

**REVEALING THE INFLUENCE OF DIGITAL LITERACY ON THE INNOVATIVE
PERFORMANCE OF MSMEs: THE ROLE OF ENTREPRENEURIAL SKILLS AS A
MEDIATING VARIABLE**

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ABSTRACT

This research was conducted to analyze the effect of digital literacy on Micro, Small and Medium Enterprises (MSMEs) innovative performance in the culinary sectors in the Jakarta area mediated by entrepreneurial skills. This research uses a method of survey in the forms of primary data by disseminating questionnaires to MSMEs entrepreneur in the culinary sector in Jakarta. In testing this research using SEM analysis techniques with Partial Least Square (PLS). The research results show that digital literacy has a positive and significant influence on the innovative performance of MSMEs in the culinary sector directly by 0.443. Furthermore, digital literacy also has a positive and significant effect on the entrepreneurship skills of MSMEs players in the culinary sector directly by 0.648. Entrepreneurial skills have a significant positive effect on the innovative performance of MSMEs in the culinary sector directly by 0.466. Furthermore, there is an indirect significant positive effect of digital literacy on the innovative performance of MSMEs with the entrepreneurial skills as a mediation variable of 0.302.

Keyword: Digital literacy, Entrepreneurial skills, Innovative performance, MSMEs

ABSTRAK

Penelitian ini dilakukan bertujuan menganalisis pengaruh dari literasi digital terhadap kinerja inovatif usaha mikro, kecil, dan menengah (UMKM) pada sektor kuliner di wilayah DKI Jakarta dimediasi dengan keterampilan berwirausaha. Penelitian ini menggunakan metode survei berupa data primer dengan cara penyebaran kuisisioner kepada pelaku usaha UMKM sektor kuliner di DKI Jakarta. Dalam pengujian penelitian ini menggunakan teknik analisis SEM dengan Partial Least Square (PLS). Hasil penelitian ini menunjukkan bahwa literasi digital mempunyai pengaruh positif dan signifikan terhadap kinerja inovatif UMKM pada sektor kuliner secara langsung sebesar 0.443. Selanjutnya, literasi digital juga mempunyai pengaruh positif dan signifikan terhadap keterampilan berwirausaha pada pelaku UMKM sektor kuliner secara langsung sebesar 0.648. Keterampilan berwirausaha berpengaruh positif signifikan terhadap kinerja inovatif UMKM pada sektor kuliner secara langsung sebesar 0.466. Selanjutnya, terdapat pengaruh positif signifikan secara tidak langsung literasi digital terhadap kinerja inovatif UMKM dengan keterampilan berwirausaha sebagai variabel mediasi yakni sebesar 0.302.

Kata kunci: Literasi digital, Keterampilan berwirausaha, Kinerja inovatif, UMKM

INTRODUCTION

In Indonesia, the role of Micro, Small and Medium Enterprises (MSMEs) is very large for the growth of the Indonesian economy by having 99% of all business units. In 2022, MSMEs business actors reached around 66 million. The contribution of MSMEs reached 61% of Indonesia's Gross Domestic Product (GDP), equivalent to IDR 9,580 trillion. MSMEs absorb around 117 million workers (97%) of the total workforce. By knowing the number and growth rate of MSMEs in Indonesia and looking at MSMEs data, it shows the condition of the national economy and illustrates the economic conditions in a region. So, if the number of MSMEs continues to increase, it will have an impact on economic conditions, which means that it is improving. Vice versa, if it decreases or stagnates, it will have an impact on economic indications, which means it is weakening.

MSMEs in Indonesia are still difficult to develop in the market and compete with MSMEs abroad, this is due to the low quality of human resources in skills, mastery of technology and management, lack of information and low innovation in business. In this competition, business actors innovate in following consumer demand which is increasingly diverse products that have better quality, so that each company must provide a good standard of excellence for each product. Innovation and creativity are important for entrepreneurs due to desire, ability or skill, and knowledge. If there is willingness but not skill, there will be many challenges and risks faced and result in failure (Krismonica, 2023).

From previous research conducted by Husniyah et al (2022) in their article, it states that an entrepreneur must have the ability to understand and evaluate the information received, including those in digital form. In addition, research conducted by Farhan et al. (2022) also states that digital literacy has a positive and significant effect on MSMEs business performance. The development of widespread information dissemination via the internet has changed the way an entrepreneur innovates. Ollerenshaw et al (2021) found that MSMEs owners must be equipped with digital literacy in order to innovate and advance their companies.

