

A Scoping Review for proposing an eParticipation Framework for South African Local Municipalities

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Abstract: Governments globally are making notable efforts to facilitate conversations with citizens to improve their participation in government decision-making by using various digital technologies in what could be coined as electronic participation approaches (e-Participation). It is even more critical for local governments as they want to apply feedback from citizens through e-participation to improve service delivery and inform policies. Both e-participation and local government have unique issues, challenges and important aspects to consider. This paper aims to identify these concepts through a scoping review to build a conceptual framework for local South African municipalities to implement e-participation for improved service delivery. The scoping review analysed 19 papers after applying the exclusion criteria used to conceptualise the framework. Both e-participation and local government need to consider value, content for access, skills, transparency, trust and funding to make e-participation a reality. The concepts that emanated from the scoping review under e-participation and local government considerations allowed for a list of requirements to consider when implementing e-participation. Key findings are that a conducive environment that allows for both online and offline participation platforms is needed to be of value to citizens and where they feel safe to participate otherwise, they will not engage in e-participation.

Keywords: e-participation, local government, e-government, e-participation models and frameworks, citizens

1. Introduction

Information and communications technology (ICT) continues to evolve at a fast pace. The role of ICT also changes depending on its use and applicability and affects how public and private institutions conduct business [1]. ICTs are used as transparency and accountability tools to ensure services are delivered effectively and efficiently [1]. Public institutions allow citizens to give feedback on services they receive due to the changed processes and practices made possible by ICT advancements [2]. This has resulted in e-participation, which allows for communication between citizens and public institutions without the citizens being physically present [1; 2]. E-participation also engages people in public decision-making, administration and service delivery; hence, e-participation is usually considered part of e-government [3]. Governments worldwide are taking deliberate steps to ensure that the citizens are involved in the policy and service delivery decision-making processes and have budgeted to procure the necessary infrastructure that enables public participation virtually and physically [4; 5]. Building a capable and developmental state is one of the key priorities outlined in the South African National Development Plan (Vision 2030) [3]. Modern technologies and ICT could play a critical role by creating e-participation platforms for engagement and participation in public policy affairs, which is a

crucial element of building a capable state [4]. In addition, building a capable state requires government institutions and departments, particularly municipalities, to adopt technologies to improve service delivery and accountability. This paper emerged from a bigger project (DSI funded) that focuses on e-Participation and Policy Modelling that aims to develop, test, and pilot an e-Participation and public policy modelling platform for local government. As part of this pilot project, a framework for e-participation for local South African municipalities was needed to inform a list of requirements to assist local governments with their e-participation initiatives. Previous papers focused mainly on how e-participations were executed but did not develop a framework or a list of requirements. Thus this paper was written to inform learning in terms of the requirements for e-participation, as these requirements are novel as were not previously outlined in past papers. The limitations of the study are that it is a scoping review and that it should be supplemented with feedback from all parties involved. The paper will provide the objectives, research question, methodology, literature review, results, the framework with requirements, discussions and the conclusions.

2. Objectives and research question

The paper aims to identify concepts relating to e-participation in local governments through a scoping review to build a conceptual framework for local South African governments to implement e-participation for improved service delivery. This framework can empower municipalities to build trust between them and their citizens [6]. The framework will address the requirements that local municipalities should consider for e-participation. These include the technical specifications, user requirements, infrastructural requirements, implementation guidelines, support structures and requirements for deploying the 4IR-related technologies [3, 7]. The framework should also cater for various types of municipalities in different contexts, especially in South Africa. If tested successfully in future research, the framework can assist municipalities in maximising their resources, improving citizen participation in the decision-making process, and minimising all the current service delivery issues they encounter [7]. The research question that will address the paper's aim is: How can a scoping review assist in developing a conceptual framework for e-participation in local South African municipalities?

3. Methodology

This paper applied the scoping literature review to identify the key concepts to develop the framework. Scoping reviews clarify and examine those definitions used in the literature and are applied to conduct and evaluate research [8]. Using IEEE Xplore, ScienceDirect, ACM digital library, and Scopus, relevant papers on the following search terms were identified: 'e-participation', 'e-Government', 'local government', 'components of e-participation and 'models and 'frameworks of e-participation. Only 19 of the 760 papers retrieved dealt with e-participation at a local government level. Papers between 2012 to 2022 were searched. The inclusion criteria for this scoping review were that only papers that discussed e-participation at a local government or municipality level were included and texts should be written in English. Articles that were irrelevant to the study, non-English articles, and duplicates were all excluded. Following the screening process, 77 papers were identified as remaining eligible; 80 papers were excluded, and 19 were considered eligible for the study. The scoping review allowed for a broad search of applicable papers, and a focus on local government ensured that components for the conceptual framework could be grouped according to themes.

