TUNAS
JURNAL PENDIDIKAN GURU SEKOLAH DASAR
http://journal.umpr.ac.id/index.php/tunas
Vol. 11, No. 2, June 2026, PP. 115-124
ISSN: 2477-6076 (print); 2685-8169 (online), DOI: 10.33084/tunas.v11i2.12997

Digital Competence and Financial Literacy as Predictors of Student Entrepreneurial Business Growth in the Society 5.0 Era

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Article Information
Received: March 2026
Accepted: March 2026
Published: June 2026

ABSTRACT
Background: The emergence of Society 5.0 presents both challenges and opportunities for university students, particularly in entrepreneurship. *Aim:* This study aimed to analyze digital competence and financial literacy as catalysts for innovation and business growth among student entrepreneurs in the digital era. *Method:* A mixed-methods approach with a sequential explanatory design was employed. Data were collected from 115 students engaged in entrepreneurial activities through questionnaires, interviews, and focus group discussions. *Result and Discussions:* The quantitative findings showed that most students had moderate to high digital competence, particularly in using social media, e-commerce platforms, and basic design tools. However, their ability to use advanced digital tools, including digital analytics, paid advertising, and cybersecurity, remained limited. In terms of financial literacy, students demonstrated awareness of basic financial practices, such as separating personal and business finances and recording transactions, yet many still lacked strategic financial planning skills, including budgeting, investment risk assessment, and long-term financial forecasting. Pearson correlation analysis revealed a significant positive relationship between digital competence and student business growth ($r = 0.614$; $p < 0.01$), as well as between financial literacy and student business growth ($r = 0.587$; $p < 0.01$). These results indicate that higher levels of digital competence and financial literacy are associated with stronger business growth, including increased revenue, market expansion, and product innovation. *Conclusions:* The qualitative findings supported the quantitative results by identifying several barriers, such as limited practical training, insufficient curriculum integration, and lack of mentoring. This study concludes that strengthening digital and financial competencies is essential for fostering sustainable student entrepreneurship in the Society 5.0 era. Therefore, universities are encouraged to integrate practical digital skills, financial literacy, and entrepreneurial mentoring into entrepreneurship programs to better prepare students for real-world business challenges.
Keywords: Digital Competency, Financial Literacy, Predictors, Student Business Growth, Society 5.0 Era

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Citation Information: Ningsih, I. ., Nurbudiyani, I., & Fitriyanto, M. N. (2026). Digital Competency Analysis and Financial Literacy as a Catalyst for Innovation and Student Business Growth in the 5.0 Era. *Tunas: Jurnal Pendidikan Guru Sekolah Dasar*, 11(2), 115–124. https://doi.org/10.33084/tunas.v11i2.12997

INTRODUCTION

The Society 5.0 era brought significant changes in education and the business world. Students as the next generation are required to have digital competence and qualified financial literacy in order to innovate and develop their business sustainably (Ying Tseng, 2025). Digital competencies include the ability to use technology in the process of learning, working, and entrepreneurship (Drydakis, 2022). Financial literacy includes understanding personal and business financial management, investment, and the use of financial technology (fintech).

The phenomenon shows that many students are starting to enter the business world through digital platforms, such as e-commerce, social media, and marketplace applications (Susanto et al., 2021). In line with the increasingly wide access to technology, not all students have enough digital competencies to optimize business opportunities (Monteiro & Leite, 2021). Obstacles in digital marketing, financial management, and technology-based business development strategies are still encountered in students' business skills (Paradi et al., 2022).

Studies show that most students still have a low understanding of financial management (Nazah et al., 2022), including managing business capital (Aisa, 2021), managing cash flow (Rapina et al., 2023), and understanding investment risks and opportunities (Hidayat & Hartono, 2022). This causes many student businesses to not last long due to a lack of careful financial planning.

The government strongly supports the development of students' entrepreneurial skills through the Independent Entrepreneurship Program which is one of the Independent Curriculum Programs implemented in universities including the Muhammadiyah University of Palangka Raya. This program aims to improve students' entrepreneurial competence. This program is carried out in the Business Proposal Competition. This competition encourages students to develop creative and

innovative business ideas (Abushakra et al., 2019). This program provides provisions for students to enter the business world with more mature readiness, as well as innovate in the business world.

