

The Journal of Sustainable Development Law and Policy



ISSN: 2467-8406 (Print) 2467-8392 (Online) Journal homepage: https://www.ajol.info/index.php/jsdlp

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To cite this article: Mooki Lobelo, Mphumudzeni Siphuma and Tshepo Dimpho Preston Segalwe (2025). The Role of Information Communication Technology in Improving Community Participation in Municipal Process in Rural Areas. The Journal of Sustainable Development, Law and Policy. Vol. 16:1. 209-225. DOI: 10.4314/jsdlp.v16i1.11

To link this article: DOI:10.4314/jsdlp.v16i1.11

Published online: January, 2025

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THE ROLE OF INFORMATION COMMUNICATION TECHNOLOGY IN IMPROVING COMMUNITY PARTICIPATION IN MUNICIPAL PROCESS IN RURAL AREAS

Mooki Lobelo*, Mphumudzeni Siphuma** and Tshepo Dimpho Preston Segalwe***

ABSTRACT

Around the world, especially in democratic states, governments, both national and local, are major players in improving people's livelihoods, especially in areas where all indicators depict a bad service delivery image. Over the years, communication has been a major player in improving people's livelihoods in subaltern communities. In South Africa, most studies have focused on the role of traditional communication in improving community participation in rural areas, while few have focused on information and communication technologies in semi-urban areas, necessitating investigating Information communication technology (ICT) use on community participation in rural areas. This study aims to explore the information communication technologies used in facilitating community participation in local government, especially in rural areas. To get deeper insights into how the internet, cell phones, and social media usher in the involvement of the community in municipal processes, the study adopted a qualitative content analysis methodology to interrogate and examine various data sources like academic articles, case studies, government reports, and ICT project evaluations, allowing the researcher to identify words, themes, and patterns for data analysis. The researcher further employed textual analysis as it facilitated the analysis of secondary data and offered a systematic framework for data interpretation. The study used technological determinism as a framework. The findings of this study show that, although ICTs may aid communities in effective participation in municipal processes, the digital divide and illiteracy remain challenges that may hinder the use of ICTs for effective participation since most rural communities live in poverty. To address the latter while necessitating the former, this study recommends that municipalities and community organisations conduct technological needs assessments to understand their communities' particular requirements, prospects, and challenges and ultimately make digital infrastructure and resources available to rural communities.

Keywords: Community participation, Information communication technology, ICT for change, Technological determinism, Municipalities, rural areas, South Africa.

1. INTRODUCTION

Around the world, especially in democratic states, governments, both national and local, are major players in improving people's livelihoods, especially in rural areas where all indicators depict a bad service delivery image. The local government, which is responsible for creating a conducive environment for public participation in municipal processes, is without a doubt considered to be a pillar for societal change and is the most desirable vehicle to aid communities in social change. In South Africa, as a catalyst for development, the local government has been a major player in facilitating public participation to bring about positive changes in rural communities¹. Municipalities have always relied on traditional methods of communication, such as community town halls, imbizos, ward committees, and, to some extent, door-to-door discussion, to facilitate community participation in the municipal process. However, academics like Arnstein and Fung posit that, although public participation in municipal governance improves accountability, transparency, and responsiveness, traditional channels of communication have not been effective in facilitating community engagement due to, amongst other factors, a lack of political education^{2 3}

According to Molale in South Africa, the promulgation of the Municipal Act, 108 of 1996, dwells on the need for local government to encourage

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¹ Molale T B, 'Participatory Communication in South African Municipal Government: Matlosana local municipality's Integrated Development Plan (IDP) processes' (2019) 38 Communicare 1

² Arnstein S R, 'A Ladder of Citizen Participation'(1969) 35 Journal of the American Planning Association 4, 216

³ Fung A, 'Varieties of Participation in Complex Governance' (2006). 66 Public Administration Reviews, 66.

community participation⁴. The Municipal System Act of 2000 underscores this further, mandating the local government to involve communities in decision-making processes concerning their welfare. In their quest to adhere to the latter and former acts, the local governments adopt various communication initiatives. This emphasises the importance of communication in ensuring effective public participation in municipalities. However, several scholars argue that old traditional methods of communication do not allow the general community to be active participants in the municipal process since they require resources and, at times, are timeconsuming. As a result, traditional communication methods such as ward committee meetings, imbizos, and town hall meetings have excluded a chunk of the population, resulting in communities protesting their municipalities. This necessitates a new approach to effective public participation in rural areas.

