Jurnal Penyuluhan Vol. 22 (01) 2026 | 96-107
https://doi.org/10.25015/22202666430
E-ISSN: 2442-4110 | P-ISSN: 1858-2664

The Correlation of Digital Literacy and Acceptance of Information and Communication Technology in Bantarjaya Village Community

Amiruddin Saleh[1,*)], Hudi Santoso[2], Fatimah Az-Zahra[3]

[1]Department of Communication and Community Development Science, IPB University, Bogor, West Java, 16680, Indonesia
[2]Digital Communication and Media Studies Program, Vocational School, IPB University, Bogor, West Java, 16128, Indonesia
[3]Center for Gender and Child Studies (PKGA), Institute for Research and Community Service (LPPM), IPB University Baranangsiang Campus, IPB University Jl. Raya Pajajaran, Bogor 16144 West Java, Indonesia
[*)]*E-mail correspondence: amiruddin_ipb@yahoo.co.id*
Received: 21 July 2025 | Revised: 26 March 2026 | Accepted: 23 April 2026 | Online Publication: 18 May 2026

ABSTRACT

There is a need for basic technological skills in the form of digital literacy as a basis for facing the digital era, to be able to accept existing information and communication technology (ICT). Moreover, the government, through Presidential Instruction Number 3 of 2003, stated that the creation of e-government focuses on transparent, efficient, and accurate communication between government, businesses, the public, and other stakeholders, including through new media (digitalization). Technological innovations are currently being promoted in villages across Indonesia to support digitalization. Digital literacy challenges remain in rural communities, leading to low acceptance of ICT in terms of perceived usefulness and perceived ease of use. ICT acceptance can be measured using the Technology Acceptance Model (TAM). This study aims to analyze the level of digital literacy and ICT acceptance in society, as well as to analyze the relationship between digital literacy and individual characteristics and ICT acceptance. The research used a quantitative approach with a survey method for 54 respondents, and qualitative data. The results of the study indicate that 1) digital literacy in Bantarjaya Village is in the moderate category; 2) ICT acceptance in Bantarjaya Village shows moderate results; 3) There is a significant relationship between individual characteristics including age, education, occupation, and number of gadgets owned with digital literacy; 4) and there is a significant relationship between digital literacy and acceptance of information and communication technology in the technology acceptance model.

Keywords: *digital literacy, information and communication technology, social media, TAM*

INTRODUCTION

The development of information and communication technology (ICT) is currently growing rapidly. Various services are offered through online media, aiming to simplify human life. Based on data presented by the Badan Pusat Statistik (2024), ICT development continues to increase over time, reaching 5,76 percent in 2021. This figure is a 0,17 percent increase from 2020. ICT developments need to be implemented by various sectors, one of which is the government sector. According to Prabandari and Faizatul Ansoriyah (2023), the role of ICT in the government sector encourages the effective and transparent dissemination of information. This can support the development of e-government as stated in Presidential Instruction Number 3 of 2003, which states that the creation of e-government focuses on transparent, efficient, and accurate communication between the government, businesses, the public, and other stakeholders. The dissemination of information by the government can be done through social media. Social media is an online medium that provides a space for its users to easily participate, share, interact, discuss, collaborate, and create ideas (Novianti 2020; Saleh & Hanifah 2024). Various types of social media such as Instagram, Facebook, Twitter (x) and YouTube can be used by the government to disseminate information. Based on data from We Are Social (2024), the most widely used social media in Indonesia are WhatsApp at 90,9 percent, Instagram at 85,3 percent, and Facebook at 81,6 percent with an average time spent reaching three hours and eleven minutes per day. According to Loilatu et al. (2021), the development of ICT has changed the way people obtain information. Previously, information was only obtained through print media, now information can be found through their social media. There has been a shift in participation in community empowerment programs during and after the Covid-19 pandemic, from utilizing conventional mass media (radio broadcasts, television and print media) to digital media (Saleh & Hanifah 2024; Leonardo 2024). According to research conducted by Dana & Kadeni (2023), individual characteristics significantly influence digital literacy. This study used indicators such as age, gender, education, occupation, and gadget ownership (Iman et al. 2024; Sarbana et al. 2023; Sulistianingsih et al. 2021).

The continuous development of information and communication technology requires basic skills to operate it. This basic skill is digital literacy. According to United Nations Educational, Scientific and Cultural Organization [UNESCO] (2018), digital literacy is an individual's ability to find, evaluate, utilize, create, and operate information using information and communication technology. Based on a survey conducted by Kementerian Komunikasi dan Informatika (2022), Indonesia's digital literacy index in 2022 was 3,54, which is in the moderate category. According to Pratiwi et al. (2021), online media has become a platform for communicating and interacting with family and close relatives without the need for face-to-face meetings. This is one of the positive impacts of online media. However, it does not guarantee that online media is safe from negative impacts such as hoaxes, cyberbullying, radicalism, ethnicity, religion, race, and intergroup relations (SARA), and fraud. According to Sutrisna (2020), individual awareness can prevent the negative impacts of online media; this awareness is in the form of digital literacy. Several previous studies on digital literacy have yielded varying results, depending on the research context. For example, research conducted by Pratiwi et al. (2021), showed that the digital literacy of Mathematics students at Semarang State University is at a fairly good level. Takariani et al. (2023), stated that the digital literacy level of the West Bandung Regency community is still in the moderate category.

