) to 5 (strongly agree).

Digital entrepreneurial competence was operationalized into four dimensions adapted from previous digital entrepreneurship studies, including digital literacy, digital innovation capability, online networking ability, and digital tools utilization (Lam et al., 2025). Business growth was measured through financial and non-financial indicators, including perceived sales growth, customer expansion, and brand visibility. Prior to full distribution, the questionnaire was subjected to a pilot test involving 20 SME owners to evaluate item clarity and measurement consistency.

Data Analysis Technique

The collected data were analyzed using descriptive statistics and multiple regression analysis with the assistance of SPSS software. Descriptive statistics were used to present respondent characteristics and examine the overall tendency of each research variable through mean scores and standard deviations. Multiple regression analysis was then employed to assess the influence of each dimension of digital entrepreneurial competence on business growth. This analytical technique was considered suitable because it enables the simultaneous examination of multiple independent variables in predicting a dependent variable (Hara et al., 2021).

Before conducting regression analysis, classical assumption tests were performed, including normality, multicollinearity, and heteroscedasticity tests, to ensure the suitability of the regression model. The coefficient of determination (R^2) was also used to evaluate the explanatory power of the model in predicting business growth.

Validity and Reliability

To ensure instrument validity, content validity was established through expert review involving academics in entrepreneurship and digital business studies. Construct validity was subsequently evaluated using corrected item-total correlation analysis. All questionnaire items exceeded the minimum acceptable correlation threshold of 0.30, indicating satisfactory validity.

Reliability testing was conducted using Cronbach's Alpha coefficient to assess internal consistency among measurement items. According to Ahmad et al. (2024), a Cronbach's Alpha value above 0.70 indicates acceptable reliability. The results demonstrated that all research variables achieved reliability coefficients above the recommended threshold, confirming that the measurement instrument was sufficiently consistent for empirical analysis. In addition, ethical considerations were carefully observed throughout the research process. Respondents were informed about the objectives of the study, assured of confidentiality and anonymity, and participated voluntarily without coercion.

RESULTS AND DISCUSSION

This section presents the empirical findings regarding the contribution of digital entrepreneurial competence to the business growth of women-owned SMEs in the fashion industry in Yogyakarta. To ensure systematic and analytical presentation, the results are organized into several subsections. The first subsection explains the respondent and business characteristics. The second subsection presents the operationalization of variables and descriptive statistical findings. The third subsection discusses instrument validity and reliability testing. The fourth subsection reports correlation analysis and classical assumption testing. The final subsection presents the multiple regression results, including simultaneous testing and model estimation. All findings are derived from primary survey data collected from 120 women entrepreneurs between October and December 2025 and processed using SPSS statistical software.

Respondent and Business Characteristics

The demographic and business profiles of respondents provide contextual understanding regarding the characteristics of women-owned fashion SMEs in Yogyakarta. Table 1 presents the distribution of respondents based on age, business duration, business scale, employee size, and digital platform utilization.

Table 1. Respondent and Business Characteristics (n = 120)

Characteristic	Category	Frequency	Percentage
Age	20–25 years	18	15.0%
	26–40 years	74	61.7%
	>40 years	28	23.3%
Years in Business	<3 years	35	29.2%
	3–5 years	52	43.3%
	>5 years	33	27.5%
Business Scale	Micro Enterprise	49	40.8%
	Small Enterprise	53	44.2%
	Medium Enterprise	18	15.0%
Number of Employees	1–5 employees	58	48.3%
	6–10 employees	39	32.5%
	>10 employees	23	19.2%
Digital Tools Used	Instagram & TikTok	98	81.7%
	E-commerce Platforms	86	71.7%
	Website	42	35.0%

Source: Primary Survey Data Processed by Authors, 2026

The findings indicate that most respondents were women aged between 26 and 40 years, representing 61.7 percent of the sample. This age group reflects economically productive entrepreneurs who are generally more adaptive to digital transformation. In terms of business experience, the majority had operated their businesses between three and five years, indicating relatively stable business operations.

Most enterprises were categorized as micro and small businesses, confirming the dominance of small-scale entrepreneurial activities within the fashion sector in Yogyakarta. Nearly half of the respondents employed fewer than five workers, reflecting labor-intensive operational characteristics commonly found in creative SMEs. Regarding digital platform utilization, Instagram and TikTok emerged as the most widely used platforms due to their visual orientation and accessibility for fashion promotion. The relatively lower use of websites suggests that respondents preferred cost-efficient and user-friendly digital channels rather than more advanced digital infrastructures.