Thus, the advent of information communication technology particularly, mobile cell phones, the internet, and social media has revolutionized communication and potential broader community participation in municipal processes. Thus, if used correctly, information communication technology presents an opportunity for effective community engagement due to its realtime connection, flexibility, and ability to reach the general population. As such, this study is likely to contribute to ongoing discussions regarding the role of new communications technology as a tool to facilitate community participation in local government, especially in disadvantaged areas.

The rise of information and communication technology (ICT) presents various ways in which communities, particularly poor communities, can get involved in municipal operations. ICT includes a variety of digital tools and platforms, including but not limited to the internet, cell phones, and social media. Rural communities can use these to overcome numerous challenges. The availability of modern technology can help people in rural areas get involved in governance because it can help people communicate instantly, connect people in different places, and improve access to information. However, scholars such as Warschauer and Norris argue that, in areas where people face extreme poverty, digital illiteracy, and the digital divide, ICT projects could make inequality worse ⁵ ⁶.

⁴ Molale (n 1).

⁵ Warschauer M, 'Technology and Social Inclusion: Rethinking the Digital Divide' (MIT Press, 2004)

According to Agyeman and Gibson et al. argue that rural communities have fewer participation opportunities than urban ones, owing to inadequate resources and the digital divide. Most citizens cannot fully engage in municipal proceedings due to social, economic, and physical constraints. In rural areas, these constraints exacerbate the problem since residents may have trouble getting information and attending public activities. Moreover, their lack of physical and digital infrastructure may worsen this situation^{7 8}. Potts and Verba, Schlozman, and Brady discuss the barriers to participation, citing weak infrastructure, limited social and economic resources, and rural communities' low political education^{9 10}. These issues demonstrate the necessity for new local government engagement strategies to allow greater communication and thus greater participation in municipal matters.

Despite the critiques by the above scholars, Bhatnagar and Schware and Heeks maintain that Information Communication Technology may help local governments to connect with more people and share knowledge about policies, programs, and public services, which would result in more efficient participatory governance^{11 12}. Furthermore, Digital tools can also give people in rural areas a way to express their opinions, be involved in making decisions, and hold local governments responsible from their comfort zones.

Integrating ICT into municipal operations has been praised as a revolutionary strategy for public engagement, particularly in rural regions with geographical isolation, limited information availability, and socioeconomic inequities. ICT may fill these voids, but its ability to foster meaningful community contact in rural regions remains untested. Agyeman and Gibson

⁶ Norris P, 'Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide' (Cambridge University Press, 2001).

⁷ Agyeman J, Sustainable Communities and the Challenge of Environmental Justice' (New York University Press, 2003).

⁸ Gibson M, Cantillon S, Pupalova R, Palakshappa, N, and Kaambwa B, 'Urban-Rural Differences in Access to Social Protection: An Empirical Analysis' (2020) 29 International Journal of Social Welfare 2, 198

⁹ Potts D, The Urban Informal Sector in Sub-Saharan Africa: From Bad to Good (and Back Again?) (2004) 21 Development Southern Africa 2, 151

¹⁰ Verba S, Schlozman, K L, and Brady H E, 'Voice and Equality: Civic Voluntarism in American Politics' (Harvard University Press.1995).

¹¹ Bhatnagar S, and Schware R, 'Information and Communication Technology in Development: Cases from India, (Sage Publications, 2000)

¹² Heeks R, 'Information Systems and Developing Countries: Failure, Success, and Local Improvisations' (2002) 18 The Information Society 2, 101

et al. the digital divide and lack of digital literacy prevent municipal government from using ICT for community participation¹³ ¹⁴. However, Heeks and Norris believe that correctly integrated ICT may democratise information access, transparency, and rural civic participation¹⁵ ¹⁶. The study assumes that, if local governments apply ICTs, it may boost community engagement in municipal processes.

The ongoing discussions in local municipality, ICT4 development, and community involvement in participatory governance make this situation worth investigating. In addition, considering the expanding necessity, popularity, and inherent potential of information communication technology in other regions of the globe, this research seeks to contribute to the ongoing debate on information communication technology as a facilitator in improving community participation in municipal processes.