Technological innovations are currently being promoted in villages across Indonesia to support digitalization. However, a gap still exists between urban and rural communities. One of the challenges in achieving technology acceptance is the low level of digital literacy among the community. Digital literacy plays a crucial role in digital information transformation. According to Kamal et al. (2021), rural communities still face challenges in digital literacy, resulting in low acceptance of information and communication technology in terms of perceived usefulness and perceived ease of use. The TAM model is one method that can be used to identify and analyze factors influencing user acceptance of technology (Sasmita et al. 2025a; Hantono et al. 2023; Wijaya et al. 2023).

Low levels of digital literacy can result in low acceptance of technology (Wijaya et al. 2023), including among millennial farmers (Sasmita et al. 2025b). ICT acceptance can be measured through the theory of Technology Acceptance Model (TAM). According to Wartono et al. (2024), technology *acceptance model* TAM is a technology adoption model developed by Fred D Davis in 1989 to provide an accurate and simple explanation of technology acceptance. The TAM theory has two main indicators, namely perceived usefulness and perceived ease of use (Wibowo 2008; Hantono et al. 2023).

Digital literacy is a crucial aspect that everyone must possess to keep up with the ever-evolving developments in digital technology. According to Maulana and Suyono (2023), the rapid pace of technological development presents challenges in terms of digital literacy, and the digital skills possessed by the community are not evenly distributed. Technological innovations are currently being promoted in villages across Indonesia to support digitalization. One such innovation is the creation of village social media to disseminate information to the public. However, a gap still exists between urban and rural communities. According to Kamal et al. (2021), rural communities still face challenges in digital literacy, resulting in low acceptance of information and communication technology in two aspects: perceived usefulness and perceived ease of use. Bantarjaya Village, Rancabungur District, Bogor Regency, has implemented digitalization in its information dissemination process. This dissemination is carried out through village social. Explicitly, there are four research problem formulations and two research hypotheses (H1) presented as research objectives, namely 1) to analyze the level of digital literacy, and 2) the acceptance of ICT in the Bantarjaya Village community, 3) to analyze the relationship between individual characteristics and the digital literacy of the Bantarjaya Village community, and 4) to analyze the relationship between the digital literacy of the Bantarjaya Village community and the acceptance of ICT in the TAM model.

METHODS

This study used a quantitative approach with a survey method of 54 respondents, and qualitative. This quantitative approach was used to answer questions related to the relationship between respondent characteristics and digital literacy and the relationship between digital literacy and the acceptance of information and communication technology. The qualitative data in this study aims to support the quantitative data, providing a detailed description of aspects of digital literacy and the acceptance of information and communication technology. Qualitative data are generated from in-depth interview guides with informants to provide detailed data regarding digital literacy skills and the acceptance of information and communication technology. The location was deliberately chosen in Bantarjaya Village, Rancabungur District, Bogor Regency, considering it a digitally independent village. In 2021, the Bantarjaya Village government's Instagram account won first place in the Bogor Regency social media management competition. The study was conducted from January to July 2025.

The study population was 1,681 internet users across twelve neighborhood units (RW) in Bantarjaya Village, Rancabungur District, Bogor Regency. Cluster random sampling was used, selecting the two neighborhood units (RW) with the highest number of internet users as the target population: RW 1 and RW 7. The total sample size calculated between these two groups was 551. Using the Taro Yamane formula, a sample size of 54 respondents was obtained. In addition, four informants provided relevant insights regarding digital literacy and the acceptance of information and communication technology within the Bantarjaya Village community. The data used in this study consisted of primary and secondary data. Primary data included data collected directly using survey data collection techniques, in-depth interviews, and field observations. Secondary data were obtained through a literature review related to the general overview of the research location and relevant literature on digital literacy and the acceptance of information and communication technology (ICT) in the TAM model. The collected data was then input into Microsoft Excel 2021 and processed using IBM SPSS Statistics 25 to answer the descriptive research questions. Descriptive statistical analysis was used, including percentages, averages, scores, total scores, and cross-tabulations. Qualitative data was processed and analyzed through data reduction, data presentation, and conclusion drawing.

RESULTS AND DISCUSSION

Overview of Bantarjaya Village

Bantarjaya Village is located in Rancabungur District, Bogor Regency. Situated to the east of Rancabungur District, it has an elevation of less than 165 meters above sea level and averages 200 mm of rainfall with temperatures ranging from 28 to 32 degrees Celsius. Bantarjaya Village covers 267,40 hectares and has 12 neighborhood associations (RW). The total land area per RW is as follows: RW 01 is 33,07 hectares, RW 02 is 16,26 hectares, RW 03 is 24,26 hectares, RW 04 is 10,27 hectares, RW 05 is 27,71 hectares, RW 06 is 36,03 hectares, RW 07 is 22,68 hectares, RW 08 is 29,06 hectares, RW 09 is 26,84 hectares, RW 10 is 11,01 hectares, RW 11 is 16,35 hectares, and RW 12 is 13,83 hectares.

