



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 79/2026
A New Decade for Social Changes



PLUS
COMMUNICATION P



International
Communication & PR

Even Digitalized Can Be Humane: Implementing the Humane-Smart Village Model

Sukarso¹, Niken Paramarti Dasuki², Sedy Noviko³

^{1&3} Public Administration Department, ²Sociology Department Universitas Jenderal Soedirman of Indonesia

Sukarso2412@unsoed.ac.id

Abstract. The innovative, humane village model is a community where residents can efficiently utilize available resources, particularly those related to information technology, without marginalizing anyone. Studies on this model have identified key actors who are crucial to ensuring that no villager is marginalized. These actors or agents are members of the community who care about enabling other community groups to utilize advances in information technology, digitalization, or the internet through social media. This study seeks to identify these actors. Using a case study method in one village, data were collected from informants and respondents, and descriptive analysis was used to identify agents who can facilitate the implementation of the innovative humane village model. These agents are all family members, especially the younger generation in each family. These agents serve as facilitators, mediators, and even consultants for communities without access to the internet, particularly social media.

Keywords. smart village, humane, younger, family, social media

Introduction

The humanized smart village model is characterized by inclusivity, deconstruction, mediation, and institutionalization. This model underscores the need for agents (mediators) to minimize the presence of marginalized groups. These agents will assist marginalized communities in using and benefiting from information technology. Therefore, it is necessary to identify and describe what this model is and how it is implemented.

The smart village concept can be considered a derivative of the smart city concept (e.g., Subekti & Damayanti, 2019¹; Ramachandra et al., 2015²), but some also distinguish the two concepts (e.g., Rachmawati, 2018³). Nevertheless, the smart village and smart city concepts share obvious similarities, such as the use of information technology, digitalization, and the internet.

Meanwhile, in November 2021, Karanggintung Village, Sumbang District, Banyumas Regency, was designated by the Banyumas Regent as an Internet Independent Village, capable of managing its internet access independently and free from government dependence. The village's internet management collaborates with a third party, specifically the private sector, to provide internet access, particularly to its residents. The study showed that nearly all families

in the study area owned smartphones and used them for various purposes, including entertainment. However, not all family members owned and used them (Sukarso et al., 2020⁴).

Government programs on smart villages aim to introduce information technology into the lives of rural communities. The use of information technology (social media) in the lives and livelihoods of rural communities is an effort to align rural communities with the characteristics of information technology itself. Many regions in Indonesia have begun introducing smart village programs, including Banyumas Regency. This regency has even collaborated with Telkom University to develop this smart village concept.

The results of a study on the humanized smart village model by Sukarso et al. (2021⁵) indicate that this model is characterized by: (a) Inclusiveness, meaning that all citizens have the right to exist through the use and utilization of the internet or social media; (b) Deconstructiveness, changing society's understanding of the internet or social media by recognizing their positive and negative values; (c) Mediation, increasing the use and utilization of the internet or social media by utilizing existing local wisdom (agents of change, from individual family members, neighborhood groups (dasa-wisma), neighborhood units (RT), neighborhood units (RW), and villages); and (d) Institutionalization, continuous efforts to introduce and familiarize the use of the internet or social media so that the community will consider the internet or social media an integral part of their lives. The humanized smart village model (Sukarso et al., 2021) demonstrates the importance of agents or actors acting as catalysts or facilitators for community members who lack access to digital life.

Research Question

The results of the study on the Humanized Smart Village model also indicate that Karanggintung Village has the potential to minimize the emergence of marginalized groups, namely groups whose circumstances prevent them from using and utilizing the internet and social media, by identifying agents who can act as mediators for these marginalized groups in using and utilizing the internet and social media. In this regard, Karanggintung Village, Sumbang District, Banyumas Regency, was designated by the Banyumas Regent in November 2021 as a pilot village for independent internet management (but still with the private sector). *Therefore, it is necessary to identify how agents can act as mediators to help marginalized groups use the internet and social media.*

Method

Research Location:

This research uses a case study approach, located in Karanggintung Village, Sumbang District, Banyumas Regency. This location was selected because Karanggintung Village was designated by the Banyumas Regent in November 2021 as an internet-independent village, meaning it can manage its internet access without relying on the government. Internet management has been carried out in collaboration with independent private parties since 2021.

