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Hybrid Transformation Model of Rural Communication Patterns in Indonesia: A Uses and Gratifications Perspective on WhatsApp Usage

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Abstract - The development of technology and information (ICT) is currently very rapid, especially with the internet network. This has various influences or impacts, both positive and negative. One of the impacts felt was the cultural transformation (pattern) of community communication in the village. The aim of the research is to describe and find a model of cultural change in interpersonal communication that occurs through social media in daily communication. The method used to realize the goal is descriptive qualitative. Data was collected through FGDs with several informants who were selected using a purposeful technique, namely people who have a role in the environment. In addition, data was also collected through a documentation study, namely by looking at the contents of public communication messages that occur through social media, especially on WhatsApp social media. The research results show that the Purwobinangun community has experienced a communication transformation through the use of WhatsApp for social coordination, information dissemination, and activity reminders. This use fulfills communication needs according to the Uses and Gratification theory, such as surveillance, correlation, entertainment, and cultural transmission. The community maintains traditional communication patterns, resulting in a hybrid communication model that combines local values and digital practices. Communication transformation creates hybrid patterns, combining social and traditional media to maintain local values and strengthen community connectedness. This model balances local cultural values with digital efficiency, enhancing social connectedness without eroding traditional cohesion. This model enhances social connectedness, mitigates exclusion, and offers empirical insights for scalable digital inclusion policies in rural contexts.

Keywords: Digital Culture; Social Media; Communication Patterns; Transformation model; Contemporary society

Introduction

The development of information and communication technology (ICT) has become a transformative force in contemporary society, particularly in developing countries like Indonesia. Amidst digital globalization, Indonesia has experienced a significant increase in internet penetration, with household access reaching 80.66%, up from 1.16% in 2024 (Sabrina, 2025).This means that currently around 82% of Indonesia's population is connected to the internet.

However, this progress is still uneven, as can be seen from the penetration in urban areas of 83.53% while in rural areas it is still 76.96% (Internetsehat.id, 2025). This digital divide is not only limited to infrastructure access, but also encompasses the dimensions of skills, usage, and supporting environments, which directly affect the communication patterns of rural communities (Ilham et al., 2023). In this context, the transformation of communication patterns is a crucial issue, because communication is not only a tool for exchanging information, but also a social integrator that maintains harmony and community cohesion.

The social structure of rural communities in Indonesia has traditionally relied on intensive face-to-face interactions, where verbal interpersonal communication provides immediate responses and builds emotional bonds. This creates strong social cohesion and prevents conflict, as illustrated by studies of rural interaction patterns that emphasize collective values such as mutual cooperation. (Zahara, 2018).From a geographical perspective, rural communication differs from urban communication, with rural communication emphasizing personal and traditional relationships, while urban communication tends to be impersonal and technology-driven (Andrian, 2020). However, with the advent of social media like WhatsApp, this pattern has undergone a significant shift. Villagers have begun adopting digital platforms for daily coordination, such as meeting invitations or village agendas, reducing reliance on traditional practices such as *"sowan"* or *"rawuh"* in Javanese culture, which involve in-person visits to convey messages.

This transformation is driven by government initiatives, such as the 2015-2019 Strategic Plan of the Ministry of Communication and Informatics (Kemkominfo), which targets national connectivity in rural areas, border areas, and outermost islands through universal access services (Rakhmadevi et al., 2021). At the local level, the Sleman Regency Government is collaborating with the Kominfo Office to install free Wi-Fi in 1,212 hamlets, prioritizing white-spot areas to support the education, economic, and tourism sectors (Prayoto, 2022). In Bimomartani Village, including the Purwobinangun Hamlet, there is a concrete example where free Wi-Fi access has encouraged active use of WhatsApp for community communication. From initial surveys, the Purwobinangun community uses this platform not only for messaging but also to build broader social networks, although this change is rapid and fundamental, requiring an adaptive response to maintain a balance between the old and new order (Hidayatullah & Ahmad Toni et al., 2023).