By having good digital literacy, an entrepreneur also needs to have skills in entrepreneurship. Having skills in digital literacy will produce a new innovation, which can develop an entrepreneur's business. Previous research conducted by Rizan and Utama (2020) states that an entrepreneur is required to always innovate and have innovative thinking in utilizing opportunities, one of the opportunities that can be applied is having entrepreneurial skills. Meanwhile, Muhyi (2012) argues that the major influence of entrepreneurship on sustainable small business growth is from the entrepreneurial skills to sustainable small business growth is from entrepreneurial skills.

The Jakarta Industry, Trade, Small and Medium Enterprises Cooperative (PPUKM) Agency is encouraging MSMEs in Jakarta to upgrade and compete internationally to welcome Jakarta as a global city. The culinary business in Jakarta is the most popular or largest business as data from the Jakarta Industry, Trade, Small and Medium Enterprises Cooperative (PPUKM) Office, namely 56.39% or around 140,349 thousand culinary business units in Jakarta. By innovating to compete with other culinary businesses, making Indonesian cuisine the result of cultural crossover. So the need for skills possessed by culinary business people and knowledge that can foster good ideas.

Entrepreneurial skills will assist entrepreneurs in utilizing digital media as communication, marketing, information, and demand analysis on goods or services needed for the long term. Business actors can create or create existing or non-existing products to be developed using their skills. That way entrepreneurs will be able to create an innovation or new ideas that will be applied to their business to be able to survive and be able to develop competitively in this day and age. Therefore, to apply the digital literacy that has been learned, skills are needed to create innovative thinking to develop the business created. This research

was conducted to analyze the effect of digital literacy on MSMEs innovative performance in the culinary sectors in the Jakarta area mediated by entrepreneurial skills.

LITERATURE REVIEW

Innovative Performance

Al-Sa'di et al (2017) declare that all innovations produced by a business, including those related to the creation and marketing of concepts for new goods and services, enhanced production procedures, new or improved service delivery methods, and underlying processes, are considered innovative performance. Meanwhile, according to Gunday et al., (2011) innovative performance is a combination of the company's overall achievements for the results of its renewal and upgrading efforts carried out by considering various aspects of corporate innovation, such as process, products, organization structure, etc. According to Kensinger in Ting et al (2023) effectively innovating will be the key to surviving in a product's market position, given the stalled prevalence observed among various competitive offerings year after year. Innovative performance is the cornerstone of competitive advantage in a highly volatile environment. The dimensions of innovative performance are very important for designing this research. In previous research, Syahyono (2022) has explained that there are seven dimensions of innovative performance, namely: 1) New product development; 2) Use of technology; 3) Interaction and communication with external parties; 4) Marketing capabilities; 5) Human Resource capabilities; 6) Research and development; and 7) Production operation innovation.

Digital Literacy

Digital literacy was popularized by Gilster in Shopova (2014). Digital literacy is the capacity to understanding and using information in a variety of formats from a variety of resources when presented through a computer and especially through the media of the internet. Similarly, Tinmas et al (2022) defined digital literacy as the capacity to use the information from a variety of digital sources that is presented through a computers. The competitive advantage of MSMEs business performance is influenced by the assets (resources) they have. These resources are divided into two, namely assets (visible and invisible assets), capabilities, and knowledge (digital literacy as a form of technology use) owned by the company. These resources are believed to be the most important elements to achieve superior business performance.

This theory is called Resource Based View Theory (RBV) or Resource Theory developed by Wernerfelt in 1984 revealed by Alvarez and Busenitz (2001). Technology can increase corporate entrepreneurs through the indication of organized innovation, self-revolution, new project discovery and responseivity (Alvarez & Barney, 2007). Technology enables MSMEs to be more innovative, which in turn can increase the added value of the firm. Therefore, digital literacy is a person's ability to obtain information, identify, interpret, and use existing information as a reference in entrepreneurship through internet media. From the definition of digital literacy above, a measurement framework is needed as a reference for digital literacy for this research. According to UNESCO (2018) the dimensions of digital literacy that refer to "A Global Framework of Reference on Digital Literacy Skills" there are four measurements, namely: 1) Information and Data Literacy; 2) Communication and Collaboration; 3) Security; and 4) Ability to Use Technology.

