Journal of Education, Humaniora and Social Sciences (JEHSS) *ISSN 2622-3740 (Online)*
Vol 8, No. 3, Februari 2026: 1359-1373, DOI: 10.34007/jehss.v8i3.3008

Digital Inclusion and The Challenges of Accessing G2C Public Services for The Elderly: A Case Study In Bojonegoro Regency

Putri Ana Istiqomah, Ana Kumalasari & Sri Kasiami*
Study Program Public Administration, Faculty of Social Sciences and Political Sciences, Universitas Bojonegoro, Indonesia

Received: 08 January 2026; Reviewed: 23 January 2026; Accepted: 02 February 2026

*Corresponding Email: putriistiqomah24@gmail.com

Abstract

This article aims to advance the development of increasingly sophisticated household appliances and digital technology, which are currently trending. However, a group that has been left behind in this modern era remains, namely, older people. Its novelty is that it provides a practical contribution to the Bojonegoro district government so that digital public services are not discriminatory towards older people. The purpose of this article is to gain a deeper understanding of the digital inclusion in public services for citizens (G2C) and the access challenges faced by all older adults in Bojonegoro Regency. The conceptual framework used in this article consists of digital inclusion, G2C public services, the digital divide, and elderly inclusion. This research employs a qualitative approach, utilizing a case study method. The data collection techniques described in this article were conducted through interviews and document analysis. Meanwhile, the data analysis technique used software, namely N'vivoNVivo, to process qualitative research data. The study's results show that internal and external factors act as barriers to older people's access to digital public services in Bojonegoro Regency. The internal factor is the lack of motivation among older people to learn new digital technologies, while the external factor is the lack of elderly-friendly digital technology services. The development of digital technology, especially government-provided digital public services, must overcome the digital divide across all communities in Bojonegoro Regency—practical recommendations for equitable government infrastructure and flexible service approaches.

Keywords: Digital Inclusion; Challenges; G2C; Digital Divide; Elderly Inclusion

How to Cite: Istiqomah, P.A., Kumalasari, A., & Kasiami, S. (2026), Inklusi Digital dan Tantangan Akses Layanan Publik G2C Bagi Lansia di Kabupaten Bojonegoro, *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 8 (3): 1359-1373.

INTRODUCTION

Previous studies have discussed digital inclusion for older adults in the context of the general public. However, few have specifically examined the challenges of digital inclusion in the context of good-to-citizen (G2C) public services in the Bojonegoro region. Therefore, this study seeks to fill the existing gap by focusing primarily on the barriers and strategies for digital inclusion of older adults in public services in Bojonegoro. The digital divide in Bojonegoro Regency manifests as access, skill, and utilization gaps. Older adults tend to use digital devices for the most basic tasks, while they are unable to access public service applications independently. However, the government system for citizens, which is structurally aimed at the productive age group, reinforces digital exclusion. As a result, the digital transformation of government public services for the community (G2C) should increase service efficiency and equity. Still, if not balanced with contextual digital inclusion strategies, it risks excluding older people from public services. Older people in Bojonegoro are registered as citizens receiving services, but they are practically unable to access them digitally.

Digital inclusion is an important foundation for the implementation of advanced public services. In Bojonegoro Regency itself, many older adults still have difficulty using government digital services, or E-Government. This is due to a lack of digital literacy and access, as well as the need for more advanced technology. This can create a digital divide between older people and the general public, even though it should be a fulfillment of the right to access government digital services, thereby improving the quality of public services. (Retnowati & Nugraheny, 2021) According to the WHO age classification, people aged 60 and above are considered elderly. Disparities can occur when individuals' skills and abilities are deemed insufficient for understanding, accessing, and using various information media enabled by today's digital technology. (Irwansyah, 2024)

In the fast-paced era of globalization, knowledge and skills are essential in everyday life. It cannot be denied that there are still groups that are often neglected, namely the elderly aged 60 and above. Many of these older adults lack sufficient access to and knowledge of digital literacy, making it difficult for them to adapt to current developments in digital technology. (Pradana & Widiastomo, 2023) In this case, the improvement affects individual and social factors. For individuals, digital technology makes it easier for seniors to fulfill their needs. However, in terms of social factors, it refers to the shift to digital tools and devices, which forces seniors to adapt quickly. (Febryanti & Irwansyah, 2023) It is important to master digital literacy to communicate effectively and gain an optimal understanding. (Setiansah et al., 2023)

Based on initial observations, the government has integrated technology into policy implementation. This is also regulated in Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System (SPBE). (Dewi, 2019) The state is fully responsible for fulfilling basic needs and civil rights that every citizen should enjoy. This is regulated in Law No. 25 of 2009 on public services: "Public services are a series of activities carried out to fulfill all service needs in accordance with laws and regulations for every citizen." (Ghaniyyu Khoiri Fadli, 2023) Despite widespread access to technology, many older adults in Bojonegoro still struggle because they lack basic digital skills. There are several contributing factors, including aging and physical limitations such as blurred vision or nearsightedness, which prevent them from accessing digital technology. The government's use of computers and the internet to provide information and services to citizens is referred to as e-government. (Rahmatullah et al., 2025) The current government system is integrated with technology that can be controlled from the government center itself. (Tahir et al., 2024)

This study is based on the digital divide, viewing it as an inequality in access, use, and utilization of digital technology among community groups, including older people. This theory is used to understand the obstacles that older people in Bojonegoro Regency face in accessing good-to-citizen (G2C)-based public services. The theory used is the digital divide theory. The general concept was introduced in a report by the National Telecommunications and Information Administration (NTIA), a US federal agency in telecommunications and information. (Putri Limilia

& Puji Prihandini, 2018) The digital divide can occur due to limited internet access for people from certain backgrounds, especially those with higher incomes. (Mulyaningsih et al., 2020) Even though efforts have been made at the national and regional levels, vulnerable groups still face obstacles, such as a lack of digital literacy and limited internet access in remote areas. (Hapsa et al., 2024)

Advances in communication technology can encourage older adults to adapt to various developments in information technology, such as the internet, social media, and digital media. Older adults are also forced to realize that the internet and digital media can actually make it easier for them to meet their daily needs. (Yasmin, 2025) There is a significant gap in the development of information and communication technology. According to the OECD, the digital divide is a gap in access to and use of information and communication technology among individuals (Ramadhanti & Astuti, 2022).