Research Focus (Variables):

The focus of this research is the prospects for using humanized smart villages in villages, with the following sub-aspects:

Marginalized groups in the research village;

Competent parties or individuals to act as mediation agents for internet and social media use among marginalized groups;

Identification of the capabilities of mediation agents according to the needs of existing marginalized groups.

Data source:

The primary data source for this research is the village community, consisting of village officials (informants) and the general public (respondents).

Data source selection:

Informants were selected purposively, while respondents were selected using proportional simple random sampling (because a sampling frame was available as a list of households). The sample size was 10% of the total number of households, or 190 (rounded to the nearest 1,858 households).

Data collection techniques:

Data were collected through in-depth interviews (for informants) and questionnaires (for respondents).

Data analysis techniques:

Data will be analyzed descriptively, both quantitatively and qualitatively.

Results and Discussion Research result

With an area of approximately 205.14 hectares and a population of around 5,600, Karanggintang Village is relatively small compared to the average area and population in Sumbang District, Banyumas. Due to its proximity to the district and regency capitals, with excellent road access, urban lifestyle influences, including the use of modern equipment, are quite prevalent.

The instrument was distributed to all respondents in the research sample. Some were interviewed to confirm their willingness to act as "agents" in delivering news or communicating with village officials. Six enumerators completed the instrument, selected proportionally from the total sample (930 respondents: 791 men and 136 women). Therefore, the respondent unit was the family (head of household), but the information collected included all family members relevant to internet access equipment ownership.

Internet Use. From a sample of 930 households, smartphone ownership was 280%, meaning that, on average, each household has two to three smartphones. However, approximately 30 households (about 3%) do not own a smartphone.

Similar to ownership data, usage data is also dominated by smartphones among household heads (almost 290%). Thus, smartphone use is consistent with ownership. Similarly, smartphone utilization remains dominant (almost 290%) in line with ownership and usage.

Based on the collected data, WhatsApp was the most preferred media (almost 80%), followed by Facebook (15%) and Instagram (5%). Therefore, these three applications have great potential as a communication medium among villagers as a whole.

Deliberation agents for internet use in villages

Head of Household

From interviews with several heads of households, almost all respondents who volunteered to provide information and assist others using internet-based media found that they did not have the time to do so. Therefore, the likelihood that the head of household will become an agent is low.

Couples

From interviews with several couples who are heads of households, almost all respondents were willing to volunteer to provide information and help others use internet-based media. However, they were unsure about their ability to do so. Therefore, the likelihood that couples will become agents is moderate.

Family Members

From interviews with family members (children or adolescents) who volunteered to share information and help others use internet-based media, almost all respondents were willing and had the time to do so. Therefore, the potential for family members to become agents is high, even in the health sector (Dasuki et al., 2024⁶). In other words, the group of respondents with the potential to become agents in the use and utilization of internet-based media is children or adolescents (primarily students). They are the agents in the humanized-smart-village model.

Discussion

The study revealed that the household head, the household head's assistant, and family members, particularly children and youth, each have distinct roles. The following discusses each of these expected roles.

The Role of the Head of the Household

The head of the household's role in internet use is no longer limited to the household; it now serves as the primary foundation of a healthy digital society. The following are the primary roles of the head of the household in the utilization of internet technology within the surrounding community.

Digital Literacy. Heads of households serve as pillars for improving digital literacy within their communities. By possessing a sound understanding of technology, they can educate family members and neighbors on how to distinguish between true and false information, thereby preventing the spread of fake news in their communities.

Online Ethics. As a leader, the head of the family is responsible for instilling the values of politeness and communication etiquette (netiquette). This role impacts the surrounding community by: (a) preventing cyberbullying and hate speech from family members toward others; and (b) Teaching respect for the privacy of neighbors and other digital citizens.

Technology Use. Heads of households serve as role models for maintaining a balance between digital and in-person social interactions within the community. By limiting device use in public spaces or during neighborhood events, they help maintain the quality of relationships between residents, even in the digital age.

Cyber Environment. Heads of households have a strategic role in protecting the digital ecosystem by: (a) Encouraging internet use for positive and productive purposes, such as education or the creative economy; and (b) Reporting illegal or harmful content to ensure a healthy internet environment for children in the community.

