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Strategies for Improving Digital Literacy Through The Use of Digital Technology by Small and Medium Enterprises Assisted by The Cooperative and SME Service Office of Yogyakarta Special Region

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ABSTRACT

The rise of digital trends and information technology brings new opportunities and challenges for SMEs. The use of digital technology is important for company growth, but SMEs often struggle to adopt it due to a lack of understanding of digital literacy. In the era of digitalization, businesses need to choose and make optimal use of digital technology, such as the SiBakul Jogja application that can expand markets and accelerate business development. This study uses a quantitative descriptive method with 69 respondents and applies the Technology Acceptance Model (TAM) which considers aspects of usability and ease of use of the SiBakul Jogja application. Meanwhile, external variables such as user attitude, user interest, and actual use were also added for digital technology in general. The results of the TAM analysis show the level of acceptance of business actors towards SiBakul Jogja technology and help formulate strategies to increase the adoption of digital technology.

INTRODUCTION

Technological advances have provided various benefits to human life by overcoming the limitations of space and time. Sophisticated digital technology facilitates access to information and interaction with public services, enabling the delivery of information quickly. Digital literacy becomes very important, as humans need to utilize technology and information from

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digital devices effectively and efficiently. This is especially true for Small and Medium Enterprises (SMEs). In situations of economic stagnation or crisis, SMEs become major players providing opportunities for the unemployed (Civelek and Krajčík, 2022; Krajčík *et al.*, 2023). With a dynamic and flexible structure, SMEs are able to respond quickly to changes in socioeconomic development. Despite these characteristics, SMEs need to adopt and use digital systems in their operations to remain competitive (Krajčík *et al.*, 2023). In a global perspective, SMEs have been recognized as having a very important role in economic development and growth.

Likewise, in Indonesia's economic history, all parties recognize that SMEs are the backbone of the national economy (Erlanitasari, Rahmanto and Wijaya, 2020). SMEs are able to expand employment opportunities, provide broad economic services to the community, and play a role in the process of equalizing and increasing people's income. Based on data from the Ministry of Cooperatives and SMEs, the number of MSMEs in Indonesia reached 64,2 million and contributed 61,07 percent or 8,573,89 trillion rupiah to GDP (Limanseto, 2021). MSMEs can also absorb more than 117 million workers or 97 percent of the total workforce, and can raise up to 60,4 percent of total investment (Junaidi, 2023). The Special Region of Yogyakarta is a province that has 344.757 units of MSMEs in 2024 (Bappeda, 2024). This encourages the DIY Cooperatives and SMEs Office to be able to create a digital platform for one data on Cooperatives, Micro, Small and Medium Enterprises of Yogyakarta Special Region (KUMKM DIY), guidance and development of DIY KUMKM and product strengthening support systems (Wahyudi, 2023b).

DISKOP UKM DIY created a cooperative and MSME coaching platform which was then developed into a marketplace called SiBakul Jogja with the hope that it can help answer the challenges faced by MSMEs, one of which is in the marketing aspect (Wahyudi, 2023a). The digital age offers opportunities for SMEs to increase productivity and competitiveness, but it also presents challenges in running a business. Low levels of digital literacy are often an obstacle for SMEs in effectively utilizing digital technology. Good digital literacy enables SMEs to adopt technology tools and platforms such as social media, e-commerce, and other business applications. The ability to receive, search, and identify digital information is an important demand for businesses in the digital age. Integrating SMEs into digital technology is the best move as SMEs dominate the business structure in Indonesia. Therefore, in-depth research is needed to understand the extent to which SMEs in DIY accept and understand digital technology in their business.

LITERATURE REVIEW & HYPOTHESIS

Digital Literacy

According to Gilster (1997), digital literacy is the skills and abilities that everyone has in searching, accessing, selecting, using, compiling, and disseminating new information obtained to the community using digital tools. In addition, Martin (2006) explains that digital literacy is an awareness of individual attitudes and abilities to use digital tools and facilities appropriately to identify, access, manage, integrate, evaluate, analyze, and synthesize digital resources, build new knowledge, create media expressions, and communicate with others in a digital context.

Digital literacy plays an important role in determining the position and behavior of individuals, businesses and even good companies in the era of globalization which will continue to digitize various aspects of life. Digital literacy in a business context is the ability to access trusted business information sources digitally, build business information from

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various trusted sources, think critically, and analyze the information, awareness of the importance of conventional media and connect it with media.

