RESEARCH ARTICLE

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The Adoption of the Simpeldesa Application–Shifting Social Relations between Residents and Village Government: A Study in Kendalbulur Village, Indonesia

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ABSTRACT

The digitalization program of rural areas is articulated in Article 86, paragraphs 1–6 of Law No. 6 of 2014 concerning villages, within which it entrusts villages in Indonesia with the capability to implement information technology in rural development. The rural digitalization phenomenon has repercussions on various sociological aspects of human beings, including the patterns of interaction, the intricacies of interpersonal relationships, individual attitudes and actions, and the comprehension of individual identities. This phenomenon is also observed in the digital village of Kendalbulur. In support of good governance, the village government has developed an application for managing social, economic, and governmental affairs. Throughout the digitalization process, the community has experienced a transformation in the patterns of interaction between residents and the village government, shifting from physical co-presence to virtual space. The alteration in the relationship between residents and the village government is a noteworthy subject to scrutinize since it is not an easy task to alter the mindset of rural communities, in particular for those who were born during the baby boom era, given that the consequence is that all residents must become proficient in using information technology. It applied a qualitative descriptive research design combined with the Rapid Rural Appraisal (RRA) methodology. The principle of purposive sampling determined the selection of the research subject. The data analysis was conducted based on the Miles and Huberman framework. The Village Head (Kades), as the representation of village government officials, still prioritizes direct communication with their people. In addition to the utilization of digital technology, such as the Simpeldesa application, direct communication in this context involves practices such as deliberations (*musyawarah*) and communal cooperation (*gotong royong*), either with the villagers themselves or their representatives, such as the heads of neighborhood associations (*ketua RT or RW*).

Keywords: Government, residents, Simpledesa application, social relations.

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I. Introduction

A digital village refers to a concept aiming to bring digital technology and connectivity to rural areas. Technological advancements bring changes in societal structures and serve as indicators of a nation's progress (Saidah *et al.*, 2022). Digital village innovations foster developments in governance, social dynamics, and economics. Information and Communication Technology (ICT) emerges as a crucial unit for providing services, particularly in digital villages, which prioritize facilitating virtual access to information (Fathurohman & Erdi, 2022). Considering the prevalence of the Industry 4.0 era, digital literacy has become ubiquitous in society. Almost all activities we engage in now involve digital technology (Solihin *et al.*, 2021). This phenomenon has prompted the government of Kendalbulur Village, located in the Boyolangu sub-district of Tulungagung Regency, to innovate in technology to provide services to its residents. As a result, the village has transformed into a digital village, leveraging the Simpledesa application as a platform for governmental services and accommodating its residents' social and economic interests. In its digitalization efforts, the government of Kendalbulur Village focuses on three key areas—first, digitalization in the realm of administrative services. The second is the digitalization of social governance, which is oriented towards understanding how the community interacts with or adapts to digital technology. This encompasses a broad scope of information, involving village entities such as groups and village organizations like Karang Taruna in educating the community about information technology. This

is intended to minimize harmful digital usage. The Simpeldesa application offers various features, including the panic button. This feature functions similarly to a traditional alarm or danger signal previously used for communication. The panic button serves as a support system for village preparedness.

The digital village of Kendalbulur also organizes village blood donation drives as a precautionary measure to meet the blood needs of its residents. The purpose of these blood drives is to ensure that the village community does not need to undergo the hassle of searching for and waiting for the availability of blood bags from hospitals. In its implementation, residents who need blood transfusions can ask through the application, which will then generate notifications on their smartphones. The third is economic governance. Within the Simpeldesa application, there exists a feature that facilitates financial networks, offering transaction services through the Payment Point Online Bank (PPOB) feature. This feature within the Simpeldesa application streamlines electronic transactions for mobile phone credit, electricity bills, health insurance (Social Security Agency on Health or BPJS), water bills (PDAM), and more.

Additionally, there is the "Pasar Desa" (Village Market) feature, where residents can buy and sell products, including those from micro, small, and medium-sized enterprises (UMKM) or other necessities. The village market is an alternative means to enhance the community's proficiency in digital marketing. The village also provides digital marketing support to ensure residents comprehend and maximize their grasp of online business developments. Digital economic empowerment has become increasingly crucial, as it has become commonplace and an alternative means to reach a broader market. Simpeldesa application has been used widely by people in Kendalbulur Village, with approximately 1,000 out of 1,400 households registered and actively using the application. The Simpledesa application is expected to influence the social relationship between residents and the village government. This application streamlines administrative, social, and economic services while enhancing transparency and community participation in decision-making processes accessible through online platforms. The establishment of a digital village has been a crucial thing to ensure the achievement of good governance (Lailiyah, 2022). The concept of a digital village is among the government's initiatives in the national Medium-Term Development Plan (RPJMD), alongside the development of tourist villages and other endeavors.