Overall, the head of the family determines the type of citizen a community will become. Families managed with a high level of digital awareness will produce well-rounded individuals who understand the importance of strengthening the digital resilience of the wider community.

The Role of the Partner/the Couple

The role of the head of household's spouse (wife, companion, or couple) in internet use within the surrounding community is highly strategic, particularly in terms of education and the empowerment of local communities. The following are the leading roles they play:

Community Digital Literacy Driver. Spouses of household heads are often at the forefront of grassroots digital literacy initiatives. Through social organizations such as the Family Welfare Movement (PKK) and religious study groups, they actively educate residents on the wise use of technology and how to filter information to counter neighborhood-level hoaxes.

Digitalunity Security. Within the community, this couple acts as primary supervisors, ensuring children are not exposed to harmful content. This role includes mentoring (providing positive values so children behave wisely online) and filtering (setting up content filtering and moderation systems to protect children from cyber threats and online sexual violence).

Ekonomi Digital. Pasangan kepala keluarga berkontribusi nyata dalam penguatan ekonomi masyarakat dengan memanfaatkan teknologi digital untuk unit usaha rumahan. Mereka sering menjadi jembatan bagi warga lain untuk mulai menggunakan *e-commerce* atau media sosial guna mempromosikan produk lokal, yang pada akhirnya meningkatkan kesejahteraan ekonomi lingkungan sekitar.

Social Harmony (Netiquette). They play a role in regulating technology use to prevent it from disrupting emotional closeness and genuine interactions among residents. By setting an example of balanced device use, they help maintain social solidarity and prevent conflicts caused by social media misuse in their communities.

Role of Family Members

The role of family members, especially children and adolescents as digital natives (Sukarso et al., 2024⁷¹), in internet use not only impacts the household but also makes a significant contribution to the surrounding community. The strategic role of family members in the context of social media use and utilization in society:

Mentoring the Local Community. Younger family members often serve as resourceful resources for less tech-savvy neighbors (older generations). They play a role in digital tool education (helping neighbors or seniors navigate public service apps, digital banking, or video communication) and finding simple solutions (serving as volunteer tech assistants for the neighborhood to troubleshoot basic device or internet connection issues).

Anti-Hoax Agents. As more skilled active users, family members play a role in maintaining the quality of information in digital community groups (such as community WhatsApp groups). This role includes information verification (helping filter and validate news circulating in the community before it is disseminated) and education on internet netiquette (reminding peers and other residents about communication ethics to prevent social conflict in cyberspace).

Agents for Creativity and the Neighborhood Economy. Family members utilize the internet to promote local potential to a broader audience. These contributions include Promoting Community MSMEs (Helping market neighbor-owned products or neighborhood businesses through creative social media content) and Publicizing Positive Activities (Documenting and disseminating neighborhood activities (such as community service or community events) to strengthen the community's positive image online).

Cybersecurity Awareness Pioneers. Well-literate family members help create a safe digital environment for the community through Privacy Education (Reminding residents of the

importance of protecting personal data to avoid becoming victims of online fraud) and reporting harmful content (actively reporting accounts or content that endangers public order in the surrounding area).

Together, family members act as a digital bridge, ensuring that the benefits of internet technology are felt equally and safely by all residents in their community. In other words, digital or internet matters can become a family affair, not just for those with technical skills, such as teenagers and the head of the family. All family members can be active participants or beneficiaries of internet use, especially social media. If expanded, all members of the village community should have the opportunity to benefit from social media, with no one left behind.

Conclusion and Recommendation

Conclusion

The results of the agent identification in the implementation of the humanize-smart-village approach are the head of the family, the head's companion (husband/wife), and family members. Specifically, family members include the younger generation, or children and adolescents, both those still studying/going to school and those no longer attending school.

They have the potential to volunteer as "liaisons/mediators," "helpers," "consultants," and "facilitators" for community groups that currently lack or do not utilize internet access through various social media applications. They need motivation, socialization, and recognition from their surroundings to become agents in using internet-based applications, especially WhatsApp, Facebook, and Instagram.

The collective role of the family has transformed into a key pillar of national digital resilience. The following conclusions are drawn:

Interdependent Ecosystem. The head of the family, spouse, and family members have complementary roles in creating a safe digital environment. Without internal collaboration, digital protection efforts at the community level will be challenging to achieve.