This study used Mafikeng Local Municipality as a case study. The municipality is located in the capital city of Northwest Province, South Africa. The municipality is composed of impoverished villages. Therefore, to ensure effective public participation, the municipality must use modern communication technology to engage its communities while also creating a platform for maximum public participation on matters that can expedite development and empower community members. The premise of this study is that the municipality should prioritize information and communication technology to address issues such as service delivery, holding the government accountable, and effective community development. This study seeks to explore how Mafikeng's local municipality uses information and communication technology to involve its constituency in municipal processes.

2. LITERATURE REVIEW

2.1 Community Participation in Municipalities

To understand the concept of community participation in local government administrations, it is important to understand what community participation implies. Community participation is a procedure through which the

¹³ Agyeman (N 7)

¹⁴ Gibson (N 8)

¹⁵ Heeks (N 12)

¹⁶ Norris (N 6)

parliament, provincial legislatures, and municipalities meet with the general populace, particularly the influential, associations and government elements, before deciding on any issue of governance. Conversely, community cooperation or participation is a two-way street that ought to include compelling correspondence and a community critical thinking system, to accomplish better and more adequate choices from both the government and the general populace. Public cooperation or participation can likewise be alluded to as open association, group contribution, or partner inclusion¹⁷. Several studies have been conducted on public or community participation in local government. These studies have provided findings on the integrated development plans and public participatory process, focusing on the involvement of the public in the process of community participation through information and communication technology. Previous studies Sebei and Mosotho revealed that although the local government is an aspect of the concept of community participation, there is still reluctance by these municipalities to ensure that community participation leads to shifts in power towards the communities¹⁸ ¹⁹. More precisely, in rural communities, community participation processes favour affluent people like traditional leaders, local businessmen, and wealthy members of the communities.

Njenga points out that in rural communities 'participation usually reinforces the already existing power relations, characterized by a biased preference for wealthy people who are elected to public participation structures over average people²⁰. Nampila proposes the view that public participation is a technique that is used by the community to voice issues affecting their quality of life, and every resident should be given an equal chance to participate in their own community's development. Such reports are opposed to the nature

¹⁷ South African Legislative Sector 'Public Participation Framework for South Africa's Legislative Sector' (2013) http://www.sals.gov.za/docs/pubs/ppf.pdf Accessed on May 26, 2017

¹⁸ Sebei M.T, 'Integrated Development Planning as a public policy model and Public' (2013).

¹⁹ Mosotho M L, 'Assessment of the effectiveness of public participation programmes on service delivery in the Capricorn district municipality, Limpopo Province' (Master's Thesis, University of Limpopo of South Africa).

²⁰ Njenga T M, 'A Critical Analysis of Public Participation in the Integrated Development Plans (IDP) of selected municipalities in some provinces (Gauteng, Eastern Cape, KwaZulu-Natal and Western Cape) in South Africa. (Master Thesis, University of KwaZulu-Natal of South Africa, 2009).

of participatory democracy used as a model of community development in South Africa²¹.

2.2 Information communications technology in a global context

Several successful examples indicate how ICT may promote community involvement in local processes, democratic government, and socioeconomic growth. Estonia's e-government programme simplifies government involvement and services using ICT. Estonia's e-government simplifies voting, taxation, and health data²². This increases government transparency and community involvement.

Furthermore, Egypt's "HarassMap" tracks sexual harassment using mobile devices and the internet, according to another study. The programme is volunteer run. This initiative raises awareness of harassment and encourages community members and local governments to collaborate on action to bring about social change²³. It also shows how ICT may inspire community action and social transformation²⁴.

The ITC Ltd.-managed "e-Choupal" programme in India has transformed farming by connecting farmers and suppliers, best practices, and the latest market data²⁵. This information and communication technology platform has helped farmers learn and make better decisions. Singh (2004) contend that the use of this application encourages farmers to participate in rural development, as their income and output have increased²⁶.