Operationalization of Variables

The study operationalized digital entrepreneurial competence into four dimensions derived from previous digital entrepreneurship literature. Business growth was measured using both financial and non-financial indicators.

Table 2. Operationalization of Variables

Variable	Indicators	Number of Items	Sources
Digital Literacy	Ability to use digital information, understand digital systems, evaluate online information	5	Ngoasong (2018); Lam et al. (2025)

Digital Innovation	Development of digital marketing ideas, product adaptation, online creativity	5	Singh & Dwivedi (2022)
Online Networking	Online collaboration, digital communication, relationship building	4	Ikenga & Egbule (2024)
Digital Tools Utilization	Use of social media, e-commerce, digital payment systems	5	Diawati (2024)
Business Growth	Sales growth, customer expansion, brand recognition	6	Teng et al. (2022)

Source: Adapted by Authors from Previous Studies, 2026

The measurement items were developed using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Prior to data collection, the questionnaire underwent pilot testing involving 20 SME owners to ensure clarity and consistency.

Response Rate and Questionnaire Distribution

A total of 145 questionnaires were distributed through direct visits and online forms. Of these, 128 questionnaires were returned, representing a response rate of 88.3 percent. After data screening and completeness verification, 120 questionnaires were considered valid and suitable for analysis.

Table 3. Questionnaire Distribution

Description	Total
Questionnaires Distributed	145
Questionnaires Returned	128
Incomplete Responses	8
Valid Responses Used	120
Response Rate	88.3%

Source: Primary Survey Data Processed by Authors, 2026

The relatively high response rate indicates strong respondent participation and reflects the relevance of digital entrepreneurship issues among women-owned fashion SMEs.

Descriptive Statistics

Descriptive statistical analysis was conducted to evaluate the tendency of each research variable.

Table 4. Descriptive Statistics of Research Variables

Variable	Mean	Std. Deviation	Category
Digital Literacy	4.21	0.61	High
Digital Innovation	4.05	0.68	High
Online Networking	3.89	0.72	Moderate-High
Digital Tools Utilization	4.32	0.57	High
Business Growth	4.18	0.64	High

Source: Primary Survey Data Processed by Authors, 2026

The interpretation categories used in this study are presented in Table 5.

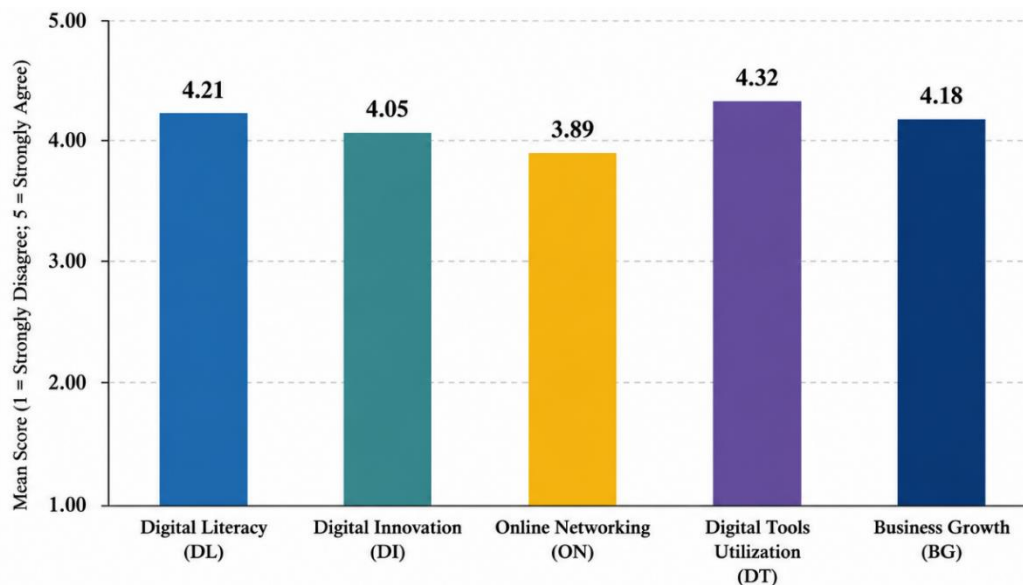


Figure 1. Mean Scores of Research Variables

Source: Primary Survey Data Processed by Authors, 2026

Figure 3 illustrates the mean scores of the research variables, including digital literacy, digital innovation, online networking, digital tools utilization, and business growth. The results show that digital tools utilization achieved the highest mean score, indicating the intensive use of digital platforms among women-owned fashion SMEs in Yogyakarta. Digital literacy and business growth also recorded high scores, reflecting strong digital capability and positive business performance. Meanwhile, online networking obtained the lowest mean score, suggesting that strategic digital collaboration remains relatively limited. Overall, the figure demonstrates that respondents generally possess high levels of digital entrepreneurial competence associated with favorable business growth outcomes.

