



## The Effect of Digital Literacy Competence Toward The Income of Home Industry Entrepreneurs

**Budi Santoso, Achmad Hufad, Uyu Wahyudin, Asep Saepudin, Purnomo Purnomo**

Departemen Pendidikan Masyarakat, Universitas Pendidikan Indonesia, Indonesia

Corresponding author, email: [purnomo@upi.edu](mailto:purnomo@upi.edu)

### Keywords

### Abstract

digital literacy,  
home industry,  
competence

The purpose of this study is to measure the effect of digital literacy competence toward the income of home industry entrepreneurs or small home industries. The condition of the Covid-19 pandemic has changed people's lives, especially in the economic sector, which consequently reduces people's purchasing power, low income and unemployment. However, behind it all, online technology has begun to penetrate all fields in the economic sector. Small entrepreneurs or home industries must be ready to adapt to technology and digital literacy if they want to survive in their business. Digital technology can be used for marketing, production, and learning resources. This study employed a quantitative approach, descriptive statistical method with random sampling technique and the number of respondents is 50 home industry business units. The results of statistical calculations show Sig. (2-tailed) < 0.05,  $H_a$  is accepted, then there is a significant difference in digital literacy competence on the income of home industry entrepreneurs. The conclusion of the analysis, is: The income of home industry entrepreneurs in this digitalization era is influenced by the ability of Information and data literacy, Communication and collaboration, Digital content creation, Safety, and Problem solving..

### INTRODUCTION

The era of the industrial revolution 4.0 makes people's activities inseparable from technology and the internet which will fundamentally change the way of life, the way of working and the way of relating to one another (Hasan et al, 2021); (Hufad, Sutarni, and Rahmat, 2019). The COVID-19 pandemic has caused various problems, especially in the economic sector. Home industries or small businesses have difficulty in promoting their products, especially for small and traditional entrepreneurs. However, behind the Covid-19 outbreak, technological progress and the usefulness of its existence are highly expected. Almost all the sectors of the economy are supported by technology, especially in the marketing aspect, the products sold will reach a wider reach. In order to survive in their business, entrepreneurs inevitably have to learn and adapt to technology. Digital literacy is an inseparable part of an entrepreneurial attitude or spirit.

The digital literacy skills of entrepreneurs must be mastered, at least the ability to use smartphones as part of business instruments. Some of the media used for economic purposes such as social media facebook, instagram, tiktok, whatsapp, and others. They are featuring marketplace in the form of a website.

With the current development of information technology, business actors need to add or change traditional sales methods to become online. Digital technology is one of the most important assets needed by industry players to develop their business. The existence of Industry 4.0 is also proof that current industrial development cannot be separated from technological developments (Hufad, Sutarni, & Rahmat 2019); (Kementerian Koperasi dan UMKM, 2021). Business actors can sell their goods or services online, order food online, improve relationships with partners and customers, thereby expanding the customer network (Hasan et al, 2021); (Rozinah and Meiriki 2020); (Aflah, Puspa Melati Hasibuan, and Afrita, 2021).

Feeling the rapid advancement of technology in this era of the Industrial Revolution 4.0, business actors must be able to develop their business strategies according to the challenges of the times and survive in the midst of rapid competition between business actors (Nurbaiti, 2019). Marketing trends in the world have changed from being conventional (offline) to digital (online). Digital marketing is more promising because it allows potential customers to get all kinds of information about products and make transactions via the internet. In addition, the existence of digitalization can bring together

business actors directly dealing with consumers. So with this, it is possible for business actors to get feedback and input from consumers directly. The response from these consumers can be a guide to be able to develop their business products to be even better (Pakpahan and Devi, 2018).

Some research results show that the use of digital media is related to self-development competencies and self-empowerment, but these studies have not shown the measurement of literacy, only the aspect of using technology (Abima et al., 2021); (Hufad, Sutarni, and Rahmat, 2019); (Lemphane & Prinsloo, 2014); (Mahmood et al., 2021). This study aims to measure the digital literacy aspect of home industry business actors, so that it has an impact or relationship with increasing their income. Through a quantitative approach, measuring digital literacy can be seen as its influence or dominance per indicator.

Digital technology-based business development needs to be accompanied by the ability to use the technology. Business actors must have the ability to use digital tools to access, manage, integrate information from various sources, analyze and evaluate information, create and communicate with others (Erlanitasari, Rahmanto, and Wijaya, 2020); (Bawden, 2008); (Hufad et al. 2021). Business actors with digital literacy will better understand how to market products with the right target market and not deceive consumers regarding traded goods, whether intentionally or not (Erlanitasari, Rahmanto, and Wijaya, 2020).