2.3. The use of information technology for change

ICT for transformation and development is a broad topic in local government and community development. Studies such as Heeks and Unwin have demonstrated how ICT may affect social change and governance, particularly democratic participation^{27 28}. These studies further advocate for leveraging

²¹ Nampila T, 'Assessing Community Participation-The Huidare Informal Settlement' (Master of Philosophy, University of Stellenbosch of South Africa, 2005)

²² UN E-Government Survey, 'United Nations Department of Economic and Social Affairs' (E-Government in Support of Sustainable Development United Nations, 2020).

²³ Cochrane Logan, Zeid Yasmine and Sharif, Raed, 'Mapping Anti-Sexual Harassment and Changing Social Norms in Egypt' (2019) 18 ACME, 394

²⁴ ibid

²⁵ Singh A, 'The e-Choupal Initiative. Case Study' (Harvard Business School, 2004).

²⁶ ibid

²⁷ Heeks (N 12)

ICT strategically to increase government transparency, citizen involvement, and public service delivery to minimise information asymmetry and promote inclusive and participatory governance.

Unwin posits that for the inclusion of ordinary people in the municipal process, information communication technology should be applied for development²⁹. Further, the latter studies also indicated that the use of ICT projects without context may increase inequality in already divided communities³⁰. Moreover, Mansell suggests a comprehensive ICT4D plan for development that tackles social, economic, and political challenges, should be implemented in municipals to ensure that community involvement includes all spheres of rural life³¹.

Furthermore, socioeconomic variables significantly restrict community participation. Rural communities are further marginalized from the municipal government by low education, illiteracy, and civic rights and procedures understanding. Wilkinson and Choguill note that economic restrictions such as prioritising daily sustenance above political involvement worsen disengagement³² ³³. Due to the lack of governmental and non-governmental organisations in rural regions, community involvement, support, and resources are limited³⁴ ³⁵. Moreover, Culture also affects involvement since many rural places established hierarchies and conventions which in most cases limit women, youth, and marginalised populations' public speech. Exclusion from participation procedures weakens government diversity and inclusion. Cornwalfl and Mansuri and Rao have addressed how cultural obstacles and distrust of authority hinder rural participation³⁶ ³⁷.

²⁸ Unwin, T. 'ICT4D: Information and Communication Technology for Development' (Cambridge University Press, 2009).

²⁹ ibid

³⁰ ibid

³¹ Mansell R, 'From digital divides to digital entitlements in knowledge societies' (2002) 50 Current Sociology 3, 407

³² Wilkinson K P, 'The Community in Rural America' (Greenwood Press. 2009)

³³ Choguill C L, 'Bridging the Urban Divide: Rural-Urban Partnerships in the Developing World' (1996) 20 Habitat International 3, 407

³⁴ Wilkinson (N 32)

³⁵ Choguill (N 33)

³⁶ Cornwall, A. (2004). Spaces for Transformation? Reflections on Issues of Power and Difference in Participation in Development. Participation: From Tyranny to Transformation? Zed Books.

According to studies conducted by communication for social change pioneers such as Melkote and Steeves, ICT demonstrated to promote a bottom-up approach to community development. They further indicated ICT may empower impoverished people to make decisions on issues that concern their own lives³⁸. Moreover, Bhatnagar revealed how governments may use ICT to improve services and serve their residents, especially in rural areas³⁹.

3. THEORETICAL FRAMEWORK: TECHNOLOGICAL DETERMINISM

Smith states that 'technological determinism' is a theory that suggests that technology shapes and controls society and human behavior⁴⁰. This theory argues that technology is the driving force behind social and economic change and that society adapts to the technology that is available to it. According to this view, technologies are not merely tools that people employ, but they also affect and occasionally dictate the course of societal development⁴¹. Hauer claims that technological determinists hold the view that technology progress shapes and impacts society which often compares to social determinists⁴², which on the contrary, argue that the introduction and use of new technologies are the result of social order ⁴³. Technological determinism posits that technology operates autonomously, independent of social or economic influences. Its emphasis is on how technology shapes society and culture rather than the other way around as it happens in social determinants.

Even though this theory has received greater recognition in the body of knowledge, it is not without critique. Critics of technological determinism claim that this theory is excessively simple and fails to take into consideration

³⁷ Mansuri, G., and Rao, V. (2013). Localizing Development: Does Participation Work? World Bank Publications.