The essence of communication as a glue for communal life is increasingly relevant in the digital era, where new media meet the social and psychological needs of audiences (Karman, 2014). However, ICT adoption in rural areas is often not the primary driver of transformation, but rather the result of an economic shift from agriculture to non-agricultural sectors, as seen in Java where economic diversification facilitated digital infrastructure (Fahmi & Mendrofa, 2023). Studies of Indonesian government initiatives show that developing ICT infrastructure in villages requires a comprehensive understanding of local challenges, including high costs and low literacy, to achieve sustainable digital inclusion (Saputra et al., 2023). In Purwobinangun itself, this transformation has created specific problems such as free Wi-Fi increasing access to social media, in this case WhatsApp, residents facing a digital skills gap, where the elderly and low-income groups struggle to adapt, leading to social exclusion and still relying on traditional patterns for culturally sensitive communication such as wedding invitations, kendurian and the like.

This suggests that the digital divide in Indonesia is more complex in rural areas, involving skill levels and usability benefits, where the youth population is growing but technology adoption is slow due to cultural values that are not aligned with technology. Policy analysis indicates that existing policies are still inadequate in supporting digital transformation in villages, focusing on access rather than optimizing benefits, so a holistic approach involving local stakeholders is needed (Ilham et al., 2023). From a youth perspective, the transformation of social capital in the digital era is a crucial issue.

Studies on shifts in social interactions among Indonesian youth show that digitalization is changing social capital, with an increase in bridging capital through online networks, but a decrease in local bonding capital due to remote interactions (researchgate.net). In Probolinggo, young internet users have an average social capital of 7.54 vs. 6.94 for non-users, indicating a potential erosion of village solidarity (Faisal & Mesra, 2024). This aligns with changing communication patterns in the

digital era, where social media facilitates rapid interaction but reduces the emotional depth of face-to-face interactions (Amelia & Balqis, 2023).

The Uses and Gratifications (U&G) theory serves as the primary analytical framework, where audiences actively choose media to fulfill needs such as surveillance (self-actualization), correlation (social networking), entertainment, and cultural transmission (McQuail's & Deuze, 2020). In Indonesia, this theory is applied to 2024 social media marketing trends, where We Are Social data shows increased use for information gratification and interaction, with implications for community communication (Pandjaitan, 2024). During the pandemic, millennials in Makassar used new media for gratification, with a coefficient of determination of 0.553, confirming the validity of U&G in the context of the crisis (Faisal & Mesra, 2024).

The transformation of online behavior also affects communication patterns, where social media changes its function from personal interaction to broad information dissemination, with 2024 trends emphasizing personalization and engagement (Priyadharma, 2024). However, in rural areas, this change is often accompanied by challenges such as low literacy and traditional values that clash with digital, as seen in a study of rural SMEs facing barriers to technology adoption (Amalia et al., 2025).

Based on previous studies, a specific model for changing village communication culture in Indonesia has not yet been found, creating a significant research gap. This study aims to fill this gap by analyzing transformation in the Purwobinangun region using U&G, focusing on the integration of social media and tradition. Contributions include a hybrid model that can be applied to digital inclusion policies, in line with recommendations for digital village development in developing countries (Ikbal et al., 2025). Thus, it is hoped that this study is not only descriptive but also provides practical implications for reducing the digital divide and strengthening social cohesion in rural areas.

Theoretical Framework

Uses and Gratification Theory

In recent years, advances in digital communication technology have transformed the way people interact with each other in rural areas. According to (Hajek & Sahut, 2022), this transformation has not only changed the way people exchange messages but also transformed the social meanings, values, and communication networks of local communities. The use of the internet, social media, and instant messaging apps like WhatsApp has resulted in a more active and connected communication ecosystem worldwide (Kosasih & Sulaiman, 2024).