Entrepreneurial Skills

Muhyi (2012) declare that skills are one of the distinctive features of an entrepreneur and one of the factors supporting the success of business in small and medium-sized enterprises. Gibb in Iskandar and Safrianto (2020) states that the entrepreneurial process includes the behaviors, skills and attributes that a person has in entrepreneurship. In developing

entrepreneurial behavior, a process is needed that includes identifying traits related to entrepreneurship. Both in the form of skills and attributes inherent in entrepreneurship. Iskandar and Safrianto (2020) says that "entrepreneurial skills will be successful by having skills in planning and budgeting in developing business strategies in the marketing field to provide attractive and innovative products, acting quickly to detect environmental changes, assessing sales problems as a way of maintaining relationships with customers, focusing on product quality so as to gain market share and attract and retain competent employees." So in this case it is essential to introduce and study the intentions of entrepreneurship as a skill and a concrete effort to building a business.

The theory of planned conduct (Ajzen, 2005) introduces the concept of entrepreneurial intent and explains how behaviour, attitude, and personality combine to generate this intent. This suggests that being willing to start a business is a crucial first step. Entrepreneurial skills are a supporting factor for the success of an individual in running his business both in applying the innovations that have been made and the information that has been obtained. From this understanding, a measurement framework is needed as a reference for entrepreneurial skills in this study. The following are the dimensions of skills according to Krismonica (2023) the dimensions of entrepreneurial skills, namely: 1) Conceptual abilities for formulating plans of action and assessing risks; 2) Creative abilities for adding value; 3) Leadership and management abilities; 4) Interaction and communication abilities; and 5) Technical proficiency in the area of business.

METHOD

This study employs a quantitative descriptive methodology with the aim of elucidating the state of innovative work productivity in the Jakarta culinary sector, which is affected by digital literacy and business acumen through data collection in the form of numeric. One method that is used to gather data is a survey to obtain the data that is needed for this research. The population used in Jakarta is around 140,349 thousand MSMEs in the culinary sector. To determine sample size, researchers used the sample size estimation technique developed by Taro Yamane using a 10% significance level. MSMEs in the culinary sector at Jakarta obtained a sample of about 100 respondents by using the aforementioned formulas. In this study, sample preparation is done using non-probability sampling in the form of purposive sampling, which is a technique for sample preparation with the goal of obtaining the desired sample. In this study, the SEM PLS analysis technique is applied using the SmartPLS 4.0 application to estimate the effect of a stimulus-based variable as a prediction study and to also reveal the existence or absence of a latent variable relationship.

RESULTS AND DISCUSSION

Profil Respondent

Questionnaires are distributed via Google Forms, social media, group chats, and responses that meet the requirements. The sample size consisted of 100 respondents that met the criteria, which included being an operational MSMEs in the culinary sector in Jakarta, using the internet to conduct daily business operations, having a minimum business of one month, and having a minimum business of one year that met high school education requirements. The following responses are based on the final education.

Table 1. Respondent Categories Based on Last Education

| No. | Education Level | Quantity | Percentage % |
|-----|-----------------|----------|--------------|
| 1 | < 35 | 54 | 54% |
| 2 | 36 – 45 | 44 | 44% |
| 3 | 46 – 55 | 7 | 7% |
| 4 | > 55 | 3 | 3% |

The second of profile respondent is categorized by business age, Table 2 shows that of the 48 respondents, or 48% of the total, the respondents with the greatest number are those who have been in company for 1- 5. Conversely, the lowest respondent's business age is for respondents who have their business age for > 10 years amounting to 7% with a total of 7 people.

Table 2. Respondent Categories Based on Business Age

| No. | Business Age (Years) | Quantity | Percentage % |
|-----|----------------------|----------|--------------|
| 1 | < 1 | 34 | 34% |
| 2 | 1 – 5 | 48 | 48% |
| 3 | 6 – 10 | 11 | 11% |
| 4 | > 10 | 7 | 7% |

Descriptive Analysis

Innovative Performance

The result of the data in Table 3 shows that the total number of respondents (N) is 100, without any missing data, ensuring the validity of the data used for processing. The innovative performance variable has a minimum score of 22 and a maximum score of 50, indicating that respondents mostly gave a score of 5 or "Agree Strongly" to the 12 questionnaire questions. The range is 28. The mean value for the innovative performance variable is 39.69, and the standard deviation is 6.50. This indicates that a mean value greater than the standard deviation reflects a positive result, indicating that the normal distribution of the data in this study does not show significant deviations.