³⁸ Melkote S R, and Steeves H L 'Communication for Development in the Third World: Theory and Practice for Empowerment' (Sage Publications, 200)

³⁹ Bhatnagar (N 11)

⁴⁰ Smith M R, 'Does Technology Drive History? The Dilemma of Technological Determinism' (The MIT Press, 1994).

⁴¹ ibid

⁴² Hauer T, "Technological Determinism and New Media" (2017) 2 International Journal of English Literature and Social Sciences 2,23917

⁴³ Servaes J, 'Introduction to the 3 A's. In Technological Determinism and Social Change: Communication in a Tech-Mad World' (Lexington books: Maryland, 2014).

the intricate ways in which technology and society interact. They contend that technology is not a neutral force but rather is formed by social and economic circumstances and that technology may be employed in various ways depending on the environment in which it is used.

Smith contend that other scholars view technological determinism as a sort of technological fatalism, since it argues that we are helpless to oppose the impacts of technology on society and culture and that we must just accept the changes that technology brings⁴⁴. In actuality, the link between technology and society is more intricate and dynamic. Technology affects our society and culture as well as technology.

Rather than acknowledging that a society or culture interacts with and even shapes the technologies that are used, a technological determinist view holds that "the uses made of technology are largely determined by the structure of the technology itself, that is that its functions follow from its form."⁴⁵.

In rural municipalities, technological determinism suggests that the adoption and integration of information and communication technology (ICT) can have profound effects on various aspects of community life and governance. In addition, this framework explores how ICT interventions shape the dynamics of community participation, governance structures, and power relationships between local authorities and residents. Additionally, it considers the potential risks of technological determinism, such as the reinforcement of existing inequalities and exclusionary practices while at the same time acknowledging that technology can be a great allow the greater community to participate in the municipal processes.

4. METHODOLOGY

4.1 Qualitative Content Analysis Approach

Krippendorff and Neuendorf define content analysis as the systematic, quantitative, and qualitative methods used to evaluate communication clarity through interrogating existing secondary data⁴⁶ ⁴⁷. This study applied qualitative content analysis because of the nature of the study, which seeks to

⁴⁴ Smith (N 40)

⁴⁵ Hauer (N 42)

⁴⁶ Krippendorff K, 'Content Analysis: An Introduction to Its Methodology' (Sage Publications, 2013)

⁴⁷ Neuendorf K A, 'The Content Analysis Guidebook' (Sage Publications, 2002).

examine how the use of information and communications technology may increase community participation in municipal processes, particularly in remote areas. The qualitative content analysis method helped the researchers explore the issues and challenges surrounding the problems associated with citizens' interest in participating in municipal processes in South Africa rural municipalities in the Northwest Province. Therefore, the researchers prioritised secondary data sources like research papers, case studies, government publications, and ICT project assessments as trustworthy sources of information. These sources were chosen based on their relevance to the research topic, their dependability, and their publication year, ensuring the data is current and considering the rural geographical context when assessing its applicability to the study.

The use of peer-reviewed studies from respected bodies ensured the research's relevance and currency. References to successful ICT implementations in rural community involvement, hurdles, and civic engagement and technology theory were included.

4.2 Sources of Data

This study carefully selects secondary materials to thoroughly explain how ICT might improve community involvement in rural municipal operations. Therefore, the following data sources were consulted:

- i. Academic Articles: The researcher scrutinised publications and conference papers examined by specialists in the fields of communication, information communication technology, ICT4D, community participation, rural development theories, research, and case studies.
- **ii.** Case Studies: A detailed look at case studies that demonstrate how ICT tools and techniques have or may incorporate more rural people into government decision-making. Case studies help the researcher understand real-world applications, strategies, challenges, and findings in South Africa and abroad.
- iii. Government Reports: Official government and international agency publications and reviews on ICT policies, programmes, and initiatives to improve civic involvement and governance, particularly in rural areas.
- iv. ICT Project Evaluations: Various reports from non-governmental organisations (NGOs), community-based organisations (CBOs), and development agencies investigate how information and communication technology (ICT) initiatives have altered how individuals living in rural regions interact with their municipalities. These evaluations provide an indepth analysis of the quality of these sorts of programmes as well as the

length of time they go on.