II. Literature Review

Technological advancements are inseparable from daily life, as they invariably change societal structures within civilization and culture. Technological progress, ranging from television to mobile phones (HP) and the internet, is not limited to urban areas; it is evenly accessible to rural communities as well (Wahyudi & Sukmasari, 2014). Considering Law No. 9 of 2014 concerning villages, it is anticipated that village governments will be granted opportunities to develop their respective communities (Republic of Indonesia, 2014). Notably, the digital village leverages information technology as a primary development component and provides swift and accurate services (Beriansyah *et al.*, 2021). Therefore, the digital village is a program designed by the government for rural empowerment and development (Rusdianto *et al.*, 2022). In order to minimize information disparities in rural areas and harness the evolving information technology and communication, the concept of a digital village has emerged as a form of community empowerment, such as a digital economy (Rohmah *et al.*, 2022). It aligns with the research conducted by Soedarwo *et al.* (2022). Empowerment serves as a motivating factor to enhance rural activities. The government can utilize the development of Information and Communication Technology (ICT) in its relationship with the community to establish good governance (Ismayawati, 2020).

Similarly, in Kendalbulur Village, understanding that nearly everyone uses smartphones has become a pivotal factor in constructing a digital village. The digital village focuses on three key areas: firstly, governance; secondly, social management; and thirdly, economic management. These three aspects are the prominent points of the village government's pursuit of good governance. Utilizing web-based archival storage is anticipated to enhance the performance of the village government (Agustya *et al.*, 2021). The adoption of innovative information and administrative service models, along with a focus on promoting good governance, elevates service excellence (Putu *et al.*, 2022). In line with the research conducted by Kusumadinata *et al.* (Kusumadinata *et al.*, 2018), Eko Kuntarto (Kuntarto *et al.*, 2022) communication media supports disseminating village information across various mass media platforms. Utilizing information technology through digital platforms (Fardani *et al.*, 2021) aligns with this objective. The Simpeldesa application is designed to support and streamline the village's operations. This application can be downloaded onto smartphones and embodies the spirit of digitalization, participation, and self-reliance. Through this application, village administration and public service processes have transitioned into a digital web and smartphone-based framework. The convenience of the virtual space has simplified the village government's tasks, enabling them to address the villagers' needs better. The openness and transparency of information manifest as a two-way communication channel between the village government and its residents This digitalization has also paved the way for new opportunities within the creative economy

(Daga *et al.*, 2023), where residents utilize digital marketing in alignment with the research conducted by Geraldo S.R *et al.* (Rumbino *et al.*, 2022), Nurchim *et al.* (Nofikasari, 2018), every social community member, from BUMDes to farmers, can be gathered through digitalization. In line with Tendi (2016), Macanovic (2022), and Fuller (Fuller & Jandrić, 2019), the online world has become a new realm that engages individuals from the physical world in various pursuits.

III. METHOD

A. Design

This research employed a qualitative method in which the Rapid Rural Appraisal (RRA) approach was applied (Chambers, 1992) to swiftly comprehend rural settings. RRA is designed to yield timely, accurate, and pertinent information about rural life and conditions. The RRA approach was employed to expedite the data collection process and reduce the costs of conducting in-depth research.

B. Research Site

The research was conducted in Kendalbulur Village, Boyolangu Sub-district, Tulungagung Regency, East Java Province, Indonesia. It has been three years since they officially established the digital village in Kendalbulur. The utilization of digital technology in the form of applications has been one of the primary focuses of the village government in developing services, social organization, and economic structures for the village residents. Leveraging the Simpeldesa application represents one facet of digitalization that encompasses various aspects, including assistance to the government, village preparedness, blood donation drives, and the village market, all of which cater to the needs of its residents. As one of the thriving and widespread digital villages, approximately 1,000 out of 1,400 households already use the Simpeldesa application. This fact led the researcher to select Kendalbulur Village as the research location.

C. Determining Research Subjects

The researcher selected the subjects for this study based on specific characteristics to facilitate data collection more expeditiously and accurately. The selection of research subjects adhered to the principle of purposive sampling (deliberate choice), chosen due to considerations and criteria aligned with the objectives of this research. The requirements included individuals who are active users of the Simpeldesa application in the administration field, totaling one person. Additionally, one correspondent was chosen as an active user of the application in the social field, and another correspondent was selected in the domain of digital economics.

D. Data Collection Techniques

1) Interview

The RRA was conducted by interviewing community members (correspondents) and actively engaging respondents in semi-structured interviews. Adapting to the subjects was necessary to create a sense of familiarity and comfort during information sharing, thus building trust and reducing the likelihood of information bias or tendency. In its implementation, the researcher initially conveyed the purpose and objectives of the study, followed by a casual discussion concerning the subject's profile before conducting the question-and-answer session. This semi-structured interview process was expected to elicit additional information. Correspondents were expected to respond to the posed questions and introduce new information throughout the process. This additional information serves as an asset in enriching and substantiating the data acquired, thereby enhancing the robustness of the field findings.

2) Observation

Observations were conducted to gather data that could not be obtained through interview techniques due to a technical issue with the Simpledesa application. This issue became evident when one resident, who had initially sought to process a document, encountered a system error, failing to fulfill the requested document needs of the resident. However, this issue was addressed beforehand through a WhatsApp conversation, allowing the resident to visit the village office with the document already being prepared.