Based on the analysis of the success of the Independent Entrepreneurship Program implemented at the Muhammadiyah University of Palangka Raya, there are several shortcomings in the aspects of digital skills and financial literacy of students. One of the main drawbacks of this program is that it has not been optimal in the development of digital skills such as the use of e-commerce platforms, as well as data analysis to make business decisions based on real-time information. Another shortcoming lies in students' financial literacy about financial management, capital management, and proper financial decision-making is still relatively low. Overall, although the Independent Entrepreneurship Program at Muhammadiyah University of Palangka Raya has succeeded in providing initial provisions in developing an entrepreneurial spirit, strengthening digital skills and financial literacy, ensuring that students can adapt to the needs of an increasingly technology-based market and have financial management is also very important. Improvements in both aspects will greatly support the sustainability and success of student businesses in the long run (Coffay & Bocken, 2023).

Although previous studies have discussed digital competence, financial literacy, and student entrepreneurship, most of them have tended to examine these aspects separately. Limited research has explored how digital competence and financial literacy simultaneously function as catalysts for business innovation and growth among student entrepreneurs in the Society 5.0 era. In addition, previous studies have mostly emphasized general entrepreneurial competence, while the specific integration of digital skills, financial management ability, and student business growth within the context of university entrepreneurship programs remains underexplored. Therefore, this study addresses this gap by analyzing the relationship between digital competence, financial literacy, and student business growth using a sequential explanatory mixed-methods design. The novelty of this study lies in its integrated analysis of quantitative evidence and qualitative insights to explain how digital and financial competencies contribute to innovation, market expansion, revenue growth, and business sustainability among entrepreneurial students.

Based on the above background, some of the problem formulations in this study are: 1) What is the level of digital competence of students in supporting their business development and innovation in the 5.0 era? 2) What is the level of financial literacy of students in managing a business? 3) Is there a relationship between digital competence and financial literacy to student business growth in the 5.0 era? 4) What are the obstacles for students in improving digital competence and financial literacy to support business growth in the digital era?

The research has the following objectives: 1) Analyzing the level of digital competence of entrepreneurial students in the Society 5.0 era, especially in terms of the use of social media, e-commerce platforms, digital content creation, the use of business applications, and digital data analysis skills. 2) Evaluate the level of financial literacy of students, including the ability to prepare business budgets, manage cash flow, separate personal and business finances, conduct financial records, and understand investment risks and opportunities. 3) Identify the role of digital competence and financial literacy as a catalyst for student business innovation, especially in creating business ideas that are creative and adaptive to technological developments. 4) To find out the extent to which digital competence and financial literacy affect the growth and sustainability of student businesses, both in terms of increasing revenue, business expansion, and business resilience in the long term.

This research is important considering the role of students as agents of change and prospective entrepreneurs in the 5.0 era. The development of technology, understanding digital competencies and financial literacy are the keys to creating sustainable innovation. The results of this research are expected to contribute to the development of a higher education curriculum that is more adaptive to the needs of students in the digital business world and improve a more effective and highly competitive digital-based entrepreneurial ecosystem.

METHOD

The Mixed Method Research Method with Sequential Explanatory is a method used in this study to combine quantitative and qualitative analysis with a structured sequence (Nagpal et al., 2021). This approach was chosen because it provides a more comprehensive picture, which not only measures statistically, but also delves into the factors that influence the phenomenon being studied in more depth (Dehalwar & Sharma, 2024). The Research Flow used is: 1) Identification of problems through initial studies and observation of phenomena. 2) Formulation of problems and research objectives. 3) Theoretical studies and literature studies. 4) Preparation of research instruments. 5) Data collection through questionnaires, interviews, and documentation. 6) Data analysis and interpretation of results. 7) Preparation of conclusions and suggestions. Meanwhile, the procedure for this research is divided into 3 phases, namely:

Phase 1: Quantitative Data Collection and Analysis

a) Quantitative Data Collection: In the first stage, this study will use a survey or questionnaire designed to measure two main variables, namely digital competence and student financial literacy. This questionnaire will include questions related to students' digital skills in using technology for business, such as digital marketing, data management, and the use of technology-based business platforms. In addition, there will be questions regarding students' understanding of financial management, such as budget management, cash flow analysis, and business capital planning and management. In the first phase, which is

quantitative, the sampling technique used is purposive sampling, which is a deliberate selection of samples based on certain criteria. The sample in this study is students who are actively running businesses or are involved in entrepreneurial activities, because they are relevant subjects to assess digital competence and financial literacy in the context of business development. Data collection was carried out using instruments in the form of questionnaires or surveys designed to measure two main variables, namely digital competence and financial literacy. The questionnaire includes questions about students' skills in utilizing technology for business as well as their understanding of managing business finances. The distribution of questionnaires was carried out both online and offline to students who met the sample criteria.