Table 3. Description Statistics to Innovative Performance Variables

| Innovative Performance | |
|------------------------|-------|
| N Valid | 100 |
| Missing | 0 |
| Minimum | 22 |
| Maximum | 50 |
| Range | 28 |
| Mean | 39.69 |
| Standard Deviation | 6.50 |

Digital Literacy

The result of the data in Table 4 shows that the digital literacy variable has a minimum score of 16 and a maximum score of 30, indicating that respondents mostly gave a score of 5 or "Agree Strongly" to the 6 questionnaire questions. The range is 14. The mean value for the digital literacy variable is 24.47, and the standard deviation is 3.59. This indicates that a mean value greater than the standard deviation reflects a positive result, indicating that the normal distribution of the data in this study does not show significant deviations.

Table 4. Description Statistics to Digital Literacy Variables

| Digital Literacy | |
|--------------------|-------|
| N Valid | 100 |
| Missing | 0 |
| Minimum | 16 |
| Maximum | 30 |
| Range | 14 |
| Mean | 24.47 |
| Standard Deviation | 3.59 |

Entrepreneurial Skills

The result of the data in Table 5 shows that the entrepreneurial skills variable has a minimum score of 24 and a maximum score of 60, indicating that respondents mostly gave a score of 5 or "Agree Strongly" to the 10 questionnaire questions. The range is 36. The mean value for the entrepreneurial skills variable is 49.53, and the standard deviation is 7.06. This

indicates that a mean value greater than the standard deviation reflects a positive result, indicating that the normal distribution of the data in this study does not show significant deviations.

Table 5. Description Statistics to Entrepreneurial Skills Variables

| Entrepreneurial Skills | |
|------------------------|-------|
| N Valid | 100 |
| Missing | 0 |
| Minimum | 24 |
| Maximum | 60 |
| Range | 36 |
| Mean | 49,53 |
| Standard Deviation | 7,06 |

Hypotesis Testing

The Influence of Digital Literacy on Innovative Performance

Based on Table 6, the results of the tests that have already been carried out show that there is a positive and significant impact of digital literacy on the innovative performance of MSMEs in the culinary sector in Jakarta directly. The results of the path coefficient calculation in table 6 show that the positive path coefficient value is 0.443 with a t-statistic of 4.583 > 1.96 and p-values of 0.000 < 0.05, so H1 is accepted. It means that digital literacy has a positive and significant effect on innovative performance directly, namely 0.443. This research confirmed that a high level of digital literacy would encourage higher innovative performance in culinary sector MSMEs in Jakarta. This is confirmed by previous research conducted by Ollerenshaw et al (2021) that MSMEs owners must be provided with digital literacy in order to be innovative and move their companies forward. In addition, technological knowledge can also generate new ideas, and increased information possessed by MSMEs through social networking sites can improve innovative performance (Kusumawardhany, 2018; Scuotto et al., 2017).

Table 6. Path Coefficient

| Hypotesis | Path | Original sample (O) | Sample mean (M) | Standard deviation (STDEV) | T statistics ((O/STDEV)) | P values |
|----------------|-----------|---------------------|-----------------|----------------------------|--------------------------|----------|
| H ₁ | X > Y | 0,443 | 0,450 | 0,097 | 4,583 | 0,000 |
| H ₂ | X > Z | 0,648 | 0,660 | 0,072 | 9,020 | 0,000 |
| H ₃ | Z > Y | 0,466 | 0,463 | 0,093 | 5,004 | 0,000 |
| H ₄ | X → Z → Y | 0,302 | 0,306 | 0,075 | 4,036 | 0,000 |

The Influence of Digital Literacy on Entrepreneurial Skills

A review of the test results, digital literacy significantly and positively influences entrepreneurial skills in MSMEs players in the culinary sector in Jakarta directly. The Table 6 displays it positive path coefficient value is 0.648 with a t-statistic of 9.020 > 1.96 and p-values of 0.000 < 0.05, so H2 is accepted. Thus digital literacy has a positive and significant effect on entrepreneurial skills directly by 0.648. This research confirms that a high level of digital literacy encourages higher entrepreneurial skills in MSMEs players in the culinary sector in Jakarta.