3) Documentation

The information collection was sourced from documents obtained from the village government or official websites on the internet, including photographs depicting interview activities, field conditions, and images essential for supporting the conveyed information. Additionally, articles provided supplementary information, and books served as foundational references for the research execution. In gathering supporting data, the researcher received assistance from the village authorities, such as the application's web pages and its various features. Documentation did not solely encompass photographs; the researcher also supplemented it with audio recordings during interviews with correspondents. This approach ensures the credibility of the generated data.

4) Focus Group Discussion

The Simpeldesa application, in its implementation, is widely utilized by village residents for administrative services and correspondence. In other domains, such as social services, it is a medium for disseminating village information and news. Furthermore, in the economic sphere, it functions as a platform for economic empowerment, allowing residents to sell various products or engage in micro, small, and medium-sized enterprises (UMKM) activities and offering an alternative for online transactions, such as bill payments. The village government, especially the Village Head (Kades), prioritises direct communication with its residents. In addition to utilizing the Simpledesa application, they engage in deliberations and communal efforts with village residents and community representatives, such as the heads of neighborhood associations (RT or RW). This application's presence benefits the social relations between residents and the government. This is because the application is primarily used for administrative services. The village government balances this by integrating residents' needs, such as village activities, into the application's features, including village news, reporting, feedback mechanisms, and online transactions. As a result, the digitization aspect can coexist harmoniously.

E. Data Analysis Technique

The data analysis technique employed in this research utilized the Miles and Huberman model to analyze qualitative data. It was conducted interactively and continuously until saturation was achieved in the data. The steps involved in data analysis include data reduction, data display, and conclusion drawing/verification. (Miles *et al.*, 2014)

F. Data Validation

The data validation method employed source triangulation. Validity refers to the degree of accuracy between the data observed within the research object and the data obtained by the researcher. Valid data do not exhibit disparities between the data reported by the researcher and the data in the actual reality of the research object (Sugiyono, 2018).

IV. Results and Discussion

A. Village Development Program

Digital Village is one of the programs selected by Kendalbulur Village within the Medium-Term Village Program Plan. Through the Simpledesa Application, Kendalbulur Village can accommodate its residents' needs, encompassing administrative, social, and economic services. Both the government and the community have undoubtedly felt many changes. The Simpledesa Application was an efficient alternative to addressing the needs of the residents. The village government continued to develop this utilization, especially considering the high usage of smartphones and the perceived convenience, which added value to the program. Delving into the aim of adopting the Simpledesa application led to examining how the government perceived the needs of village residents, particularly in administrative services. Moreover, this concept represented an innovation that can enhance the residents' knowledge of information technology. Considering the widespread use of information media and the fact that nearly everyone possesses a smartphone, it is not surprising that its implementation has been quite successful among village residents and within the internal operations of the Kendalbulur Village Government. The digitalization process was more challenging and straightforward than it may appear, yet it constitutes a crucial aspect to be comprehended. Simultaneously, the transformation process undergone by the residents and the village government, transitioning from a traditional society to a modern one, should be recognized. This transformation was a result of digitalization within the village. In this research, the researcher also describes the communication transformation process and how adopting the Simpledesa application impacts various aspects of the lives of the residents and the village government.

B. Communication Transformation between Residents and the Village Government

Communication is one of the most crucial aspects of life, enabling us to convey intentions and objectives and comprehend a wide range of information. Communication also enhances our understanding of ideas or thoughts and minimizes miscommunication. Recognizing the significance of communication in daily life, it serves numerous mediums available, including print and electronic or digital media. The shift or transformation in the character of mass and interpersonal communication results from digital technology (Gushevinalti *et al.*, 2020). Digital transformation and innovation act as catalysts for inspiring transformative ideas. Advancements in technology and the development of artificial intelligence serve as evidence of how strategic and efficient communication designs can help reach various communication networks. This also underscores how communication in the digital era is employed within organizations to align thinking and enhance ideas (Rifayanti *et al.*, 2017). In the current digital transformation era, various sectors face numerous challenges, including Kendalbulur Village government. We are aware of the strategic

role of public relations (PR) in communication, which includes conveying intentions, objectives, and messages to the public, and this presents considerable challenges. Examining the initial stages of communication transformation between residents and the village government, as described by the correspondents, it is evident that communication between residents and the government did not initially encounter significant obstacles. However, as time has progressed, along with the evolving needs of residents, especially concerning administrative matters at the village office, new ideas have emerged for the village government itself.

Before implementing the application, Kendalbulur Village conducted a review of supporting factors. It can be said that the observations aimed to assess the potential sides and risks of the community. As the Head of Kendalbulur Village stated, we live together with technological advancements, and nearly every household possesses sophisticated and smart devices. Therefore, adopting the Simpledesa application was deemed feasible for the village residents. Kendalbulur Village, which has now become a digital village, has undergone a process of adaptation to these digital services. The Head of Kendalbulur Village explained that even before the existence of the Simpledesa application, they had already implemented a website as a platform for disseminating information and accommodating other village-related information. The utilization of digital technology has continued to evolve, primarily as the village seeks to innovate its services to become more efficient and beneficial to its residents.