The new public service perspective requires all public administrators to actively involve the community and serve the community without exception, including older people. (Denhardt & Denhardt, 2000) The principles of the new public service are to serve every citizen, prioritize citizenship over entrepreneurship, think strategically to maximize public services, act democratically, and prioritize people over productivity. (Ulfah et al., 2024) The main objective of implementing public services using the New Public Service (NPS) approach is to prioritize humanity. There are three main principles: every civil servant on duty must have a desire to serve the community, including older people, without any element of coercion. (Nightyas, 2017)

This poses a unique challenge for older adults to adapt to digital technology. (Eshet-Alkalai, 2004) Digital literacy can be defined as the ability to interact with interconnected information directed by computers. (Sya Laisa Amara et al., 2022) Digital literacy is a skill and knowledge that is very important for people in this era of modernization to master. (Isabella et al., 2024) The demand for digital literacy in the workplace is increasing, and the education sector is already pushing for innovation and targeted training to cultivate skills for the workforce of the future. (Reddy et al., 2023) Stakeholder analysis is the systematic collection of data to inform the development of new policies. Stakeholders are groups affected by activities or that can impact those activities. (Amelia Setiawan et al., 2019) Stakeholder analysis to identify the various roles of local government, community, and family in introducing digital literacy to specific groups of older adults. (Varvasovszky & Brugha, 2000) This analysis covers all stages of policy, from agenda setting to policy formulation, approval, implementation, and evaluation. (Balane et al., 2020)

G2C (Government-to-Citizen) is an element of e-government that covers all interactions between the government and citizens through the development of a one-stop application that is easy to access and includes public services. (United Nations, 2020) Central and local governments are required to have official email addresses and public-facing websites to communicate effectively and smoothly. (Ridwan, 2020) Senior citizens do not need to bother coming to the office in person; with the digital technology we have at our fingertips, they can access public services online. (Mariano, 2021) The social assistance check application is a digital service system launched by the Indonesian Ministry of Social Affairs, Minister of Social Affairs Tri Rismaharini, in June 2024, which is used to make it easier for application users to monitor the active status of social assistance, determine whether or not someone is eligible to receive social assistance, and submit social assistance applications. The Social Welfare Data and Information Center expanded the application.

METHODS

Qualitative research methods are grounded in postpositivism and are used to analyze phenomena in a clear, understandable manner. In this research, the researcher serves as the primary instrument for data collection and analysis. Data collection techniques use triangulation, which involves combining multiple sources and methods to enhance the validity of the findings. Qualitative descriptive analysis involves analyzing data in research, and qualitative research results emphasize understanding the phenomena under study. (Sugiyono, 2020) This study uses

qualitative research methods to identify various challenges or obstacles faced by older adults in Bojonegoro Regency in accessing digital-based public services (Government to Citizen), understand social, economic, cultural, and technological factors that can influence the level of digital inclusion, and provide recommendations based on field findings to increase older adults' participation in digital-based public services.

In research, informants are people who have information and data about the issues and objects in the study, so they are ultimately asked for information about the research object. In research, the technique used to select informants is purposive sampling, a method for selecting data sources with specific criteria. Researchers choose the purposive sampling technique because the participants in this study are believed to provide insights into the research questions. (Creswell, 2017) The researcher deliberately chose this technique because the informants were considered knowledgeable and had direct experience with issues of digital inclusion and public services, particularly for older people.

Bazley and Jackson explain that NVivo is now increasingly developed, promoting design, literature foundations, theory formation, and reporting. They promote a variety of software tools and guide us through their practical application, using clear, precise images. (Brandão, 2015) The reason for using NVivo is that it requires a thematic analysis model and patterns that can later explain word similarities in data frequency queries on findings related to digital inclusion of the elderly and digital access challenges. In addition, a data visualization model is needed to explain the words that frequently appear in the research findings data, in the form of a word cloud and a graph that presents findings on digital inclusion and G2C access challenges. This study uses data visualization in the form of bar and hierarchical charts, as well as word frequency.

The criteria for informants in qualitative research are the characteristics or requirements an individual must meet to be considered a primary source of information in accordance with the research's focus. In this study, the researcher used the following informant criteria: older adults aged 60 and above, residing in Bojonegoro Regency, middle and lower middle class older adults, representatives of related elderly families, varying levels of digital literacy, having tried or currently trying the social assistance check application, and the head of the social rehabilitation division of Bojonegoro Regency. The researcher chose this location because, compared to Surabaya and Sidoarjo, which already have equitable information and communication technology infrastructure, Bojonegoro Regency still faces challenges in equitable internet distribution, especially in rural areas. This could have fatal consequences if left unchecked, as it would create high barriers for elderly citizens when accessing digital-based public services. This study has limitations. The research is limited to Bojonegoro Regency, so the results cannot be generalized broadly. The research focuses on in-depth understanding rather than statistical generalization, and the research subjects are only older adults who use government-to-citizen (G2C) public services. This research uses a qualitative approach. Therefore, the research findings provide a clearer picture of how and where digital inclusion among older people occurs within Government-to-Citizen (G2C) public services at the regency level. There are reasons the researchers chose this location: compared to Surabaya or Sidoarjo Regencies/Cities, which already have more equitable information and communication technology (ICT) infrastructure, Bojonegoro still faces challenges in equalizing internet access, especially in rural areas. This could increase barriers to older people accessing digital public services.

