

## Digital Marketing Literacy to Sustain MSME Businesses in Southwest Papua

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### ABSTRACT

This research aims to determine the extent to which Micro, Small and Medium Enterprises (MSMEs) in Southwest Papua understand digital marketing to sustain their business. This study focuses on factors influencing digital literacy, business resilience, and entrepreneurial orientation in MSMEs in the region. A survey method was employed by collecting data from 80 randomly selected MSME samples in the City and Regency of Sorong of Southwest Papua Province. A quantitative approach using structural partial least squares equation modeling (PLS-SEM) was utilized to predict and confirm the hypotheses. Findings unveiled that digital marketing literacy could explain entrepreneurial orientation and business resilience. This study is the beginning of research on the digital economy in the Papua region. The findings of this study successfully answered four hypotheses: (1) There was an influence between digital marketing literacy and entrepreneurial orientation, with a p-value of <0.001 and a regression path of 0.772; (2) There was an influence between digital marketing literacy and business resilience, with a p-value of 0.042 and a regression path value of 0.185. These results revealed that MSME players have been familiar with digital literacy despite residing in Papua.



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**Keywords:** Digital Literacy Marketing; Entrepreneurial Orientation; Business Resilience

## INTRODUCTION

The accelerated development of technology in recent years has impacted human activities, and the Industrial Revolution from 4.0 to 5.0 focuses on humans as the center of civilization that utilizes technology in all fields (Mourtzis et al., 2022). In addition, the COVID-19 pandemic has also encouraged the shift in activities to become all digital, and social distancing has required all humans to follow these changes (Soto-Acosta, 2020). Changes are also felt in the economic sector, requiring all large digital companies down to the Micro, Small and Medium Enterprises (MSME) level to carry out their economic activities by implementing a digital system. Face-to-face transactions during COVID-19 triggered the digitalization of the economy, and social distancing demanded that business people understand digital business to maintain their business (Yigitcanlar et al., 2020). The continuity of all-digital behavioral changes during the COVID-19 period has affected the behavior patterns of today's consumers wanting the convenience of bringing the market within their grasp (Rachmadana et al., 2022).

Eastern Indonesia, especially Southwest Papua Province, has also been affected by the COVID-19 pandemic, apart from the quality of MSMEs in the region, which has not properly developed (Risnawati, 2022). As an indicator of economic growth, MSMEs in Southwest Papua have experienced a drastic decline, reflected in the Gross Domestic Product (GDP) of the province falling to -0.51% in 2021, with a total of 4,064 MSMEs (Dihni, 2022). Basically, MSMEs are closely related to social phenomena (Auzzir et al., 2018). MSMEs in Southwest Papua witnessed a serious setback when entering the transition from conventional to digitalization. Some studies have highlighted the same phenomenon as that of MSMEs in Southwest Papua, and the decline occurred partly due to the unpreparedness of MSMEs to transform into a digital mode of performing their business activities (Cueto et al., 2022).

Understanding digital literacy is crucial for MSMEs to maintain their business in the digital era (Yanto et al., 2022). This shift is also supported by consumer behavior, which tends to prioritize convenience in transactions. The ease of transactions includes online shopping services, the availability of e-wallet payment services, and promotions through social media (Dhewi et al., 2021). MSMEs should provide these services to maintain their business (Priyono et al., 2020). Digital literacy for MSMEs refers to their ability and knowledge to utilize information and communication technology and the Internet to promote business, run operations, and expand customer networks (Cavalheiro et al., 2020; Wardana et al., 2023). Therefore, MSMEs should possess sufficient digital literacy knowledge and skills to effectively utilize digital technology and optimize their business potential (Yanto et al., 2022). Apart from digital literacy, entrepreneurial orientation is essential to support the resilience of a business. Entrepreneurial orientation is an organization's ability to think and act like an entrepreneur (Lee et al., 2019). It involves taking risks associated with new businesses having an innovative orientation and adaptive ability to market phenomena (Monferrer et al., 2021). In managing a business in the midst of an all-digital era, business people must understand digital literacy, and this understanding will have implications for business sustainability (Aldianto et al., 2021; Margherita & Heikkilä, 2021; Niemimaa et al., 2019). This research focuses on linking digital literacy, business sustainability, and entrepreneurial orientation in Southwest Papua, which is missing from other studies. Some existing studies, for example (Rachmadana, 2021; Wardana et al., 2023), have not addressed the relationship between digital literacy levels, business resilience, and entrepreneurial orientation in the Papua region. In addition, this study is unique because it focuses on the study of MSMEs in eastern Indonesia, which still has minimal references. In particular, this study is expected to be a reference for stakeholders and business people who are maintaining their businesses.