Additionally, the Village Head mentioned that various parties have facilitated the widespread adoption of this application. One of the contributing factors to the increased usage of the application is the involvement of students from a local university in Tulungagung Regency. It can be seen through the data that out of 1,400 households registered, 1,000 households have already downloaded the village application on their smartphones.

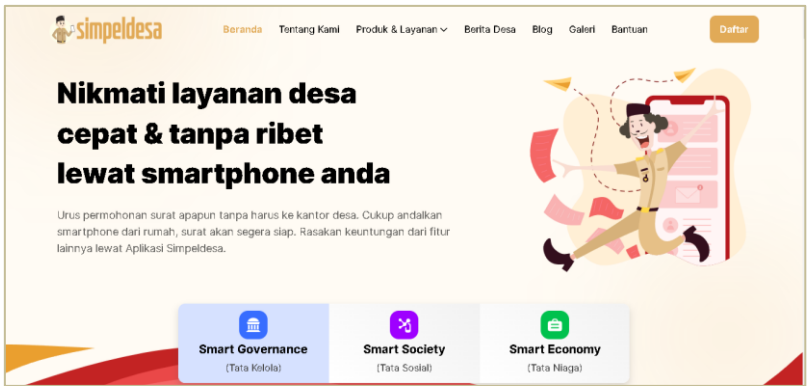

Fig. 1. Simpledesa webpage (Source: www.simpeldesa.com).

The introduction of the Simpledesa application to residents was carried out through open communication. The third correspondent explained how the plan for implementing the Simpledesa application would be introduced to the residents. The Village Government conducted village meetings attended by the heads of Neighborhood Associations (RT) and Community Associations (RW). The correspondent also mentioned that even though they had not yet become a village operator, they still had some knowledge about it:

> *"In the beginning, Simpledesa was introduced in mosques, and there were village meetings first. Initially, it started at the village meetings. That was when I had not yet become a Simple Desa operator. But I knew about it because it was socialized during village meetings. Village meetings at the RW level are RWs in those villages."* (Third correspondent)

In line with the statement of the Village Head, the first correspondent also provided similar information. The implementation was tested after the village meeting was held, and a consensus was reached. It is known that PT. Hanan was the initial developer of the Simpledesa application, which was later acquired by Telkom and remains so to this day. Whether consciously or not, online application features, such as chat, are considered more efficient in terms of time and functionality. This was emphasized by the first correspondent in describing the steps that residents go through when dealing with administrative matters at the village office. Some residents may need a different time and day to visit the village office.

Furthermore, as explained by the first correspondent, residents initially had to call the village office before their requests could be processed, and the community usually had to wait until the process was completed. The first correspondent also explained that the community can provide feedback and suggestions, and their identities should match the information registered on their family cards. Through the information provided by the first correspondent, there is a somewhat detailed explanation of the transformation of communication in village government services. It was said that implementing application-based services is undoubtedly an innovation and a new development among the residents.

Unsurprisingly, there were both pros and cons during its implementation. Kendalbulur Village chose the concept of a digital village because many tourist villages have already developed. Now, fully digital administrative services have become an added value, especially during the past COVID-19 pandemic. Digitalizing services at the village office can also impact other aspects, such as social and economic sectors. Therefore, it is unsurprising that the implementation has received a positive response and enthusiasm from the villagers.

The results of interviews with other correspondents, including the third correspondent, explained that in addition to using the Simpledesa application, the village government also utilizes other online media, especially in disseminating important news or information. One of these media is the WhatsApp application, which has become a frequently used media by the village government to communicate with representatives of the residents, such as in the scope of Neighborhood Associations (RT) and Community Associations (RW). In the transformation of communication in Kendalbulur Village's digital village, it turned out that they rely on more than just one information medium or application. Based on the correspondents' statements, they explained that almost all media serve as a communication bridge between the village government and the residents, thus minimizing miscommunication and ensuring the accurate delivery of information to the village residents.

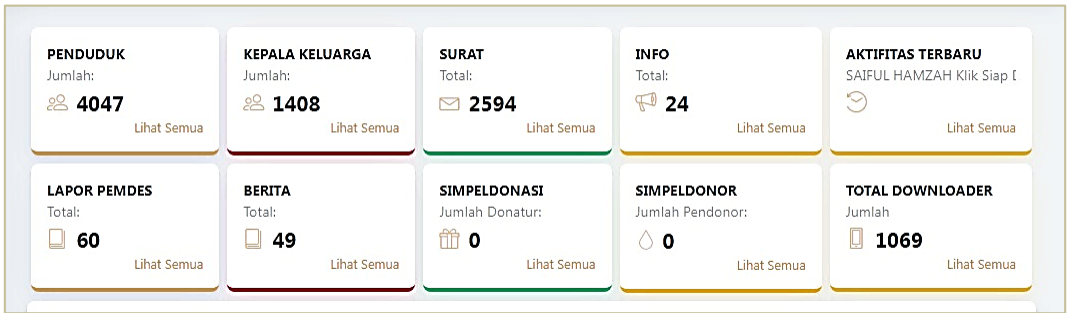

Fig. 2. Village operator menu of the Simpledesa webpage.