RESULT AND DISCUSSION

Digital inclusion

Based on field observations, digital inclusion in this study refers to older adults' abilities in Bojonegoro Regency to access G2C government digital services, with a particular focus on the

effective use of the social assistance check application. In theory, digital inclusion includes indicators or dimensions such as infrastructure access, which consists of parameters such as the availability of digital devices, the quality and stability of the internet network, and the accessibility of digital public facilities. The meaning of digital inclusion in this study shows that older people not only have access to digital devices and government services, but also have social support and an adequate understanding of information to use government digital services, including the social assistance check application, so that they can use it independently and not depend on others. Initial findings from the observation show that most older adults are aware of government digital services. Still, few know how to apply for social assistance and need assistance when doing so.

In the first indicator or dimension, namely infrastructure access, field observations indicate that many older adults already have personal digital devices. Still, their use remains limited to sending messages and making phone calls. Only a small number of them can use digital devices to access government services independently, including the social assistance check application. The quality and stability of the internet network were found to be, on average, stable in older people'selderly residential areas for accessing government digital services. Regarding the accessibility of digital public facilities, field observations did not identify any aspects of public facility availability, such as free Wi-Fi or digital internet cafes specifically for accessing government digital services. This is indicated by the many interview findings with older people, who said there is no free Wi-Fi for accessing government digital services, including the social assistance check application.

The second indicator or dimension is digital literacy, which consists of the ability to access and navigate the internet, the ability to assess and understand digital information, and attitudes and beliefs towards digital technology. In terms of accessing and navigating the internet, including using government digital services, fieldwork found that most older adults have used government digital services such as JKN Mobile, but very few older adultsuse the social assistance check application. Second is the ability to assess and understand digital information, including understanding its content and how to use it easily when viewing information on the internet or in government applications. Facts in the field show that older people have difficulty understanding and using the social assistance check application, as evidenced by their still needing others to explain its content. Regarding attitudes and trust towards digital technology, field findings show that when asked to use government services online, the majority of older adults feel confident and assured, or, conversely, feel afraid of making mistakes, as this is their first experience with digital devices.

The third indicator or dimension is economic affordability. This dimension includes parameters or aspects of data or internet package costs, as well as electricity or energy costs for devices. Regarding data or internet package costs, the field findings show that the majority of seniors reported that data package costs were not an obstacle to accessing government digital services. Regarding the second parameter or aspect, which is the cost of electricity or energy for devices, the average elderly respondent answered that electricity costs were not too much of an obstacle for them because some older adults believed that the cost of charging and electricity was a daily necessity that they fulfilled, including for digital devices used to access government digital services or social assistance check applications.

The fourth indicator or dimension is social support and policies, which include indicators such as support from family and close friends, as well as public policies on digital inclusion for older adults. The first indicator or parameter is support from family and close friends. The results show that the majority of older adults reported that they received help from their family, namely their children, rather than their neighbors, to access the social assistance check application when required. The second indicator or parameter is public policy on digital inclusion for older people. The majority of older adults said that they were not aware of any specific government policies or programs, particularly regarding the use of the social assistance check application. Dependence on others hinders access to services. This situation shows that digital inclusion for older people is not only about their abilities, but also about the influence of the social environment.

G2C access challenges

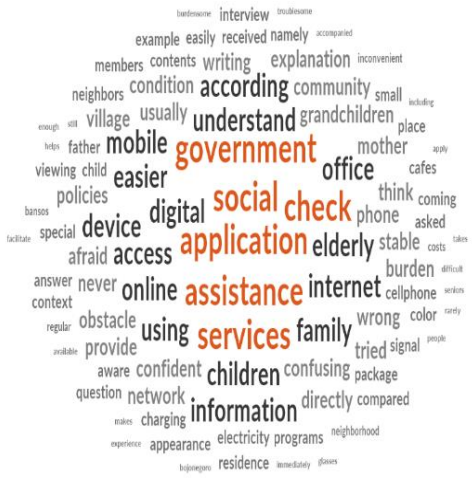
Field observations indicate that G2C access challenges for older adults in Bojonegoro Regency may arise from technical, psychological, social, and cultural factors. In theory, G2C access challenges have indicators, namely technical indicators, which include the complexity of the G2C system or application and the incompatibility of the interface with the needs of older people. The second indicator is psychological, including fear or anxiety about using technology, a lack of confidence in operating it, and perceptions of its benefits. The third indicator is social, consisting of parameters from family and social environment support. The fourth indicator is structural and includes factors such as a lack of socialization and government education. The study's findings show that all of the above indicators pose challenges to older people's use of government G2C digital access services.

Technical indicators or dimensions in the field observation results found that many older adults still feel confused when accessing public digital services for older people, including the social assistance check application for the first time. In addition, older people also feel that the interface is not suitable for their needs. According to older people, the font size, color, and menu of the social assistance check application are difficult to read and use because most are nearsighted and need visual aids, such as glasses, to read the text clearly. The small font size is the main obstacle for older people in accessing the social assistance check application.

Psychological indicators or dimensions in the field observation results indicate that older adults in Bojonegoro Regency face challenges, namely feeling anxious or afraid every time they try to use government services, such as the social assistance check application via digital devices, and fear and anxiety about using technology. In addition, older people also find it difficult to use the social assistance check application independently without help from others, including a lack of confidence in operating technology. In terms of perceptions of the benefits of digital technology, the field findings show that people are divided into several camps: those who find it easier with assistance and those who find it difficult to use the application, preferring to go directly to the office.