## **LITERATURE REVIEW**

### **Digital Marketing Literacy**

Digital literacy is a form of knowledge and understanding of the use of electronic or digital information. It relates to the ability to read and write electronically while understanding the meaning of what is read and written. Digital literacy is not only about how to use it but also includes an understanding of its impact (Gilster, 1997). It involves a range of individual

cognitive, emotional, and sociological skills required to function effectively in a digital environment (Bawden, 2001). Digital literacy is then emphasized on the ability to access digital resources to change the way of thinking (Eshet-Alkalai, 2004). Better digital literacy encourages the ability to think critically by evaluating information from digital media to improve marketing performance (Pamungkas et al., 2021). Business actors who are proficient in using the Internet can play with various search engines, actively search for information, store data, and conduct elevation from digital media, making them more capable of marketing something (Rofaida & Ciptagustia, 2020). Digital literacy helps MSMEs develop and adapt to changes in the technological environment (Civelek et al., 2023; Vasuwat et al., 2021). Digital literacy is an essential point in business development to gain a competitive advantage in the midst of increasingly tough business competition (Hasan et al., 2023; Williams et al., 2022).

*H1: Digital marketing literacy has a significant positive effect on entrepreneurial orientation.*

*H2: Digital literacy has a significant positive effect on business resilience.*

### **Entrepreneurial Orientation**

Entrepreneurial orientation is creative and innovative, and it is applied as the basis, tips, and resources to seek opportunities for success (Alvarez-Torres et al., 2019). Entrepreneurial orientation and organizational culture are closely related to the process of preparing strategies, becoming the basis for decision-making and business implementation. Entrepreneurial orientation has a critical role in improving business performance (Keh et al., 2007). It is a change that implies innovation for economic development (Santos et al., 2023). The main theory of entrepreneurial orientation from entrepreneurial behavior can be found in Mintzberg (1989) description, asserting that uncertainty can often be faced when actively seeking new opportunities (Wales et al., 2021).

*H3: Entrepreneurial orientation has a positive effect on business resilience.*

### **Business Resilience**

Several definitions of business resilience are available. It refers to the ability to survive sudden changes in the business and economic environment and to survive disruptions and catastrophic events using various strategies (Acquaah et al., 2011). It is also the ability to maintain income and a strategy to develop a spirit of social obligation despite cultural and social barriers to women's entrepreneurship (Adnan et al., 2016). Despite business challenges, businesses must survive by adapting to change (Adnan et al., 2016). It is defined as the ability of MSMEs to survive, adapt, and thrive in turbulent changes and crises (Ates & Bititci, 2011). It is also described as the ability of companies to survive, maintain income and employment, and adapt to challenges by minimizing vulnerable and ongoing situations (such as the threat of disaster) (Biggs et al., 2015). It is also the ability to withstand systemic uncertainty and adapt to new risk environments, allowing companies to discover and adjust to changing risks, endure disruptions, and create advantages over less adaptive competitors (Sanchis et al., 2014).

*H4: Entrepreneurial orientation mediates digital marketing literacy and business resilience.*

## METHODS

### Research Design

This study employed a quantitative approach, particularly partial least square (PLS), to understand how digital marketing literacy (DLM) and entrepreneurial orientation (EO) affect business resilience (BR) and the role of entrepreneurial orientation as a mediator. The adoption of PLS aims to increase the variance in the dependent variable and to estimate data based on the dimensions of the calculation model. In addition, the limitations of the data tested also encouraged the utilization of PLS. Structural Equation Modeling (SEM) was utilized following the research framework and hypotheses because it could explain the relationship between observed variables and latent variables. This scale produces measurements allowing the calculation of averages, standard deviations, statistical parameters, correlations, and others (Ferdinand, 2005).