Technology Acceptance Model

TAM was created based on the Theory of Reasoned Action (TRA) model in psychological research (Fishbein and Ajzen, 1975). This model consists of two main factors that influence an individual's intention to use a new technology, namely perceived ease of use (perceived ease of use) and perceived usefulness (perceived usefulness). The main goal of TAM is to provide a basis for reviewing the impact of external factors on internal beliefs, attitudes and intentions. To achieve this goal, TAM was formulated to identify several variables suggested by previous research relating to cognitive determinants and affective factors of computer acceptance (Davis, 1989).

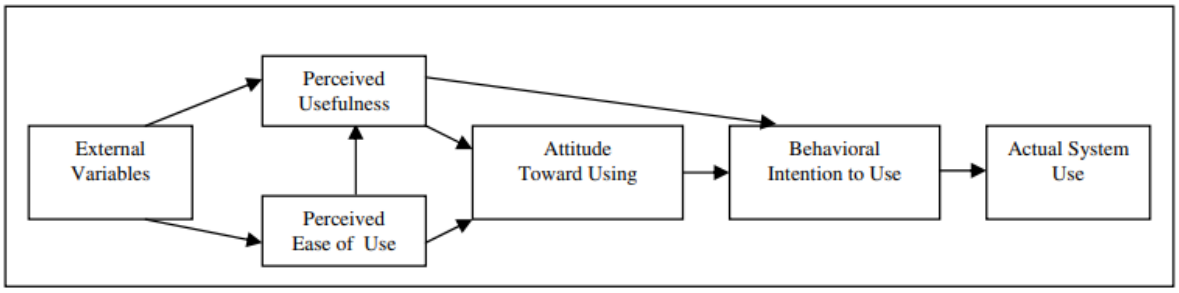

Figure 1. Technology Acceptance Model

Source: Davis (1989)

Referring to Davis (1985) perceived usefulness and perceived ease of use affect a person's Attitude Toward Use (ATU) in utilizing innovation. Therefore, instruments that construct Perceived Ease Of Use affect the expansion of perceived usefulness. Attitude Toward Use in this construct is a concept of acceptance and rejection as a result if someone uses a technology in carrying out their activities. Behavioral Intention to Use (BI) is a behavioral tendency to keep using certain technologies. The intensity of using a technology can be seen from the user's attitude towards the technology, both the desire to maintain use and the motivation to promote to others. Actual system use is the real state of system use conceptualized by measuring the duration and frequency of technology use.

SiBakul Jogja

The DIY DISKOP UKM strategy in realizing its duties to assist the governor in carrying out government affairs in the field of cooperatives, micro, small and medium enterprises, namely supporting the development of micro, small and medium enterprises (MSMEs) in DIY. SiBakul Jogja is an acronym for information system for cooperative development and business actors in the Special Region of Yogyakarta. The results of the data system development were launched on November 11, 2019. The adoption of technology such as the SiBakul Jogja application requires effort and a learning process by both business actors and consumers. SiBakul Jogja platform provides various features and services as follows:

1. Business Registration and Profile
2. E-commerce and Online Marketing
3. Payment and Shipping
4. Digital training and mentoring

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5. Product Photo Service
6. Collaboration and Networking
7. Analytics and Reporting

According to Huang, Jin and Coghlan (2021) innovation resistance is the resistance given by consumers to an innovation. Resistance is seen as a result of stability because people tend to get used to a stable state.

RESEARCH METHODS

This study uses a quantitative descriptive method with a total of 69 respondents. Data were collected through a survey using a questionnaire distributed to SMEs assisted by the DIY Cooperative and SME Office. Data analysis was conducted using the Technology Acceptance Model (TAM) which considers aspects of usability and ease of use of the SiBakul Jogja application. External variables such as user attitude, user interest, and actual use were also added for digital technology in general**.** Primary data is used in data processing in this study. Primary data is data obtained directly from informants. In this study, primary data is in the form of:

1. Information on the demographics of respondents, namely small and medium-sized businesses.
2. Respondents' assessment of statements based on TAM theory, data collection by distributing closed questionnaires distributed to Small and Medium Enterprises in Yogyakarta online via google form.