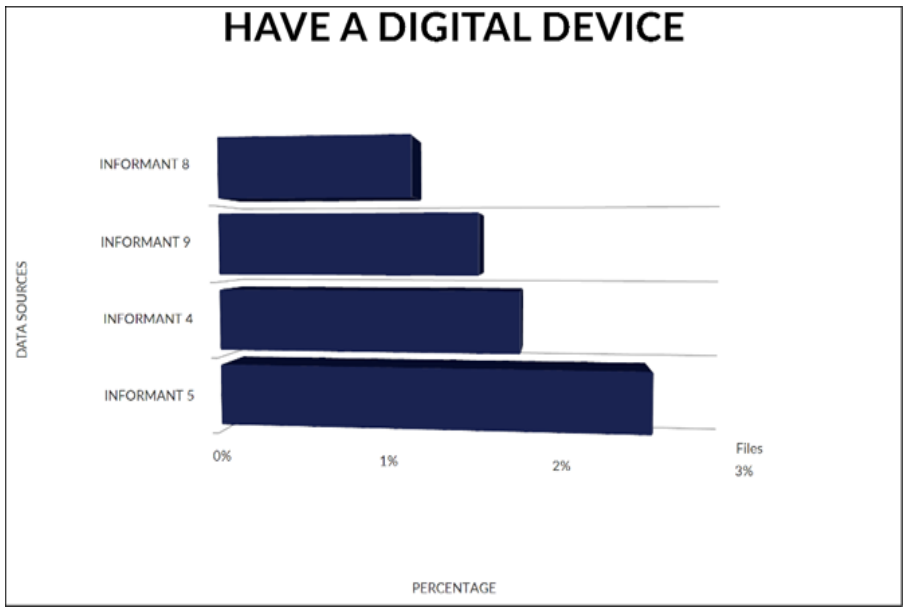
Social indicators or dimensions: field observations revealed that many older adults still receive support from their families and communities, especially those whose children help them access government digital services such as the social assistance check application. When they need to access these services, older adults also choose to send their children to government offices because they find the application complicated and do not understand how to use it. Regarding structural indicators, field observations revealed that the majority of older adults did not participate in socialization activities related to the social assistance check application, which makes it easier to check social assistance status and submit applications independently, due to declining physical limitations and a lack of explanation from village officials or apparatus regarding the use of the social assistance check application.

Digital inclusion and the challenges of G2C access for the elderly



Picture 1. World query digital inclusion and the challenges of G2C access for the
Source: researchers' data analysis results using NVivo 15

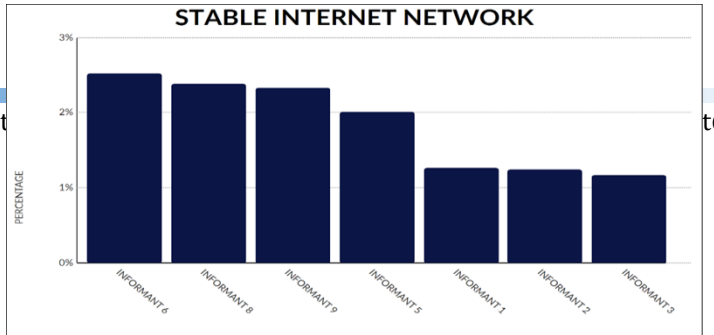
In a study entitled "Digital inclusion and G2C access challenges for the elderly in Bojonegoro Regency," 10 informants were selected, mostly elderly people, family representatives of older people, and the Head of the Social Rehabilitation Division of Bojonegoro Regency. This study found a wide variety of words, as shown in the image above. The words in bold yellow were frequently used in the study's questions and answers. The larger the font, the more frequently the word was used in the study sentences. As shown in the image below, the words application, social assistance, services, digital, and government received the most attention in this study.



Picture 2. Visualization of the digital device ownership chart
Source: researchers' data analysis results using NVivo 15

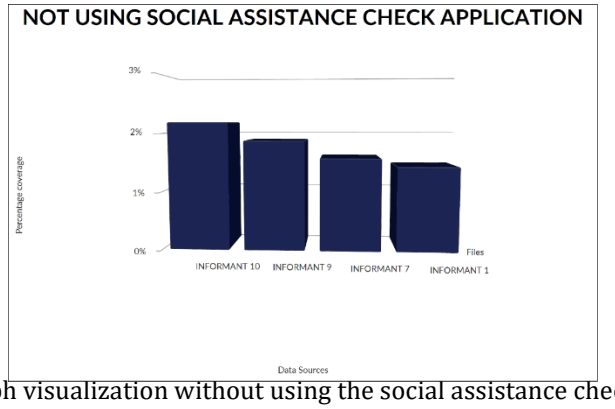
Based on observations and interviews conducted, the first concept, namely digital inclusion, comprises several dimensions. The results show that the first dimension includes infrastructure access, comprising parameters such as the availability of digital devices, the quality and stability of the internet, and the accessibility of digital public facilities. Regarding the availability of digital devices, on average, elderly informants reported having them, especially mobile phones, as shown in the figure above. Five informants had digital devices that were also used to access government digital service applications or systems. Informant number 5 had a higher percentage (2.68%) than the other informants.

Meanwhile, informant 4 had a percentage of 2%, only slightly higher than informant 9's 1.97%. The other two informants, informant 8 and informant 1, had a very small difference between them, with informant 8 having 0.85% more than informant 1. Other informants answered that they did not have digital devices.



Picture 3. Stable network chart visualization
Source: researchers' data analysis results using NVivo 15

The second aspect is the quality and stability of the internet network. Based on interviews with older people, the results are shown in the image above. Compared to access to digital devices, more informants responded about the quality and stability of the internet. A total of seven informants responded that the internet network was stable for accessing government digital services. The highest percentage of responses came from informant 8, at 1.85%, which is significantly higher than that of informant 3, at 1.10%. This means that in older people's living environments, the internet is not a major obstacle to accessing G2C public services, including social assistance applications.



Picture 4. Graph visualization without using the social assistance check application
Source: researchers' data analysis results using NVivo 15

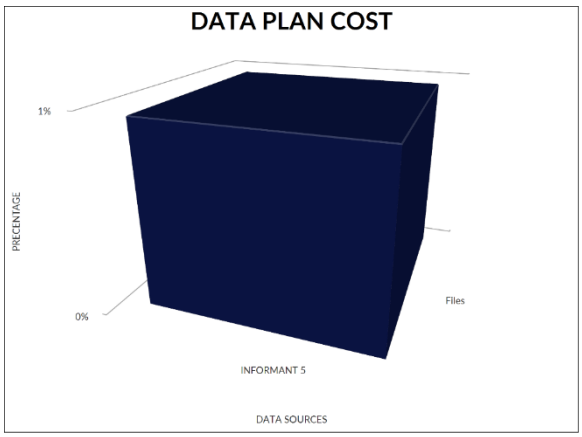
The second dimension of digital inclusion theory is digital literacy, which comprises the ability to access and navigate the internet, assess and understand digital information, and hold attitudes and beliefs towards digital technology. In the first parameter, namely the ability to access and navigate the internet, the results show that the majority of older adults have never used or accessed the social assistance check application. Older adults use government digital service applications only for the BPJS application, namely JKN Mobile. The remaining older adults have never used any government digital service applications or systems. As shown in the figure above, 4 informants do not use the social assistance check application. The highest percentage was shown by informant 1, who did not use the social assistance check application, at approximately 2% more, but only a 0.7% difference from informant 10's answer. Meanwhile, informants 7 and 9 had slightly lower results, not more than 2%. These findings indicate that older people's ability to access and navigate the internet is still limited.