### Respondents and Data Collection Techniques

MSME actors in the City and Regency of Sorong served as the respondents, representing geographical areas in Southwest Papua. A total of 150 questionnaires were proposed using purposive sampling by performing a direct survey using a form given to MSME actors. Of the 150 questionnaires distributed, 80 were returned. The research was conducted from July to October 2023. In addition, Table 1 displays the specifications of the respondents, dominated by housewives, reaching 81%. A small portion of the respondents ran a small-scale business (starting a business). More than half of the respondents were high school graduates, totaling 55.8%, and were engaged in the food and beverage business, amounting to 71.8%, with business experience ranging from one to three years. Most of them possessed one to four employees, achieving 70.8%. Online businesses emerged as the most common business scope, generating an average income of under IDR100 million per year.

**Table 1. Participant Data**

| Category        | Frequency                         | Percentage (%) |
|-----------------|-----------------------------------|----------------|
| Gender          | Female                            | 81             |
|                 | Male                              | 19             |
| Business scope  | Culinary                          | 79             |
|                 | Fashion                           | 6              |
|                 | Services                          | 3              |
|                 | Online shop                       | 3              |
|                 | Basic materials                   | 10             |
| Average revenue | IDR 2,500,000 - IDR 10,000,000    | 65             |
|                 | IDR 15,000,000 - IDR 25,000,000   | 33             |
|                 | IDR 300,000,000 - IDR 500,000,000 | 3              |

## RESULTS AND DISCUSSIONS

Data processing signified that this study was suitable for explaining the relationship between digital literacy and business resilience and entrepreneurial orientation as a mediating variable. Model loading and Cronbach's alpha value of each item were employed to review the validity and reliability of research instruments (Table 2 and Table 3).

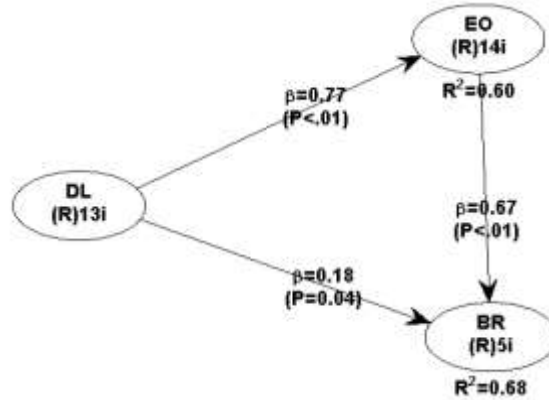
**Table 2. Model Fit And Quality Indices**

|                                                               |                      |                    |                |
|---------------------------------------------------------------|----------------------|--------------------|----------------|
| Average path coefficient (APC)                                | = 0.543              | P<0.001            |                |
| Average R-squared (ARS)                                       | = 0.638              | P<0.001            |                |
| Average adjusted R-squared (AARS)                             | = 0.631              | P<0.001            |                |
| Average block VIF (AVIF)                                      | = 2.510              | acceptable if <= 5 | ideally <= 3.3 |
| Average full collinearity VIF (AFVIF)                         | = 3.123              | acceptable if <= 5 | ideally <= 3.3 |
| Tenenhaus GoF (GoF)=0.638,                                    | small >= 0.1         | medium >= 0.25     | large >= 0.36  |
| Simpson's paradox ratio (SPR)=1.000,                          | acceptable if >= 0.7 | ideally = 1        |                |
| R-squared contribution ratio (RSCR)=1.000,                    | acceptable if >= 0.9 | ideally = 1        |                |
| Statistical suppression ratio (SSR)=1.000,                    | acceptable if >= 0.7 |                    |                |
| Nonlinear bivariate causality direction ratio (NLBCDR)=1.000, | acceptable if >= 0.7 |                    |                |