The Uses and Gratification theory is based on the assumption that audiences actively select and use media based on specific needs and motives. Audiences are positioned as subjects who select media based on expected gratification, whether in the form of information, entertainment, social integration, or personal identity (McQuail, 2010).

In rural communities, the emergence of social media like WhatsApp has created new communication spaces that expand the reach of social interaction without eliminating traditional communication values such as deliberation, mutual cooperation, and togetherness (Nasrullah, 2020). Interactions are no longer limited to face-to-face meetings, but also occur through messages, images, and videos shared in WhatsApp groups, which serve as digital platforms for coordinating social activities, disseminating village information, and strengthening social ties (Rakhmat, 2019).

Previous research has shown that Uses and Gratification Theory can explain the use of social media for various social reasons, including strengthening a sense of community and civic participation (Quan-Haase & Young, 2010). In a rural context, this theory describes the occurrence of communication hybridization, namely a complementary combination of traditional and digital communication (West, 2022). This pattern produces a new form called interpersonal mediated communication, namely communication between individuals mediated by digital media while still maintaining the social closeness typical of village culture.

Therefore, to understand the three main elements, this study relies on the Uses and Gratification theory; (1) Village communities use social media because of the need for information, social interaction, and self-actualization; (2) Satisfaction and communication experience obtained from the use of social media in everyday life; (3) Metamorphosis in the community's communication model, shifting from a conventional model to a hybrid model, which combines local cultural principles with the effectiveness of digital communication.

This process has resulted in a transformation model for digital village communication patterns, where social media serves as a means of connecting technological advancements with conventional values. While communities haven't abandoned old patterns, they have modified them to remain relevant in an era of hyper-connectedness.

This framework emphasizes that changes in communication culture are the result of complex social adaptations, not simply technological advances. Villagers use social media not to replace ancient cultures; rather, they use it to transform their communication methods to suit the needs of the times. The results support the belief (Denis McQuail, 2010)that Uses and Gratifications theory is relevant to explaining changes in communication behavior across cultural contexts, including in societies with traditional social structures.

Digital Transformation

The multidimensional phenomenon known as digital transformation encompasses changes in technology, as well as changes in social structures, culture, and human behavior in interpreting communication and interaction. Digital transformation has generated new ways to construct, maintain, and disseminate social meaning through digital media such as WhatsApp and Facebook, which now function as virtual public spaces in rural communities.

Digital transformation is the process of reimagining social and economic models using digital technology to create new value, according to (Vial, 2019a). While not linear, this process involves interactions between technological elements, humans, and the social context. In rural communities, this is evident in how people use communication technology to perform everyday tasks such as collaborating with others online, organizing community outreach programs, and disseminating community information.

Kane (2015)states that digital transformation is a strategic and cultural issue, not just a technological one. While technology only enables change, the real change lies in mindset , social values, and new ways of communicating. In rural communities, digital transformation means a shift from conventional face-to-face communication to hybrid communication, where local cultural norms, messages, and symbols are combined in the digital space.

Ultimately, in this study, the Digital Transformation Framework is understood as a flexible and participatory process in which village communities change the way they communicate as they experience technological developments. This process results in hybrid communication, a combination of face-to-face and social media-based communication.

Materials and Methodology

This study adopted a descriptive qualitative approach to explore the phenomenon of communication pattern transformation holistically, broadly, and in-depth, where the research problem guides the understanding of the social context in Purwobinangun, Bimomartani, Sleman. The site selection was based on free Wi-Fi access and quite high digital activity, seen from the daily activities of the community who run many home businesses (Micro, Small, and Medium Enterprises Fried Chicken, online shop *Bocah Baik*), so it is considered representative of digital transition villages in the Yogyakarta region.

