

Preferences for the Success of MSMEs in Digital Literacy Using the Conjoin Method (Study of Culinary MSMEs in Bandung City)

Ervin Yanuardi Efendi¹, Erna Maulina², Nenden Kostini³

^{1,2,3}Univesitas Padjajaran Bandung, Indonesia

Email: erwin20002@mail.unpad.ac.id

Abstract

Research exploring how increasing digital literacy can strengthen the competitiveness and growth of MSMEs in digital literacy is discussed in the context of Functional skills Beyond, Creativity, Collaboration, Communication, Cultural and social Understanding Critical Thinking and Evaluation E-Safety, Ability to Find and Select Information. Researchers emphasize the problems faced in increasing digital literacy, such as limited access, incompetence, and the spread of misinformation. The research method uses conjoint analysis, with a sample size of 100 respondents. The sampling carried out in this research was using a nonprobability sampling technique, the collection method was carried out using a purposive sampling method. Data analysis was carried out using IBM SPSS 23. The results of the research show that the utility coefficient value of the attribute of being able to discuss and negotiate other people's opinions is the highest attribute among other attributes with a utility value of 0.313. Attribute Using digital technology in various types and formats with a utility value of 0.213. Attributes Able to understand and understand customers. In accordance with the context of socio-cultural understanding with a utility value of 0.175. Attributes Able to explore, be creative, use digital technology with a utility value of 0.038.

Keywords: *Preferences, MSME Success, Digital Literacy, Culinary.*



A. INTRODUCTION

The digital results highlight that transformation is a widespread challenge in innovative systems that requires a multifaceted set of strategic actions they fall into three main pillars. The first pillar is called culture and skills. The second, named infrastructure and technology, indicates the need for information, interaction and artificial intelligence as key strategic areas of action. Third, natural ecosystems, highlighting the importance of investing in medium- for long-term vision, partnerships and quality of life. In short, this study shows that standalone interventions are not enough to overcome systemic digital perspective shifting (Brunetti et al., 2020; Sari & Ahmad, 2022; Wibowo & Srihandayani, 2023). Social media users are now using digital marketing as a strategy to promote businesses to a wider audience (Bala & Verma, 2018; Janita et al., 2022; Sachrir & Agustin, 2022). MSME players need direction in using information technology that suits their needs and type of business (Febriyantoro & Arisandi, 2018; Alyana et al., 2023; Kasih et al., 2023). The following is the development of West Java MSMEs:

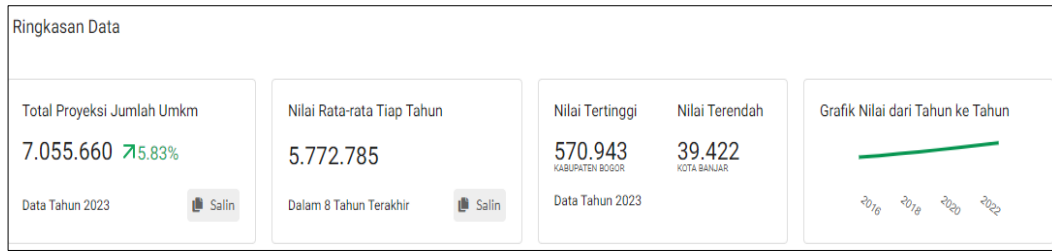


Figure 1. Projection of the number of MSMEs and increase graph

Source: <https://opendata.jabarprov.go.id/id/dataset/proyeksi-jumlah-usaha-mikro-kecil-menengah-umkm-berdasarkan-kabupatenkota-di-jawa-barat>

Social media can be used to introduce and disseminate product information by a marketer. Digital literacy can have a big impact on the wider audience being willing and interested in buying these products. This is because people can access internet technology anywhere and at any time. The following is a graph of the increase in technology users:

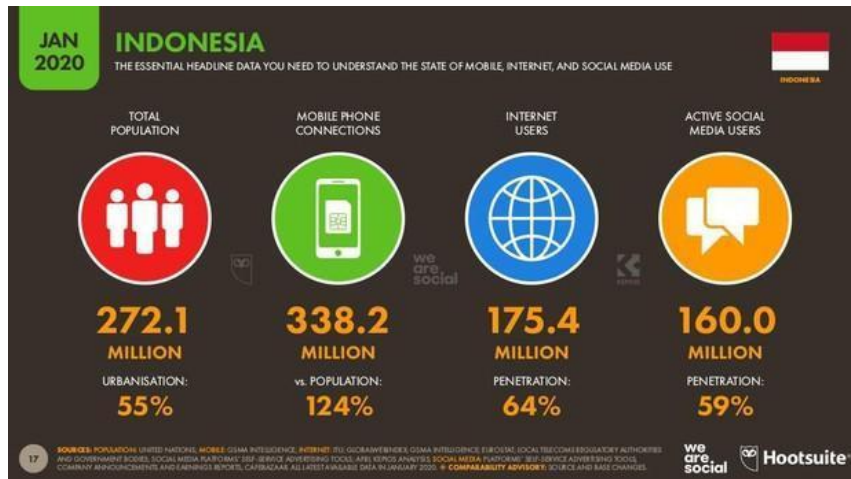


Figure 2. Level of Use of Digital Platform Technology

Source: andi.link (2020)

The digital era is transforming the world of marketing communications, including MSME strategies in various sectors. The following graph shows the development:

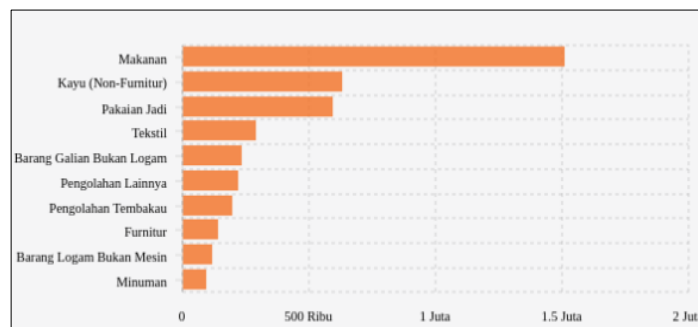


Figure 3. MSME graph in all sectors

Source: databoks (2022)

Based on the presentation (Harmawati et al., 2024), this data collection describes the measurement of Digital Literacy based on the components of Ability to use Media, Advanced Use of Digital Media, Management of Digital Learning

Platforms, and Ethics and Security in Digital Use. In line with what was stated by (Sha et al., 2024) cities are increasingly adopting advanced technology to overcome complex challenges. Applying various technologies such as information and communication technology, artificial intelligence, big data analysis, and self-management in city systems, design, planning, and management can lead to their disruptive social, economic, compositional and environmental changes. Through a systematic literature review, this research develops a conceptual model that links (1) Label-dominant cities associated with tech-driven urban development, (2) characteristics and disruptive applications of technology, and (3) current understanding of inclusive urban development.

B. LITERATURE REVIEW

Literacy which comes from English, refers to a person's ability to read and write correctly. Literacy, according to KBBI, is the ability to understand computer-based information. UNESCO added that digital literacy also includes the ability to identify, understand, interpret, create, communicate and calculate information in various digital formats. This literacy comes from computer literacy and digital information literacy, not just access and information. It is the ability to collaborate and adapt. It is not just about using tools, but also understanding when and how those tools can advance goals in various situations (Nasrullah et al., 2017; Suliswanto & Rofik, 2019; Wulansari, 2024).

Table 1. Analysis of Previous Research

Draft	Dimensions	Indicator
Hague (2020:21)	1. <i>Functional skill Beyond</i>	ICT Skills
	2. <i>Creativity</i>	1. Use of digital technology in various types and formats.
		2. Imaginative and creative thinking ability to organize, produce content, and explore ideas.
	3. <i>Collaboration</i>	1. The capacity to engage in the digital space
		2. Capacity to discuss and negotiate the opinions of others.
	4. <i>Communication</i>	1. Ability to interact via digital media.
		2. Able to understand and comprehend customers.
	5. <i>Ability to Find and Select Information</i>	Able to search and check information.
6. <i>Critical Thinking and Evaluation</i>	Able to contribute, analyze and hone critical thinking skills when dealing with information.	
7. <i>Cultural and social Understanding</i>	In accordance with the context of socio-cultural understanding.	
8. <i>E-Safety</i>	Provides security when users explore, create and collaborate with digital technology.	