The fact on the ground is that most seniors do not use social assistance check applications or government digital services, confirming that the challenge of senior access does not lie in the availability of digital technology but in seniors' ability to access or use it. In addition, the limited ability of seniors to access government applications and digital services in the Bojonegoro Regency is a technical obstacle. Although some older adults have digital devices and stable internet connections, their ability to access and navigate the internet is limited, including their understanding of the service menus in the social assistance check application. When older adults enter their productive years, they are not fully accustomed to using technology, which hampers

their learning of digital literacy and leaves them very vulnerable to anxiety when accessing digital government services.

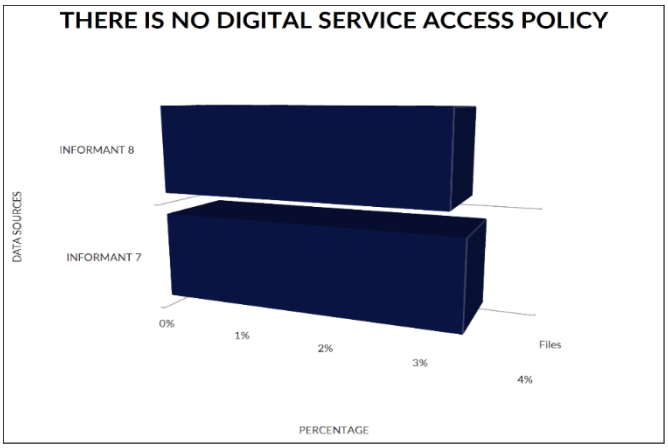
The dependence of older adults on others also contributes to their low ability to navigate the internet. Older adults with low self-confidence tend to wait for others, including their children, to handle administrative tasks in government digital services, such as the social assistance check application, while only a few handle these tasks independently. This dependence reinforces social and psychological challenges, leaving older people unable to access government digital services, such as applications for social assistance checks, even though digital devices are available and the internet connection is stable. The relationship between indicators or dimensions of the ability to access and navigate the internet and the challenges older people face, namely their limited digital literacy, is a major obstacle to their optimal use of government-to-citizen (G2C) digital services. This results in the digital inclusion process for older people being hindered, older people being unable to remain independent, and, ultimately, older people falling behind in their ability to access government digital services, such as the social assistance check application, as time progresses and digitalization advances.

In terms of attitudes and trust toward digital technology, the majority of seniors gave the same answer: they are afraid of making mistakes and need guidance from others, especially those closest to them. Only a small percentage of older adults are confident in accessing government digital services without hesitation. These findings show that psychological challenges are the main obstacle for older adults in accessing the application for social assistance checks. Hesitation or fear of making mistakes causes older adults to refuse to access the social assistance check application independently, preferring to have others help them. The relationship between attitudes and trust in digital technology and the challenges faced by older people is closely linked to the challenges of accessing G2C public services, specifically the social assistance check application, in Bojonegoro Regency. Fear and anxiety hinder older people's process of learning digital literacy, prevent them from immediately becoming digitally independent, and reinforce digital exclusion even though digital devices are available.



Picture 5. Graph visualization is not constrained by cost
Source: researchers' data analysis results using NVivo 15

Regarding data or internet package costs, the results show that the majority of older adults reported that data package costs were not an obstacle to accessing government digital services. Based on the NVivo results above, one informant responded that electricity or energy costs for the fifth elderly informant's digital devices were not a constraint. Economic affordability indicators or dimensions include data packages, internet costs, and device energy costs. Regarding data package or internet costs, the results show that the majority of older adults reported that data package costs were not an obstacle to accessing government digital services. Regarding electricity or energy costs for devices, on average, older people reported that electricity costs were not a significant obstacle for them, as some believed charging and electricity costs were part of their daily needs. The relationship between economic affordability and challenges for the elderly is not a major barrier to G2C access for older people. Still, economic conditions, whether directly or indirectly, can influence older people's ability to access long-term social assistance check applications.



Picture 6. The graph visualization does not reflect the policy

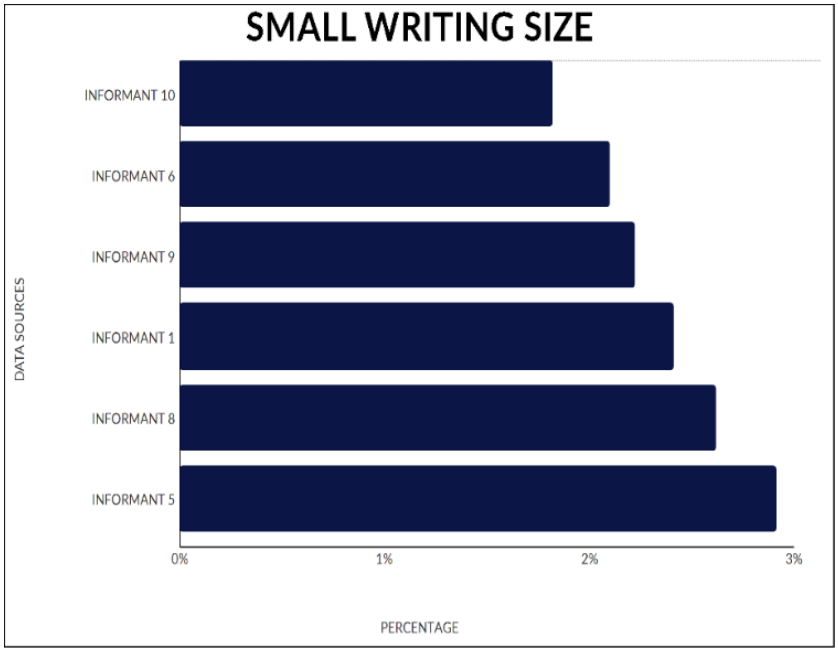
Source: researchers' data analysis results using NVivo 15