The features in the Simpledesa application contain information about the population, the number of households, and the total downloads by users. The information provided is a part of the features that have been mentioned previously. The information displayed can always change since this application is constantly used for various needs by both residents and the village government. Village residents can access information through multiple features available in the application, which can be customized to meet the needs of the village residents.

C. Simpledesa Application for Administration Services

Service development is a way to improve effectiveness and efficiency, as it impacts the output results both in work and services provided. Digital services are one of the methods developed by the Kendalbulur Village Government. One is the Simpledesa application, a village information system that helps in digital-based administrative services. Administrative services have become a flagship area in utilizing the Simpledesa application's digitalization. In the account provided by the first correspondent, a village operator, he explained significant changes internally in the village government and externally among village residents. Although it cannot be denied that adaptation also felt somewhat slow in his work scope, especially among staff over 40 years of age. Adaptation is a phase faced by the internal Village Government, as explained by the first correspondent, who emphasized the need for a step-by-step approach and a willingness to learn during the process. Implementing the Simpledesa application in Kendalbulur Village also coincided with the pandemic period, which impacted services that limited contact between individuals as a form of social distancing. According to the first correspondent, besides the distant location of residents' homes or their inability to come to the office, the application of Simpledesa became more effective and efficient in handling correspondence, especially given the pandemic circumstances. In administrative services, particularly in handling correspondence, the Simpledesa application is considered highly beneficial, primarily due to its time efficiency. In some instances, such as the need to process school-related documents that require swift action, the Simpledesa application is viewed as a significant facilitator in the handling process. According to the first correspondent, the application serves as a supporting factor. With the presence of this application, data can be promptly entered into the village operator's server. As a result, the village government can immediately carry out subsequent steps. As explained in the previous paragraph, digitalization does not only impact the efficiency and effectiveness of village work and services. It can be understood that what occurs in the administration field brings about positive changes. Village residents can receive administrative services easily and quickly, and the management of village administration can become more efficient and transparent.

D. Simpledesa Application for Social Services

Based on our previous discussion, we have gained some understanding of its implementation and utilization in the administrative field. Similarly, in the social aspects, it has its functions. The social service serves as an alternative means of communication between the village government and residents and among residents. Users may use the social field less widely than the administrative service. However, the social services also play a role that must be addressed. The presence of a digital village is expected to bring positive changes in the social aspect of the village. The main points include the participation and enthusiasm of the residents, and it is also hoped that the villagers can have better access to information and technology. At the same time, they can engage in village development and utilize digital technology to improve their well-being. Correspondent Andi Purwanto, or third correspondent, explained that the use of the Simpledesa application in the social aspect of his village is quite significant. This is marked by utilizing features available in the application, especially features like village news, the panic button, and the development of blood donation availability features.

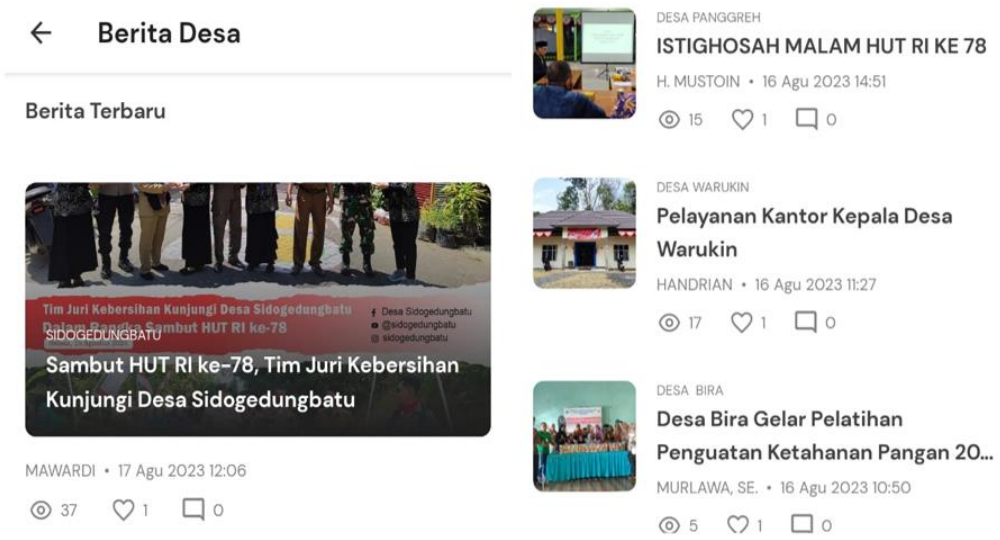

Fig. 3. Village news in Simpledesa application.

In addition to the village news feature, correspondent Three also mentioned using blood donation as a precautionary measure for blood availability. Although the blood type data collection process among residents is still ongoing, it is hoped that this will be one of the forms of village preparedness for its residents. This social aspect also serves as a platform for collecting the aspirations of its residents, whether they are suggestions or criticisms. Residents can provide comments that will be directly sent to the head of the village or the Village Consultative Board (BPD) through messaging contacts. Correspondent three continued to emphasize that this is an added value of the application's usage because previously, people were hesitant to provide suggestions or criticisms to the village government.