Table 1. Descriptive Analysis of Demographic Variables

Demographic Variables	N	%
Gender		
Male	32	46
Female	37	54
Age		
21 - 25 years	13	19
26 - 30 years	4	6
31 - 35 years old	12	17
36 - 40 years	7	10
41 - 45 years	15	22
>46 years	18	26
Position/Title in SME		
Staff/senior employees	5	7
SME manager/director	6	9
Owner as well as manager/director	19	28
Owner	39	56
Last Education		
Lower than high school	1	1
High school or equivalent	23	33
Bachelor	44	64
Master/Master	1	2
SME Field/Sector		
Manufacturing	1	1
Services	4	6

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Demographic Variables	N	%
Fashion	8	12
Craft	23	33
Culinary	23	33
Others	10	15
Number of Workers		
20 - 99 people	6	9
5 - 19 people	26	38
<5 people	37	53
Sales Turnover		
>Rp 2,5 billion - max Rp 50 billion	2	3
>Rp 300 million - max Rp 2,5 billion	22	32
Maximum IDR 300 million	45	65
Business Age		
More than 10 years	21	31
Less than 5 years	23	33
5 - 10 years	25	36

Source: Primary Data (2024)

ANALYSIS RESULTS

Descriptive Analysis of TAM Variable

Table 2. TAM Variable Assessment

Variables/Indicators	Average	Description
Perceived Usefulness	*4,90*	*Agree*
Our SMEs feel that the SiBakul application will make it possible to get work done more quickly	4,93	Agree
Our SMEs feel that installing and using the SiBakul app makes work easier to do	4,88	Agree
Our SMEs find using the SiBakul application useful for doing various jobs	4,84	Agree
Our SMEs feel that using the SiBakul application will increase productivity	4,94	Agree
Perceived Ease Of Use	*5,08*	*Agree*
Our SMEs find the SiBakul application easy to use	5,20	Strongly Agree
Our SMEs find the SiBakul application easy to learn	5,17	Agree
Our SMEs find the SiBakul application easy to use on *Smartphones* or Other *Devices*	5,04	Agree
Our SMEs find the SiBakul application easy and flexible to use anytime and anywhere	4,90	Agree
Attitude Toward Using Technology	*4,86*	*Agree*
Our SMEs love working with digital technology	4,90	Agree
Our SMEs can perform better using digital technology	4,86	Agree
Our SMEs can make work more interesting using digital technology	4,94	Agree

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Variables/Indicators	Average	Description
Our SMEs are more motivated to work with digital technology	4,87	Agree
Our SMEs can work more independently using digital technology	4,72	Agree
Behavioral Intention To Use	4,65	Agree
Our SMEs are confident that they can achieve their set goals using digital technology	4,64	Agree
Our SMEs are confident that they can complete difficult jobs using digital technology	4,59	Agree
Our SMEs can find answers quickly using digital technology	4,64	Agree
Our SMEs can solve many challenges using digital technology	4,70	Agree
Our SMEs are able to perform well when faced with the rigors of using digital technology	4,67	Agree
Actual To Use Technology	*3,90*	*Moderately Agree*
Smartphone	5,80	Strongly Agree
Computer	3,33	Disagree
Laptop	4,86	Agree
Tablet or iPad	2,81	Disagree
Wearable device	1,78	Strongly Disagree
Radio	2,13	Disagree
Microsoft Office (Word, Excel, Power Point)	4,70	Strongly Agree
File sharing (Gdrive, Google Box)	4,64	Agree
Photo Editing (Photoshop, Canva)	4,72	Agree
Email service (Gmail, Outlook)	4,90	Agree
Social media (Facebook, Instagram, Tiktok)	5,58	Strongly Agree
ERP (Enterprise Resource Planning) System	2,99	Disagree
SAP	2,41	Disagree

Source: Primary Data Processed (2024)

Broadly speaking, respondents' responses have satisfactory results. Because it can be seen from the descriptive analysis of respondents' responses, researchers can find out the high agreement of respondents with each statement in the construct. This reflects that digital technology such as SiBakul Jogja has provided usefulness and convenience for SMEs in Yogyakarta. This is evident in the responses for perceived usefulness and ease of use which have high values. However, the actual to use technology construct apparently still shows a medium value. Therefore, the causes faced by business actors and the reasons for not being proficient in optimizing the use of digital technology are:

1. Lack of Knowledge and Skills
   As outlined in the background, Small and Medium Enterprises play a significant role in the local economy and can contribute to overall economic growth. However, the lack of knowledge and skills regarding digital literacy will be an obstacle in using technology effectively. Businesses that do not have a strong knowledge base often feel overwhelmed by rapid technological change, which makes them reluctant to try and learn new technologies.