Business actors must have digital literacy skills so that they can easily search, find, utilize and use information technology as a goal to develop their business (Zahro, 2019). Through digital literacy, business actors not only adopt digital media, but can create deeper synergies with daily activities, especially to support their business activities, including promotions and network marketing activities to generate profits for the businesses they run, such as through

WhatsApp, Instagram, and Facebook (Zahro, 2019).

This study will measure the digital literacy indicators of home industry players and their impact on income, which so far, the research related to this influence has not been widely conducted in similar studies, especially from the aspect of digital literacy behavior.

## **THEORY STUDY**

Digital literacy was first understood by Paul Gilster in 1997. Gilster defines digital literacy as "the ability to understand and use information in various formats from various sources when presented through a computer" (Rozinah, et al., 2020). The concept of literacy, which has just been defined in the digital domain, makes digital literacy independent of the conventional literacy of reading, writing, and arithmetic.

The basis of digital literacy includes computers, information, technology, media, communication and visuals. Formulated the following dimensions of digital literacy:

1. Digital literacy involves the ability to perform digital actions related to work, free time to study, and other aspects of everyday life
2. Digital literacy individually varies depending on the daily situations that he experiences and also a lifelong process as well as the individual's life situation.
3. Digital literacy is broader than ICT literacy and will include elements drawn from several related "digital literacy"
4. Digital literacy involves the ability to collect and use knowledge, techniques, attitudes and personal qualities as well as the ability to plan, execute and evaluate digital actions as part of solving problems/tasks in life.
5. Digital literacy also involves a person's awareness of his level of digital literacy and the development of digital literacy (Setiawan, et al., 2021).

Digital literacy competencies for the community, namely:

**Table1.** Digital Literacy Competence

<i>Area of Competence</i>	<i>Competence</i>
1. <i>Information and data literacy</i>	a. <i>Browsing, searching and filtering data, information and digital content</i> b. <i>Evaluating data, information and digital content</i> c. <i>Managing data, information and digital content</i>
2. <i>Communication and collaboration</i>	a. <i>Interacting through digital technologies</i> b. <i>Sharing through digital technologies</i> c. <i>Engaging in citizenship through digital technologies</i> d. <i>Collaborating through digital technologies</i> e. <i>Netiquette</i> f. <i>Managing digital identity.</i>
3. <i>Digital content creation</i>	a. <i>Developing digital content</i> b. <i>Integrating and re-elaborating digital content</i> c. <i>Copyright and licences</i> d. <i>Programming</i>
4. <i>Safety</i>	a. <i>Protecting devices</i> b. <i>Protecting personal data and privacy</i> c. <i>Protecting health and well-being</i> d. <i>Protecting the environment</i>
5. <i>Problem solving</i>	a. <i>Solving technical problems</i> b. <i>Identifying needs and technological responses</i> c. <i>Creatively using digital technologies</i> d. <i>Identifying digital competence gaps</i>

Source: Vuorikari et al, (Zahro, 2019)

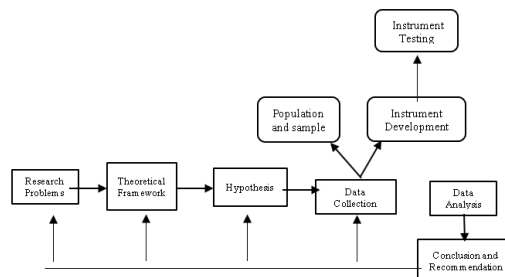
Based on Table 1, the conceptual frame of reference model regarding digital literacy competence is an effort developed by the European Commission to address the problem of digital literacy competence. If someone has mastered the five core competencies, then someone can be said to have digital literacy competence.

**METHOD**

This study employed a quantitative approach with descriptive statistical methods, namely statistics used to analyze data by portraying and describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations, also provide an overview of the relationship between the variables that studied, hypothesis testing and prediction making. The researcher uses a simple random sampling technique by taking sample members from the population randomly without regard to the strata that exist in the population, because the members of the population are considered homogeneous. As for the population in this study, the number of home industry players in West Bandung Regency is 100 home industry business units, then the sampling using the Slovin formula with a degree of error of 1%, the total sample was 50 business units.

The steps in this study were carried out

as shown in the following Figure 1:



**Figure 1.** Research steps

Based on Figure 1 above, the research steps are carried out carefully to produce maximum and measurable research. Through these steps, the researcher compiled an instrument with the items of the respondent's attitude statement, as follows.

