

Review of the Role of Digital Technology and Self-Efficacy in Forming Entrepreneurial Intention: Entrepreneurial Behavior of Photo Studio

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ABSTRACT

This study examines how self-efficacy and digital technology contribute to the emergence of entrepreneurship among photo studio businesses in Semarang City. This study uses Structural Equation Modeling (SEM) analysis tools to show the positive influence of digital technology on entrepreneurial ambition. Another factor in the decision to launch a business is self-efficacy or confidence in one's skills. Self-efficacy, digital technology, and entrepreneurial ambition are interrelated through entrepreneurial activity. The study shows that digital technology, increased self-efficacy, and entrepreneurial drive are essential elements to improve the welfare of photo studios in the Semarang City environment. Therefore, increasing technical empowerment, strengthening self-confidence, and fostering entrepreneurial behavior are key to increasing the success of photo studios. This study advances knowledge about the critical elements influencing entrepreneurial tendencies in the digital era by explaining the complex interactions between these variables. To increase local economic prosperity and entrepreneurial potential, policies and strategies that support photo studios in Semarang City can be developed using the practical consequences of this study.

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INTRODUCTION

A photo studio is a room specifically designed for photography purposes. This studio has various equipment and supplies to support photo shoot activities, such as lighting, backgrounds, and other properties. Photo studios allow photographers to control the shooting situation, including lighting, composition, and other elements. In today's digital era, digital technology is the key to increasing competitiveness and survival in a dynamic business environment (Oktaputra, Alif Wahyu, Noersasongko et al., 2011).

This study aims to determine the role of digital technology and self-efficacy in shaping entrepreneurial intentions in photo studios. We will try to understand the extent to which digital technology and the level of self-efficacy of studio owners influence their entrepreneurial intentions. In addition, this study also examines whether the entrepreneurial behavior of photo studios acts as a mediator in the relationship between these factors. The development of e-business cannot be separated from the advancement of information

technology, and the development of e-business can be used as a new paradigm and key to success in business. (Putri et al., 2023) explains that e-business is a business operation carried out via the Internet to help expand product marketing in national and international markets. E-business is very suitable as a digital platform for entrepreneurship. E-business can be done or applied by an individual or group using several digital platforms, such as social media. Chaffey in Utami & Saputri (2020) state that social media is a medium that monitors and provides a means for consumers to interact and actively participate in the company or brand they own.

METHOD

Samples and collections

Data was taken from a personal physical questionnaire. The sample size is collected using a formula (Krejcie, RV, and Morgan, 1970), which is used to determine the sample size required in a study based on a larger population with a specified confidence level (usually 95%) and a specified error rate (usually a percentage). So, based on the formula (Krejcie, RV and Morgan, 1970) with $N = 4811$ and $e = 5\%$, the required sample size is about 369.02, but in practice, you would usually round this to the nearest whole number, so the appropriate sample size is about 369.02.

Scale/Measuring Instrument

Entrepreneurial Intention (Shapero, A., & Sokol, 1982). Three things support entrepreneurial intention in the MSME sector: the Desire to Create Business Opportunities, Belief in the Ability to Succeed, and Focus on Improving Welfare. MSME Entrepreneurial Behavior. (McClelland, 1961) . Three items support entrepreneurial behavior in forming MSME entrepreneurs: Initiative and Willingness to Entrepreneur, Creativity, and Innovation, and Management Ability—self-efficacy (Mahmood, R., & Hanafi, 2013). There are two items supporting self-efficacy in supporting entrepreneurship: Belief in the ability to overcome challenges and Belief in the ability to think creatively. Digital Technology, (Caniato, F., Cattaneo, D., & Spina, 2015). Five technological support items are increasingly integrated into improving MSMEs: The use of Digital Devices, the Use of Software, Internet Connectivity, the Use of Social Media and Websites, and Environmentally Friendly E-commerce Capabilities (Setia Budi et al., 2022).