Source: Data Proceed

C. METHOD

Research using the conjoint method is used to form profiles at several levels offered. The Conjoint Method, a multivariate technique, is designed to understand how respondents' preferences develop for goods, services, or ideas (Jr., Black, Babin, & Anderson, 2010). Combining Analysis is based on consumer subjectivity regarding several combinations of features offered. Consumer subjectivity is measured by providing an assessment (rank) or Likert scale scoring (Herrmann et al., 2009). After carrying out this method, the next stage is to identify the factors that influence Digital Literacy for the Success of MSMEs. These factors are used to form levels and attributes for the next stage, namely the profiling stage, using formulas from experimental design principles, namely because the number of attributes at each level of this research is not the same (Supranto, 2010). The following is a table of data levels and attributes used:

Table 2. Data Levels and Attributes

<i>Level</i>	<i>Attribute</i>
<i>Functional skill Beyond, Creativity</i>	ICT Skills Ability
	Using digital technology in various types and formats
	Ability to think imaginatively and creatively, produce content, and explore ideas
<i>Collaboration</i>	Capacity to engage in the digital space
	Capacity to discuss and negotiate the opinions of others.
	Ability to Collaborate with others in the digital space
<i>Communication, Cultural and social Understanding Critical Thinking and Evaluation</i>	Ability to interact via digital media.
	Able to understand and understand customers in accordance with the context of socio-cultural understanding
	Able to contribute, analyze
	Ability to think critically when dealing with information.
<i>E-Safety, Ability to Find and Select Information</i>	Provides security when users explore, create and collaborate with digital technology.
	Provide customer privacy data security
	Able to search and check information

After the data has been collected, the next stage is processing the data from the questionnaire using the Conjoint method. In the next stage, data processing is carried out, Malhotra (2010) states that there are several stages in using the conjoint analysis method, namely as follows:

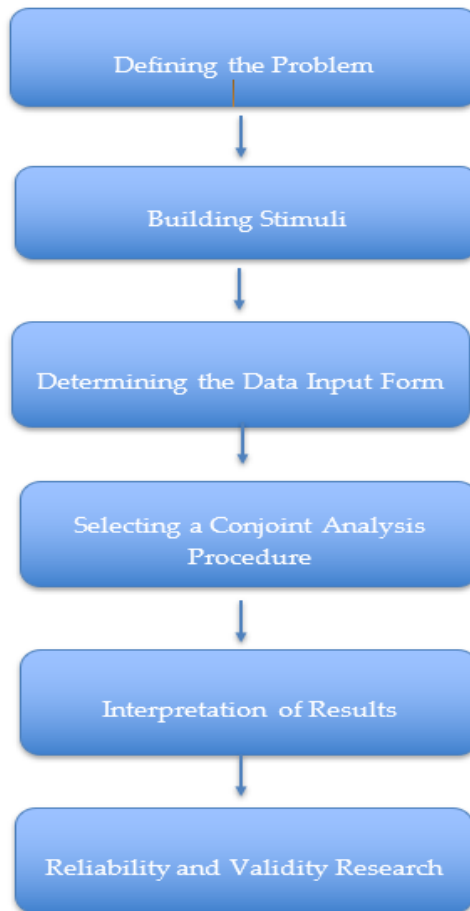


Figure 4. Conjoint Analysis Framework

Population and Sample

Population and sample members are matched to certain criteria. The respondent criteria used were as follows: 1) Bandung residents; 2) Aged 17 years and over; and 3) Is a lover who has purchased Bandung MSME Culinary at least twice. The criteria mentioned above are based on the assumption that respondents who meet these requirements are able to understand the products offered and the contents of the questionnaire. Researchers can draw samples using the following proportion technique using the formula (Cochran, 2010) because the population is quite large and unknown, as follows:

$$n_0 = \frac{Z^2 pq}{e^2}$$

Where:

n_0 = Sample

Z^2 = Abscisa normal curve that cuts the side area (tails), or 1- level of confidence

e = Desired level of trust

p = Proportion in population (if unknown, assumed = 50%)

q = 1- p

$$n_o = \frac{Z^2 pq}{e^2}$$

$$= \frac{(1,96)^2 (0.5)(0.5)}{(0.1)^2}$$

no = 96.4 was added up to 100 respondents.