Bantarjaya Village has a total of 3.689 families with a total of 10.240 people in 2020. The largest population is found in RW 03 with a population of 1.261 people, while the RW with the smallest population is RW 08 with a population of 649 people. The population by gender consist of 5.200 males and 5.040 female. Based on education level, the population without a diploma is mostly found in RW 7. In terms of employment, the people of Bantarjaya Village are dominated by housewives, numbering 2.391 people, in addition, many people have side jobs trading. This also affects the large number of land conversions carried out in Bantarjaya Village, so that people who previously worked as farmers or farm laborers changed professions to become traders.

Characteristics of Individuals in Bantarjaya Village

Respondents in this study were residents of Bantarjaya Village who lived in RW 1 and RW 7 and had accessed the village government's social media. This study involved 54 respondents, with details of 29 respondents from RW 1 and 25 respondents from RW 7. The statements listed in the questionnaire were relevant to the conditions or experiences of each respondent. The characteristics of respondents in this study included (1) age, (2) gender, (3) education, (4) occupation, and (5) number of gadgets owned. The characteristics of respondents in this study are listed in the following Table 1.

Table 1. Characteristics of individual in Bantarjaya Village, 2025

Characteristics of Individual	Number (people)	Percentage (%)
Age		
Gen Z (13-28 tahun)	23	42,59
Gen Milenial (29-44 tahun)	21	38,89
Gen X (45-60 tahun)	10	18,52
Gender		
Male	21	38,89
Female	33	61,11
Education		
Graduated from elementary school/junior high school	21	38,89
High school graduate/equivalent	30	55,56
Pass Diploma/Undergraduate	3	5,55
Occupation		
Last day labor	12	22,22
Self-employed	6	11,11
Housewife	24	44,44
Students	1	1,85
Honorary employees	1	1,85
Private sector employee	5	9,26
Not yet working	5	9,27
Number of gadgets owned		
1 gadget	49	90,74
2 gadgets	5	9,26

n = 54. Source: Processed data, 2026.

The majority of respondents in this study were between the ages of 13 and 28, which demographically falls into the Generation Z group. According to Firamadhina and Krisnani (2021), Generation Z is a generation that grew up in a technologically advanced environment, so they are accustomed to and tend to have a high interest in using the internet in their daily lives. In line with this, research conducted by Nurohmat et al. (2024), also shows that the presence of social media has had an impact on increasing the productivity of Generation Z, especially in the aspects of communication, entertainment, and information utilization.

In the context of village social media use, women tend to be more active in accessing information provided through official village government digital platforms. Although, according to Deselia and Sinaga (2024), women generally have slightly lower technological skills than men, they still play a crucial role in the process of economic and social digitalization, particularly in rural communities. This role reflects the fact that technology is not only used by those with higher education or formal employment, but is also actively adopted by women's groups to meet their daily needs.

The majority of respondents who actively access village-owned social media are those with a high school diploma or equivalent. This indicates that secondary education is a crucial starting point for communities in understanding and using digital media, particularly in the context of government communications. Meanwhile, the majority of respondents in this study were housewives, who despite not being formally employed, still showed interest and participation in using village social media as a source of information. Ownership of gadget and laptop remains limited, with most respondents only owning smartphones for accessing information (Saleh et al. 2025; Takariani et al. 2023). This indicates that gadget ownership is fairly widespread, but only at a low level.

Digital Literacy of Bantarjaya Village Community

Digital literacy plays a crucial role in society's ability to adapt to the increasingly rapid development of information and communication technology. Amidst the rapid digitalization of rural areas, the ability to understand, manage, and utilize technology has become a basic need for everyone. According to Pitrianti et al. (2023), digital literacy is crucial in supporting individual understanding in the digital era.

According to Tahir et al. (2021), defines digital literacy as a person's ability to operate technological devices for specific purposes, including the utilization and evaluation of technical and cognitive skills. In the context of this research, the digital literacy of the Bantarjaya Village community was analyzed through four main indicators referring to the UNESCO (2018) include information and data literacy, communication and collaboration, digital security, and technological capabilities. These four indicators are used to measure the extent to which the community is able to access and understand information, interact and collaborate through digital platforms, maintain the security of personal data from digital risks, and use technological devices to support daily activities.

The selection of these indicators reflects the importance of a comprehensive understanding of digital literacy among the public. Information and data literacy reflects the public's ability to find, evaluate, and utilize information effectively and efficiently. Communication and collaboration reflect the extent to which people can use digital media to interact positively and build cooperation in the digital space. Digital security measures public awareness of protecting privacy and personal data, and avoiding risks arising from digital media use. Meanwhile, technological capability focuses on an individual's technical skills in operating digital devices such as smartphones and available applications.

With the increasing use of social media by village governments as a means of disseminating information, strong digital literacy skills have become crucial. Communities with high levels of digital literacy will more easily understand and utilize information disseminated by the village. Conversely, communities with low levels of digital literacy tend to experience obstacles in accessing information, understanding message content, or even being exposed to digital risks such as online fraud. Therefore, a deeper understanding of digital literacy among the Bantarjaya Village community is needed to improve the effectiveness of village government communications through social media.

Table 2. Digital literacy of the community in Bantarjaya Village, 2025

Digital Literacy	Category	Number (people)	Percentage (%)
Information and Data Literacy	Low	17	31,48
	Moderate	25	46,30
	High	12	22,22
Communication and Collaboration	Low	18	33.33
	Moderate	32	59,26
	High	4	7,41
Security	Low	8	14,81
	Moderate	40	74,07
	High	6	11,12
Technological Capabilities	Low	26	48,15
	Moderate	19	35,19
	High	9	16,66

n = 54. Source: Processed data, 2026.

