The Raising Digital Literacy: An Alternative for Empowering Rural Communities

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ABSTRACT

This research aims to develop a formula for empowering village communities through digital literacy. The study was conducted in Tunjungmuli Village, Karang Moncol District, Purbalingga Regency, Central Java Province. This research used the qualitative method, collecting primary data through interviews and focus group discussion The research findings indicate that utilizing digital literacy for empowerment goes beyond technological innovation. It also involves enhancing digital literacy skills, which contribute to increasing the potential of human resources to effectively manage digital technology and local resources. Additionally, enhancing digital literacy gradually narrows the digital gap, leading to improved community capabilities and sustainable rural development. This research highlights the importance of digital literacy in empowering village communities and fostering inclusive development.

1. INTRODUCTION

Community empowerment is a potential strategy for achieving sustainable national development goals based on local resources. Every empowerment process requires several elements, including human, natural, social, economic (capital), and technological resources. The crux of empowerment lies in improving the quality of human resources. In the era of globalization, the use of innovation, especially information technology, is crucial for enhancing human resource capabilities. Various community activities now hinge on the availability and application of information technology. Citizens' proficiency in leveraging the functional benefits of information technology has birthed a digital society. This society is present not only in urban areas but also extends to rural regions. Economic activities that rural communities previously conducted using conventional transaction methods are now transitioning to digital platforms. The deployment of digital technology, both directly and indirectly, connects villages to the broader world. Consequently, communication between regions intensifies, fostering mutual benefits and interdependence. While Giddens (1989) sees globalization as heightening mutual dependence, Robertson (1992) views it as a process that condenses the world into a singular space. The infusion of information technology has impacted rural communities, presenting both challenges and solutions. Residents of Tunjung Muli Village in Indonesia exemplify this impact, evolving into a "Marketer Village." Here, socio-economic activities heavily rely on information technology. Preliminary surveys reveal a growing community in Marketer Village, where villagers are turning to digital marketing as a lucrative occupation. This profession has emerged as an alternative income source for many, allowing them to engage in profitable digital transactions and establish global networks. The Marketer Village Movement plays a vital role in local community empowerment. Data shows that members of this community earn between IDR 1,000,000 to IDR 5,000,000 per month. Additionally, the Marketer Village initiative is strategically reducing unemployment, especially among the youth, and curbing urban migration. The success of Marketer Village can be further harnessed to empower local communities and serve as a blueprint for human resource development in other villages. However, challenges persist. One primary issue is the inconsistent and weak signal strength due to reliance on a single provider. Marketers in Tunjung Muli Village emphasize the need for multiple providers to ensure uninterrupted business operations. Aside from the digital divide, the community grapples with

limited technological infrastructure. To address these concerns, there's a pressing need for equitable distribution of digital technology infrastructure and enhanced digital literacy at the grassroots level. The focus of the research is to explore community empowerment patterns through community development. This study is pivotal for several reasons: Existing research scarcely explores the intersection of digital technology and community development. The rising numbers of educated yet unemployed individuals and the overwhelming rate of urbanization pose significant challenges for rural communities and governments. Prioritizing human resource development, especially among the youth, is essential to boost digital literacy and, concurrently, enhance well-being. All these reasons underscore the importance of the research, which primarily aims to devise an empowerment strategy rooted in advanced digital literacy.

2. METHOD

The research design used a case study with the embedded method to answer the research questions. This research combines qualitative and quantitative research with qualitative dominant (Creswell, 1994). The research method used is a descriptive case study. The research was conducted in the village of Tunjungmuli, the District of Karang Moncol, Purbalingga Regency, Central Java Province. The location of this study was determined by intentionally purposive sampling area with some criteria. The reason for determining the location is because it is based on the consideration that the village is the center of a Marketer Village that was developed to empower local communities. Therefore, the formulation and research objectives are relevant to the problems in the selected research locations. The types of data are primary and secondary data. Primary data were collected using in-depth interview techniques, participating observation, FGD, and Google form or telephone contact. Qualitative data processing techniques were carried out through the stages: data entry, data filtering, data grouping, data categorization, conclusions, retesting, and data presentation. Meanwhile, quantitative data processing techniques are carried out through the stages of editing, coding, and data entry which are done manually. After the qualitative data was processed, it was immediately analyzed using the interactive analysis model (M.B. Miles and A.M.1991).