4.3 Data Analysis Procedure

The researcher qualitatively analysed the selected secondary sources to gain insights. First, the researcher constructed a coding system based on research problem categories such as ICT types, community participation outcomes, impediments, and implementation methods. The coding method was involved in extracting data from each source for a consistent and comprehensive analysis. Themes, trends, and stories in the data were found through qualitative content analysis. These show how ICT helps or hurts community involvement in city processes. A quantitative study gathered data on the frequency of ICT actions and their effects to identify trends and links.

The study was done in stages, and the findings of earlier stages were used to guide further data analysis and suggest changes to the code system. This method made sure that the study could be changed to fit the amount of difficulty and depth of the material.

5. FINDINGS AND DISCUSSIONS

5.1 Findings and Discussion on ICT Use in Rural Areas

Early results from content analysis show that ICT helps the community get involved in various ways with local government processes in rural areas. Case studies and actual research papers, such as Heeks and Unwin, demonstrate that ICT projects make it easier for people to get involved in the affairs of the municipality's services, improve contact between rural communities and local governments, and make it easier for people to take part in decision-making⁴⁸ ⁴⁹. The data has revealed that mobile technology has been used to teach people how local governments work and get their input on development projects, which has made individuals smarter.

Social media, converging community radio, and online community radio help rural residents collaborate, raise political awareness, and become active in their government. Rural residents discuss local concerns, government services, and community activities on WhatsApp and Facebook groups, and a limited number of populations use X. This data indicates that information

⁴⁸ Heeks (N 12)

⁴⁹ Unwin (N 28),

and communication technology help people become active participants rather than passive participants in issues that affect their lives. However, the question of whether the government does consider their input cannot be confirmed since the platforms used are not local government official's platforms but community platforms.

Despite the positive results that the data revealed, the study further revealed that ICT activities had different effects depending on where they were applied, despite some encouraging results. Challenges like inadequate infrastructure, the digital divide and illiteracy in rural areas, and the responsiveness of municipal digital engagement contributed to these differences.

5.2 Challenges to implementation of information communications technology

In South Africa, the data has revealed that it is not easy to use ICT, particularly in rural municipalities, due to the digital divide and digital literacy since people in rural areas lack either digital resources or skills to use such resources. South Africa has introduced an e-governance service; however, this platform only provides services to communities without providing engagement space. Hence, the data also revealed that the use of information technology may cause inequalities regarding community participation since those who already have it may stand a better chance than those who do not in rural areas. Cultural and societal considerations may make internet platforms difficult for older people. Lack of digital skills also hindered technology utilisation in rural areas due to the high rate of poverty.

These issues provide opportunities for imaginative ICT community engagement, which provides an opportunity for local governments to provide facilities and rural digital learning activities to reduce the digital gap. Moreover, such initiatives might benefit from rural ICT alternatives tailored to their needs and expertise.

The findings indicate that ICT project conception and execution must engage participants. This may greatly increase their value. Participating in information and communication technology project planning promotes community-specific solutions, which increases technology utilization. Rural ICT projects require resources and knowledge from local governments, NGOs, and commercial partners. The data further revealed that educating people on the use and effectiveness of information technology could transform the situation by facilitating rural people's participation in municipal processes. To meet this commitment, local government should work with the community to mitigate the digital divide, focusing on accessibility, sustainability, and inclusion of communities through ICT. A more comprehensive and open approach to information and communication technology, combined with strong community participation and connections, may lead to greater and more lasting results in increasing rural political participation.

6. **RECOMMENDATIONS**

6.1 Strategies for Implementing ICT in Local Government

Strategic planning and execution are required to leverage ICT solutions to promote community engagement in rural municipal operations. First, municipalities and community organisations should conduct technological needs assessments to understand their communities' particular requirements, prospects, and challenges. By taking this step, they make sure that ICT solutions are customised to the particular requirements of rural communities⁵⁰ ⁵¹. To expand on this, community members and local government representatives must get capacity-building training, so they have the skills needed to use ICT technologies efficiently. Toyama suggests creating training courses that enhance digital literacy by emphasizing information access, analysis, and utilisation for community involvement and engagement⁵².