D. RESULT AND DISCUSSION

Utility Coefficient Value is used in various contexts, especially in economics, finance, and business decisions, to measure a person's preferences or level of satisfaction with various choices or outcomes. The following are the UCV results in this study:

Table 3. Utility Coefficient Value

Utilities			
		Utility Estimate	Std. Error
Functional skill Beyond, Creativity	1. ICT Skills Ability	-.096	.086
	2. Using digital technology in various types and formats	.213	.101
	3. Ability to think imaginatively and creatively. produce content. and explore ideas	-.117	.101
Collaboration	4. Capacity to engage in the digital space	-.182	.086
	5. Capacity to discuss and negotiate the opinions of others.	.313	.101
	6. Ability to collaborate with other people in the digital space	-.131	.101
Communication, Cultural and social Understanding, Critical Thinking and Evaluation	7. Ability to interact via digital media.	-.361	.112
	8. Able to understand and comprehend customers in accordance with the context of socio-cultural understanding	.175	.112
	9. Able to contribute. analyze	.103	.112
	10. Ability to think critically when dealing with information.	.082	.112
E-Safety, Ability to Find and Select Information	11. Provide customer privacy data security	-.003	.086
	12. Able to search and check information	-.034	.101
	13. Able to explore. be creative. use digital technology.	.038	.101
(Constant)		4.064	.076

Based on table 3, it shows that the utility coefficient value of the attribute of being able to discuss and negotiate other people's opinions is the highest attribute among the other attributes with a utility value of 0.313. The attribute uses digital technology in various types and formats with a utility value of 0.213. Attributes Able to understand and understand customers. In accordance with the context of socio-cultural understanding with a utility value of 0.175. Attributes Able to explore, be creative, use digital technology with a utility value of 0.038.

Digital literacy is not only related to technical abilities in using digital technology. Following are several points that explain collaboration, digital literacy does not only refer to technical abilities to use digital technology (Millaningtyas et al., 2024; Dairobi & Anisah, 2024):

- a. **Ability to Understand Digital Collaboration Ethics:** Individuals who understand or are digitally educated know about the ethics of collaborating online, such as copyright, digitally know how important it is to respect the rights and privacy of others and comply with the regulations made by the company or platform they use
- b. **Communication Skills:** Digital literacy includes the ability to communicate effectively through various digital platforms, such as email, instant messaging, video conferencing, and social media. Individuals who have good digital literacy can convey their ideas clearly and in an organized manner, as well as articulate their opinions appropriately in online discussions.
- c. **Ability to Adapt to Change:** The ability to adapt to changing technology and an ever-changing work environment is also part of digital literacy. Digitally skilled people tend to be more flexible and open to the use of new tools and platforms, and they are better prepared to face the challenges that arise in team or individual collaboration online.

Digital literacy requires not only technical knowledge of digital technology, but also the use of practical and creative skills (Wahdiniwaty et al., 2022; Naufalin & Tohir, 2022). Here are some ways digital literacy is related to functional skills and creativity:

- a. **Digital Content Development:** Developing creative and interesting digital content is also included in digital literacy. Writing blogs, making videos, designing graphics, or creating apps or websites are some examples. Individuals who can use digital tools and platforms in creative ways can convey their ideas visually and create content that appeals to their audience.
- b. **Creativity in the Use of Technology:** The ability to use technology creatively to achieve specific goals is part of digital literacy. For example, you can use graphic design tools to create engaging visual content, create inspiring videos, or create innovative technological solutions to specific problems. Creativity allows people to go beyond the use of conventional technology and create something new and interesting.

Digital literacy is not limited to technical skills; it includes other important elements such as communication, cultural and social understanding, critical thinking, and evaluation. Here are some ways digital literacy relates to these elements:

- a. **Cultural and Social Understanding:** Those who have digital literacy also have an understanding of how digital technology impacts culture and society. This includes awareness of issues such as language, the digital divide, and the impact of social media. People who have good digital literacy also understand the complexity of human interactions in the digital world, as well as the cultural and social impacts of technology use.

- b. **Communication:** Individuals who have good digital literacy can convey messages clearly, understand various communication styles, both formal and informal digitally, and adapt their messages to the intended audience. Digital media includes the use of email, instant messaging, social media, and collaboration platforms to interact with others.