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2. Access to Technology
   Not all businesses have easy and affordable access to technology tools. Businesses tend to use simple and familiar technologies more often and are less interested in complex technologies that can provide greater benefits. This is because businesses find it difficult to integrate digital technology with existing business processes, so the technology is not used optimally. This is supported by research from Deloitte Access Economics that in expanding e-government services, access to the internet for the public is a major concern. Without the internet, these services cannot be accessed. Furthermore, existing online portals do not allow SMEs to communicate interactively about issues related to rules and procedures.

Discussion

Based on the description of the results in table 2, namely the perceived usefulness and ease of use of the SiBakul application, it shows that business actors agree that the application provides benefits, such as being able to access features on the platform such as training, MarketHub, YIA Gede Market Gallery, and product photo facilities. In addition, in terms of user convenience, business actors feel that the SiBakul application helps in the process of business activities because it can be flexibly accessed anytime and anywhere. However, to further optimize the use of the application in terms of expanding the market and reach to consumers, the author provides recommendations that can be made by the DIY cooperative and SME office as follows:

1. Provide education to the community
   There are still many people in Yogyakarta who do not know about the features of the SiBakul Jogja application and how to use it to order MSME products. Therefore, comprehensive education is needed not only for business actors but also for the general public to increase public awareness about the existence and benefits of the application.
2. Promoting SiBakul Jogja Application
   One of the objectives of the SiBakul Jogja application is to assist SMEs in reaching a wider market and as a marketing platform to promote their products. With this digital platform, SME products will be accessible to more consumers. Therefore, this platform requires promotion with a good marketing system. One of the things that can be done by the DIY cooperative and SME office is to add promotional media to further introduce the SiBakul application to the community. These promotional media include organizing or participating in events by providing booths for demonstrations and application downloads, making public service advertisements, regularly promoting on social media through creative content such as holding giveaways. This is in line with more proactive educational measures and promotion of public services through social media is needed so that the public better understands and utilizes the available services effectively (Darmawan *et al.*, 2020).

Based on Table 2, it is known that the aspect of actual use of digital technology must be the main focus in its development. The author provides recommendations for improvements that can be made by the DIY cooperative and SME office by increasing the number of sustainable training programs. Training programs and workshops that focus on increasing the digital literacy of business actors, such as how to use photo editing, data security, and the use of digital technology features that are directly practiced by business actors. This is in line with the strategy of Fuadi, Akhyadi and Saripah (2021) which shows that a mentoring strategy is needed in empowering SMEs, one of which is conducting continuous training and monitoring the results of the training.

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CONCLUSION

In writing the final internship assignment, it can be concluded that the SiBakul Jogja application is an application that began to be launched by the DIY cooperative and UKM office since 2019 and continues to develop to be able to facilitate business actors in Yogyakarta in carrying out their business activities. Over time, efforts to increase the number of application users and educate in increasing the use of digital technology continue. This final project seeks to identify the level of usability and ease of use of the SiBakul Jogja application. In addition, to find out how attitudes, intentions, and how often to use digital technology more generally in the daily operations of business people using the TAM (Technology Acceptance Model) approach.

The author distributed questionnaires using google form media which were filled in by 69 respondents. These respondents have characteristics, namely small and medium enterprises must have registered with the SiBakul Jogja application and have a smartphone. The data that has been obtained is processed and concluded that the perceived usefulness and perceived ease of use of the SiBakul Jogja application can be well received by SMEs in Yogyakarta. In addition, attitudes and intentions towards using digital technology also show an average value that falls into the agree category. While the actual use of technology regarding how often SMEs use digital technology shows an average value that falls into the category of moderately agree. Suggestions for the implementation of the next internship related to the use of digital technology, especially the SiBakul Jogja application, namely the need to explore specific reasons related to the assessment of the application.

In addition, it is better to find respondents who are more representative of application users. In addition, DISKOP UKM DIY as the government should play an active role in helping SMEs in the Special Region of Yogyakarta to improve digital literacy. With increased digital literacy, business actors will be better able to compete in the current digital era and more easily access consumers from various regions, both at home and abroad. In addition, good digital literacy will help SMEs in improving product quality, so that SME products can have higher competitiveness. DISKOP UKM DIY must be able to ensure that the development of SiBakul Jogja must maintain the two elements of usefulness and convenience so that it can be accepted as an innovation that helps SMEs in running their business.