The majority of respondents fell into the moderate category for the information and data literacy indicators. This indicates that the Bantarjaya Village community already possesses sufficient information and data literacy skills. However, some residents still fall into the low category. "...*kadang*

ada info-info yang saya kurang paham, tapi paling nanya RW buat lebih jelasnya..." (IS, Bantarjaya Village, 6/5/25)

This statement indicates that some residents of Bantarjaya Village already possess basic skills in understanding information conveyed through social media. This demonstrates a sufficient level of digital literacy, allowing residents to access and understand information, despite limitations. Residents take the initiative to seek clarification from the neighborhood unit (RW) head when they encounter unclear or confusing information.

The majority of respondents fell into the moderate category for the communication and collaboration indicators. This indicates that the Bantarjaya Village community already possesses sufficient skills in interacting, communicating, and collaborating on social media. However, 18 respondents fell into the low category, indicating that they still face challenges in interacting through social media. The people of Bantarjaya Village use social media primarily for entertainment by watching videos, without engaging in interactive activities like commenting. This indicates that the primary purpose of social media use is to fill free time or simply for entertainment, rather than to communicate, interact, and collaborate with other users.

The majority of respondents in the security indicator fell into the moderate category. This means that the majority of Bantarjaya Village residents already have sufficient understanding and skills in maintaining digital security, such as protecting personal data and maintaining a healthy digital environment. Some respondents fell into the low category, indicating that some still don't understand the importance of maintaining security when using social media. People are increasingly concerned about digital security and are aware of negative content such as satire or insults, and understand the digital security risks posed by the spread of suspicious links. Based on research conducted by Sitabuana et al. (2023), a lack of technical understanding regarding suspicious links or applications, such as verification through close friends, can prevent someone from experiencing losses through digital media.

The majority of respondents fell into the low category on the technological capability indicator. This indicates that most respondents have difficulty using technology independently. Only 16,66 percent of respondents fell into the high category, indicating that there are still very few people who are truly capable of using technology effectively and independently. "…*Saya sih paling cuma buka ig atau WA, kalo yang lain mah masih bingung. Kadang dibantuin sama anak*…" (KK, Bantarjaya Village, 6/5/25) The people of Bantarjaya Village still have limited technological capabilities, particularly when it comes to accessing and operating devices. They still find it difficult to access applications or other features.

Acceptance of Information and Communication Technology

The acceptance of information and communication technology (ICT) in this study uses the TAM theory by Davis (1989). The aspects examined in this study include two aspects: perceived usefulness and perceived ease of use. The following is the percentage of acceptance of information and communication technology in Bantarjaya Village (Presented in Table 3).

Based on the indicator for accelerating information acquisition, the majority of respondents, or 55,56 percent, fell into the moderate category. This demonstrates that village social media is quite helpful in accelerating information acquisition. Although 40,74 percent still felt it was of little benefit, and only 3,70 percent felt it was very helpful. This indicates that village social media is beginning to be felt to be useful in conveying information, but its use is not yet fully optimal or evenly distributed.

Similarly to the perception of usefulness, respondents' perception of the ease of receiving and accessing information on social media is classified as moderate, more than half (53,70 percent) of respondents stated this.

The perceived usefulness in this study has four indicators: accelerating information reception, increasing productivity, increasing effectiveness, and being useful. In the indicator of accelerating information reception, village social media is beginning to be felt to be useful in conveying information. However, its utilization remains suboptimal and unevenly distributed. In the indicator of increasing productivity, the Bantarjaya Village community still prefers to obtain information directly by visiting the village office rather than using social media. Village social media has not been optimally utilized as a productive means to facilitate daily activities to receive information. In the indicator of increasing social media effectiveness, the village government has not been fully effective in supporting the ease of transparency of village information through social media. In the indicator of the usefulness of social media, the village government has not yet fully perceived the benefits of social media by the community.

Table 3. Acceptance of information and communication technology in Bantarjaya Village, 2025

The Acceptance of ICT	Category	Number (people)	Percentage (%)
Perceived Usefulness	***Moderate***		**55.56**
Increase productivity	Low	25	46.30
	Moderate	25	46.30
	High	4	7.40
Improve effectiveness	Low	26	48.16
	Moderate	24	44.44
	High	4	7.40
Usefulness	Low	36	66.67
	Moderate	28	33.33
Perceived Ease of Use	***Moderate***		**53.70**
Easy to learn	Low	27	50.00
	Moderate	25	46.30
	High	2	3.70
Easy to understand	Low	22	40.74
	Moderate	29	53.70
	High	3	5.00
Flexibility	Low	30	55.56
	Moderate	19	35.19
	High	5	9.25
Easy to operate	Low	31	57.41
	Moderate	21	38.89
	High	2	3.70

n = 54. Source: Processed data, 2026.