Digital literacy includes a deep understanding of electronic security as well as the ability to find and select information carefully. The following is a discussion of the relationship between digital literacy, electronic security, and the ability to find and select information:

- a. **Electronic Security:** Digital literacy includes knowledge of security threats associated with the use of digital technology, such as malware, phishing, and identity theft. People who have good digital literacy know how to protect themselves on the internet, such as using strong passwords, updating software regularly, and being careful when sharing personal data. They may also take additional cyber security measures, such as data encryption and the use of a VPN (Virtual Private Network) to protect their privacy when they use the internet.
- b. **Ability to Select Information:** Individuals who have digital literacy can not only find information, but can also select appropriate and quality information from various available sources. Digitally literate individuals consider things such as source credibility, relevance, and importance of information before using or disseminating it. Additionally, they may use their critical evaluation skills to spot bias or manipulation in online content and discern accurate information.

E. CONCLUSION

The conclusions of the success of MSMEs in Digital Literacy are as follows: a) Collaboration: Ability to Understand Digital Collaboration Ethics, Communication Ability, Ability to Adapt to Change; b) Functional skills Beyond, Creativity: Digital Content Development, Creativity in Using Technology; c) Communication, Cultural and social Understanding, Critical Thinking and Evaluation: Cultural and Social Understanding, Communication; and d) E-Safety, Ability to Find and Select Information: Electronic Security, Ability to Select Information.

ACKNOWLEDGEMENT

In the course of exploring the topic of digital literacy, based on very complex discussions. Through an in-depth review, we explore various aspects of digital literacy, from technical skills to understanding digital culture and ethics. The suggestions that the author can convey include: a) Education and Training: It is very important to create education and training programs that teach children about digital literacy from an early age, both at home and at work. The program should include an understanding of digital technology, skills in the use of digital tools; b) Digital Content Education: Incorporating lessons or curricula on safe and responsible use of social media, sharing information online, and spotting hoaxes or fake news into the formal

curriculum helps students gain the skills necessary to participate; c) Community Partnerships: Collaboration between schools, businesses, government, and community organizations can expand the reach and impact of digital literacy programs. Involving communities in digital literacy programs can help adapt programs to local needs and ensure that they reach target audiences; and d) Encourage Positive Use: Encourage the use of digital technologies for beneficial purposes, such as skills development, and creativity. Supporting initiatives such as online collaborative projects, online learning platforms, and digital communities that focus on mutual teaching and learning can encourage individuals' interest and motivation to improve their digital literacy. Through this integrated method, it allows us to increase digital literacy at all levels of society and strengthen everyone's skills to face the challenges and opportunities in the digital era.

REFERENCES

1. Babin, Barry J., Hair, Joseph, Black, William C., Anderson, Roplh E. (2010). *Multivariate Data Analysis: A Global Perspective* (Seventh Edition). Boston: Pearson
2. Bala, M., & Verma, D. (2018). A Critical Review of Digital Marketing Paper Type: - Review and Viewpoint. *International Journal of Management, IT & Engineering*, 8(10), 321–339.
3. Brunetti, F., Matt, D. T., Bonfanti, A., De Longhi, A., Pedrini, G., & Orzes, G. (2020). Digital transformation challenges: strategies emerging from a multi-stakeholder approach. *TQM Journal*, 32(4), 697–724. <https://doi.org/10.1108/TQM-12-2019-0309>.
4. Cochran, W.G. (2010), Teknik Penarikan Sampel. Penj. Rudiansyah. Jakarta: UI-Press. Universitas Indonesia.
5. Dairobi, M., & Anisah, H. U. (2024). Influence of Digital Literacy, Customer Intimacy, and Brand Image on Competitive Advantage. *Open Access Indonesia Journal of Social Sciences*, 7(3), 1506-1516.
6. Elyana, I., Nelfianti, F., Joesah, N., Martiwi, R., & Karlina, E. (2023). Marketing Communication As A Form Of MSME Digital Literacy In Sumedang Regency. *Jurnal Ekonomi*, 12(01), 879-885.
7. Febriyanto, M. T., & Arisandi, D. (2018). Pemanfaatan Digital Marketing bagi Usaha Mikro, Kecil dan Menengah pada Era Masyarakat Ekonomi Asean. *JMD: Jurnal Riset Manajemen & Bisnis Dewantara*, 1(2), 61–76. <https://doi.org/10.26533/jmd.v1i2.175>.
8. Hague, C., & Payton, S. (2010). *Digital Literacy across the Curriculum*. Bristol: Futurelab.
9. Harmawati, Y., Abdulkarim, A., Bestari, P., & Sari, B. I. (2024). Data of digital literacy level measurement of Indonesian students in facing society 5 . 0 : Based on the components of ability to use me dia , advance d use of digital me dia , managing digital learning platforms , and ethics and safety in the use of digi. Data in Brief, xxxx, 110397. <https://doi.org/10.1016/j.dib.2024.110397>
10. Herrmann, A., Huber, F., & Regier, S. (2009). Adaptive Conjointanalyse.