Table 5. Mean Score Interpretation

Mean Interval	Category
1.00–1.80	Very Low
1.81–2.60	Low
2.61–3.40	Moderate
3.41–4.20	Moderate–High
4.21–5.00	High

Source: Adapted from Likert Scale Interpretation Standards, 2026

Digital tools utilization recorded the highest mean score, indicating intensive use of digital platforms among respondents. Meanwhile, online networking achieved the lowest mean score, suggesting that strategic digital relationship-building remains less developed compared to operational digital practices.

Validity and Reliability Testing

Instrument testing was conducted to ensure the validity and reliability of measurement items.

Table 6. Validity Test Results

Variable	Item Code	Corrected Item-Total Correlation	Status
Digital Literacy	DL1–DL5	0.511–0.782	Valid
Digital Innovation	DI1–DI5	0.534–0.768	Valid

Online Networking	ON1–ON4	0.488–0.734	Valid
Digital Tools Utilization	DT1–DT5	0.562–0.801	Valid
Business Growth	BG1–BG6	0.519–0.789	Valid

Source: Primary Survey Data Processed by Authors, 2026

All items exceeded the minimum correlation threshold of 0.30, indicating satisfactory construct validity.

Table 7. Reliability Test Results

Variable	Cronbach's Alpha	Status
Digital Literacy	0.842	Reliable
Digital Innovation	0.817	Reliable
Online Networking	0.791	Reliable
Digital Tools Utilization	0.864	Reliable
Business Growth	0.851	Reliable

Source: Primary Survey Data Processed by Authors, 2026

The Cronbach's Alpha values above 0.70 confirm strong internal consistency among all constructs.

Correlation Analysis

Pearson correlation analysis was conducted to examine the relationships among variables before regression analysis.

Table 8. Correlation Matrix

Variable	DL	DI	ON	DT	BG
Digital Literacy (DL)	1				
Digital Innovation (DI)	0.621	1			
Online Networking (ON)	0.544	0.517	1		
Digital Tools Utilization (DT)	0.673	0.598	0.551	1	
Business Growth (BG)	0.684	0.621	0.556	0.739	1

Source: Primary Survey Data Processed by Authors, 2026

The results reveal positive and statistically significant correlations among all variables. Digital tools utilization demonstrated the strongest correlation with business growth, indicating the importance of practical digital engagement in supporting SME performance.

Classical Assumption Testing

Before conducting regression analysis, classical assumption tests were performed.

Table 9. Classical Assumption Test Results

Test	Indicator	Result	Interpretation
Normality	Kolmogorov-Smirnov Sig.	0.200	Normal
Multicollinearity	VIF Range	1.214–2.106	No Multicollinearity
Heteroscedasticity	Glejser Test Sig.	>0.05	No Heteroscedasticity

Source: Primary Survey Data Processed by Authors, 2026

The findings confirm that the regression model satisfied all statistical assumptions.

Multiple Regression Analysis

Multiple regression analysis was conducted to examine the influence of digital entrepreneurial competence dimensions on business growth.

Table 10. Multiple Regression Results

Predictor Variable	Beta (β)	t-value	Sig.
Digital Literacy	0.241	2.98	0.004**
Digital Innovation	0.198	2.52	0.013*
Online Networking	0.172	2.11	0.037*
Digital Tools Utilization	0.306	3.75	0.000**
Model Summary	Value		
R ²	0.620		
Adjusted R ²	0.607		
F-value	46.811		
Sig. F	0.000		

Source: Primary Survey Data Processed by Authors, 2026

The regression model explains 62 percent of the variance in business growth, while the adjusted R² value of 0.607 indicates strong model stability. The F-test significance value below 0.001 confirms that the independent variables simultaneously influence business growth.