Primary data was collected through Focus Group Discussions (FGD) with 12 purposive informants totaling 13 people, who were selected based on their role in the environment, namely representatives of hamlet heads, heads of Neighborhood Associations (RT) 1-5, heads of Citizens' Associations (RW) 12-13, heads of Family Empowerment and Welfare (PKK), representatives of youth and community MSME activists. In addition, informants have used social media in their daily activities for at least the last 5 years, using at least 1 social media WhatsApp. The FGDs were conducted in two 90-minute sessions, each with semi-structured guided questions about the use of WhatsApp and other digital media, including reasons for their use, barriers, and integration with traditional practices. The sessions were recorded with permission, transcribed, and analyzed thematically.

The data were also strengthened by direct observation conducted formally, namely with permission to participate in one of the women's PKK groups of RT 01, and informal observations of daily interactions conducted for 1 month, to record the frequency of media use. Documentation studies involved analysis of messages sent from WhatsApp groups of PKK, RT and Youth, including

village documents such as meeting agendas and invitations, to identify the type of communication. The analysis used the interactive model of Miles & Huberman which includes data reduction by codifying themes, data display, and then verification or provisional conclusions.

Results and Discussion

Rapid technological developments are interconnected and integral to modern human needs. Such advanced technological advancements have made digital activities inseparable from all aspects of life. These digital activities can be conducted through social media, which is accessible to the public. Talking about digital activities, social media is inextricably linked. Social media is a tool for quickly and widely searching for and disseminating information. Social media offers various conveniences for the public, such as ease of use, convenience, and time-saving in finding trending information.

In its early days, social media was primarily used to interact with close friends, but has now shifted its function to become a means of seeking and disseminating information. This is evident in the fact that almost all levels of society and all ages are now using social media platforms. Based on FGD results, it was found that many people are already using internet-based communication media, namely WhatsApp (WA). Based on FGDs and observations, the Purwobinangun community has integrated WhatsApp into their daily communication, with each neighborhood unit (RT) having specific groups such as the RT *Bapak-Bapak* group, the PKK *Ibu-Ibu* group, the *Dasawisma* group, the *Jagawarga* group, the youth group, the *Posyandu* group for toddlers and the elderly, the *Mushala* group, the gymnastics group, the *Syawalan* group, and others.

The number of groups can continue to grow, in line with the needs of residents in coordinating and conveying information. Of the 13 informants, 11 stated that WhatsApp is widely used for coordinating events or daily activities such as mutual cooperation, religious study groups, weekly routine activities, and others. It can be said that almost 100% of social media, especially WhatsApp, is used to convey information and agenda reminders. In other words, the use of social media by the *Purwobinangun* community is to fulfill needs and self-satisfaction, which are grouped as follows: (1) Supervision, which is related to self-actualization and following technological developments; (2) Correlation, which is creating social networks and channeling hobbies; (3) Entertainment, which is seeking entertainment, spending time with social media; (4) Cultural transmission, which is learning and understanding new cultures and languages.

Furthermore, based on observations and FGDs, it was also found that WhatsApp, the social media platform most commonly used by the public, is for group purposes. This includes task, procedural, climate, and egocentric communication. *First*, Task Communication. In this case, task communication encompasses various communication activities between members in a WhatsApp group, which are used to convey ideas, information, and messages, as well as provide feedback and evaluation to ensure the content of previously initiated group work. *Second*, Procedural Communication is carried out to maintain order within the WhatsApp group. Procedural communication is used for coordination related to agenda preparation, agenda evaluation, conflict prevention within the group, monitoring the development of group performance, and monitoring group member participation.

Communities can benefit from the adoption or utilization of digital communication technology in their daily lives, as seen in Bhatt's research, which explores the Digital Village scheme and the Digital Village 2.0 campaign and their impact on villagers after their implementation in selected villages in India. This demonstrates the vital need to provide digitalization knowledge to rural India to create a balance between urban and rural India, and this success motivates the government to take further steps to increase digitalization in rural India (Bhatt, 2020).