This is evident from the low public perception of the ability of social media to present content that suits their needs. This indicates that village social media has not been optimally utilized as a means of disseminating information relevant to community needs. The lack of information related to training can reflect the low role of village social media in encouraging active community involvement. Perceived ease of use has four indicators: ease of learning, ease of understanding, flexibility, and ease of operation. Based on the ease of learning indicator, the majority of people still find it difficult or require additional assistance in learning how to use social media, particularly accessing village government social media. There are difficulties in learning and adapting to social media among older age groups, while young people find it easier to learn because they are already accustomed to using digital technology. These results indicate that village social media is still not fully user-friendly and accessible to all groups, necessitating efforts to improve digital literacy, especially for those unfamiliar with technology. In the ease of understanding indicator, information disseminated through village government social media is not yet fully understood by the public. This indicates that the approach to message delivery still needs to be improved. Therefore, village social media is still not fully effective in conveying information that is easily understood by the public, especially those unfamiliar with digital technology or those with limited information literacy. In the flexibility indicator, the majority of respondents are categorized as low, indicating that accessibility of information through village government social media is still limited for most people. Although village social media provides various social media platforms, their use has not yet reached a wide audience. This indicates that the level of flexibility in accessing information through village social media is still low and cannot replace the effectiveness of direct communication among the community. The majority of respondents rated the ease of use indicator as low. This indicates that the majority of the community still does not perceive village social media as easy to use. This reflects a suboptimal ease of use. This indicator demonstrates the need for improvements in usage or technical outreach to the community to ensure its effective operation.

The Relationship between Individual Characteristics and Digital Literacy

The individual characteristics in this study consisted of five indicators: age, gender, education, occupation, and number of gadgets owned. These individual characteristics were then examined in relation to digital literacy, which encompasses aspects of information and data literacy, communication and collaboration, security, and technological capabilities. The relationship was tested using Spearman's rank correlation and chi-square tests. Variables with nominal data, namely gender and occupation, were tested using chi-square.

Table 4. The relationship between individual characteristics and digital literacy, 2025

Individual Characteristics	Digital Literacy		
	Statistical Test	p-value	Correlation Coefficient
Age	rank Spearman	0,000	-0,506**
Gender	chi-square	0,051	0,333
Education	rank Spearman	0,000	0,567**
Occupation	chi square	0,016	0,506*
Number of gadgets owned	rank Spearman	0,000	0,469**

*significant at α ≤0,05; **significant at α ≤0,01. Source: Processed data, 2026.

For the age indicator, the Spearman rank correlation test results showed a p-value of 0,000 and a correlation coefficient of -0,506**, indicating a significant negative relationship between age and digital literacy variables. Based on the results of the correlation test, the higher a person's age, the lower their digital literacy. According to Hidayati et al. (2023), young people tend to use the internet more frequently than older people. This suggests that young people are already accustomed to using technology in their daily lives. The gender indicator was tested using the chi-square correlation test. There was a p-value of 0,051 with a correlation coefficient of 0,333, indicating that there was no significant relationship between gender and digital literacy. These results align with research conducted by Hadiyanto et al. (2024), that found that gender had no statistically significant relationship to digital literacy levels. Lafifa and Rosana (2023), also found that although men had a slight advantage over women in digital skills, the difference was not statistically significant. The education indicator was tested using the Spearman rank correlation test and showed a p-value of 0,000 and a correlation coefficient of 0,567**, indicating that there was a significant positive relationship between education level and digital literacy. This is in line with research conducted by Takariani *et al*., (2023), which stated that there is a significant relationship between education level and digital literacy, the higher an individual's education level, the higher their digital literacy level. The occupation indicator was tested using the chi-square correlation test which showed a p-value of 0,016 with a correlation coefficient of 0,506*, meaning there was a significant relationship between the type of work and digital literacy. The gadget ownership indicator was tested using the Spearman rank correlation which produced a p-value of 0,000 with a correlation coefficient of 0,469**, which indicates a significant positive relationship between the number of gadget ownership indicators and digital literacy. These results align with research by Hadiyanto et al. (2024), which found a significant correlation between gadget ownership and digital media literacy. The greater the number of communication devices owned, the higher the level of digital literacy.

The results of the inferential statistical analysis in Table 4 confirm the acceptance of the first research hypothesis (H1), which states a significant relationship between individual characteristics and digital literacy. This is consistent with the variables of age, education, occupation, and number of gadgets owned, which are associated with digital literacy. However, the correlation between gender and digital literacy is rejected.

The Relationship between Digital Literacy and Acceptance of Information and Communication Technology

The acceptance of information and communication technology (TAM) model explains how users accept and use new technology. TAM is fundamentally based on psychological theory, which refers to user beliefs, attitudes, interests, and behavioral relationships (Indiarma 2023). This study examines the correlation between digital literacy and the acceptance of information and communication technology. Dimensions of digital literacy include information and data literacy, communication and collaboration, security, and technological capabilities. The acceptance of information and communication technology explored in this study includes perceived usefulness and perceived ease of use.

The results of the Spearman rank correlation test regarding the relationship between digital literacy and acceptance of information and communication technology in the aspect of perceived usefulness show a p-value of 0,000 with correlation coefficient of 0,808. This figure indicates a very strong and significant relationship between the community's digital literacy level and their perception of the usefulness of information and communication technology, particularly social media, used by the Bantarjaya Village government. In other words, the higher the community's digital literacy, the greater their acceptance of

village social media as a tool that provides tangible benefits in daily life, such as disseminating information, notifying village activities, and accessing public services.