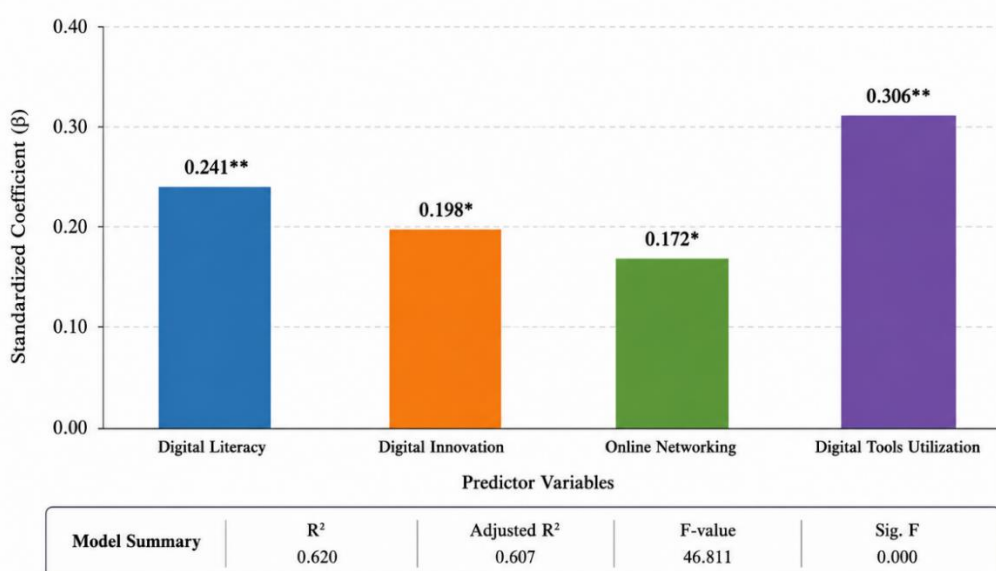


Figure 2. Regression Model Results

Source: Primary Survey Data Processed by Authors, 2026

Figure 2 presents the standardized regression coefficients obtained from the multiple regression analysis examining the influence of digital entrepreneurial competence dimensions on business growth. The findings indicate that digital tools utilization has the strongest positive effect on business growth ($\beta = 0.306$), followed by digital literacy ($\beta = 0.241$), digital innovation ($\beta = 0.198$), and online networking ($\beta = 0.172$). All predictor variables are statistically significant, indicating that higher levels of digital entrepreneurial competence contribute positively to the growth of women-owned fashion SMEs in Yogyakarta. The regression model explains 62.0 percent of the variance in business growth ($R^2 = 0.620$), indicating substantial explanatory power.

Among all predictors, digital tools utilization emerged as the strongest determinant of business growth. This finding suggests that active engagement with digital platforms significantly contributes to sales growth, customer expansion, and brand visibility. Digital literacy also demonstrated a substantial influence, emphasizing the importance of digital understanding in maximizing technological opportunities.

Digital innovation and online networking exhibited positive and statistically significant effects, although their influence was relatively weaker. These findings imply that strategic digital creativity and online relationships support SME development but may require longer-term institutional and relational strengthening to generate stronger business outcomes.

Digital Entrepreneurial Competence as a Strategic Driver of Women-Owned SME Growth

Based on the results of this study, it can be concluded that digital entrepreneurial competence is an important factor in the growth of women entrepreneurs in the field of fashion in the form of small and medium enterprises (SMEs) in Yogyakarta. The positive and significant effects of digital literacy, digital innovation, online networking and digital tools utilization suggest that digital capability has become not just a supplement to the business, but a strategic tool to maintain competitiveness in digitally mediated markets. This is in line with existing studies that highlight the growing importance of entrepreneurs' skills in adapting their strategies to the business environment while simultaneously applying technological capability in the growth of SMEs (Teng et al., 2022; Xia et al., 2024; Quansah et al., 2022; Pulka et al., 2021; Ibidunni et al., 2022).

Of these dimensions studied, digital tools utilization was the strongest predictor of business growth. The result is consistent with the findings of Gupta et al. (2024) and Diawati (2024) that social media systems, e-commerce systems, and digital operational technologies directly affect the accessibility of markets, customer interaction and visibility of businesses in the creative industries. The use of digital tools, within the domain of women entrepreneurs and SMEs in the fashion industry, seems to offer tangible and short-term commercial advantages by lowering operational barriers and opening up new markets beyond local reach. This study, however, builds on the existing literature by empirically showing that the use of digital tools can have a stronger effect on the growth of SMEs than other strategic facets like networking or innovation. This discovery is insightful for the operational digital competency in the context of resources-poor entrepreneurial environments.