Transformation can also impact the economic movements of the community, as found in research by Nababan and Imron (2022). demonstrates the importance of digital transformation in driving the economy, namely by implementing digital economic strategies through improving digital infrastructure facilities, enhancing the digital ecosystem, and identifying potential and superior village products, as well as cooperation between stakeholders that needs to be strengthened in line with local values (Nababan & Imron, 2022; Onitsuka et al., 2018). A conducive communication climate within the group, which encourages group members to contribute cooperatively, respects group members, helps resolve conflicts, and provides motivation for group members and the activities carried out.

Furthermore, in the transformation process there is also the emergence of egocentric communication, namely communication carried out to seek personal interests within the group.

This communication is a form of negative communication that appears in the group, where this communication focuses on self-egoism, such as boasting about oneself, being aggressive towards other members, and not respecting the ideas and thoughts of other members. Egocentric communication tends to reduce cohesion or cohesiveness within the group, or can be said to be divisive or provocative within the group. As research findings show that there are still some residents who engage in egocentric communication, by opposing the use of WA groups for the purpose of conveying information because they feel it does not reflect the values of politeness.

The use of social media in group communication sometimes faces various challenges. This is due to the large number of community members with diverse educational, social, economic, and cultural backgrounds. Findings indicate that challenges or obstacles experienced by the community include not all residents have mobile phones capable of accessing WhatsApp, resulting in some residents being left without access to information. Furthermore, some residents still prefer to avoid using WhatsApp because they feel it is impolite or disrespectful to the person they are communicating with Javanese cultural values regarding politeness towards elders are still deeply embedded in the community, especially the elderly.

Research on Indonesian rural communities' digital skills gap highlights that generational differences worsen the issue, with teenagers thinking they are more skilled at using social media compared to their parents, who often need help from younger family members (Purboningsih et al., 2023). The dynamic in this instance parallels the Purwobinangun case, in which elderly residents' adherence to cultural norms such as "ijeman" reflects a resistance arising from perceived discourtesy, which requires the implementation of customised digital literacy programmes to bridge these disparities without cultural degradation.

To address this, residents have adopted traditional communication methods, supported by WhatsApp. Communication with traditional media still occurs through door-to-door invitations, the use of mosque or prayer room loudspeakers, and direct communication between the communicator and the recipient, commonly called "ijeman" (Javanese: delivering an invitation verbally by meeting the person invited). This indicates that the transformation or shift in communication towards digital has not completely eliminated traditional communication patterns long practiced by the community itself. Therefore, a model can be obtained regarding the transformation of community communication patterns, as seen in Figure 1.

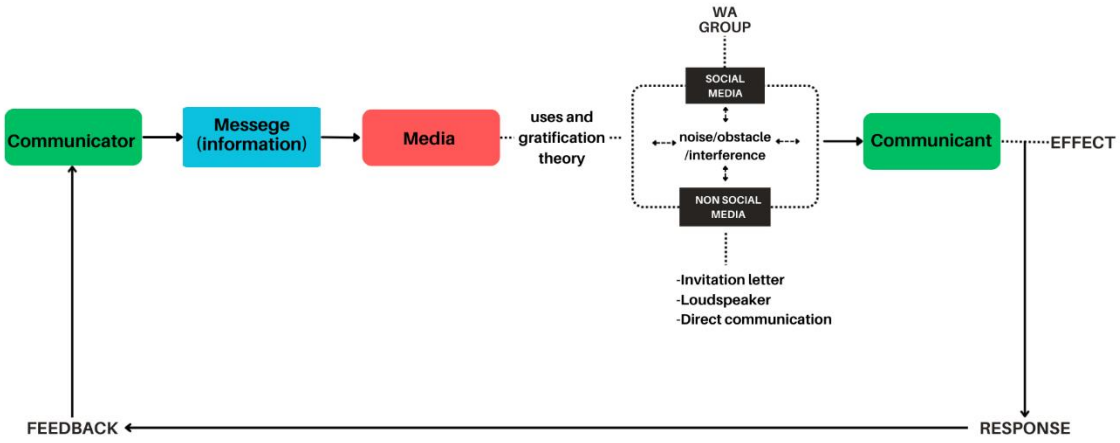


Figure 1. Model of Transformation of Purwobinangun Community Communication Patterns