- Positive statements :
- Strongly Agree (ST) : score 4
- Agree (S) : score 3
- Disagree (TS) : score 2
- Strongly Disagree (STS) : score 1
- Negative statements:
- Strongly Agree (ST) : score 1
- Agree (S) : score 2
- Disagree (TS) : score 3
- Strongly Disagree (STS) : score 4

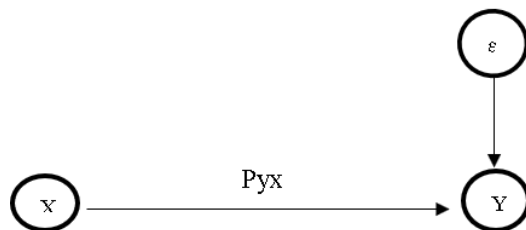
For data processing, researchers used SPSS version 22.00 . The variables and indicators developed in Table 2.

**Table 2.** Research indicators

Researched aspects	Indicator
home industry entrepreneur income (Y)	1. Information and data literacy (X1)
	2. Communication and collaboration (X2)
	3. Digital content creation (X3)
	4. Safety (X4)
	5. Problem solving (X5)

Source: Vuorikari et al, (Zahro, 2019)

The structure of the causal relationship between the causal variables, namely digital literacy competence and the effect variable, namely the income of home industry entrepreneurs can be described as follows in Figure 2 below:



**Figure 2.** Main Structure of X and Y Effects

Information:

X : digital literacy competence  
 Y :income of home industry entrepreneurs  
 Pyx : path coefficient x and y  
 Pyε : coefficient of residual path k y

**RESULTS AND DISCUSSION**

Digital literacy means being able to process various information, understand messages, and communicate effectively with others in a variety of ways. In this case, the methods referred to include creating, collaborating, communicating and working in accordance with ethical rules and understanding when and how technology must be used to be effective and achieve goals. This includes realizing and thinking critically about the various positive and negative impacts that can arise from the use of technology in everyday life.

Digital literacy is not only limited to the ability to use new technology, learn to use new devices, or even apply these devices and technologies into the learning process. On the other hand, digital literacy is an ability that results from high adaptability that allows people to utilize technical skills and navigate a variety of information on the internet. The technical ability to access today's technology can be changed in the future, but digital literacy shapes a person to be ready for the present and the future, whatever the form of technology that will be in the future (Erlanitasari, Rahmanto, and Wijaya, 2020).

**Table 3.** Descriptive Statistics

	N	Minimum	Maximum	mean	Std. Deviation	Variance
	Stat	Stat	Stat	Stat	Std. Error	Stat
Information and data literacy	50	19,00	26,00	22,5000	,23430	1,65677
Communication and collaboration	50	19,00	27,00	22,2000	,23212	1,64130
Digital content creation	50	19,00	25,00	21,9200	,21916	1,54972
Safety	50	19,00	28,00	22,2200	,22730	1,60725
Problem solving	50	18,00	32,00	22,3800	,30087	2,12747
Valid N (listwise)	50					

Based on Table 3, it shows that there are 50 respondents who have filled out the instrument. Provisions in making decisions, assessed from the value of Sig. (2-tailed) > 0.05, then there is no significant difference between digital literacy competence and the income of home industry entrepreneurs, Ho is accepted. If the value of Sig. (2-tailed) < 0.05, then there is a significant difference in digital literacy competence on the income of home industry entrepreneurs, Ha is

accepted.

In addition to developing digital transformation, home industry business actors can also analyze the strategies taken to deal with their competitors. It can even increase sales of the products they sell. Some of the media that are often used for online marketing are Facebook, Twitter, Instagram, and others. By using this media the company will be able to reach its target market. Several features have been provided in the media,

ranging from service providers, needs, daily, as well as the latest information (Hufad et al., 2021); (Kurniawati et al, 2021); (Hufad et al., 2020)

Digital literacy gives participants additional insight into the online market network even though they are new to social media. After being able to do online marketing through social media, they can open their awareness and courage to venture into digital e-Commerce platforms and

marketplaces, including transactions and financing carried out by fintech, and other to support their marketing activities that are more developed and promoted (Setiawan, Susetyo, & Pranajaya, 2021).

Based on the test results, it can be concluded that the summary of the path coefficient results on the influence structure between the variables is presented in Table 4.