Digital literacy also had a significant impact on the growth of businesses, further emphasizing that technology access is not enough without a good understanding and analytical capacity of digital literacy. It aligns with the insights of Omol (2024) and Lam et al. (2025), who highlight the importance of digital literacy for enabling entrepreneurs in navigating market information, adapting to platform dynamics, and responding to technological change more effectively. Digital literacy seems to act as a basic skill that boosts the capacity of entrepreneurs to reap the maximum benefits of digital transformation in this study (Mohamad et al., 2025; Ben Ghrbeia & Alzubi, 2024). The result adds to the theoretical discourse on digital entrepreneurship, in line with the notion that knowledge-based capability continues to play a core role in digitally oriented entrepreneurial ecosystems.

Digital innovation had a positive impact but it was a relatively smaller one on business growth. This finding corroborates previous arguments that innovation capability can often work through incremental adaptation of the organization that does not necessarily lead to a quick financial success (Usman et al., 2024; Patroni et al., 2022; Alshukri et al., 2024). Digital innovation, in fashion SMEs, might be about experimenting on branding, product presentation or creation of digital content,

which needs learning processes and investment of resources. The moderate influence found in this study may indicate that working women entrepreneurs in developing economies are not yet ready to engage in innovation-oriented transformation to a greater extent; rather they are more focused on digital efficiency.

While not the most impactful, online networking yielded the least impactful contribution to business growth. This result corroborates what Ikenga and Egbule (2024), and Fatmawati and Garad (2022) have found, with digital networking identified as a vital means of gaining access to collaboration, information and market opportunities. However, the relatively small impact found in this study suggests that women entrepreneurs may encounter difficulties when translating digital relationships into concrete business results. This condition might indicate some form of constraint in the process of trust formation, strategic collaboration ability, institutional support in networks of SMEs.

The study contributes to theory in a number of ways. First, it extends the body of digital entrepreneurship literature by operationalising digital entrepreneurial competence as a multidimensional construct as opposed to digitalisation as a monodimensional phenomenon. This study examines digital literacy, innovation, networking and utilization of digital tools as a single entity, allowing the authors to show the different contributions of each dimension to the outcomes of business growth. Second, the results add to the scholarship on entrepreneurship in developing economies by incorporating empirical evidence of women entrepreneurs in the context of culturally embedded creative industries which have been underrepresented in existing literature.

In practice, the results indicate that the capacity-building approach of applied digital skills, especially on the use of digital platforms, as well as digital literacy, should be given more weight in the development of SMEs by policy makers and SME development institutes. Entrepreneurs' ability to effectively utilize digital resources may be limited by technology training that does not include a component for effective management (Chotipurk et al., 2023; Nebolisa, 2024). The results also suggest the need to develop an ecosystem for networking opportunities and innovation support for women entrepreneurs facilitated by digital means.

Although this study has made contributions, there are certain limitations. However, the cross sectional design limits the study to causal interpretation and the study of women-owned fashion SMEs in Yogyakarta restricts the results to generalizability to other areas. Self-reported data could also contain perceptual biases. Longitudinal designs, comparative regional studies and mixed methods are however suggested for future studies to observe the dynamics of digital entrepreneurial competence in a long-term perspective, across various SME sectors and socio-economic settings. Furthermore, future research could consider exploring other factors that serve as mediators, such as entrepreneurial resilience, digital trust, or institutional support, to provide deeper insights into how digital competence contributes to business growth.

CONCLUSION

It is found that digital entrepreneurial competence has a significant contribution to the growth of the business of women's fashion SME in Yogyakarta. The results show that the use of digital tools and digital literacy has the greatest impact on business growth, and digital innovation and online networking have a positive impact on the development of the organization as well. The results of this work suggest that strategic knowledge of and use of digital technologies has become a key factor for competitiveness and sustainability in digitally mediated business environments.

Theoretically, the study adds by proposing digital entrepreneurial competence as a multidimensional construct of four components: digital literacy, digital innovation, online networking, and digital tools utilization. This study integrated the dimensions, allowing for a more complex view of the effects of various digital competencies on the growth of SMEs in a creative industry sector in a developing economy. The study's practical implications underscore the urgent need to bolster digital skill development initiatives for women entrepreneurs, focusing especially on real-world application of digital skills and platform usage. Even with these contributions, the study faces certain limitations such as cross-sectional design and its geographical scope on women-owned fashion SMEs in Yogyakarta that may limit a wider generalizability. It is, therefore, recommended that further studies be conducted using a longitudinal or comparative research design in various industrial sectors and regions. However, other factors like entrepreneurial resilience, institutional factors, and digital trust can be explored further to gain insights into the dynamics of digital entrepreneurship and SME growth.

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