This is confirmed by previous study carried out by Sariwulan et al (2020) which found that digital literacy has a positive and significant effect on entrepreneurial skills of MSMEs. After conducting the analysis, this study affirms that a high level of digital literacy will encourage higher entrepreneurial skills. It is the same with the research conducted by Krismonica (2023) that there is a positive and significant influence between digital literacy on the skills of entrepreneurship in MSMEs, so with a high level of digital literacy someone will be a good entrepreneurial skill, on the contrary, if the digital literacy is low, MSMEs entrepreneurs do not have the skills of entrepreneurship and can be detrimental.

The Influence of Entrepreneurial Skills on Innovative Performance

In the test results, entrepreneurial skills have an important and beneficial effect on MSMEs' innovative abilities in the culinary sector in Jakarta directly. It can be seen in Table 6 that the positive path coefficient value is 0.648 with a t-statistic of $9.020 > 1.96$ and p-values of $0.000 < 0.05$, so H3 is accepted. Thus, entrepreneurial abilities are positively and significantly impacted by digital literacy in a direct way of 0.648. This research confirmed that a high level of entrepreneurial skills will stimulate higher innovative performance in culinary sector MSMEs in Jakarta.

Entrepreneurial skills have been compared to demographic profiles, psychological, behavioral, and technical skills that have a stronger impact on firm performances (Kovid et al., 2011). This is evidenced by previous research carried out by Rizan and Utama (2020) that the skill of entrepreneurship has a positive and significant influence on the performance of MSMEs businesses, in addition to previous research also conducted by Sariwulan et al (2020), they stated that the performance of MSMEs is positively and significantly impacted by entrepreneurial skills; thus, the more successful these MSMEs are in their business endeavors, the stronger their entrepreneurial skills.

Digital Literacy Influences Innovative Performance through Entrepreneurial Skills

The analysis that were done showed that digital literacy has a favorable and significant impact on inventive performance through entrepreneurial abilities. It shows in Table 6 that the positive path coefficient value is 0.302 with a t-statistic of $4.036 > 1.96$ and p-values of $0.000 < 0.05$, so H4 is accepted. Thus digital literacy has a positive and significant impact on innovative performance as mediated by entrepreneurial skills of 0.443.

Culinary sector MSMEs players in Jakarta have fairly good digital literacy for MSMEs players. By using digital knowledge, they can have the opportunity to compete and see opportunities by leveraging digital technology for business development, if they do not having digital knowledge, they do not have the skills so they do not create new innovations to be implemented in the development of the business. So, digital literacy, entrepreneurial skills are associated with producing innovative performance for MSMEs actors. By getting good digital literacy, it will cultivate good entrepreneurial skills for innovative performance in MSME players in the culinary sector in Jakarta. It is supported by previous research carried out by Sariwulan et al (2020), in their research it states that the performance of MSMEs is able in opening new businesses and achieving sales targets with digital literacy using online social media and trade carried out by the entrepreneurs, and entrepreneurs must learn entrepreneurial skills to manage their business well. The development of performance through entrepreneurial skills and digital literacy shows a positive and significant correlation (Neumeyer et al., 2021). The output of research analysis using SEM-PLS can be seen in Figure 2.

