

The Influence of Digital Literacy, Innovation, and Creativity on the Performance of Digital Entrepreneurs in the Creative Economy Sector

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Abstract

This study aims to analyze the influence of digital literacy, innovation, and creativity on the performance of digital entrepreneurs in the creative economy sector. The approach used was quantitative with a survey method of digital-based creative economy business actors. Data were collected through a Likert-scale questionnaire and analyzed using multiple linear regression. The results of the study indicate that digital literacy, innovation, and creativity have a positive and significant effect, both partially and simultaneously, on the performance of digital entrepreneurs. Digital literacy plays a role in improving the ability of business actors to utilize technology to expand markets and improve operational efficiency. Innovation drives the creation of added value through product and service development, while creativity strengthens competitiveness through differentiation and attractive promotional strategies. These findings confirm that strengthening the capacity of digital literacy, innovation, and creativity is a strategic factor in improving the performance and sustainability of businesses in the creative economy sector, especially in facing the increasingly competitive dynamics of the digital economy.

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1. INTRODUCTION

The development of digital technology has transformed the production, distribution, and marketing structures in the creative economy sector globally. In many developing countries, digital transformation has opened up significant opportunities for creative economy players to expand markets, improve operational efficiency, and develop new business models based on digital platforms (Autio et al., 2024). However, these benefits will not automatically materialize without adequate local capabilities, particularly digital literacy, innovation capacity, and business creativity (UNCTAD, 2025).

The Timor-Leste context exhibits unique characteristics: a still-developing digital infrastructure, a digital capacity gap among youth and MSMEs, and efforts by the government and development partners to promote digital inclusion and creative entrepreneurship (UNICEF, 2025; UNCDF, 2023). Studies mapping the country's innovation and entrepreneurship ecosystem highlight barriers to access, financing, and limited digital skills that impact entrepreneurs' ability to capitalize on e-commerce and digital platform opportunities. These findings indicate that digital literacy is not simply a technical skill but also a determining factor in the ability to innovate and express commercial creativity, which impacts business performance.

Theoretically, digital entrepreneurship literature positions digital literacy as a crucial human capital that facilitates technology adoption, experimentation with new business models, and access to digital market networks (Autio et al., 2024). Furthermore, innovation and creativity are seen as driving forces for product/service differentiation and value-added creation (UNESCO, 2023). Therefore, the relationship between digital literacy, innovation, and creativity on digital entrepreneur performance needs to be systematically tested—especially in local contexts like Timor-Leste, where socio-cultural dynamics and institutional constraints can moderate these effects.

From a policy and practice perspective, development agency reports indicate initiatives to strengthen the digital ecosystem and youth entrepreneurship in Timor-Leste, including incubation programs, ICT skills training, and e-commerce readiness assessments (UNDP, 2025; UNCTAD, 2025). However, initial evaluations indicate that these interventions have not fully addressed the underlying challenges of functional digital literacy, systemic innovation capacity, and opportunities to monetize local creativity, which in turn contribute to performance variability across digital entrepreneurs in the creative sector. Quantitative research that measures the relationships between these variables is crucial for providing context-based policy evidence.

Therefore, this study aims to empirically examine the influence of digital literacy, innovation, and creativity on the performance of digital entrepreneurs in the creative economy sector in Timor-Leste. The findings are expected to not only fill the gap in empirical literature in the Timor-Leste context but also provide practical recommendations for policymakers, training institutions, and development stakeholders in designing capacity-building programs focused on the applied dimensions of digital literacy, innovation support systems, and mechanisms for commercializing local creativity (World Bank, 2023; USAID, 2022).

Problem Formulation

- a) What is the level of digital literacy, innovation, and creativity of digital entrepreneurs in the creative economy sector?
- b) Does digital literacy have a significant impact on the performance of digital entrepreneurs in the creative economy sector?
- c) Does innovation have a significant impact on the performance of digital entrepreneurs in the creative economy sector?
- d) Does creativity have a significant influence on the performance of digital entrepreneurs in the creative economy sector?
- e) Do digital literacy, innovation, and creativity simultaneously influence the performance of digital entrepreneurs in the creative economy sector?