Table 5. The relationship between digital literacy with perveiced usefulness and perceived ease of use, 2025

Digital Literacy	Perceived Usefulness			Perceived Ease of Use	
	Statistical Test	p-value	Correlation Coefficient	p-value	Correlation Coefficient
	rank Spearman	0,000	0,808**	0,000	0,828**

**significant at α ≤0,01. Source: Processed data, 2026.

This very strong relationship confirms that digital literacy plays a crucial role in shaping positive public perceptions of digital technology, particularly in assessing the practical benefits it offers. This finding reinforces the research conducted by Fadliyah and Zatadini (2024), which stated that Technology Acceptance Model (TAM), especially in the aspect of perceived usefulness is closely related to digital literacy levels. The study explained that the more frequently someone uses technology in their daily activities, the more their digital literacy skills will develop. This occurs because high frequency of technology use encourages individuals to become more accustomed to navigating digital devices, understanding their functions, and being able to utilize the technology to meet informational and social needs.

The results of the correlation test between digital literacy and perceived ease of use show p-value of 0,000 and correlation coefficient of 0,828. This value shows that it is very strong and significant. There is a correlation between a community's digital literacy level and their ease of using or accessing information and communication technology, particularly village-owned social media. In other words, the higher a person's digital literacy, the higher their perception that using village social media is easy, uncomplicated, and accessible without significant difficulty.

These findings indicate that communities with high levels of digital literacy adapt more quickly to technology, are more adept at navigating various social media features, and are better able to understand information delivered digitally by village governments. This ease of use encompasses various aspects, such as understanding shared content, finding important information, and even accessing village services and announcements published online.

These results are in line with research conducted by Istikomah et al. (2024), who found that digital literacy has a significant relationship with the acceptance of information and communication technology, especially in the aspect of perceived ease of use or perceptions of ease of use. The study explained that the better a person's digital skills, both in terms of technological understanding and technical skills, the greater the ease with which they can use and accept digital technology as a means of communication and information delivery.

"*...Menurut saya gampang sih, karena saya udah biasa juga buka facebook, tiktok, gitu jadi pas dikasih info dari desa ya tinggal baca aja, gampang....*" (ND, Bantarjaya Village, 6/5/25). This statement shows that the habit of using social media in everyday life can shape the perception of ease of use of social media. This shows that experience and habits in using social media can influence public acceptance of social media as a means of communication.

The second research hypothesis (H1) is that there is a significant relationship between digital literacy and the acceptance of information and communication technology. The study results indicate a significant relationship between digital literacy and the acceptance of information and communication technology. Therefore, the second H1 is accepted.

CONCLUSION

The digital literacy of the Bantarjaya Village community is classified as moderate. This finding indicates that the community has a basic understanding of digital technology use, but has not yet reached a high level. Therefore, capacity building efforts through ongoing education and mentoring are needed to ensure the community's digital literacy develops more evenly and optimally.

The analysis of perceived usefulness and perceived ease of use indicators shows that both are in the moderate category. This indicates that the Bantarjaya Village community has begun to experience the benefits and ease of use of information and communication technology, but their acceptance has not yet

reached optimal levels. Therefore, capacity building and practical assistance with technology use are still needed to encourage higher technology acceptance in the future.

Based on the results of the Spearman rank and Chi-Square correlation tests, age, education, occupation, and number of gadgets owned have a moderate and significant relationship with digital literacy. However, gender did not significantly correlate with digital literacy. There was a negative relationship with age, indicating that the older a person is, the lower their digital literacy skills.

The results of the correlation test between digital literacy and acceptance of information and communication technology, tested using the Spearman rank test, showed a significant and very strong positive relationship between digital literacy and perceived usefulness and perceived ease of use. This indicates that the higher a person's digital literacy skills, the higher their acceptance of information and communication technology.

ACKNOWLEDGEMENT

The author like to thank people in the research community Bantarjaya Village and other parties who have contributed to this research, especially Department Communication Science and Community Development, IPB University.

REFERENCE

Badan Pusat Statistik. (2024). *Indeks pembangunan teknologi informasi dan komunikasi 2023*. https://www.bps.go.id/id/publication/2024/09/30/b50f00b8615fc8716c8e02d4/indekspembangunan-teknologi-informasi-dan-komunikasi-2023.html

Sarbana, B., Saleh, A., Fatchiya, A., & Firdaus, M. (2023). Analisis efektivitas komunikasi pemangku kepentingan untuk keberlanjutan bisnis UMK di Geopark Pongkor. *Jurnal Penyuluhan 19*(1), 104-116. https://doi.org/10.25015/penyuluhan.v19i1.49159

Dana, M., & Kadeni. (2023). Pengaruh karakteristik individu, literasi digital, lingkungan keluarga, teman sebaya terhadap niat berwirausaha mahasiswa. *Jurnal Ilmiah Multidisiplin, 1*(9), 305-312. https://doi.org/10.5281/zenodo.10040931

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly: Management Information Systems*, *13*(3), 319–339. https://doi.org/10.2307/249008

Deselia, S., & Sinaga, H. (2024). Gender disparities in technological proficiency among women online workers in the digital economy era. *HUMANISMA: Journal of Gender Studies*, *8*(2), 106–121. https://doi.org/10.30983/humanisma.v8i2.8742