Next Policy Transition. The role of the family becomes increasingly crucial with the government's policy to restrict social media access for children, scheduled to take full effect in March 2026.

The Family as a Social Filter. The family serves as the primary filter against the flood of information and cyber threats, preventing their negative impacts from spreading to the community or the surrounding environment.

Recommendation

Based on the conclusions above, the following recommendations can be formulated to provide training for the younger generation to become agents in the use and utilization of all internet-based media. (1) It is necessary to increase the younger generation's understanding of the various regulations regarding the use of all internet-based media (the Law on Information and Electronic Transactions). This increased understanding will not only benefit prospective agents but also benefit them, making them more judicious in using these media; (2) It is necessary to increase the motivation of the younger generation to commit to specific moral values, in this case, doing good for others, both for humanitarian and religious reasons; and (3) It is necessary to increase the "closeness" between the younger generation and village officials so that their presence and involvement in all village government activities are more recognized and they feel valued. Popular social media can be a means to increase this "closeness."

References

- [1] SUBEKTI, T., & DAMAYANTI, R. (2019). Penerapan Model Smart Village Dalam Pengembangan Desa Wisata: Studi Pada Desa Wisata Boon Pring Sanankerto Turen Kabupaten Malang (*Implementation of the Smart Village Model in the Development of Tourism Villages: A Study of the Boon Pring Sanankerto Turen Tourism Village, Malang Regency*). *Journal of Public Administration and Local Governance*, 3(1), 18-28.
- [2] RAMACHANDRA TV., G. HEDGE, SUBHASH CHANDRAN M.D., T.A. KUMAR, & V. SWARMIJI (2015) Smart Village: Self Sufficient and Self Reliant Village with Empowerment of Manpower (Rural Youth) through Locally Available Natural Resources and Appropriate Rural Technologies, *ETR 90, Smart Village, Energy & Wetland Research Group, CES, IISc*.
https://www.researchgate.net/publication/332194735_Developing_A_Smart_Rural_Model_for_Rural_Area_Development_in_Indonesia/fulltext/6382f34948124c2bc6750e55/Developing-A-Smart-Rural-Model-for-Rural-Area-Development-in-Indonesia.pdf
- [3] RACHMAWATI (2018). "Pengembangan *Smart Village* Untuk Penguatan *Smart City* Dan *Smart Regency*." ("Smart Village Development to Strengthen Smart City and Smart Regency.") *Jurnal Sistem Cerdas*, 1(02), 12-18. [Elibrary UNIKOM](#).
- [4] SUKARSO DAN NIKEN PARAMARTI DASUKI (2020). Media Sosial dan Dekonstruksi Partisipasi Masyarakat dalam Perumusan APBDes, makalah Seminar Nasional "Membangun Kolaborasi Strategis antara Perguruan Tinggi, Pemerintah, Bisnis, dan Masyarakat Menuju Kampus Merdeka dalam Era Revolusi 4.0" (*Social Media and the Deconstruction of Community Participation in Village Budget Formulation, National Seminar Paper "Building Strategic Collaboration between Universities, Government, Business, and the Community Towards an Independent Campus in the Era of Revolution 4.0"*). Purwokerto, 6-7 Oct. 2020.
- [5] SUKARSO, NIKEN PARAMARTI DASUKI, SENDY NOVIKO, (2023), "Smartize and Humanize People in the Village for Every Pandemic" in International Conference on Politics, Social, and Humanities Sciences, KnE Social Sciences, pages 483–495. DOI 10.18502/kss.v8i3.12850
- [6] DASUKI, N. P., SUKARSO, S., & ROFIK, A. (2024). Stunting Reduction Policy: Learning From the Field. *Technium Social Sciences Journal*, 66(1), 335–346. <https://doi.org/10.47577/tssj.v66i1.12095>
- [7] SUKARSO, DASUKI, N.P. & NOVIKO, S. (2024). The Post Governance: Paving the Way for Teenagers' Role in Society Through Social Media, *Technium Social Sciences Journal*, Vol 66, 431–440, Dec. 2024, ISSN: 2668–7798. <https://doi.org/10.47577/tssj.v66i1.12092>