b) Quantitative Data Analysis: After the questionnaire is distributed to a sample of students involved in entrepreneurial activities, the collected data will be analyzed using descriptive statistical techniques to determine the level of digital competence and financial literacy. In addition, correlation or regression analysis will be used to see the extent to which digital skills and financial literacy are related to student business growth, both in terms of turnover, number of customers, or product/service improvement. These findings will provide an overview of the relationship between these two variables and the development of student businesses in the digital era.

Phase 2: Qualitative Data Collection and Analysis

a) Qualitative Data Collection: Based on the findings obtained from the quantitative phase, the second phase aims to delve deeper into the reasons and factors that affect students' digital competence and financial literacy. In this case, if the quantitative results show that many students lack good digital skills or have difficulty managing their finances, then this phase will involve in-depth interviews and focus group discussions with students to explore the obstacles and challenges they face in improving both skills. The interview also aims to understand the context and experience of students in managing their businesses as well as how they utilize digital technology and financial literacy in business management.

Table I. Digital Competency Level Questionnaire Statement

No.	Indicator	Statement
1	Ability to leverage social media for digital marketing	I am able to use social media to promote my business products or services.
2	Ability to manage business data with spreadsheet apps	I can manage customer data and business transactions using Excel or Google Sheets.
3	Mastery of the use of e-commerce platforms	I understand how to use e-commerce platforms such as Shopee or Tokopedia.
4	Digital content production capabilities for promotion	I am able to create digital content (images, videos, text) for the promotion of my business.
5	Utilization of digital applications for business operational management	I am used to using digital tools to record stock and business transactions.
6	Understanding of paid digital advertising	I know how to advertise products through Google Ads or Meta Ads.
7	Ability to use digital analytics data for evaluation	I use social media analytics tools to analyze the performance of my promotions.
8	Digital graphic design capabilities for business needs	I'm used to using design apps like Canva or Photoshop for business needs.
9	Knowledge of digital data security in business	I know how to keep customers' digital data and business transactions safe.
10	Digital technology integration capabilities for business expansion	I can integrate various digital platforms to expand my business reach.

Furthermore, in the second phase which is qualitative, purposive sampling or snowball sampling techniques are used again to select informants who have certain characteristics based on the results of the quantitative phase, such as students with low or high digital competence, as well as those who experience obstacles in financial literacy. The data collection technique in this phase was carried out through in-depth interviews and focus group discussions. Interviews aim to explore students' individual experiences in facing challenges in improving digital and financial skills, while allow students to share perspectives and discuss solutions collectively. The instruments used are interview guides and discussion guides that have been prepared based on the focus of the research. This combination of sampling and data collection techniques allows the research to obtain comprehensive data, both quantitatively and qualitatively, to answer research questions in depth and contextually.

b) Qualitative Data Analysis: Data obtained from in-depth interviews and focus group discussions will be analyzed using thematic analysis. The purpose of this analysis is to identify key themes related to the obstacles and barriers students face in improving their digital competence and financial literacy. For example, whether they have difficulty accessing digital training, or lack of practical knowledge regarding efficient cash flow management. These qualitative findings will shed more depth on the quantitative results and

provide insight into factors that cannot be measured with numerical data.

Phase 3: Integration and Presentation of Research Results

a) After the quantitative and qualitative data are analyzed separately, the next stage is to combine the findings from the two phases. Quantitative data will provide an overview of the relationship between digital competencies, financial literacy, and student business growth, while qualitative findings will enrich the analysis by explaining the reasons and context behind these relationships. The findings of this integration will provide a more complete and comprehensive insight into the influence of digital competencies and financial literacy on student business success.

b) Presenting the results of quantitative and qualitative analysis in an integrated manner, as well as providing recommendations based on these findings to improve students' digital competence and financial literacy to support their business growth and innovation in the 5.0 era.