Fig. 4. “Report and Aspiration” feature to the village government or BPD.

Utilizing these features also positively impacts the village government, particularly as it encourages village residents to communicate, even through the application. The researcher also inquired about how the village government responds to proposals from its residents. Responding to this, correspondent three explained that the village government considers any ideas from its residents. For instance, residents propose to add a gym or exercise area in Nangkula Park (a village tourist area). Such suggestions were considered and intended to be realized in future development planning. According to Correspondent Three, these

moments are highly beneficial, not only for the residents but also for the village government. Addressing residents' aspirations is more than just a matter of providing a platform; correspondent three continued the explanation. If there are suggestions or criticisms conveyed, the village authorities will review them, indicating that there is a process for handling residents' aspirations. The correspondent also explained how the village government utilizes digitalization as part of its residents' activities, such as a healthy walkathon that uses the application as one of the stages of participation. The application is an alternative to obtaining walking coupons, where participants enter their ID numbers (NIK) and full names. As a result, village residents receive free tickets without purchasing them manually. This approach is also partially a method introduced by the village government to enhance the interest of its residents in utilizing the Simpledesa digital application. This leads to the residents gradually becoming more adept with technology, and the number of Simpledesa application users is also increasing. In addition to utilizing the application for village activities, Correspondent Three also explained that in certain instances, the Simpledesa application is used by the police to search for missing individuals. This occurs because sometimes individuals are registered within the Kendalbulur village area but do not reside in the village. However, this issue can be addressed using the sorting feature to match names with the registered Family Cards (KK). The third correspondent shared that using the Simpledesa application in the social domain goes beyond the realm of communication and illustrates the active engagement of residents in voicing their aspirations to the village government. In the social field, residents have harnessed this as a preferred means of communication to articulate their ideas. This is evident from the number of suggestions submitted through the application. Consequently, correspondent three, one of the village operators, expounds on the increased participation of village residents, especially in implementing social programs. Through the digital platform, village residents can provide input, share their experiences, and collaborate with the village government in community development efforts.

E. Simpledesa Application for Economy Services

The utilization of the Simpledesa application in the economic domain is employed by the village government and the Village-Owned Enterprises (BUMDes) as an alternative means of conducting business for village residents. This utilization serves as a platform for advertising, a creative economy, and a learning medium for digital marketing. The Simpledesa application is known to offer several features in the economic domain, like online marketplaces found in various online applications today. Within the Simpledesa application, one of these features is called the "Pasar Desa" or Village Market. The Village Market sells specific products and allows residents to freely trade various commodities, including vegetables, food, rental properties, beauty products, and products from Micro, Small, and Medium-sized Enterprises (UMKM).

Fig. 5. A stall for online payment transactions managed by BUMDES Larasari (Source: Author's archive).

The researcher then acquainted themselves with the correspondent Dian, who serves as one of the operators in the economic sector of the Simpledesa application. In Dian's account, the economic sector within the Simpledesa application has 12 partners. These partners consist of residents who engage in sales and provide various payment services, including bill payments and vehicle tax renewals, which can serve not only residents of Kendalbulur village but also beyond. The digitization of the economic sector is not unfamiliar to society, given the prevalence of online shopping. However, it provides a distinct experience when rural residents can engage in online commerce through village-specific applications such as Simpledesa. The first correspondent, one of the driving forces behind village businesses, naturally possesses a mature understanding of involving rural residents. Considering the BUMDes units that have already been developed, they boost enthusiasm among residents for utilizing the Simpledesa digital application. The second correspondent also explained the significant benefits of the application for residents, such as the

availability of payment services, bill payments, and online transactions. In addition to the correspondent correspondent, the researcher posed similar questions to one of the BUMD's executives, who became the next correspondent in the economic field. He is Shobir, who is not only a member of BUMDes but also manages the village tourist park known as Nagkulula Park. Not significantly different from the second correspondent's description, the fourth correspondent also detailed the utilization of the Simpledesa application. According to him, the residents have played a valuable role, actively participating in the village market feature within the Simpledesa application. The second correspondent also expressed a similar sentiment, explaining that apart from promoting BUMDes residents' businesses, they also facilitated them. The development of the digital village was supported by collaboration and cohesion that involved not only one group but also cooperation from all layers of the village. In addition to the explanation about the utilization of the application in the economic sector, there are also other positive aspects. The fourth correspondent explained that previously, this application provided an opportunity for residents who wanted to engage in selling. However, unexpectedly, the entrepreneurial spirit of the village residents could flourish, which marked the positive effect of the application.