RESULTS AND DISCUSSION

Data analysis

Likert 7 on SEM (Structural Equation Modeling) analysis tools such as SmartPLS, 1 = not sure to 7 = very sure. Because this scale is a standard method used in social and business research. (DeVellis, 2003) . A comprehensive guide that discusses the development of measurement instruments (scales) in the context of social and behavioral research. DeVellis offers in-depth insights into measurement theory, practical steps in developing scales, and applications of scales in empirical research. To analyze the data, PLS-SEM was used (Ringle, C.M., Wende, S., and Becker, 2022)

Results

The SmartPLS (Partial Least Squares) method analyzes the relationship between variables in a structural model. In SmartPLS, the quality of the structural model is measured through the path coefficient, which indicates the strength and direction of the relationship between variables (Hair, JF, Ringle, CM, & Sarstedt, 2011). The PLS algorithm, also called the standard algorithm for calculating PLS components (factors), is nonlinear iterative partial least squares abbreviated as NIPALS (Sarstedt, M., & Cheah, 2019)



Figure 1. Path coefficient

The path coefficient that mediates entrepreneurial intention influences entrepreneurial behavior of photo studios (M2->Y1) with a positive value of 0.097, digital technology mediates entrepreneurial intention (X1->M2) with a positive value of 0.713, for the variable digital technology influences entrepreneurial behavior (X1->Y1) with a positive value of 0.748, for the variable self-efficacy mediates entrepreneurial intention (X2->M2) with a positive value of 0.142, the variable self-efficacy influences entrepreneurial behavior (X2->Y1) with a positive value of 0.152.

Table 1. Indirect Impacts

X2 -> m2 -> Y1.	0.023
X1 -> m2 -> Y1.	0.001

Indirect Effects

A practical and comprehensive guide to PLS-SEM (Hair, JF, Hult, GTM, Ringle, CM, & Sarstedt, 2016) includes discussing indirect and mediation effects, the relationship between variables, and specific indirect effects between other variables. The efficacy variable mediates entrepreneurial behavior towards entrepreneurial intention with a value of 0.023, while the digital technology variable mediates entrepreneurial behavior towards entrepreneurial intention with a value of 0.001.

Table 2. R-squared

	R-squared	Adjusted R-squared
Entrepreneurial Intention (Y1)	0.971	0.971
Entrepreneurial Behavior (M2)	0.924	0.923

R Square and R Square Adjusted to find out what percentage of exogenous variables can influence endogenous variables. R-square entrepreneurial intention has a value of

0.971, which means 9.71, while 0.924, which represents 9.24, is a mediating variable of entrepreneurial behavior.

Table 3. Construct validity and reliability

	Alpha Cronbach	composite reliability (rho_c)	Average Variance Extracted (AVE)
X1	0.720	0.951	0.575 years
X2	0.961 years	0.965	0.962
year 1	0.693	0.945 years	0.679 years
M2	0.694	0.954	0.657

Cronbach's Alpha (α) above 0.6 is also acceptable, especially in social or behavioral research. Values below 0.6 may raise questions about the reliability of the instrument. A Composite Reliability (rho_c) value of 0.6 is also acceptable, but higher values indicate that the construct is stronger and more reliable. Average Variance Extracted (AVE) values below 0.5 may indicate that the construct convergence is poor and needs to be improved by adding or fixing indicators. One of the classic references in the field of psychometrics (Streiner, DL, & Norman, 2008). The digital technology variable has 0.720 points, self-efficacy has 0.961 points, and mediates entrepreneurial behavior with 0.694 points, while the entrepreneurial intention variable gets 0.693 points, where Cronbach's Alpha is above 0.6. The digital technology variable has a value of 0.951 points, self-efficacy has a value of 0.965 points, and mediates entrepreneurial behavior with a value of 0.954 points.

In comparison, the entrepreneurial intention variable obtains a Composite Reliability (rho_c) value of 0.945 points with an acceptable value of 0.6. Meanwhile, the average AVE is above 0.5, where the digital technology variable has a value of 0.575 points, self-efficacy has a value of 0.962 points, and mediates entrepreneurial behavior with a value of 0.657 points. In comparison, the entrepreneurial intention variable has a value of 0.679 points. Calculate the external weights.