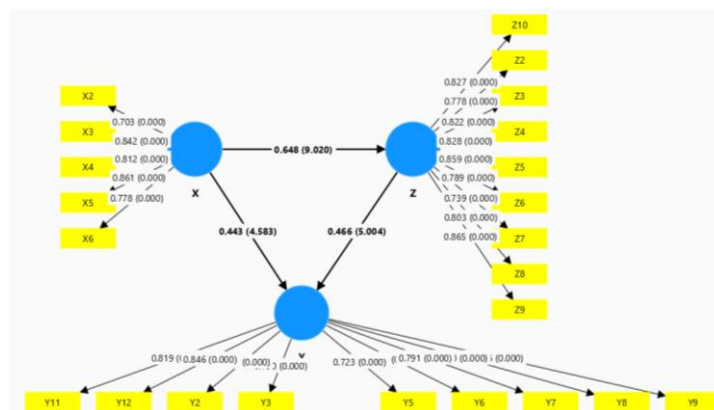


Figure 1. SEM PLS Results

CONCLUSION AND RECOMMENDATION

The following conclusions can be made in light of the study's findings, which sought to investigate the relationship between digital literacy and the innovative performance of micro, small, and medium-sized enterprises (MSMEs) in the culinary sector in Jakarta, as well as the mediating role that entrepreneurial skills play in this relationship: 1) MSMEs participants in Jakarta's culinary industry typically demonstrate a high degree of digital literacy. Additionally, they exhibit a high degree of inventive performance and entrepreneurial talents; 2) Digital literacy directly has a favorable and noteworthy impact on the inventive performance of MSMEs in the culinary industry in Jakarta. Therefore, the degree of inventive performance increases with digital literacy; 3) Digital literacy has a direct, beneficial, and significant impact on the entrepreneurial abilities of MSMEs in the culinary industry in Jakarta. Therefore, the degree of entrepreneurial skills increases; 4) The inventive performance of MSMEs in the culinary industry in Jakarta is directly impacted favorably and significantly by entrepreneurial abilities. In other words, greater levels of entrepreneurial skills correspond to higher levels of inventive performance; and 5) Digital literacy has a positive and significant impact on innovative performance through the indirect mediation of entrepreneurial skills. Therefore, the greater the degree of digital literacy, the more likely it is that entrepreneurial abilities will be encouraged, which would enhance innovative.

During this research process, researchers faced several limitations, both in terms of conceptual framework, research methodology and data collection practices. First, in this study using a new variable that is still little researched, namely innovative performance, it is difficult to find a little literature from relevant research. Second, during the data collection process, researchers experienced limitations, for example, such as obtaining data figures from the Jakarta Cooperative and MSMEs Office, where the process was slowed down by the Jakarta Cooperative and MSMEs Office due to the busy schedule carried out by employees and resulting in the length of time the data was sent and distributing questionnaires through the Jakarta MSMEs community group, but the level of responsiveness was low, so the researcher distributed it through personal chat and the help of relatives. Third, researchers find it difficult to choose the right words to be understood by respondents.

For future researchers, researchers provide suggestions for examining other variables that can increase the competitiveness of culinary sector MSMEs and have a good influence on the innovative performance of MSMEs. It is hoped that future researchers will be able to conduct better research and reduce or eliminate the limitations felt by researchers during this research process for further research so that the research can be a good and useful contribution.

REFERENCES

- Ajzen, I. (2005). *Attitudes, personality, and behavior*. McGraw Hill Education.
- Al-Sa'di, A. F., Abdallah, A. B., & Dahiyat, S. E. (2017). The mediating role of product and process innovations on the relationship between knowledge management and operational performance in manufacturing companies in Jordan. *Business Process Management Journal*, 23(2), 349-376. <https://doi.org/10.1108/BPMJ-03-2016-0047>
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1-2), 11-26. <https://doi.org/10.1002/sej.4>
- Alvarez, S. A., & Busenitz, L. W. (2001). The entrepreneurship of resource-based theory. *Journal of Management*, 27(6), 755-775. <https://doi.org/10.1177/014920630102700609>
- Farhan, M. T., Eryanto, H., & Saptono, A. (2022). Pengaruh Literasi Digital Dan Orientasi Kewirausahaan Terhadap Kinerja Usaha UMKM. *TRANSEKONOMIKA: Akuntansi, Bisnis Dan Keuangan*, 2(6), 35-48.