- Conjointanalyse*, 113–127. https://doi.org/10.1007/978-3-642-00754-5_8.
11. Jenita, J., Yuwono, A., Heriana, T., Dewi, S., & Sari, M. D. (2022). The importance of Digital-based Payment Management Knowledge for MSME Drivers: a Study of Financial Literacy. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 5(2), 9073-9084.
 12. Kasih, E., Kumandang, C., & Amelia, Y. (2023, December). Empowering MSMEs Through Financial Literacy And Management Skills. In *The International Conference on Education, Social Sciences and Technology (ICESST)* (Vol. 2, No. 2, pp. 596-602).
 13. Malhotra, Naresh K. 2010. *Riset Pemasaran (Marketing Research)*. New Jersey, Indonesia: PT. Indeks
 14. Millaningtyas, R., Amin, M., Hermawan, A., & Handayati, P. (2024). Digital Transformation of Financial Literacy and Inclusion as a Support for Convenience for MSMEs. *International Journal Of Humanities Education and Social Sciences*, 3(5).
 15. Nasrullah, R., Aditya, W., Satya, T. I., Nento, M. N., Hanifah, N., Miftahussururi, & Akbari, Q. S. (2017). Materi Pendukung Literasi Digital. *Kementerian Pendidikan Dan Kebudayaan*, 43. <http://gln.kemdikbud.go.id/glnsite/wp-content/uploads/2017/10/literasi-digital.pdf>.
 16. Naufalin, L. R., & Tohir, T. (2022). Factors Affecting Digital Financial Literature on Batik SMEs in Banyumas Regency. *Economic Education Analysis Journal*, 11(1), 65-76.
 17. Sachrir, M. I., & Agustin, G. (2022). The Influence of Entrepreneurship Digitalization and Literacy Strategies on the Ability of MSMEs After Surviving the Middle of the Covid-19 Pandemi in Makassar City. *Jurnal Multidisiplin Madani*, 2(12), 4387-4398.
 18. Sari, D. M., & Ahmad, R. (2022). Digital Literacy Readiness from the MSME Perspective: Literature Review. *Russian Journal of Agricultural and Socio-Economic Sciences*, 131(11), 51-59.
 19. Sha, K., Taeihagh, A., & Jong, M. De. (2024). Technological Forecasting & Social Change Governing Disruptive Technologies for Inclusive Development in Cities : A Systematic Literature Review. *Technological Forecasting & Social Change*, 203(April), 123382. <https://doi.org/10.1016/j.techfore.2024.123382>.
 20. Suliswanto, M. S. W., & Rofik, M. (2019). Digitalization of micro, small & medium enterprises (MSMEs) in East Java, Indonesia. *Muhammadiyah International Journal of Economics and Business*, 2(1), 34-43.
 21. Supranto J. (2010). *Statistik Teori dan Aplikasi*. Jakarta: UI Press.
 22. Wahdiniwaty, R., Firmansyah, D., Suryana, A., Dede, D., & Rifa'i, A. A. (2022). Mystery in Marketing Management Products Post COVID-19 as a Model of Survival Strategy Towards the Awakening of Micro Small and Medium Enterprises (MSMEs) in the Digital Economy Era. *Khazanah Sosial*, 4(1), 187-210.
 23. Wibowo, T. S., & Srihandayani, C. M. (2023). The Role of Digital Literacy in Moderating the Effect of Entrepreneurial Orientation and Market Orientation on Business Sustainability in the Culinary Sector MSMEs in Surabaya. *International Journal of Social Science Research and Review*, 6(12), 274-288.

24. Wulansari, K. (2024). The Influence of Digital Literacy on Intention to Use QRIS by Using TAM as the Cashless Paying Method on MSME in Samarinda Seberang District. *KnE Social Sciences*, 521-537.