3. RESULT AND DISCUSSION

Empowering respondents through the use of digital literacy forms skilled behavior in using digital media, especially communication tools and internet networks for business purposes, marketing products not only locally and nationally but also globally. Respondents admitted that digital literacy skills do not happen suddenly in a short time. However, this is done in stages. The stages of digital literacy starting from the individual respondent level are shown in Figure 1.
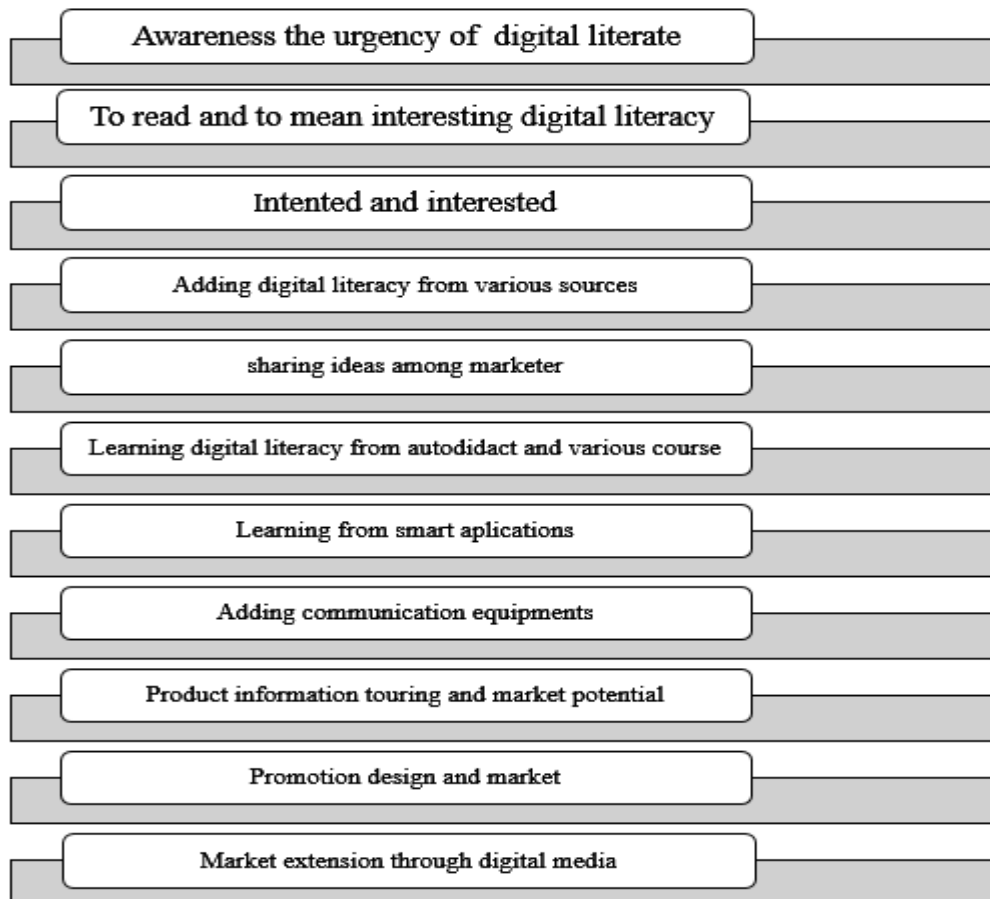

Figure 1. Digital Literacy Stages in Respondents

Not all respondents of this type have gone through the digital literacy stages as observed in Figure 1. Some have gone through them in shorter stages or some have gone through more. Motivation and personal abilities also encourage to respondents utilize digital literacy for economic and social interests. Support from external parties, facilitators, mediators, and village government as well as community leaders also supported the speed of respondents in developing their work as marketers. The support provided is in the form of preparing internet room facilities at the village hall 24 hours a day. Respondents who are registered as members of the marketer group are free to work in the available space.

Digital literacy-based empowerment for respondents continues independently and does not involve potential outside the human resources of their village. This means that respondents learn while working and exchange information and experiences. Senior marketer respondents train junior ones to become more proficient and skilled in utilizing digital media for productive activities and can add additional sources of income outside the agricultural sector. The development of digital literacy for respondents starts from learning together and continues with self-study until they are proficient and able to access and have skills in several elements of digital literacy when surfing negotiations, offering products, and fulfilling consumer requests promptly. Skills in establishing social networks through digital spaces are one of the most important elements that respondents have as marketers who are trusted by product manufacturers and consumer users. Social networks over a certain time form a sense of mutual trust even though they have never met face to face or met in person. The only contact that takes place is through digital media.

As time goes by and managing the branding business regularly encourages respondents to be able to fulfill the elements of proficiency in searching, collecting, selecting, combining, modifying, creating, creatively disseminating product content so that it is easily accessed by a wide audience via various social media. Such respondent skills are known as skills in transliteration elements. Transliteration skills can be developed autodidactically through practice and learning on the job. Respondents acknowledged that to achieve this capability strategic needs are needed, especially awareness, digital communication, creative promotional design, and others. Transliteration tends to be owned by respondents who have worked longer.