<https://transpublika.co.id/ojs/index.php/Transekonomika/article/view/265>

- Goffin, K. and Mitchell, R. (2005). *Innovation Management: Strategy and implementation using the pentathlon framework* (2nd ed.).
- Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. *International Journal of Production Economics*, 133(2), 662–676. <https://doi.org/10.1016/j.ijpe.2011.05.014>
- Husniyah, N., Ramadansyah, E., Pertiwi, H., Fadhiila Tamara, A., Mariska Purwaamijaya, B., & Asep Nuryadin, D. (2022). Analisis Tingkat Literasi Digital UMKM di Jawa Barat. *Economics and Digital Business Review*, 4(1), 845-858.
- Iskandar, K. A., & Safrianto, A. S. (2020). Pengaruh Keterampilan Wirausaha Dan Pengalaman Usaha Terhadap Keberhasilan Kewirausahaan. *Ekonomi Dan Industri*, 21(1), 14–20.
- Kovid, R. K., Bhati, B., & Sharma, G. M. (2021). Entrepreneurial Competencies, Institutional Voids and Performance of Small and Medium Enterprises: Evidence from an Emerging Economy. *Vision*, 0(0). <https://doi.org/10.1177/097226292111058809>
- Krismonica, D. (2023). *Pengaruh Literasi Digital, Literasi Keuangan, Dan Norma Subjektif Terhadap Keterampilan Wirausaha (Survei pada Anggota Komunitas UMKM Pondok Melati di Kecamatan Pondok Melati Kota Bekasi)*. Universitas Siliwangi
- Kusumawardhany, P. A. (2018). Pengaruh kapasitas absorptif dan situs jejaring sosial terhadap kinerja inovasi UMKM di Indonesia. *Jurnal Manajemen Teori dan Terapan*, 11(1), 71-88. <https://doi.org/10.20473/jmtt.v11i1.10237>.
- Muhyi, A. H. (2012). Pengaruh Keterampilan Berwirausaha Terhadap Pertumbuhan Usaha Berkelanjutan Pada Industri Kecil Di Kota Sukabumi. *IJAD: International Journal of Dialectics*, 2(2), 109-118.
- Neumeyer, X., Santos, S. C., & Morris, M. H. (2021). Overcoming Barriers to Technology Adoption When Fostering Entrepreneurship Among the Poor: The Role of Technology and Digital Literacy. *IEEE Transactions on Engineering Management*, 68(6), 1605-1618, Dec. 2021, doi: 10.1109/TEM.2020.2989740.
- Ollerenshaw, A., Corbett, J., & Thompson, H. (2021). Increasing the digital literacy skills of regional SMEs through high-speed broadband access. *Small Enterprise Research*, 28(2), 115–133. <https://doi.org/10.1080/13215906.2021.1919913>
- Rizan, J., & Utama, L. (2020). Pengaruh Keterampilan Kewirausahaan, Orientasi pasar dan Orientasi Penjualan terhadap Kinerja Usaha UMKM. *Jurnal Manajerial dan Kewirausahaan*, 2(4), 962-968. <https://doi.org/10.24912/jmk.v2i4.9878>
- Sariwulan, T., Suparno, S., Disman, D., Ahman, E., & Suwatno, S. (2020). Entrepreneurial Performance: The Role of Literacy and Skills. *Journal of Asian Finance, Economics and Business*, 7(11), 269–280. <https://doi.org/10.13106/jafeb.2020.vol7.no11.269>
- Scuotto, V., Del Giudice, M., & Carayannis, E. G. (2017). The effect of social networking sites and absorptive capacity on SMES' innovation performance. *Journal of Technology Transfer*, 42(2), 409–424. <https://doi.org/10.1007/s10961-016-9517-0>
- Shopova, T. (2014). Digital literacy of students and its improvement at the university. *Journal on Efficiency and Responsibility in Education and Science*, 7(2), 26–32. <https://doi.org/10.7160/eriesj.2014.070201>
- Syahyono, S. (2022). Business Performance Improvement Model Through Entrepreneurial Skills and Benchmarking Mediated by Innovation Performance of MSMEs in the Culinary Creative Industry Sub-Sector in West Java Province. *Jurnal Manajemen Industri Dan Logistik*, 6(1), 65–83. <https://doi.org/10.30988/jmil.v6i1.1003>
- Ting, I. W. K., Sui, H. J., Kweh, Q. L., & Nawansir, G. (2021). Knowledge management and firm innovative performance with the moderating role of transformational leadership. *Journal of Knowledge Management*, 25(8), 2115-2140. <https://doi.org/10.1108/JKM-08-2020-0629>

Tinmaz, H., Lee, Y. T., & Fanea-Ivanovici, M. A systematic review on digital literacy. *Smart Learning. Environment.* 9, 21 (2022). <https://doi.org/10.1186/s40561-022-00204-y>

UNESCO. (2018). *A Global Framework of Reference on Digital Literacy Skills for Indicator 4.4.2.* <http://www.uis.unesco.org>

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