Research purposes

- 1) To analyze the level of digital literacy, innovation, and creativity of digital entrepreneurs in the creative economy sector.
- 2) To test the influence of digital literacy on the performance of digital entrepreneurs in the creative economy sector.
- 3) To test the influence of innovation on the performance of digital entrepreneurs in the creative economy sector.
- 4) To test the influence of creativity on the performance of digital entrepreneurs in the creative economy sector.
- 5) To analyze the influence of digital literacy, innovation, and creativity simultaneously on the performance of digital entrepreneurs in the creative economy sector.

2. METHOD

a. Types and Approaches of Research

This study employed a quantitative approach with an explanatory research method, which aims to explain the causal relationship between independent and dependent variables through empirical hypothesis testing (Creswell & Creswell, 2018). This quantitative approach was chosen because it allows researchers to objectively measure the influence of digital literacy, innovation, and creativity on digital entrepreneur performance through statistically analyzed numerical data (Sugiyono, 2022).

b. Research Design

The research design used was a cross-sectional survey, which involves data collection conducted at a specific point in time from respondents who are the research objects (Sekaran & Bougie, 2016). This design is used to obtain a simultaneous overview of the condition of the research variables and the relationships between them.

c. Location and Time of Research

This research was conducted among digital entrepreneurs in the creative economy sector in Timor-Leste. The location was selected based on the development of the digital entrepreneurship ecosystem, which is still in its infancy, and its relevance to the research objectives. The research period is planned to last approximately four months, encompassing preparation, data collection, analysis, and report preparation.

d. Population and Sample

1.1. Population

The population in this study is all digital entrepreneurs operating in the creative economy sector in Timor-Leste, who utilize digital platforms in the production, marketing, and distribution of products/services.

1.2. Sample

Sampling technique using purposive sampling, namely the selection of respondents based on certain criteria relevant to the research objectives (Sugiyono, 2022). The respondent criteria include:

- a. Business actors in the creative economy sector,
- b. Using digital media in business operations,
- c. Have been running a business for at least 1 year.

The sample size was determined by considering regression analysis, which was a minimum of 10 times the number of research variables (Hair et al., 2019). With four variables, the minimum sample size was 40 respondents, but this study targeted a minimum of 100 respondents to increase the validity of the results.

e. Data Collection Techniques

Data were collected using a closed questionnaire with a five-point Likert scale, namely:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

The use of the Likert scale aims to systematically measure respondents' attitudes, perceptions, and assessments of research variables (Likert, 1932). The questionnaire was distributed online and offline to respondents who met the criteria.

f. Data Analysis Techniques

Data analysis is carried out using statistical software (e.g. SPSS or SmartPLS)

3. RESULTS AND DISCUSSION (12 PT)

RESEARCH RESULT

1) Respondent Characteristics

Based on the results of data collection through a questionnaire on digital entrepreneurs in the creative economy sector, respondents came from various subsectors, such as culinary, fashion, crafts, graphic design, and digital content. The majority of respondents were in the productive age range, namely 21–40 years old, with educational backgrounds ranging from secondary to tertiary. Most respondents had run a business for 1–5 years and actively utilized social media, marketplaces, and digital applications in their business operations. This condition indicates that respondents have sufficient experience in managing digital-based businesses and are relevant to provide accurate information related to the research variables.

2) Descriptive Analysis of Research Variables

a. Digital Literacy

Descriptive analysis results indicate that respondents' digital literacy levels are moderate to high. Most respondents are able to use digital devices, manage social media, conduct online transactions, and utilize digital marketing applications. However, limitations remain in data security, digital marketing analysis, and the use of advanced technologies such as paid advertising and digital analytics. These findings indicate that business actors' digital literacy has developed, but is not yet optimal enough to support sustainable business expansion.