**Table 4.** Summary of Relationship Path Coefficient Results

<i>Variable effect</i>	<i>Path coefficient (beta)</i>	<i>Sig.</i>	<i>Conclusion</i>
X 1 X 2	0,405	0,004	Ho rejected
X 1 X 3	0,604	0.000	Ho rejected
X 1 X 4	0,471	0.001	Ho rejected
X 1 X 5	0.686	0.000	Ho rejected
X 2 X 3	0,375	0.007	Ho rejected
X 2 X 4	0,540	0.000	Ho rejected
X 2 X 5	0.381	0.006	Ho rejected
X 3 X 4	0.687	0.000	Ho rejected
X 3 X 5	0.604	0.000	Ho rejected
X 4 X 5	0.602	0.000	Ho rejected

While the results of the path coefficient test on the structure of the influence between variables X to Variable Y, are presented in

Table 5.

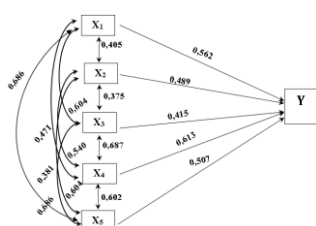
**Table 5.** Summary of Effect Path Coefficient Results

<i>Variable effect</i>	<i>Path coefficient (beta)</i>	<i>Sig.</i>	<i>Conclusion</i>
X <sub>1</sub> Y <sub>2</sub>	0,562	0.000	Ho rejected
X <sub>2</sub> Y <sub>2</sub>	0,489	0.000	Ho rejected
X <sub>3</sub> Y <sub>2</sub>	0,415	0.0003	Ho rejected
X <sub>4</sub> Y <sub>2</sub>	0,507	0.000	Ho rejected
X <sub>5</sub> Y <sub>2</sub>	0,613	0.000	Ho rejected

Based on Table 4 and Table 5, the results of decision making are based on the value of Sig. (2-tailed) < 0.05, H<sub>a</sub> is accepted, then there is a significant difference in digital literacy competence on the income of home industry entrepreneurs.

Significant effect on Y among others: (X<sub>1</sub> Y), (X<sub>2</sub> Y), (X<sub>3</sub> Y), (X<sub>4</sub> Y), (X<sub>5</sub> Y). In addition, it is also shown that the variables that are related to each other include (X<sub>1</sub> X<sub>2</sub>), (X<sub>1</sub> X<sub>3</sub>), (X<sub>1</sub> X<sub>4</sub>), (X<sub>1</sub> X<sub>5</sub>), (X<sub>2</sub> X<sub>3</sub>), (X<sub>2</sub> X<sub>4</sub>), (X<sub>2</sub> X<sub>5</sub>), (X<sub>3</sub> X<sub>4</sub>), (X<sub>3</sub> X<sub>5</sub>), (X<sub>4</sub> X<sub>5</sub>).

The relationship between significant and linear variables is as follows in Figure 3 below:



**Figure 3.** Path Analysis Structure

Based on Figure 3 the decisions from the analysis are: The income of home industry entrepreneurs in this digitalization era is influenced by the ability of Information and data literacy, Communication and collaboration, Digital content creation, Safety, Problem solving.

This shows that traditional home industry entrepreneurs who are transforming their businesses to digital are able to encourage increased business profits, especially those from increased turnover and sales, as well as the arrival of new customers. This is because through digital marketing, transactions become easier, can reach a wider market, and are able to attract the attention of new customers through the various promos offered. Before carrying out digital transformation, entrepreneurs need to determine the right and appropriate innovations so that the marketing process can run well (Hasan et al., 2021).

With digital literacy skills, business

actors can improve products or services, expand distribution networks and also increase sales by carrying out digital marketing activities based on digital media such as marketing through search engines, search, and online advertising. Different forms of digital marketing can be used to gain media insights so that customers can order products or services.

## CONCLUSION

The impact of digital literacy on the income of entrepreneurs in home industries or small household industries. The Covid-19 pandemic situation has changed people's lives, especially in the economic sector, causing a decrease in purchasing power, low income and unemployment. However, online technology has begun to penetrate all areas of the economic industry. Small businesses or home industries must be ready to adapt to technology and digital if they want to stay in business. The results of statistical tests show that the income of home industry entrepreneurs in this digitalization era is influenced by digital literacy skills, including Information and data literacy, communication and collaboration, digital content creation, safety, problem solving.