The subject of this study is 115 students who are involved in entrepreneurial activities or programs such as the Independent Entrepreneurship Program. The questionnaire used a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree. Each variable consisted of 10 statement items, so the maximum score for each variable was 50. The digital competence variable measured students' ability to use social media, e-commerce platforms, digital content, business applications, digital analytics, paid advertising, and data security. The financial literacy variable measured students' ability to prepare budgets, record transactions, separate personal and business finances, understand profit and loss, manage capital, and assess financial risks. Meanwhile, the student business growth variable measured revenue growth, market expansion, product innovation, customer growth, brand awareness, networking, scalability, and business sustainability.

In this case, the students involved are students of the Economics Education, Elementary School Teacher Education and Counseling Guidance study programs. The research subjects filled out a questionnaire to find out the level of digital competence and financial literacy. The indicators of the level of digital competency are as follows.

Table II. Financial Literacy Questionnaire Statement

No.	Indicator	Statement
1	Ability to prepare and monitor business budgets	I am able to compile and follow my business financial budget every month.
2	Ability to record financial transactions systematically	I always record my business income and expenses regularly.
3	Separation of personal and business finances	I separate personal money from business money in daily financial activities.
4	Understanding of income statements and simple accounting basics	I understand how to calculate profit and loss from the business activities I run.
5	Financial planning skills (short term and long term)	I have short-term and long-term financial goals for my business.
6	Understanding of the concept of emergency funds in financial risk management	I know the importance of an emergency fund in running a business.
7	Ability to evaluate the risks and benefits of using credit or loans	I understand the risks of using loans for venture financing.
8	Ability to prepare and manage capital plans (simple capital budgeting)	I am able to make realistic business capital planning according to business needs.
9	Efficiency in business operational cost management	I know how to manage material spending effectively.
10	Ability to prepare basic financial statements (cash statements, profit and loss, etc.) for business evaluation	I once made a simple financial report to evaluate the performance of my business.

Table III. Student Business Innovation and Growth Questionnaire Statement

No.	Growth Aspects	Indicator
1	Turnover/Revenue	Increase in business turnover over the last 6 months
2	Market Reach	Market expansion through digital media or online marketplace
3	Product/Service Innovation	The existence of product development or innovation according to customer needs
4	Use of Technology	Utilization of digital technology for business efficiency and management
5	Customer Enhancement	Increase in the number of regular or new customers in a given period
6	Brand Awareness	The more known or known the business is among consumers/the public
7	Collaboration/Networking	The formation of new partnerships, collaborations, or business networks
8	Adaptasi Digital	Adaptability to technological developments and new digital trends
9	Business Scalability	There is a plan or realization to enlarge the scale of the business (branches, employees, capital, etc.)
10	Business Sustainability	Business resilience in the face of market challenges and changes

Based on the results of quantitative data analysis of 115 respondents, a validity and reliability test was carried out to ensure the quality of research instruments consisting of two variables, namely digital competence and financial literacy. The validity test using Pearson Product Moment correlation showed that all items in each variable had a calculated r value greater than the r of the table (0.183) with a significance of < 0.05, so that all question items were declared valid. Furthermore, the reliability test using Cronbach's Alpha showed that the digital competency instrument had a value of $\alpha = 0.872$ and financial literacy of $\alpha = 0.891$. Because both values are above 0.70, the instrument is declared to have a high level of reliability. Thus, the questionnaire instrument used in this study has met the requirements for validity and reliability, and is suitable for measuring the digital competence and financial literacy of entrepreneurial students.

After filling out the questionnaire, interviews were also conducted to explore the respondents' experiences and views on the impact of digital competence and financial literacy on the business developed. Interview subjects were selected purposively based on questionnaire scores, which represented high, medium, and low categories in terms of digital competence and financial literacy, and considered activeness in running a business. In the qualitative phase, in-depth interviews were conducted with nine selected student entrepreneurs representing high, medium, and low categories of digital competence and financial literacy. Each category was represented by three students. In addition, one focus group discussion was conducted with eight student entrepreneurs to explore their collective experiences, challenges, and needs in developing digital competence and financial literacy. The informants were selected purposively based on questionnaire scores and their active involvement in entrepreneurial activities. The questions in the interview are as follows.