**Table 3. Research Instrument Test**

| Variable                                        | Indicator                                              | Loading | Cronbach's Alpha | Composite Reliability | Average Variance Extracted |
|-------------------------------------------------|--------------------------------------------------------|---------|------------------|-----------------------|----------------------------|
| Literasi Digital                                | Data literacy                                          | (0.732) | 0.954            | 0.948                 | 0.617                      |
|                                                 | Critical thinking                                      | (0.810) |                  |                       |                            |
|                                                 | Communication skills                                   | (0.814) |                  |                       |                            |
|                                                 | Technology ethics                                      | (0.701) |                  |                       |                            |
|                                                 | Personal safety                                        | (0.792) |                  |                       |                            |
|                                                 | Device security                                        | (0.753) |                  |                       |                            |
|                                                 | Technology capabilities                                | (0.760) |                  |                       |                            |
|                                                 | Creating innovation                                    | (0.861) |                  |                       |                            |
|                                                 | Organizing innovation                                  | (0.825) |                  |                       |                            |
|                                                 | Implementing innovation                                | (0.816) |                  |                       |                            |
|                                                 | Integrating innovation                                 | (0.745) |                  |                       |                            |
| Entrepreneurship Orientation                    | Making decisions                                       | (0.829) | 0.953            | 0.958                 | 0.622                      |
|                                                 | Share findings                                         | (0.753) |                  |                       |                            |
|                                                 | Daring to take the risk                                | (0.728) |                  |                       |                            |
|                                                 | Implementing a new strategy                            | (0.831) |                  |                       |                            |
|                                                 | Scaling up the business                                | (0.803) |                  |                       |                            |
|                                                 | Being open to business opportunities                   | (0.722) |                  |                       |                            |
|                                                 | Directing consumers                                    | (0.757) |                  |                       |                            |
|                                                 | Adding value to the business                           | (0.785) |                  |                       |                            |
|                                                 | Making product innovations                             | (0.744) |                  |                       |                            |
|                                                 | Planning a new strategy                                | (0.816) |                  |                       |                            |
|                                                 | Creating a competitive advantage                       | (0.794) |                  |                       |                            |
| Business Resilience                             | Being a pioneer in business                            | (0.733) | 0.879            | 0.912                 | 0.676                      |
|                                                 | Taking the risk of competing with similar products     | (0.839) |                  |                       |                            |
|                                                 | Improving business                                     | (0.863) |                  |                       |                            |
|                                                 | Maintaining business based on past business experience | (0.851) |                  |                       |                            |
|                                                 | Changing strategy to sustain business                  | (0.755) |                  |                       |                            |
|                                                 | Having the confidence to sustain business              | (0.769) |                  |                       |                            |
|                                                 | Adapting to change                                     | (0.738) |                  |                       |                            |
|                                                 | Minimizing risk to sustain business                    | (0.843) |                  |                       |                            |
| Ongoing business in line with consumer interest | (0.883)                                                |         |                  |                       |                            |
| Having a competitive advantage in business      | (0.867)                                                |         |                  |                       |                            |

The research results, in accordance with Table 1, unveiled that the research instrument was suitable for use when looking at the loading value and Cronbach’s alpha value. The analysis results, with the help of WarpPLs 8.0, revealed the relationship between the digital marketing literacy (DL) variable and business resilience (BR) mediated by the entrepreneurial orientation (EO) variable.



**Figure 1. Relationship between variables**

Figure 1 illustrates the relationship between digital marketing literacy and entrepreneurial orientation, obtaining an R square of 0.595. In contrast, the relationship between digital marketing literacy and business resilience acquired an R square of 0.681. In addition, Table 4 depicts the relationship coefficient of each variable.