Lobelo posit that effective ICT usage requires infrastructure improvement.⁵³ This includes digital and physical infrastructure, such as user-friendly websites and mobile applications, as well as a free SMS service for people of all digital literacy levels⁵⁴ (Mansell, 2002). The former includes broadband and mobile networks. Therefore, the local government may facilitate the

⁵⁰ Heeks (N 12)

⁵¹ Unwin (N 28)

⁵² Toyama, K, 'Geek Heresy: Rescuing Social Change from the Cult of Technology' (New York: PublicAffairs, 2015).

⁵³ Lobelo M, 'An evaluation of North West Provincial government's communication system towards rural development: a multisectoral approach' (Doctoral dissertation, North-West University of South Africa, 2020).

⁵⁴ (Mansell (N 31).

establishment of partnerships between governments, corporate sector companies, NGOs, and CBOs to help maintain ICT efforts and mobilise resources for infrastructure development, which allows the greater community to be part of the municipal process⁵⁵ (Bertot, Jaeger, & Grimes, 2010).

6.2 Policy Recommendations

The local government need to change policies and create new projects to help people in rural areas use ICT to participate more actively in municipal processes. Governments must formulate a comprehensive ICT policy strategy that addresses issues such as cost, accessibility, and how ICT can engage individuals. The local government, as the pillar of community development, should have user-friendly websites that are accessible to the communities. To close a much more evident digital divide, local governments should ensure the availability of a network and internet service in rural areas ^{56 57}. The latter should be made available as per policy in poverty-stricken communities.

Another important change that may occur is putting in place incentives for the corporate sector to employ information and communication technology for rural development. Public-private partnerships (PPPs) can use the best qualities and resources of both groups to create and use ICT solutions that meet the needs of rural areas⁵⁸. There is a need to also examine and, if necessary, modify legal and governmental systems to ensure they facilitate the effective acceptance and use of ICT in rural areas, rather than hindering it.

6.3 Future Research Directions

This research has shed light on how ICT improves community engagement in rural municipal procedures, although numerous areas need more investigation. Future studies should examine how ICT projects affect community engagement and governance over time. Such research would illuminate rural ICT solutions durability and scalability.

Another important study field is rural ICT adoption's socio-cultural aspects. Understanding cultural obstacles and facilitators to ICT usage may help build

⁵⁵ Bertot, J C, Jaeger, P T, and Grimes J M, 'Using ICTs to create a culture of transparency: E-government and social media as openness and anti-corruption tools for societies' (2010) 27 Government Information Quarterly 3, 264

⁵⁶ Bertot (N 55)

⁵⁷ Warschauer (N 5)

⁵⁸ Heeks (N 12)

inclusive and successful solutions. Comparative studies across regions or nations may reveal universal principles, context-specific problems, and possibilities for using ICT to improve rural community engagement.

A study on the multi-communication channel approach to effective communication would assist the local government in determining the methods useful to involve the community in municipal processes in rural areas.

7. CONCLUSION

In conclusion, this research focused its attention on the role of information and communications technologies in improving community participation in local governance in South Africa. The Municipal Act of 2000 has gazetted community participation, highlighting its significance. Because of their flexibility, information and communication technologies offer alternative channels of communication that can enhance participation and maintain transparency in local governance processes, whereas traditional methods of communication have proven ineffective in increasing participation. The importance of community participation in municipal processes lies in resource allocation and infrastructure development, which facilitate the provision of data-free networks to enable rural communities to have a voice on issues that affect their lives.

Furthermore, the research delves into the significance of technological determinism, a theory that posits technology's ability to shape and control society and human behavior and affirms the potential of information and communications technologies to enhance community involvement. This emphasises that community has the potential to be a driving force behind this theory, which argues that social and economic change requires that society adapt to the technology that is available to it. Although social media and community radio have demonstrated that they can assist communities in active participation rather than passive participation in municipal processes, these platforms are not without challenges. The majority of people in rural areas lack access to digital cell phones, and where few citizens have access, issues of connectivity exist. Moreover, digital literacy and the digital divide exacerbate these challenges. The research data indicated that, depending on the geographical areas, the effects of these technologies on communities were discouraging, while in other areas, the results were discouraging. Hence, this study suggested that for the municipality to accommodate the majority of citizens in the municipal process, they should introduce a multicommunication channel approach to effective participation, incorporating both traditional methods of communication and the new information communication technology.