As shown in the Nvivo results, among elderly informants who were unaware of the policy, only two discussed this issue. Informant 7 did not dominate the answers, as the difference was only 3%, while informant 8 had the highest percentage at 3.47%. This means that informant 8 discussed the lack of awareness of government policies or programs aimed at facilitating older people's access to digital services in the context of social assistance check applications more than all other informants. Informant 7 did not emphasize this issue much, even though he discussed similar matters. This reinforces the analysis that the digital divide can hinder older adults' adaptation to digital technology.

In the concept of challenges in accessing G2C public services, the first dimension is technical. Technical challenges include the complexity of G2C systems or applications and the incompatibility of interfaces with the needs of older people. The complexity of G2C systems or applications. The G2C application here is a social assistance check application that is also useful for older people to check their social assistance status and submit applications independently. The majority of older adults find the social assistance check application confusing without assistance from others or officers who guide them in using it.

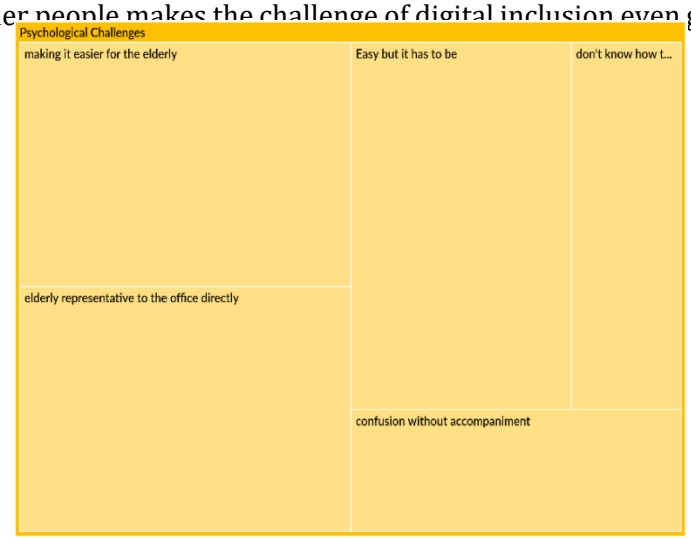
Regarding the incompatibility of the interface with the needs of older people, the results show that older people find it difficult to use the social assistance check application because the font size in the application is very small, so older people need visual aids such as glasses to be able to read the text in the application. In addition, some older adults find the social assistance check application confusing because, when logging in to their social assistance check account, they are required to take a selfie with their ID card and a photo of it. Technical challenges confirm that older people still have limited access to the social assistance check application. The relationship between

technical challenges and challenges faced by older people is very complex because the social assistance check application is not elderly-friendly, and the more obstacles encountered in it, the greater the difficulties the elderly experience in accessing it.



Picture 7. Small font size visualization
Source: researchers' data analysis results using NVivo 15

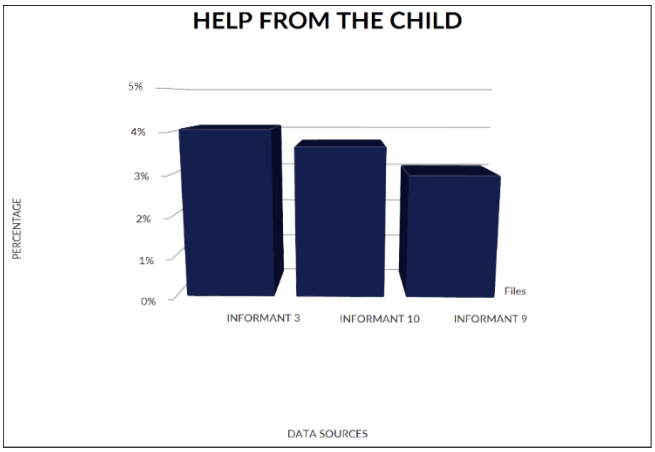
Based on the image above, the second parameter is dominated by responses from older adults, indicating that the small font size in the social assistance check application display makes it difficult for them to read. Informant 5 had the highest percentage among the five elderly informants. Informant 5 had a percentage of 3.45%, but when compared to informant 1, the difference was not too far apart, only a few decimal points. Meanwhile, the lowest percentage was recorded for informant 10 at 2%. This means that the font size in the social assistance check application menu is the main obstacle faced by most older adults. The interface's incompatibility with the needs of older people makes the challenge of digital inclusion even greater for this group.



Picture 8. Visualization of the psychological challenges hierarchy chart

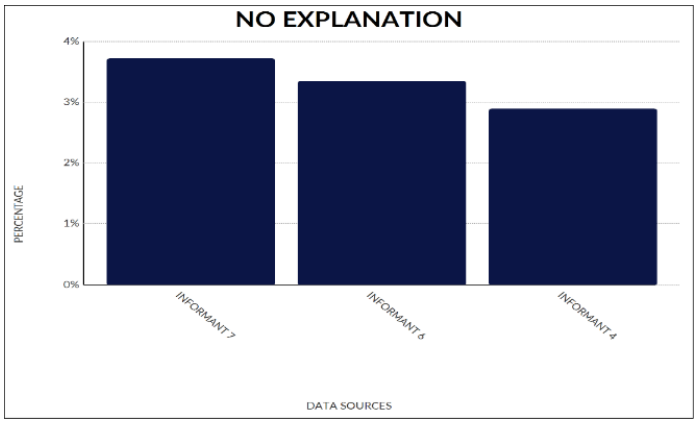
Source: researchers' data analysis results using NVivo 15