A sophisticated hybrid transformation model, as depicted in Figure 1, integrates traditional communication methods such as face-to-face interactions, loudspeaker announcements, and the verbal "ijeman" (Javanese), with digital platforms like WhatsApp, within a non-hierarchical, cyclical structure. The model begins with community-driven requirements (social coordination), advancing through digital adoption to boost efficiency and accessibility, and incorporates feedback mechanisms

that revert to traditional approaches when cultural sensitivity or inclusivity is necessary, such as elder participation or ritual invitations. Adaptive reciprocity is symbolized by bidirectional arrows, which show how digital tools make traditional values such as gotong royong (mutual cooperation) stronger by enabling real-time mobilization, while preventing alienation by keeping emotional depth in interpersonal relationships (Nasrullah, 2016). This is also seen in rural digital empowerment initiatives, where literacy efforts improve MSME outreach, but reveal infrastructure problems, leading to the need for multi-stakeholder interventions to maintain the cycle (Nugroho et al., 2025). Ultimately, the figure embodies a resilient, context-specific transformation, countering digital exclusion and strengthening communal resilience in the face of globalisation.

Based on the model in Figure 1, the transformation that occurred did not eliminate face-to-face communication processes or traditional media. Digital technology helps people in villages have communication media that assist them in their daily lives. This is in line with research findings that show four types of internet access: access to motivation, access to materials, access to skills, and access to usage. Furthermore, the different challenges for each group at various stages of digital meetings resulted in policy recommendations for each group to utilize internet technology to develop rural areas in the village (Onitsuka et al., 2018).

The use of social media by the Purwobnangun community strengthens the assumptions of the Usage and Gratification Theory. In this theory, it is stated that there are many media options for conveying messages, so preferences arise based on the needs of each individual (Sabharwal, 2024). The findings of this study are also in line with previous research conducted by (Ashrianto & Yustitia, 2020), which found that social media cannot be used as the sole medium for seeking information about Papua. Audiences actively choose media based on their motivation, experience, and satisfaction.

Similarly, the results of this study, the Purwobnangun community also needs to fully utilize social media such as WhatsApp to gather information. People choose the media they use according to their needs and maintain their traditional communication patterns. In depth, this hybrid model reflects rural adaptation to digitalization, where gratification in the Usage and Gratification theory supports economic and social transformation, but requires risk mitigation such as skills divide for community sustainability (Fahmi & Mendrofa, 2023). Overall, the discussion highlights that digital transformation fosters inclusivity when blended with cultural norms, as supported by empirical evidence from similar rural contexts in developing nations (Vial, 2019b). Integrating U&G with qualitative insights also shows that this research reveals layered gratifications including emotional relief from isolation, social bridging across different generations, but it also highlights risks such as addiction and misinformation, which suggests that community-led digital education is necessary to maximise the benefits (Purboningsih et al., 2023)

Conclusions

Traditional communication patterns have not been eradicated by the transformation of communication through social media. Homeowners have selected WhatsApp as their preferred method for addressing their requirements. While WhatsApp is not the sole medium for daily communication, some residents require mobile phones to access the app, whereas others continue to adhere to traditional methods. Thus, residents maintain traditional communication methods by employing letters, loudspeakers, and direct face-to-face conversations. This combination of various media is sufficient for the community's sustainability, particularly regarding the ease of delivering information more quickly, at any time, and from anywhere. This hybrid approach preserves cultural integrity and promotes fair digital access, providing a model that can be replicated by other rural communities undergoing similar changes. Future research should investigate long-term effects to improve policy interventions to ensure sustainable digital inclusion.

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