If they have fulfilled primary and secondary strategic needs, respondents can learn to be competent in carrying out digital literacy elements related to the ability to maintain and maintain everything related to working as a marketer. Preparing social contact addresses and bank accounts is an important part of the elements known as maintaining privacy. Ownership of this element is accompanied by the respondent's ability to manage identification to identify themselves as citizens of the digital space (managing digital identity). Ownership of passwords and usernames is managed so that it is easy to log in to certain digital spaces. Several senior respondents admitted to having several identifiers in the digital space. This is intended to maintain and manage security when using different social media channels.

Respondents' curiosity was answered through learning while working and practicing exploring the internet space, helping to gain experience in creating and sharing creative content, creating blogs and website links for promotion, and showing that respondents could access elements of great content. Experience for senior respondents is also demonstrated by their skills in filtering and selecting, which includes elements of filtering and selecting. Furthermore, the respondent's ability is capable of distributing messages and product promotions to various potential market segments so this condition shows the ownership of the element of self-broadcasting. It doesn't stop at owning these various elements, it turns out that several senior respondents stated that they need a senior and professional trader who is proficient and competent in the elements of digital creativity and digital perseverance. These two elements are the key to respondents' smooth productive work in digital media.

Fulfilling various primary and secondary strategic needs and being able to have all the elements of digital literacy makes it easier to empower respondents so that they can obtain a secure source of income. Every transaction for product sales always provides a fee for the respondent. Every additional income in the peasantry world is considered a new lifeline for their survival strategy. This is in line with previous researchers' statements. (Afsana, 2018); (Sugihartati, 2014); (Klerkx et al., 2019). Guaranteed income also comes from giving bonuses by producers after smoothly meeting transaction targets according to the provisions or agreements. Not only for economic empowerment, but the use of digital literacy also builds and strengthens the social empowerment of respondents together with other village residents in the research's location. The use of digital literacy has become a safety valve for respondents despite the threat of unemployment. Of course, this phenomenon supports rural development. One of these is increasing income-generating alternatives for village residents. Internal economic pressures on rural communities have caused rural communities to become increasingly responsive to every alternative for raising the rate of income (Dumasari, 2020); (I. Santosa et al., 2020). The job of a digital literacy-based marketer was liked by all respondents. There are several reasons behind this which are listed in Table 1.

Table 1. Respondents' reasons for pursuing productive work based on digital literacy

No.	Various Reasons	Respondent (%)		
		Type 1	Type 2	Type 3
1.	Not bound by time	100	100	100
2.	Work can be done anywhere	100	100	100
3.	The work atmosphere is more pleasant	92	96	100
4.	Digital-friendly work atmosphere	88	92	100

5.	There is income assurance	100	100	82
6.	No pressure during work	92	88	89
7.	Free for creativity development	100	100	93
8.	there is an entertainment feel	100	100	100
9.	Sharing information between members of the strong marketer group	88	83	89
10-	Low competitive business	100	100	86
11.	Appropriate communication technology	100	96	89
12.	Digital Literate can be learned easily with an autodidact	100	100	92
13.	There are clear bonuses and fees for each transaction and they are sent automatically to the registered account	100	100	100
14.	Digital literacy can be developed through trials using the learning-by-doing method	100	100	100

Note: Type 1 respondents have work experience > 5 years = 24 people)

   Type 2 respondents have work experience 2≤ x ≤ 5 years (n= 26 people)

   Type 3 respondents have work experience < 2 years (n= 28 people)

Digital literacy-based empowerment of respondents is not only carried out to improve their abilities as individual marketers. However, this effort is also to increase personal and group capacity so that they can create productively and innovatively by utilizing digital literacy for profitable economic activities. Social relations between members of the Marketer group are getting stronger to share information and skills regarding digital technology. Fellow respondents also helped each other at any time to overcome difficulties or obstacles in managing online product market businesses. Social cohesion with high bonds of mutual trust shows the respondents' commitment to a solid group togetherness. Opportunities to open and develop online business ventures, especially in the field of product marketing services, continue and provide opportunities for respondents to increase the number of products marketed digitally using several commercial social media channels. The pattern of relationships between various primary and secondary strategic needs for empowering respondents through the use of digital literacy is observed.