Fadliyah, A. H., & Zatadini, G. I. (2024). Pengaruh pemanfaatan ChatGPT terhadap literasi digital pengguna (studi kasus di kalangan mahasiswa UIN Sayyid Ali Rahmatullah Tulungagung). *Journal of Educational and Cultural Studies*, *3*(2), 175–181. https://jurnal.litnuspublisher.com/index.php/jecs

Firamadhina, F. I. R., & Krisnani, H. (2021). Perilaku generasi z terhadap penggunaan media sosisal tiktok: tiktok sebagai media edukasi dan aktivisme. *Share: Social Work Journal*, *10*(2), 199-208. https://doi.org/10.24198/share.v10i2.31443

Hadiyanto, Batubara, R., & Nawireja, I. K. (2024). Hubungan karakteristik individu dan aksesibilitas terhadap internet dengan tingkat literasi digital di kalangan pemuda (Kasus: pemuda Desa Gunung Putri, Kecamatan Gunung Putri, Kabupaten Bogor). *Jurnal Sains Komunikasi dan Pengembangan Masyarakat [JSKPM]*, *8*(03), 28–39. https://doi.org/10.29244/jskpm.v8i03.1347

Hantono, H., Tjong, W., & Jony, J. (2023). Pengaruh technology acceptance model terhadap intention to use dengan kinerja sebagai variabel moderasi dalam menggunakan sistem informasi akuntansi. *Owner: Riset dan Jurnal Akuntansi, 7*(2), 1815-1830. https://doi.org/10.33395/owner.v7i2.1583

Hidayati, L., Kusuma, L. P., & Agustini, D. (2023). Analsisis perilaku masyarakat dalam literasi digital di Provinsi Ntb. *Journal of Innovation Research and Knowledge*, *3*(2), 353–362. https://doi.org/10.53625/jirk.v3i2.6244

Iman, M. R., Bakari, Y., & Moonti, A. (2024). Literasi gigital UMKM agribisnis dalam adopsi strategi

pemasaran digital di Kecamatan Limboto Kabupaten Gorontalo. *Mimbar Agribisnis : Jurnal Pemikiran Masyarakat Ilmiah Berwawasan Agribisnis*, *10*(2), 2613–2625. http://dx.doi.org/10.25157/ma.v10i2.14313

Indiarma, V. (2023). Inovasi teknologi informasi dan komunikasi di usaha mikro kecil menengah pedesaan (adopsi inovasi dalam pemanfaatan teknologi informasi dan komunikasi pada UMKM di Desa Sukasari, Seluma). *Tuturlogi*, *4*(3), 90. https://doi.org/10.21776/ub.tuturlogi.2023.004.03.4

Istikomah, N. E., Sudarno, S., & Sabandi, M. (2024). The influence of digital literacy on the use of online tutoring systems according to technology acceptance model (TAM). *Edueksos Jurnal Pendidikan Sosial & Ekonomi*, *13*(01), 199–214. https://doi.org/10.24235/edueksos.v13i01.17214

Kamal, K., Makmur, M. A., & Ibrahim, M. R. (2021). Aksesibilitas media online pada masyarakat pedesaan di Kecamatan Bua Kabupaten Luwu: Media online accessibility in rural communities in Bua District, Luwu Regency. *Jurnal Pekommas, 6*(2), 33–40.

Kementerian Komunikasi dan Informatika. (2022). *Status literasi digital di Indonesia 2022*. https://data.komdigi.go.id/publikasi/document/indeks-literasi-digital-2022

Lafifa, F., & Rosana, D. (2023). Exploring the digital literacy profile: A closer look based on gender. In *Proceedings of the International Joint Conference on Arts and Humanities 2023* (IJCAH 2023). Atlantis Press. https://doi.org/10.2991/978-2-38476-152-4_194

Leonardo, A., Hubeis, A. V. S., Saleh, A., & Fatchiya, A. (2024). Utilizing digital information and communication technology for business development among female micro-scale fish processors in Jakarta. *Multidisciplinary Science Journal, 7*(5), 2025193. https://doi.org/10.31893/multiscience.2025193

Loilatu, M. J., Irawan, B., Salahudin, S., & Sihidi, I. T. (2021). Analisis fungsi Twitter sebagai media komunikasi transportasi publik. *Jurnal Komunikasi, 13*(1), 54–68. https://doi.org/10.24912/jk.v13i1.8707

Maulana, M. I., & Suyono, E. (2023). Pengaruh litersi keuangan dan literasi digital terhadap keberlanjutan bisnis pelaku UMKM berbasis syariah. *Jurnal Ilmiah Ekonomi Islam*, *9*(3), 4256-4271. https://doi.org/10.29040/jiei.v9i3.10856

Novianti, E., Nugraha, A. R., Komalasari, L., Komariah, K., & Rejeki, D. S. (2020). Pemanfaatan media sosial dalam penyebaran informasi program pemerintah (studi kasus sekretariat daerah Kabupaten Pangandaran). *Jurnal Komunikasi dan Penyiaran Islam*, *11*(1), 48–59. https://ejournal.uinib.ac.id/jurnal/index.php/almunir

Nurohmat, N., Latief, R., & Safrudiningsih. (2024). Pengaruh media sosial terhadap produktivitas Gen Z. *Dialektika Komunika: Jurnal Kajian Komunikasi dan Pembangunan Daerah, 12*(1), 110–122. https://doi.org/10.33592/dk.v12i1.4932