REFERENCE

Bappeda (2024) *APLIKASI DATAKU DAERAH ISTIMEWA YOGYAKARTA, Bappeda Yogyakarta*. Available at: https://bappeda.jogjaprov.go.id/dataku/data_dasar/cetak/107-umkm (Accessed: 23 July 2024).

Civelek, M. and Krajčík, V. (2022) 'How do SMEs from different countries perceive export impediments depending on their firm-level characteristics? System approach', *Oeconomia Copernicana*, 13(1), pp. 55–78. Available at: https://journals.economic-research.pl/oc/article/view/1999.

Darmawan, A.K. *et al.* (2020) 'Identifying the Differing Service Maturity Levels of Mobile-based Smart Regency with e-Government Adoption Model (GAM) framework', in *2020 International Conference on ICT for Smart Society (ICISS)*. Bandung: IEEE, pp. 1–6. Available at: https://ieeexplore.ieee.org/document/9307540/authors#authors.

Davis, F.D. (1985) *A Technology Acceptance Model for Empirically Testing New End-User Information Systems*. Massachusetts Institute of Technology. Available at:

https://dspace.mit.edu/handle/1721.1/15192.

Davis, F.D. (1989) 'Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology', *Management Information System Quartely*, 13(3), pp. 319–340. Available at: https://www.jstor.org/stable/249008?origin=crossref.

Erlanitasari, Y., Rahmanto, A. and Wijaya, M. (2020) 'Digital economic literacy micro, small and medium enterprises (SMES) go online', *Informasi*, 49(2), pp. 145–156. Available at: https://doi.org/10.21831/informasi.v49i2.27827.

Fishbein, M. and Ajzen, I. (1975) *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Boston: Addison-Wesley Publishing Company.

Fuadi, D.S., Akhyadi, A.S. and Saripah, I. (2021) 'Systematic Review: Strategi Pemberdayaan Pelaku UMKM Menuju Ekonomi Digital Melalui Aksi Sosial', *Diklus: Jurnal Pendidikan Luar Sekolah*, 5(1), pp. 1–13. Available at: https://journal.uny.ac.id/index.php/jurnaldiklus/article/view/37122.

Gilster, P. (1997) *Digital literacy*. New York: Wiley Computer Pub.

Huang, D., Jin, X. and Coghlan, A. (2021) 'Advances in consumer innovation resistance research: A review and research agenda', *Technological Forecasting and Social Change*, 166, p. 120594. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0040162521000263.

Junaidi, M. (2023) *UMKM Hebat, Perekonomian Nasional Meningkat, Kementrian Keuangan Republik Indonesia*. Available at: https://djpb.kemenkeu.go.id/portal/id/berita/lainnya/opini/4133-umkm-hebat,-perekonomian-nasional-meningkat.html (Accessed: 23 July 2024).

Krajčík, V. *et al.* (2023) 'Digital Literacy and Digital Transformation Activities of Service and Manufacturing SMEs', *Journal of Tourism and Services*, 14(26), pp. 242–262. Available at: https://jots.cz/index.php/JoTS/article/view/551.

Limanseto, H. (2021) *UMKM Menjadi Pilar Penting dalam Perekonomian Indonesia*. Available at: https://ekon.go.id/publikasi/detail/2969/umkm-menjadi-pilar-penting-dalam-perekonomian-indonesia (Accessed: 23 July 2024).

Martin, A. (2006) 'A european framework for digital literacy', *Nordic Journal of Digital Literacy*, 1(2), pp. 151–161. Available at: https://www.idunn.no/doi/10.18261/ISSN1891-943X-2006-02-06.

Wahyudi, Y. (2023a) *SiBakul Jogja Platform Transformasi Digital Koperasi, Sibakul*. Available at: https://sibakuljogja.jogjaprov.go.id/blog/timteknis/sibakul-jogja-platform-transformasi-digital-koperasi/ (Accessed: 23 July 2024).

Wahyudi, Y. (2023b) *SiBakul Jogja Upaya digitalisasi Koperasi dan UKM Pemda DIY, Sibakul*. Available at: https://sibakuljogja.jogjaprov.go.id/blog/timteknis/sibakul-jogja-upaya-digitalisasi-koperasi-dan-ukm-pemda-diy/ (Accessed: 23 July 2024).