Table IV. Interview Questions

No.	Indicators	Question
1	Increase in business turnover over the last 6 months	What are some of the challenges you face in using digital technology to support your business?
2	Market expansion through digital media or online marketplace	What do you think digital skills are most important in running a business today? Why?
3	The existence of product development or innovation according to customer needs	Have you ever had difficulty marketing your product/service online? Tell us about your experience.
4	Utilization of digital technology for business efficiency and management	How do you manage your business finances on a daily basis? What are some of the difficulties that often arise?
5	Increase in the number of regular or new customers in a given period	How well do you understand the importance of recording cash flow in business? Do you do it regularly?
6	The more known or known the business is among consumers/the public	What are the main obstacles that make it difficult for you to make business financial planning?
7	The formation of new partnerships, collaborations, or business networks	Do you feel that you have received enough training or information on financial and digital literacy from your campus or environment?
8	Adaptability to technological developments and new digital trends	In certain situations, how do you make financial decisions for your business?
9	The existence of a plan or realization to enlarge the scale of the business	What kind of support or training do you think you need most to improve your digital and financial skills?
10	Business resilience in the face of market challenges and changes	If you've ever attended an entrepreneurship training or workshop, what have you felt the most benefit? Does it help improve your competence?

Supporting data is in the form of official documents of the campus entrepreneurship program, PWM implementation reports, journal articles, and relevant literature. Thus, the instruments of this research are Questionnaires (Quantitative Data), Interview Sheets and Documents (Qualitative Data).

The data analysis carried out in this study is quantitative and qualitative data analysis. Quantitative data analysis in this study was carried out with the help of SPSS or Microsoft Excel through descriptive statistics to determine the percentage of students' digital competency level and financial literacy, as well as simple correlation analysis to see the relationship between the two variables and student business growth indicators, such as increased turnover or business expansion. Meanwhile, qualitative data analysis was carried out based on the model of Miles and Huberman (1994) which included data reduction, data presentation, and conclusion drawn (Anisa et al., 2024). Interview and FGD data were reduced to filter important information, then presented in the form of narratives and thematic quotes, and then verified through data triangulation to gain a deep understanding of the challenges and experiences of students in developing digital competencies and financial literacy in running a business.

RESULTS AND DISCUSSION

Results

Students' Digital Competency Level in Supporting Business Innovation in the 5.0 Era

The results of quantitative data analysis show that the majority of entrepreneurial students have a moderate to high level of digital competence. Most respondents stated that they were able to utilize social media and digital platforms such as e-commerce to market products. They also show proficiency in using simple applications such as Google Sheets and Canva to support business activities. However, only a small percentage have made the most of the features of digital analytics, paid advertising, and cybersecurity. This shows that even though students are familiar with technology, not all are able to maximize it to support long-term business strategies.

Table V. Percentage of Students' Digital Competency

Category	Number of Students	Percentage (%)
Low	28	24%
Keep	54	47%
Tall	33	29%
Total	**115**	**100%**

Analysis per indicator shows that most college students feel confident in using social media (82%) and e-commerce platforms (70%) to market products. Around 65% say they are able to create digital content independently using a simple design application like Canva. However, only 38% of college students say they understand Google Ads or Meta Ads features, and only 33% actively use social media analytics tools to evaluate promotional strategies.