Based on the hierarchy chart above, it is clear that older people who answered that it was easy but needed assistance and that it was easy for older people had equal shares. Meanwhile, the other small shares tended to be of similar size, such as the share of those who did not know how to use it and the share of elderly representatives in the office. Similarly, the chart for going directly to the office showed the same share as those who were confused without assistance at this time. Psychological challenges include a lack of confidence in operating technology and perceptions of its benefits. Due to a lack of confidence in operating technology, the majority of older adults find it difficult and are hesitant to access the social assistance check application. Only a few of the 10 elderly informants feel confident in accessing the social assistance check application without worrying about making mistakes. In terms of the benefits of technology, older adults who prefer to go directly to the office for checks find the social assistance application. The relationship between psychological challenges and challenges for older people is closely related to the low level of confidence in older people. The majority of older people feel that the application for social assistance is cumbersome and that it is better to go directly to the office. The relationship between psychological challenges and challenges faced by older people is closely linked to low confidence and negative perceptions among older people, which exacerbate the challenges of digital G2C access for them.



Picture 9. Graphic chart visualization assistance from children
Source: researchers' data analysis results using NVivo 15

The social challenges consist of parameters taken from the family and social environment support. Regarding support from family and social environment, the majority of older adults reported receiving more help from their own families, especially their children, than from neighbors or relevant officials. Based on the NVivo results above, three informants mentioned assistance from their children, namely informants 3, 10, and 9. The most notable was informant 3, who most frequently discussed children's assistance in accessing government digital services. The relationship between social challenges and those faced by older people depends on how consistently the social environment assists. If family or the social environment provides strong support, obstacles such as a lack of understanding of technology and difficulties in accessing the social assistance check application can be overcome. However, if this is not the case, technical and psychological obstacles remain unresolved.



Picture 10. Graph chart visualization without explanation
Source: researchers' data analysis results using NVivo 15

Structural challenges include a lack of socialization and government education. Regarding the lack of socialization and education from the government, the majority of older adults responded that they had never participated in socialization on the use of the social assistance check application by the village or central government. There was no guidance or explanation from officials on how to use and access the social assistance check application. This is as stated in the NVivo chart results regarding the lack of explanation from officials. The result is that three informants mention this more often than the others. Informant 7 has the highest level at 3.20%, while informant 6 has 2.80%, and informant 4's percentage has decreased to 2.30%. This means that informant 7 discussed the issue more frequently than informants 6 and 4. Other informants stated they had never participated in any socialization regarding the application for the social assistance check.

Thus, the results of this study are in line with the digital divide theory, digital literacy framework, new public service theory, stakeholder analysis theory, and G2C (Government to Citizen) theory, which show that the barriers or challenges to digital inclusion in Bojonegoro Regency have technical, psychological, social, and structural aspects. This study shows that not only is infrastructure access important for government-to-citizen public services, but also digital literacy, economic affordability, social support, and policies focused on Bojonegoro Regency residents using the social assistance check application for those who are registered or who will apply independently through the social assistance check application in collaboration with stakeholders. By showing that older people are an important group in the agenda to include digital public services at the local level, including in Bojonegoro Regency itself, this synthesis enriches the theoretical discussion on e-government.

CONCLUSION

Based on the results of the above research, it can be concluded that digital inclusion and the challenges of accessing G2C public services for older people in Bojonegoro Regency, various findings and facts in the field show that current digital technology is still not elderly-friendly. This is evident in the social assistance check application, where older people still face challenges, such as the menu font being too small for most. In addition, older people are dependent on assistance from family and friends and feel they do not need to adapt to learning digital technology, especially government digital services or applications. The social assistance check application aims to make it easier for the community, including older people, to apply for social assistance or other services without having to travel far to the office, as they can do so independently through the application. The challenges faced by older people include a lack of interest and knowledge in the digitization of public services, as well as low participation in their implementation. Field findings revealed inconsistencies and contradictions on the part of the government due to a lack of public awareness

campaigns regarding the use of the social assistance check application. It is hoped that various relevant stakeholders can innovate and provide appropriate digital technology training for older people, including awareness campaigns about the social assistance check application, so that they do not feel socially disconnected within the community due to the digital divide. The implications of targeted digital innovation and training include increased social inclusion for older adults, greater access to public services, and increased engagement and trust in local government. In addition, this policy helps reduce the negative effects of the digital divide, enabling the digital transformation of government public services for older adults (G2C) in Bojonegoro Regency to run more fairly and sustainably. This study focuses on the perspective of older people or the elderly as service users. Furthermore, this study can explore the perspectives of public service providers, such as local government officials, system developers, and service officers.

REFERENCES

Amelia Setiawan, Sylvia Fettry Elvira Maratno, Puji Astuti Rahayu, & Monica Paramita Ratna Putri Dewanti. (2019). Stakeholder Analysis on IndonesianE-Commerce Taxation. *International Research Journal of Business Studies |*, *12*(3), 277–288.

Balane, M. A., Palafox, B., Palileo-Villanueva, L. M., McKee, M., & Balabanova, D. (2020). Enhancing the use of stakeholder analysis for policy implementation research: Towards a novel framing and operationalised measures. *BMJ Global Health*, *5*(11), 1–12. https://doi.org/10.1136/bmjgh-2020-002661

Dewi, A. C. (2019). *PERSEPSI MASYARAKAT TERHADAP LAYANAN DAN INFORMASI KEPENDUDUKAN VIA WEBSITE DINAS KEPENDUDUKAN DAN PENCATATAN SIPIL KOTA SEMARANG*. 1–9.

Febryanti, D. R., & Irwansyah, I. (2023). Chance and Hindrance for Elders Toward Digital Inclusion: a Literature Review. *Mediator: Jurnal Komunikasi*, *15*(2), 172–185. https://doi.org/10.29313/mediator.v15i2.10097

Ghaniyyu Khoiri Fadli, F. (2023). INOVASI PELAYANAN PUBLIK BERBASIS E-GOVERNMNET DI DESA (STUDI KEBERHASILAN DI DESA BANYUBIRU KECAMATAN BANYUBIRU KABUPATEN SEMARANG). *Jurnal Undip*, *4(1)*, 1–23.