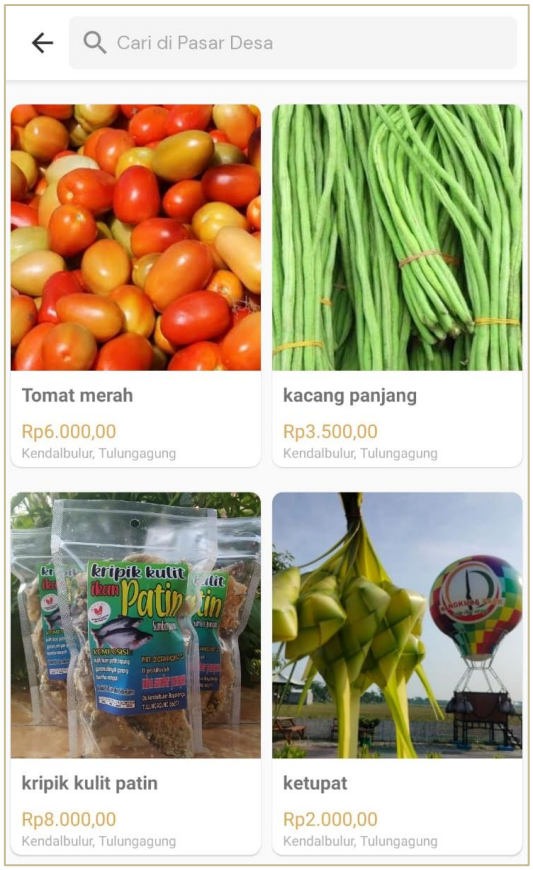

Fig. 6. A selection of products sold in the Village Market menu on the Simpledesa Application
(Source: Simpledesa Application Interface owned by the correspondent).

The transformation in the economic sector was perceived to bring about changes, especially with significant impacts on several residents. As mentioned earlier, the village head and the village government aim to enhance the human resources of the village residents. The introduction of the Digital Village, which encompasses various fields, was seen as capable of accommodating essential aspects of the residents' needs. Moreover, it also focused on making the village residents understand the new technology and effectively utilize it. Empowering the residents through this application was also highlighted, where the residents are guided in understanding the concept of digital marketing. Additionally, this aimed to improve the understanding and skills of the residents.

F. Relationship between the Residents and the Village Government

The introduction of a digital village in a rural area undoubtedly had impacts across various aspects. The relationship between residents and the village government had undergone significant changes. Through the transformation from a traditional village to a digital village, it naturally takes time for residents to adapt and fully utilize the application as intended. This shift can be sociologically analyzed through Emile Durkheim's theory of the transition from mechanical solidarity to organic solidarity in society. Previously, residents tended to exhibit mechanical solidarity, being bound together by shared culture and traditions, and individuals were interdependent, with the majority engaged in agricultural activities. The transition

towards organic solidarity occurs with the adoption of the Simpledesa application. Digital technology opened access to a broader world and connects the village to the global market and information. This can alter patterns of work and specialization within the rural community. Changes in values and norms during this transformation underwent a shift. There was a balance between the traditional values that are preserved and the modern values that are applied. This created social dynamics in which some individuals are more open to change and innovation while others uphold traditional values. Social conflict and integration can vary from mechanical solidarity to organic solidarity. Conflict may arise due to differences in values, technological understanding, or changes in employment structures. However, broader integration also occurred because villagers must increasingly rely on each other in an increasingly complex life. Conflict resolution and the formation of integration can play a crucial role in how the village copes with these changes. Using Durkheim's theoretical framework, research in the Digital Village can explore the processes of shifting relations between residents and the village government and the dynamics therein, as well as how the adoption of digital technology affects solidarity, values, conflict, and integration in the environment. The village head also explained that initially, this was about more than just adopting concepts and service models. The village head also hopes the villagers can adapt to the digital 4.0 era.

TABLE I: AGE DISTRIBUTION OF THE KENDALBULUR POPULATION (SOURCE: KENDALBULUR, 2023)

Age group	Frequency	Percentage
0–4 years	155	3.83%
5–9 years	225	5.56%
10–14 years	259	6.40%
15–19 years	297	7.34%
20–24 years	360	8.90%
25–29 years	337	8.33%
30–34 years	247	6.10%
35–39 years	254	6.28%
40–44 years	290	7.17%
45–49 years	322	7.96%
50–54 years	359	8.87%
55–59 years	292	7.22%
>= 60 years	650	16.06%

The population age data, as observed from the bar chart and the information provided in the table, allows us to conclude that the percentage of the population aged 60 and above is 16.06%, followed by the age group of 50-54 years with a rate of 8.33%. These figures prove that the baby boomer generation is more dominant. Undoubtedly, this presents a distinct challenge for the village government, as previously mentioned by the first correspondent. Initially, the villagers could have been more receptive to the digitalization of the village, given their limited adaptation to online media. However, the first correspondent also explained that villagers do not need to worry because registering on the Simpledesa application can be delegated to a family member. Thus, villagers unfamiliar with its usage can be assisted by family members who can access it. According to the first correspondent, the Simpledesa application, now an integral part of the village, has already had many positive impacts. As a result of this digitalization, villagers have become more educated about digital technology. As a result, the villagers are more willing to learn and, at the very least, can use basic service features such as administrative services for handling official documents at the village office. It was just the same as the use of a smartphone. It is now affordable to purchase and convenient to access internet connectivity. Due to that reason, regardless of age, both young and old now possess sophisticated smartphones. This fact served as a foundation for adopting the Simpledesa application in Kendalbulur Village, considering the widespread use of smartphones and the availability of reliable internet signals. Before implementing the Simpledesa application, the Kendalbulur village government utilized a website as a digital information medium. This website provided access to village residents and information that a broader audience could view.