Pitrianti, S., Sampetoding, E. A. M., Purba, A. A., & Pongtambing, Y. S. (2023). Literasi digital pada masyarakat desa. *Prosiding Seminar Nasional Teknologi dan Sistem Informasi*, *3*(1), 43–49. https://doi.org/10.33005/sitasi.v3i1.655

Prabandari, A. D., & Ansoriyah, F. (2023). Pengaruh persepsi kegunaan, kemudahan, sikap, niat pengguna terhadap kenyataan penggunaan aplikasi SiPolgan. *Jurnal Mahasiswa Wacana Publik, 3*(2), 312–326. https://doi.org/10.20961/wp.v3i2.78254

Pratiwi, D., Utami, T., Korneliya, B., Rafiadzkay, M., & Aini, S. (2021). Tingkat literasi digital mahasiswa Jurusan Matematika Universitas Negeri Semarang pada pembelajaran daring. *Journal of Education and Technology*, *1*(1), 30–36.

Saleh, A., Hamzah, Wetik, J. D., Palahudin, & Sumaedi, S. (2025). A model of smart village ICT behavior: The role of external conditions, perceptions, and attitudes towards ICT use (an empirical evidence from Indonesia). *Cogent Social Sciences, 11*(1), 2560663. https://doi.org/10.1080/23311886.2025.2560663

Saleh, A., & Hanifah, N. (2024). The influence of program participation on the empowerment of sustainable food program participants during the pandemic era. *Jurnal Penyuluhan***,** *20*(01), 115-124. https://doi.org/10.25015/20202442659

Sasmita, H. O., Saleh, A., Priatna, W. B., & Muljono, P. (2025a). Digital motivation, knowledge, and skills: Pathways to adaptive millennial farmers. *Open Agriculture*, *10*(1), 20250426. https://doi.org/10.1515/opag-2025-0426

Sasmita, H. O., Saleh, A., Priatna, W. B., & Muljono, P. (2025b). Extending TAM: Interactivity, efficiency, and trust in ICT adoption among millennial farmers. *Research Square* (preprint). https://doi.org/10.21203/rs.3.rs-5920374/v1

Sitabuana, T. H., Sanjaya, D., & Shrishti. (2023). Penyuluhan masyarakat melek digital dalam membangun kesadaran dan perlindungan hukum terhadap penipuan dan pencurian digital. *Jurnal Serina Abdimas*, *1*(2), 778–788. https://doi.org/10.24912/jsa.v1i2.26056

Sulistianingsih, H., Maivalinda, & Riski, T. R. R. (2021). Dampak literasi digital dengan faktor demografi terhadap perilaku keuangan pinjaman online di masa pandemi COVID-19. *JAZ: Jurnal Akuntansi Unihaz, 4*(2), 259–270. https://doi.org/10.32663/jaz.v4i2.2450

Sutrisna, I. P. G. (2020). The digital literacy movement during the COVID-19 pandemic. *Stilistika: Jurnal Pendidikan Bahasa dan Seni, 8*(2), 269–283. https://doi.org/10.5281/zenodo.3884420

Tahir, T., Ahmad, M. I. S., Nurjannah, N., Rijal, S., & Hasan, M. (2021). Perilaku berwirausaha UMKM sektor kuliner dalam perspektif literasi digital. Dalam *Proceeding Seminar Nasional Teknologi Pendidikan 2021: Digital Generation for Digital Nation* (Vol. 1, No. 8, hlm. 144–154). Universitas Negeri Makassar. https://ojs.unm.ac.id/tekpend/article/view/22621

Takariani, C. S., Sari, D., Pangaribuan, T. R. A., & Simatupang, O. (2023). Literasi digital masyarakat Kabupaten Bandung Barat. *Jurnal Pekommas*, *8*(1), 47–58. https://doi.org/10.56873/jpkm.v8i1.5108

United Nations Educational, Scientific and Cultural Organization. (2018). *A Global Frame-work of Reference on Digital Literacy Skills for Indicator 4.4.2.* http:// www.uis.unesco.org

Wartono, S., Witjaksono, A. D., & Kistyanto, A. (2024). Analisis implementasi identitas kependudukan digital (IKD) menggunakan technology acceptance model (TAM) di Kecamatan Kartoharjo Kabupaten Magetan. *INTEGER: Journal of Information Technology*, *9*(2), 207–216. https://doi.org/10.31284/j.integer.2024.v9i2.6129

We Are Social. (2024). *Digital 2024: Special report*. https://we-aresocial.com/id/blog/2024/01/digital-2024/

Wibowo, A. (2008). Kajian tentang perilaku pengguna sistem informasi dengan pendekatan technology acceptance model (TAM). Dalam Konferensi Nasional Sistem Informasi 2008: Indonesia modern dalam budaya informasi (Yogyakarta, 14–15 Januari). Universitas Sanata Dharma.

Wijaya, A. S., Muljono, P., Saleh, A., & Hapsari, D. R. (2023). Pengaruh sistem informasi dan komunikasi terhadap penerimaaan teknologi dalam pengembangan desa cerdas. *Jurnal Riset Komunikasi*, *6*(2), 194-207. https://doi.org/10.38194/jurkom.v6i2.850