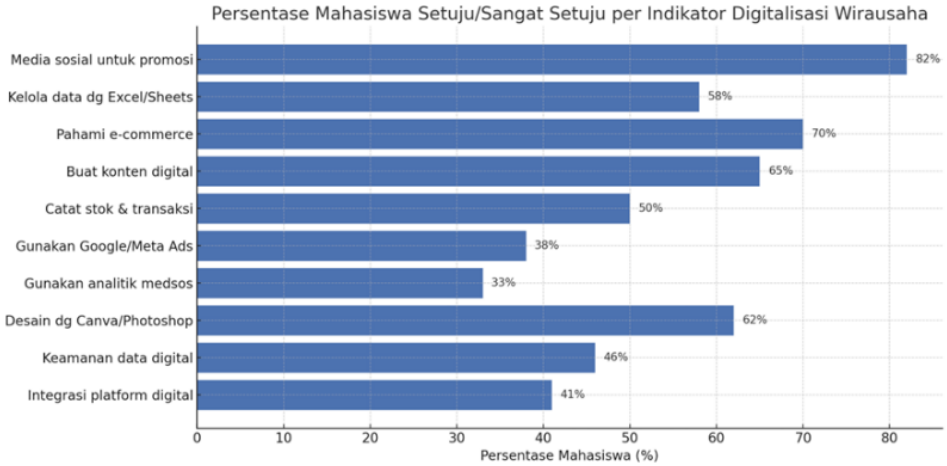

Figure I. Analysis Graph Per Indicator of Students' Digital Competency Level

Student Financial Literacy Level in Business Management

In the aspect of financial literacy, it was found that most students are used to recording business expenses and income on a regular basis, as well as understanding the importance of separating personal finance from business. However, only some are able to prepare a business budget systematically or have a long-term financial plan. Many students are also still hesitant in their decision-making regarding lending and capital management, which suggests that a deep understanding of financial risk still needs to be strengthened. This is proof that practical financial skills are indispensable in shaping the resilience and sustainability of student businesses.

Table VI. Percentage of Student Financial Literacy Level

Category	Number of Students	Percentage (%)
Low	22	19%
Keep	49	43%
Tall	44	38%
Total	**115**	**100%**

The results of the analysis of 10 indicators of student business growth show that most students have made positive progress, especially in the aspects of digitalization and innovation. As many as 70% of students have succeeded in expanding market reach through digital platforms, 68% have utilized technology for business efficiency, and 66% have innovated products according to consumer needs. The increase in the number of customers (64%) and business turnover (62%) also shows the tangible results of these efforts. However, there are still weaknesses in terms of business scalability (45%), business sustainability (50%), and cooperation and networking (53%), which indicates that some students do

not have long-term expansion plans or the ability to build strategic business collaborations. Therefore, further assistance is needed in strengthening business growth and sustainability strategies so that students are not only able to survive, but also develop sustainably in the era of digital competition.

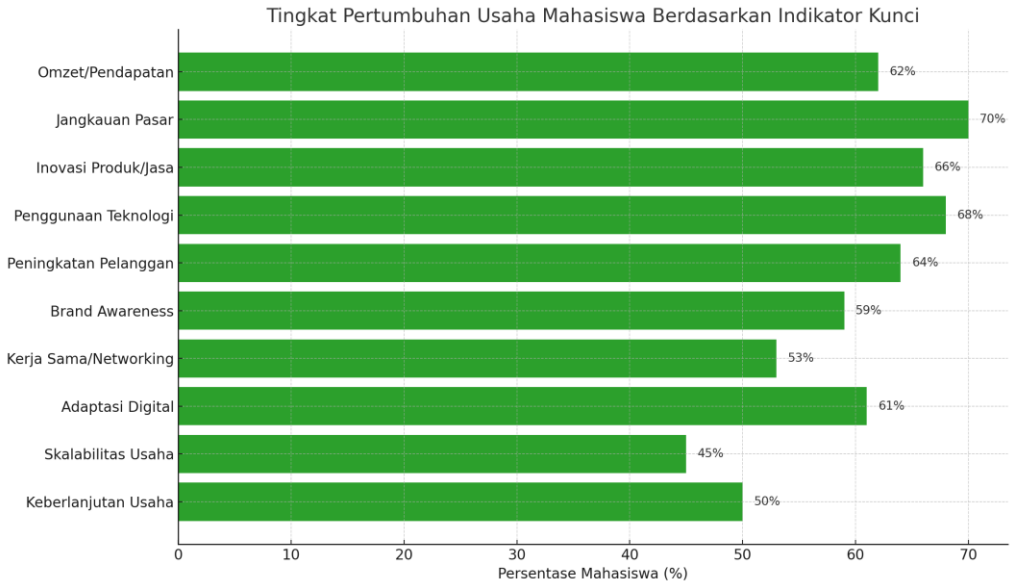

Figure II. Analysis Graph by Indicator of Student Financial Literacy Level

The Relationship between Digital Competence and Financial Literacy to Business Growth

A simple correlation test obtained the results that there is a significant positive relationship between digital competence and financial literacy on student business growth indicators. Respondents with high scores in both variables tended to show increased turnover, expanded market reach, and better product innovation. These findings reinforce the argument that the combination of digital skills and financial management proficiency is an important foundation for students to build sustainable businesses, especially in an ever-evolving digital ecosystem. The following are the results of descriptive statistical analysis and the correlation of Pearson product moment output from SPSS used in this study.