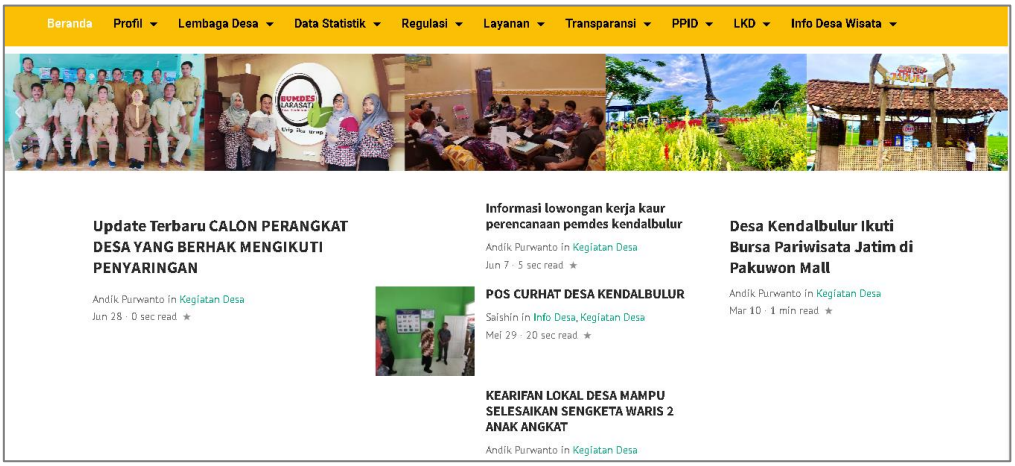

Fig. 7. Kendalbulur Village webpage.

The village government utilizes the website as a medium for information and as a means of transparency for its citizens. The information it contains starts with the profiles of the village head and staff, and then extends to village institutions and transparency in the use of village funds. The first correspondent explained that there have been many changes since the village became digital. In this case, they noted that residents are more active and open than before. The website serves as an alternative digital information medium, in addition to printed media such as banners and direct communication with residents. Several explanations provided by other correspondents, such as the third correspondent, describe the changes in village residents after the village became digital and started using the Simpeldesa application. They narrated how village residents have become more active in establishing communication with the village government. Residents who previously provided little feedback are now, with the presence of the Simpeldesa application and the active efforts of the village government to build communication, more sensitive to what is happening in their village. Moreover, they perceive this as progress and a positive value. They explained that the transformation of Kendalbulur into a digital village does not immediately digitize all aspects. All media were utilized as platforms for social relations, with the village government maintaining communication with various parties, especially representatives of residents, including RT and RW, and the village's organizations.

It was observed that adopting the Simpledesa application as a supporter of the digital village concept in Kendalbulur does not immediately eliminate face-to-face interactions between residents and the village government. Although the development of services in various fields has shifted towards digital platforms, it has not reduced the intensity of residents' interactions with the village government. It was proven by the explanations provided by the first correspondent regarding administrative services. During the research conducted by the researcher at the village office, while interviewing the first correspondent, it was observed that several residents came to collect documents that had previously been submitted through the Simpledesa application. The first correspondent also explained that village residents continue to visit the village office to collect documents and handle other matters related to the village government. In the relationship between the village residents and the government, communication from residents to the government could have been more active before becoming a digital village. Many village residents were reluctant and seemed shy when interacting with the village government as if there were still barriers.

Moreover, in expressing their aspirations, residents did not yet have the appropriate platform to channel them. The presence of the Simpledesa application as a supporter of the digital village concept has encouraged residents to become more open in expressing their opinions about the village. The results of adopting the Simpledesa application allow residents to become closer and more informed about developments in their village, accompanied by meetings conducted by the village head with the residents. The village government balanced virtual interactions with direct interactions with its residents. In its implementation, this application prioritizes excellent service to village residents and aims to enhance the technological capabilities of the rural population.

V. Conclusion

Adopting the Simpledesa application in Kendalbulur Village, which has been in place for three years, has brought about numerous changes. Some transformations have occurred in communication technology and in the sense that this digital application serves as a bridge to strengthen interactions. Village residents feel that this application provides a new space for communication. Therefore, it can be concluded that adopting the Simpledesa application increases the social relations between the residents and the village government. This is reinforced by how the village government emphasizes direct communication, such as

community work (*gotong royong*) and other social village activities. The characteristics that strongly differentiate between a community with mechanical solidarity and organic solidarity, as conceptualized by Emile Durkheim, do not appear prominently in this digital village. The existing reality describes a fusion of mechanical and organic solidarity characteristics. The relationship between residents and the government is based on modernity while preserving local cultural values.

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CONFLICT OF INTEREST

The authors declare that they do not have any conflict of interest.

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