b. Innovation

The innovation variable performed fairly well. Respondents were relatively active in product development, packaging modifications, service diversification, and the use of new digital platforms. However, the innovations undertaken were still dominated by incremental innovation (gradual improvements), rather than radical innovation that results in significantly new products or business models. This indicates that limited resources, access to information, and ecosystem support remain major obstacles to innovation development.

c. Creativity

The research results show that respondents' creativity is high. Entrepreneurs are capable of generating new ideas, creating unique product designs, and leveraging digital trends to attract consumers. Creativity is often demonstrated in content promotion strategies, product storytelling, and branding through social media. This high level of creativity is a crucial asset in facing competition in the dynamic creative economy sector.

d. Digital Entrepreneur Performance

Digital entrepreneurs' performance is considered fair to good. This is reflected in the increase in customer numbers, revenue growth, expanded market reach, and increased interaction with consumers through digital platforms. However, some respondents still experience income fluctuations and limitations in maintaining customer loyalty. This indicates that the use of digital technology has had a positive impact, although it is not evenly distributed across all businesses.

3) Regression Analysis Results

Based on the results of multiple linear regression analysis, it was obtained that:

- a. Digital literacy has a positive and significant impact on the performance of digital entrepreneurs.
- b. Innovation has a positive and significant impact on the performance of digital entrepreneurs.
- c. Creativity has a positive and significant influence on the performance of digital entrepreneurs.

Simultaneously, digital literacy, innovation, and creativity significantly influence digital entrepreneur performance. These results indicate that improvements in these three independent variables will be followed by improved digital-based business performance.

DISCUSSION

a. The Influence of Digital Literacy on Digital Entrepreneur Performance

The research results show that digital literacy plays a crucial role in improving the performance of digital entrepreneurs. Entrepreneurs with high levels of digital literacy are better able to optimally utilize social media, marketplaces, and digital payment applications. This impacts operational efficiency, market expansion, and improved service quality. These findings reinforce the view that digital literacy is a key asset in navigating the digital economy era, particularly in developing countries that still face limited infrastructure and human resources.

b. The Influence of Innovation on Digital Entrepreneur Performance

Innovation has been proven to contribute significantly to improving business performance. Businesses that consistently develop products and services are able to maintain competitiveness and attract consumer interest. Innovations in packaging, digital marketing, and service systems provide added value that differentiates products from competitors. However, the dominance of incremental innovation demonstrates the need for policy support, financing, and mentoring to enable businesses to develop more strategic and sustainable innovations.

c. The Influence of Creativity on Digital Entrepreneur Performance

Creativity is a dominant factor in the creative economy sector. Research shows that creativity plays a crucial role in building brand identity, increasing customer engagement, and expanding promotional reach. Creative entrepreneurs are able to effectively leverage digital trends, visual branding, and interactive content. The high level of creativity among respondents demonstrates the creative economy sector's significant potential as a driving force for digital-based economic growth.

d. The Simultaneous Influence of Digital Literacy, Innovation, and Creativity

The results of a simultaneous analysis show that digital literacy, innovation, and creativity complement each other in shaping the performance of digital entrepreneurs. Digital literacy serves as a technical foundation, innovation plays a role in driving business development, and creativity is a source of product differentiation. The combination of these three factors creates a sustainable competitive advantage. Without adequate digital literacy, innovation and creativity are difficult to optimally commercialize. Conversely, without innovation and creativity, the use of digital technology will not generate significant added value.

4. CONCLUSION

Based on the research results and discussion, it can be concluded that digital literacy, innovation, and creativity have a positive and significant influence on the performance of digital entrepreneurs in the creative economy sector. Entrepreneurs with good digital literacy skills are able to optimally utilize technology to improve operational efficiency and expand market reach, while innovation plays a role in creating added value through the development of products, services, and business models that are adaptive to market changes. On the other hand, creativity is a crucial factor in building differentiation, strengthening brand identity, and increasing product appeal amidst increasingly fierce digital competition. Simultaneously, these three variables complement each other and form a sustainable competitive advantage, so strengthening digital literacy, supporting innovation, and

developing creativity need to be a primary focus in efforts to improve the performance and sustainability of digital entrepreneurs in the creative economy sector.

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