Table VII. Descriptive Statistics

Variable	N	Mean	Hours of deviation	Minimum	Maximum
Digital Competence	115	38.47	6.12	24	50
Financial Literacy	115	40.13	5.89	25	50
Business Growth	115	37.68	7.03	20	50

Table VIII. Pearson Product Moment Correlation

Correlation	r (Pearson Correlation)	Sig. (2-tailed)
Digital Competence & Business Growth	0.614**	0.000
Financial Literacy & Business Growth	0.587**	0.000

Based on the results of descriptive statistical analysis of 115 respondents, it was found that the average digital competency score of students was 38.47, financial literacy was 40.13, and business growth was 37.68 from a maximum scale of 50. All three variables have a relatively low standard deviation, indicating a fairly even distribution of data. Furthermore, the results of the Pearson correlation test showed a significant positive relationship between digital competence and business growth ($r = 0.614$; $p < 0.01$) as well as between financial literacy and business growth ($r = 0.587$; $p < 0.01$). This shows that the higher the digital competence and financial literacy of students, the higher the growth of the business they run.

These results corroborate the finding that students who have mastery of digital technology and good financial skills tend to experience more significant business growth. They are able to utilize digital media to reach a wider market, create product innovations, and manage capital and cash flow efficiently. In interviews, they stated that their understanding of technology and finance helps them be more confident in making business decisions and adapting to the development of the Society 5.0 era. Therefore, strengthening these two aspects is an important investment in fostering young entrepreneurs in the university environment.

Obstacles Faced by Students in Improving Digital Competence and Financial Literacy

Based on the results of in-depth interviews and Focus Group Discussions with several students who are active in entrepreneurial activities, a number of main obstacles were found that hinder the improvement of digital competence and financial literacy. One of the most widely expressed challenges

is the lack of access to digital training that is applicable and according to the needs of entrepreneurial students. Some students admitted that they had to study independently because there was no systematic training available from the campus.

"I find it difficult to learn how to create engaging promotional content and digital marketing strategies. So far, I've only learned from YouTube, but I'm confused about applying it in my business."

(Interview, Respondent 4, Student of elementary school teacher education study program, 22 years old)

Another obstacle lies in the lack of integration of financial literacy in the learning curriculum, which causes students to not have a basic understanding of business financial management. Many rely on intuition or direct experience without clear guidance or reference.

"My problem is in finance. Sometimes I use business money for personal purposes because I am not used to recording or making a budget. There are also no special courses on business finance on campus."

(Interview, Respondent 7, Student of Economics Education Program, 21 years old)

In the Forum Group Discussion, the participants also expressed their hope for integrated training that combines technology, finance, and entrepreneurial skills from experienced speakers. They feel that entrepreneurship coaching has tended to be general, not answering the real needs they face in running a digital business.

"In my opinion, it would be very helpful if there was direct training from business actors, for example being taught to make financial reports while running a business, or digital marketing strategies that can be directly practiced."

(Forum Group Discussion, Student of Counseling Guidance Program, 20 years old)

These findings indicate that systemic support from educational institutions, including adaptive curricula and relevant coaching programs, is needed to enable students to improve digital competence and financial literacy in a sustainable manner. Without this, students will find it difficult to adapt to the demands of the business world in the era of Society 5.0 which is very dynamic and technology-based.

In-depth interviews and FGDs provide a contextual picture of the challenges faced by students. Some students revealed that limited access to applicable digital training and managerial skills is the main obstacle. On the other hand, the lack of financial education integrated into the curriculum makes many students self-taught, and even that is often limited to hands-on experience in the field. In the discussion forum, students also conveyed the need for integrated training that combines aspects of technology, financial planning, and mentoring from experienced business actors. This shows that systemic support from educational institutions is needed in equipping students to face business challenges in the era of Society 5.

Discussion

The results of this study reveal that entrepreneurial students in the Society 5.0 era have shown an initial mastery of various digital and financial skills that are important foundations in building a business. In terms of digital competence, students are used to using social media and digital platforms to promote their business, as well as using simple applications to support daily business activities such as recording transactions or designing promotional materials. This shows that the student generation already has strong basic technology capital (Aisa, 2021). Nevertheless, advanced digital skills such as the utilization of social media analytics features, paid digital advertising, and data security are still challenging (Ye et al., 2024). The mastery of technical technology has not been fully balanced with the strategic ability to apply this technology to analyze data, optimize promotional performance, and design long-term digital strategies (Hutsaliuk et al., 2024).