## REFERENCES

- Abima, B., Engotoit, B., Kituyi, G. M., Kyeyune, R., & Koyola, M. (2021). Relevant local content, social influence, digital literacy, and attitude toward the use of digital technologies by women in Uganda. *Gender, Technology and Development*, 25(1), 87-111.
- Bawden, D. (2008). Origins and concepts of digital literacy. *Digital literacies: Concepts, policies and practices*, 30(2008), 17-32.
- Erlanitasari, Y., Rahmanto, A., & Wijaya, M. (2020). Digital economic literacy micro, small and medium enterprises (SMES) go online. *Informasi*, 49(2), 145-56.
- Hasan, M., Dzakiyyah, A., Kumalasari, D. A., Safira, N., & Aini, S. N. (2021). Transformasi Digital UMKM Sektor Kuliner Di Kelurahan Jatinegara, Jakarta Timur. *Jurnal Bisnis Dan Kewirausahaan*, 17(2), 135-150.
- Hasibuan, P. M. (2021, April). Pelatihan Tentang Peningkatan Dan Pengembangan Usaha Bagi UMKM Melalui Pemanfaatan Teknologi Informasi (Studi Pada Kelurahan Tegal Sari III Medan Area). In *Talenta Conference Series: Local Wisdom, Social, and Arts (LWSA)* (Vol. 4, No. 1).
- Hufad, A., Pramudia, J. R., Purnomo, N. S., Triwahyuni, N., & Rahmat, A. (2020). The management of needs assessment for community empowerment programs. *Solid State Technology*, 63(6), 8351-8354.
- Hufad, A., Purnomo, N. S., & Rahmat, A. (2019). Digital literacy of women as the cadres of community empowerment in rural areas. *International Journal of Innovation, Creativity and Change*, 9(7), 276-288.
- Kementerian Koperasi dan UMKM, Humas. (2021). "Target Pemerintah 30 Juta UMKM Masuk Ekosistem Digital Pada Tahun 2024." <https://kemenkopukm.go.id/read/target-pemerintah-30-juta-umkm-masuk-ekosistem-digital-pada-tahun-2024> (April 15, 2022).
- Kurniawati, E., Idris, I., Handayati, P., & Osman, S. (2021). Digital transformation of MSMEs in Indonesia during the pandemic. *Entrepreneurship and Sustainability Issues*, 9(2), 316.
- Lemphane, P., & Prinsloo, M. (2014). Children's digital literacy practices in unequal South African settings. *Journal of Multilingual and Multicultural Development*, 35(7), 738-753.
- Mahmood, M., Batool, S. H., Rafiq, M., & Safdar, M. (2022). Examining digital information literacy as a determinant of women's online shopping behavior. *Information Technology & People*, 35(7), 2098-2114.
- Nurbaiti, D. (2019). "Penerapan Strategi Inovasi Untuk Pelaku Usaha Mikro, Kecil Dan Menengah Dalam Menghadapi Tantangan Era Industri 4.0." *Prosiding Seminar Nasional Bagian I Pusat Penelitian Badan Keahlian DPR RI*: 175-86.
- Pakpahan, Aknolt K, and Savitri Nurlia Devi. (2018). "Digitalisasi bagi Usaha Kecil Menengah Dalam Era Globalisasi.Pdf." *Infokop: Media Pengkajian Koperasi Usaha Kecil dan Menengah* 28(Desember): 1-147.
- Purnomo, A. H., Wahyudin, U., Akhyadi, A. S., Sutarni, N., & Rahmat, A. (2020). Model digital needs assessment program of community empowerment. *International Journal of Control and Automation*, 13(4), 401-411.
- Rozinah, S., & Meiriki, A. (2020). Pemanfaatan Digital Marketing Pada Usaha Mikro Kecil dan Menengah (UMKM) di Kota Tangerang Selatan. *Jurnal Doktor Manajemen (JDM)*, 3(2), 134-152.
- Santoso, B., Hufad, A., Wahyudin, U., Saepudin, A., & Purnomo, P. (2023). The Effect Of Digital Literacy Competence Toward The

- Income Of Home Industry  
Entrepreneurs. *Lembaran Ilmu Kependidikan*, 52(1).
- Setiawan, T., Susetyo, D. P., & Pranajaya, E. (2021). Edukasi Literasi Digital: Pendampingan Transformasi Digital Pelaku UMKM Sukabumi Pakidulan. *J-ABDI: Jurnal Pengabdian Kepada Masyarakat*, 1(7), 1599-1606.
- Zahro, E. K. (2019). *Kemampuan Literasi Digital Untuk Meningkatkan Keuntungan Usaha Pada Kalangan Pelaku Usaha Skala Kecil Di Kota Surabaya* (Doctoral dissertation, Universitas Airlangga).