Table 5. Mean STDEV, T-value, p-value

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Statistics (O/STDEV)	P Value (P value)
M2.11 <- m2	0.283	0.282	0.068	4,149 years	0.000
M2.13 <- m2	0.971	0.970	0.008	115,311 people	0.000
M2.15 <- m2	0.974	0.974	0.007	148,182 people	0.000
X1.9 <- X1	0.206	0.200	0.093	2,201 people	0.028
X1.10 <- X1	0.983	0.983	0.005	189,376 people	0.000
X1.11 <- X1	0.131	0.130	0.076	1,722 people	0.085

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Statistics ((O/STDEV))	P Value (P value)
X1,12 <- X1	0.938	0.937	0.024	39,595	0.000
X1,13 <- X1	0.983	0.983	0.005	189,376 people	0.000
X2.7 <- X2	0.979	0.979	0.009	110,825	0.000
X2.8 <- X2	0.982	0.983	0.006	164,696 people	0.000
Y1.1 <- Y1.	0.282	0.274	0.102	2,779 years	0.005
Y1.2 <- Y1.	0.990	0.989	0.006	162,531 people	0.000
Y1.3 <- Y1.	0.989	0.989	0.006	161,955	0.000

The P value, where the digital technology variable is an indicator that exceeds the 0.05 point, and the question variable of digital devices used for various business tasks, such as inventory management, marketing, or sales, is small for assessment.

Discussion

The results of the study show that the presence of digital technology has a positive influence on interest in entrepreneurship; the use of digital technology is known as one of the factors that trigger interest in starting and developing a business, according to the theory put forward by (Depaoli et al., 2020). This shows the importance of technology in shaping motivation and entrepreneurial desire among photo studios—a positive relationship between self-efficacy and entrepreneurial intention. Individual Belief in their abilities is essential in shaping motivation to engage in entrepreneurial activities. The findings support a positive relationship between self-efficacy and entrepreneurial intention, in line with (Perozzo, H., Zaghloul, F., & Ravarini, 2022). This shows that an individual's Belief in their ability to succeed in entrepreneurship can positively boost their intention to start a business. Meanwhile, entrepreneurial behavior has been shown to mediate the relationship between digital technology and entrepreneurial intention and self-efficacy and entrepreneurial intention.

This shows that the ambition to become an entrepreneur is influenced by technology and the level of one's self-efficacy, which affects entrepreneurial behavior. This finding is consistent with the theory that entrepreneurial activities influence self-efficacy and entrepreneurial goals. This shows how actual entrepreneurial experiences and actions can affect self-confidence and the desire to continue entrepreneurial efforts. In a photo studio, factors such as technology, self-efficacy, and entrepreneurial behavior are interrelated and can form a holistic framework for forming entrepreneurial intentions. This can be the basis for developing supporting policies and strategies for photo studios, including technology empowerment and entrepreneurial skill development. These findings can be directed to develop supporting policies and strategies for photo studios in Semarang City. Technology empowerment, increasing self-efficacy, and increasing entrepreneurial behavior can be the focus to increase entrepreneurial potential among MSMEs. The findings of this study

support several related theories and literature, such as the Self-Efficacy Theory (Bandura, 1997), the Diffusion of Innovation Theory (Rogers, 2003), and the Planned Behavior Model Theory (Ajzen, 1991).

CONCLUSION

The study proves that digital technology is essential in shaping the entrepreneurial aspirations of photo studios in Semarang City. The adoption and utilization of digital technology are increasingly closely related to the success of their businesses. Entrepreneurial intentions are significantly influenced by self-confidence or Belief in one's talents. People who have such self-confidence tend to be more interested in entrepreneurship. The findings of the study indicate that entrepreneurial behavior is an important mediator. By highlighting the influence of certain activities on the development of entrepreneurial ambition, these behaviors moderate the relationship between digital technology use or self-confidence and entrepreneurial intentions. Digital technology, self-confidence, entrepreneurial behavior, and intentions are all interrelated. This relationship produces a comprehensive framework that helps understand how entrepreneurial intentions are formed in photo studios. This study's findings align with various theoretical frameworks, including the theory of planned behavior, the theory of diffusion of innovations, and the theory of self-efficacy. This shows how the study's conclusions complement and enhance the body of knowledge found in the literature. The implications of the results of this study can be used to decide and direct the support strategy for photo studios in Semarang City. Technology empowerment, self-efficacy development, and strengthening entrepreneurial behavior can be the primary focus of entrepreneurial intentions and performance improvement policies. This study assists the understanding of the variables that influence entrepreneurship. It is recommended that certain contextual elements be considered and that the analysis of certain variables be examined more closely in future research. With these conclusions, this study provides a comprehensive picture of how digital technology, self-efficacy, and entrepreneurial behavior influence and affect entrepreneurial intentions in photo studios in Semarang City.

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