Figure 1. Pattern of Village Empowerment Through Digital Literate
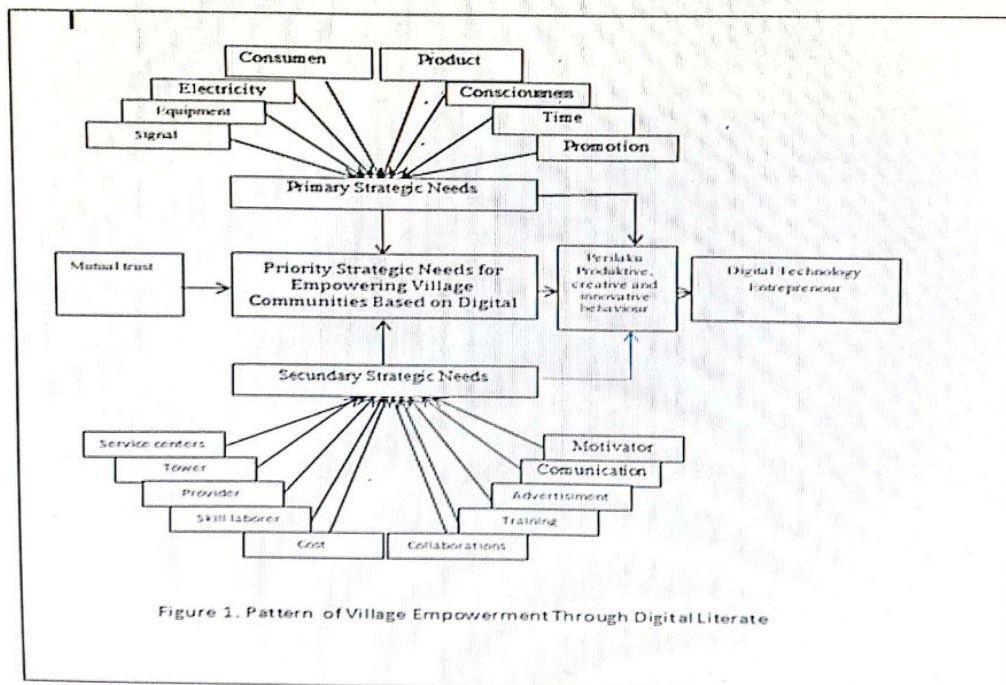
The pattern of empowerment can be formulated through the combination of three kinds of optimization between primary and secondary strategic needs and mutual trust. Thus, the priority of strategic needs for empowerment-based digital literacy. Human resources can be enlarged in that community so that community development enables it to rise. Efforts to integrate digital literacy in the context of community development meant overall community development carried out systematically and directed at expanding community access to achieve a better standard of living. (Budimanta, 2000); (Wrihatnolo, 2007); (Dumasari, Santosa, 2021). The formulation of empowerment patterns through improving digital relations still needs to be integrated with the support of

central and regional government policies in the context of sustainable rural development. Community aspirations to develop human resource capacity in the sector of digital literacy are not yet fully supported by regional government policies.

Community empowerment through digital literacy must also consider the local environment and culture, as said by Wahyudin Literacy should have been instilled in culture to result in the ability for a community to compete in the current digital era. One's competence to read, understand, and analyze information is a must to recognize and develop potential as an effort to improve self-quality (Wahyudin et al., 2019).

In another case, digital literacy also helps to absorb and develop information. Based on the searched market information, digitally literate low-income groups can accurately develop information and grasp market needs to develop new business opportunities, which can help them join rural entrepreneurial activities (Dettling, 2016). In rural China, Digital literacy is capable of reducing the cost of knowledge and effective information acquisition, strengthening risk appetite, increasing the efficiency of resource endowment allocation, and achieving a sense of access (Zhang, 2023). Swedberg and Granovetter (1991), the economic actions of marketers are a part of social action and are therefore socially constructed. In the context of changes in society towards a post-modern society, migration from a traditional economy to a digital economy is characterized by changes in the form of electronic means of exchange, such as Bitcoin, Cryptocurrency, Ovo, GoPay, etc. Socio-economic transformation has implications for the need for changes in human capacity to have better digital literacy. Events that occurred at the research location show an accelerated increase in digital literacy that exceeds its natural growth.

4. CONCLUSION AND SUGGESTIONS

The most important achievement is oriented toward increasing the potential of human resources so that they can manage digital technology and local resources so that they are effective and on target. The empowerment function focuses more on liberating citizens from digital backwardness and ignorance as well as unemployment, resulting in the digital divide. Of course, the impact can improve the performance of digital literacy-based empowerment. The suggestions can be drawn that human resources can be encouraged. Increasing human resources through increasing digital literacy needs to be carried out continuously and sustainably.

5. ACKNOWLEDGMENT

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