**Table 4. Relationship Test Results of Research Variables**

| Relationship                                                                     | Regression Path | Coefficient (p) | Effect Type | Remark      |
|----------------------------------------------------------------------------------|-----------------|-----------------|-------------|-------------|
| Digital literacy and business resilience                                         | 0.185           | 0.042           | Direct      | Significant |
| Digital literacy and entrepreneurial orientation                                 | 0.772           | <0.001          | Direct      | Significant |
| Entrepreneurial orientation and business resilience                              | 0.673           | <0.001          | Direct      | Significant |
| Digital literacy and business resilience mediated by entrepreneurial orientation | 0.520           | <0.001          | Indirect    | Significant |

Table 4 show that the relationship between digital marketing literacy and business resilience had a significant effect, with a coefficient of 0.4. Conversely, the entrepreneurial orientation and business resilience variables had a significant effect with a coefficient of 0.1. The findings of this study successfully answered four hypotheses. The analysis results confirmed the influence between digital marketing literacy and entrepreneurial orientation, gaining a p-value of <0.001 and a regression path of 0.772. As for digital marketing literacy and business resilience, the analysis obtained a p-value of 0.042 and a regression path value of 0.185. These results indicated that MSME players have been familiar with digital literacy even though they were in Papua. This discovery supports previous research conducted by (Ariansyah et al., 2021). Internet use in Indonesia has been evenly distributed to even the smallest regions. MSME

players, dominated by women, could take advantage of social media to analyze markets and consumer needs (Abima et al., 2021; Irfan & Salam, 2020; Sujarwo et al., 2022). Increased income could rise along with the understanding and use of Internet connectivity. Connectivity could penetrate regional boundaries, supporting the tendency of today's consumers, who prefer to shop online, realizing economic improvement (Ballerini et al., 2023; Bauer, 2018; Bayer et al., 2021).

Regarding the third hypothesis, the analysis unveiled an influence between entrepreneurial orientation and business resilience, obtaining a p-value  $<0.001$  and a regression path of 0.673. It implied that MSME players in Southwest Papua have possessed new strategic innovations to maintain their business, as discovered by a previous study (Safa'atin et al., 2022). With the development of technology, MSME players could follow and update business plans through innovations (Putri et al., 2023; Rachmadana, 2021; Tajeddini et al., 2023). Moreover, MSME players can easily observe competitors and determine whether there is something new related to business strategies. Besides, they could also calculate the possible risks if they innovate their business (Al-Hakimi et al., 2021; Cherif et al., 2022).

The statistical calculation of the fourth hypothesis revealed the effect of digital marketing literacy on business resilience through entrepreneurial orientation, acquiring a p-value of  $<0.001$  and a regression path of 0.520. In short, MSME players have demonstrated a high competitive spirit in maintaining their business using their technological understanding. It confirms the preliminary study by Alonso and Bressan (2015) and Khan et al. (2023), reporting that businesses would survive for a long time if they could survive, adapt, and develop despite challenges. Other research mentioned that digital technology is key to identifying, evaluating, capitalizing on opportunities, and improving the competitiveness of a business, as well as increasing efficiency and innovation, especially in uncertain times (Khurana et al., 2022; Nambisan et al., 2019; Priyono et al., 2020; Santos et al., 2023). Lastly, this study supports the findings of a prior study that suggests a positive correlation between the level of intellectual capacity in digital transformation among MSME companies and their ability to withstand uncertain changes in the business environment (Putra et al., 2022; Santos et al., 2023; Zighan et al., 2022).

## **CONCLUSION**

This research examined the extent to which MSMEs in Southwest Papua understand digital marketing to maintain their business. The results revealed that the creative economy could arise as a result of understanding digital literacy, having implications for business sustainability. Furthermore, entrepreneurial attitudes could provide a link between digital literacy and business sustainability. This research highlights how MSME players in Papua have understood digital marketing literacy. The region, known as the underdeveloped, frontier and outermost areas, could implement simple digitalization to maintain its business. Increasing digital marketing literacy could encourage MSME players to know about market research for best-selling product research through digital marketing and targeted research. This paper provides practical and academic implications. To begin with, this research provides input to

MSME players, especially in Southwest Papua, to enhance digital marketing literacy and utilize social media as a business tool to improve and maintain business. Furthermore, the government could provide support and regulations to protect the businesses by providing digital marketing training and infrastructure assistance that supports media-based marketing to sustain business resilience. This study has a limitation regarding the difficulty in the sampling due to a limited understanding of filling out questionnaires and the limited area of the sample tested. Thus, future researchers can explore Papua Island more widely.

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