Hapsa, Yusuf, M., Karim, N., & Fatriani, R. M. (2024). Building Digital Inclusion and Non-Discriminatory Services for Vulnerable Groups in Jambi City Government. *GOVERNABILITAS (Jurnal Ilmu Pemerintahan Semesta)*, *5*(2), 115–131. https://doi.org/10.47431/governabilitas.v5i2.500

Irwansyah, S. (2024). INKLUSI DIGITAL PADA LANJUT USIA DALAM MASYARAKAT SAAT INI. *Sistem Informasi Dan Teknologi*, *6* no. *2*, 1–14.

Isabella, I., Alfitri, A., Saptawan, A., Nengyanti, N., & Baharuddin, T. (2024). Empowering Digital Citizenship in Indonesia: Navigating Urgent Digital Literacy Challenges for Effective Digital Governance. *Journal of Governance and Public Policy*, *11*(2), 142–155. https://doi.org/10.18196/jgpp.v11i2.19258

Mariano, S. (2021). PENERAPAN E-GOVERNMENT DALAM PELAYANAN PUBLIK DI KABUPATEN SIDOARJO. *KEMBARA Journal of Scientific Language, Literature, and Teaching*, *7*(2), 508–528. https://doi.org/10.22219/kembara.v7i2.17893

Mulyaningsih, T., Wahyunengseh, R., & Hastjarjo, S. (2020). Poverty and digital divide: A study in urban poor neighborhoods. *Jurnal Ilmu Sosial Dan Ilmu Politik*, *24*(2), 189–203. https://doi.org/10.22146/JSP.52325

Pradana, A., & Widiastomo, A. (2023). *Pengembangan Program Pelatihan Keterampilan Digital bagi Lansia dalam Menghadapi Era Digitalisasi Info Artikel Abstrak yang cepat dan perubahan sosial yang terjadi . Lansia memiliki potensi yang pelatihan keterampilan digital yang efektif dan relevan bagi*. *01*(1), 33–42.

Putri Limilia, & Puji Prihandini. (2018). Perbedaan Motif Penggunaan Internet Antar Gender Sebagai Bentuk Baru Kesenjangan Digital. *Medium*, *Volume 6*(Issue 2), 1–14.

Rahmatullah, R., Habibi, A., Khaeruddin, K., Yaqin, L. N., Alharmali, T. M., Fauzee, M. S. O., & Mahat, J. (2025). A study of user satisfaction and net benefits in Indonesia through the DeLone and McLean Model for E-Government success. *Discover Sustainability*, *6*(1). https://doi.org/10.1007/s43621-025-01645-4

Ramadhanti, H. D., & Astuti, E. T. (2022). Digital Divide and A Spatial Investigation of Convergence in ICT Development Across Provinces in Indonesia. *Jurnal Aplikasi Statistika & Komputasi Statistik*, *14*(1), 69–84. https://doi.org/10.34123/jurnalasks.v14i1.388

Reddy, P., Chaudhary, K., & Hussein, S. (2023). A digital literacy model to narrow the digital literacy skills gap. *Heliyon*, *9*(4), e14878. https://doi.org/10.1016/j.heliyon.2023.e14878

Retnowati, N. D., & Nugraheny, D. (2021). G2C (Government to Citizen) Digital Interaction And C2G (Citizen to Government) on The Jogja Smart Service Application. *Sainstek : Jurnal Sains Dan Teknologi*, *13*(2), 90.

https://doi.org/10.31958/js.v13i2.4692
Ridwan, E. R. (2020). E-Government : Implementasi, Strategi, dan Inovasi. In *Yayasan Kita Menulis*.
Setiansah, M., Nuryanti, N., Santoso, E., Runtiko, A. G., & Novianti, W. (2023). Improving Indonesian seniors' digital resilience and quality of life through the Digital Academy for Seniors program. *Journal of Media Literacy Education*, *15*(2), 71–83. https://doi.org/10.23860/JMLE-2023-15-2-6
Sugiyono. (2020). *Metodologi Penelitian Kuantitatif, Kualitatif dan R & D*.
Sya Laisa Amara, Shintia Rahayu Safitri, & Sulpani, N. Tunnada. (2022). Digital Literacy and Digital Inclusion: Information Policy and the Public Library. *Medium*, *9*(2), 92–104. https://doi.org/10.25299/medium.2021.vol9(2).8436
Tahir, A., Tui, F. P., & Puluhulawa, Y. (2024). Analisis Pelayanan Publik Berbasis Inovasi (E-Government) di Kantor Wilayah Kementrian Agama Provinsi Gorontalo Universitas Negeri Gorontalo , Indonesia memberikan informasi dan pelayanan bagi warganya , urusan bisnis , serta hal - hal yang Penyelenggar. *Parlementer: Jurnal Studi Hukum Dan Administrasi Publik*, *1*(4), 84–100.
Ulfah, S. N., Kurniawan, I. A., & Firdiyani, F. (2024). Penerapan Prinsip-Prinsip New Public Service Studi Kasus: Layanan SAMSAT Keliling Balaraja. *Jurnal Administrasi Pemerintahan Desa*, *6*(1), 17. https://doi.org/10.47134/villages.v6i1.177
United Nations. (2020). E-Government Survey 2020 - Digital Government in the Decade of Action for Sustainable Development. In the *United Nations E-Government Surveys*.
Yasmin, S. (2025). Adopsi Teknologi Digital Oleh Lansia: Hambatan, Pemaknaan, Dan Akses Informasi Kesehatan. *MITZAL (Demokrasi, Komunikasi Dan Budaya) : Jurnal Ilmu Pemerintahan Dan Ilmu Komunikasi*, *10*(1), 61. https://doi.org/10.35329/mitzal.v10i1.6046