In terms of financial literacy, most students have the awareness to separate personal finances from business and record income and expenses regularly. However, this conceptual understanding has not fully developed into a structured and strategic practice in business financial management (Permata, 2023). There are still many students who are not used to compiling a systematic business budget, designing financial projections, and managing business capital and risk professionally. This condition shows that students' financial skills tend to be still at the operational level, not yet at the level of planning and evaluation (OECD (2024). This is important to note, given that careful financial planning and data-driven decision-making capabilities are key to business sustainability.

Furthermore, the findings of the study also show that there is a positive relationship between digital competence and financial literacy and the growth of student businesses (Kristian et al., 2024). Students who are able to integrate technology and financial skills tend to be more innovative, able to reach a wider market, and run a business in a more structured and adaptive manner (Hamzat et al., 2023). In this context, the two competencies are inseparable—digital competencies allow students to create opportunities and expand business networks (Ostanina et al., 2023), while financial literacy provides a framework to maintain business stability and sustainability (Burchi et al., 2021).

The qualitative findings reinforce this picture, where students reveal a number of challenges in improving their competence, ranging from a lack of relevant training, limited access to mentors or business practitioners, to the lack of integration of digital and financial skills materials into the on-campus learning curriculum. Students feel that they have to study independently without adequate support from the academic environment (Setyaningsih et al., 2023). They also conveyed the need for more applicable training, not only theory-based, but directly touching the business practices they run. This indicates that strengthening students' entrepreneurial

competencies is not enough only through a curricular approach, but also needs to be through a comprehensive and contextual coaching ecosystem (Rosienkiewicz et al., 2024).

Thus, the results of this study confirm that digital competence and financial literacy are two main pillars that complement each other in supporting innovation and student business growth. For this reason, universities need to design mentoring programs that target both aspects simultaneously, as well as build active collaboration with the business world, so that students are not only able to survive in running a business, but also are able to develop, innovate, and compete in the midst of an increasingly rapid digital transformation flow.

CONCLUSION

This study concludes that entrepreneurial students in the Society 5.0 era have a level of digital competence that is generally classified as medium to high, especially in the use of social media, e-commerce platforms, and simple design applications to support business activities. However, the use of advanced digital technologies such as paid advertising, promotional data analysis, and digital system integration is still not optimal. On the other hand, students' financial literacy shows that even though there is awareness in recording finances and separating personal and business finances, the ability to plan budget, manage capital, and understand financial risks still needs to be improved. This study also found that there is a significant positive relationship between digital competence and financial literacy with the growth of student businesses, characterized by increased turnover, market expansion, and product and service innovation. The main obstacles faced by students in developing these two competencies include lack of access to applicable training, limited curriculum support, and lack of practical assistance. Therefore, strengthening entrepreneurship education in higher education needs to include the integration of digital skills and financial literacy contextually, so that students are able to innovate and maintain business sustainability in the midst of the challenges of the digital era.

Future research is recommended to expand the scope of participants by involving student entrepreneurs from different universities and regions to obtain more generalizable findings. Further studies may also use longitudinal designs to examine how digital competence and financial literacy influence student business growth over time. In addition, future research should consider using more objective business performance data, such as financial reports, sales records, or digital marketing analytics, to strengthen the validity of student business growth indicators.

ACKNOWLEDGMENTS

The authors would like to express their deepest appreciation and gratitude to the Ministry of Higher Education, Science, and Technology of the Republic of Indonesia and the Directorate General of Research and Community Service for their support and contribution to the implementation of this research. The authors also extend sincere gratitude to the leadership of Muhammadiyah University of Palangkaraya, especially the Rector and all related units, for providing support and opportunities to conduct this research as part of academic development and contribution to higher education.

Gratitude is also expressed to the respondents, particularly student entrepreneurs, supervisors, and all parties, both institutional and individual, who have provided assistance, input, and contributions directly or indirectly during the process of data collection, discussion, and preparation of this scientific article. The authors also thank their families for their prayers, moral support, and encouragement throughout the completion of this research. May all the support and kindness given be rewarded by Allah SWT.

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