4. Literature review

From the scoping review of 19 selected papers, the following concepts emerged to be considered as components for developing the framework and requirements (sections

4.1. *Understanding e-participation*

e-Participation can be defined in many ways. E-Participation is a process that allows citizens and all relevant stakeholders to influence the decision-making processes of public institutions, this is made possible by ICTs [1,2]. E-Participation falls under the umbrella of e-government, defined by [6, 7, & 9] as all government activities that involve using ICT to deliver services to the citizens. E-Government is about digitising all government services [1,3,4]. E-Participation focuses more on the citizens' participation in the democratic process in governments and having a say as to how they want to be serviced, which can positively influence their future communities [4, 5 & 9]. Citizen participation can happen on many platforms, including social media [4; 5], like Facebook, Twitter, radio broadcasts, and TV advertisements. E-participation should be understood from two contexts, i.e. citizens' willingness to participate in government initiatives and the government's capability to use the feedback from the citizens to improve service delivery[4]. It would be essential to approach delivery holistically by contextualising the nuances of the local community, including gender, cultural, religious and power dynamics, which would be possible only through more effective e-participation and e-engagement [3]. The UN [3] proposes specific steps for successful e-participation: The first step in developing solutions is to acknowledge that exclusion exists and to identify barriers to equity and inclusion in three critical areas: access (to electricity, Internet and mobile infrastructure, e-information and e-services); affordability (the ability to cover the cost of Internet access and digital devices and the availability of free public access points for e-government); and ability (traditional literacy, digital literacy and language literacy).

The second step is prioritising and optimising data, design and delivery in e-government services development and provision.

4.2. *e-participation within the context of e-government*

A study by Kinemo [10] classifies e-participation under e-government and it is concerned with citizens' participation in the policy cycle. The first level of contact between government and citizens is the municipalities therefore, this local leg of government must be prepared and capable of dealing with the influx of information coming from the citizens' engagements. The local government should also have equipped and skilled staff to support e-participation and engage with citizens on ICT platforms [9]. The South African government states that all decisions taken at any level of government should be evidence-based [10]. Through mechanisms like e-participation, the government will be able to draft policies based on the needs of the citizens as they will have evidence to work with. Maremi et al. [1] indicate that ICT has changed how governments deliver services to the citizens to ensure they improve the level of services. The UN [3] also suggests that local governments should explore and exploit methodologies and practices that optimise outcomes for all, with particular attention given to data (disaggregated data, open government data and digital identity), design (co-creation and co-production and the integration of assistive technologies), and delivery (experimentation/sandboxing and blended, omnichannel services delivery). Governments should have targeted policies, dedicated budgets, and resources to support the development and implementation of anticipatory, personalised services for the most vulnerable members of society, including persons with disabilities and other disadvantaged populations [5, 6].

4.3. e-participation link with other concepts

Concepts to consider are inclusion, transparency, accountability and communication.

Inclusion: Inclusion can be defined in the context of e-government as the duty of governments to engage all citizens. However, since the inception of e-government, there have been problems that digital technologies do not reach certain portions of the population and that digital solutions do not embrace all groups of citizens equivalently [11]. In addition, considerations about the digital divide have given rise to multiple divides, including connectivity and access issues and the challenges of differential digital knowledge and abilities (see below). This is referred to as "e-inclusion" at times [12]. While these concerns are crucial for assessing the success of e-participation proposals, they stem from a differentiated notion and will not be the primary focus of this paper.

Transparency: To adapt to new management governance strategies of municipalities, one of the significant factors to be considered is transparency. Local governments must show that they work harmoniously with the population, offering transparent management [12]. In this context, any citizen can consult any information about the political or economic organisation through data transfer. A transparent and intelligent government facilitates proximity to the population [3]. This allows for obtaining accurate information on those aspects that the citizen demands and on the functioning of the municipality [12].

Accountability: According to the World Public Sector Report 2019, participation (along with transparency) is recurrently a crucial element of democratic accountability, such as those aimed at holding governments accountable for public service provision [3]. E-participation is no different. Digital citizen feedback methods on public services have evolved tremendously across developed and developing countries [13].

Communication: A large portion of information exchange between governments and citizens is unrelated to participation goals. Communication about what the government does, communication about rules as they apply to public services and citizens' obligations (laws, regulations, codes, and so on), and individualised communication between the government and citizens about administrative transactions that affect them are all examples of this. Numerous governments have developed functionalities for individual accounts and digital access to all government services on a portal as part of e-government approaches [3]. Citizens, for example, can pay their taxes online using secure channels and electronic IDs, view records of their tax filings and other transactions, and ask government employees questions about documents or processes that concern them [13]. On the other hand, the personalisation of online communication is nothing more than a digitisation of administrative transactions with no participation implications [12]. Furthermore, many communication activities are commonly referred to as e-participation. This includes, for example, providing information on members' parliamentary information, the calendar of parliamentary activities, upcoming opportunities for public consultation, and other structures of engagement in the context of parliamentary activities [13]. These concepts add value to e-participation in local governments and should be noted.

5. Results: Current frameworks for e-Participation

The academic literature on e-participation is broadening, with several papers discussing methodological frameworks. Utterances and words constantly appear in the frameworks and will be utilised in this study to develop an e-participation framework. It is also necessary to conduct a requirement analysis that will inform municipalities whether their systems, processes, and procedures are ready to incorporate e-participation to increase citizens' engagement in the policy-making process. Figure 1 illustrates a screenshot of the summary of phrases, theme requirements, and e-participation concepts that were identified

during the scoping review that were used to create an e-participation framework. This is certainly not an exhaustive list; rather, it is a brief overview of some scoped concepts.

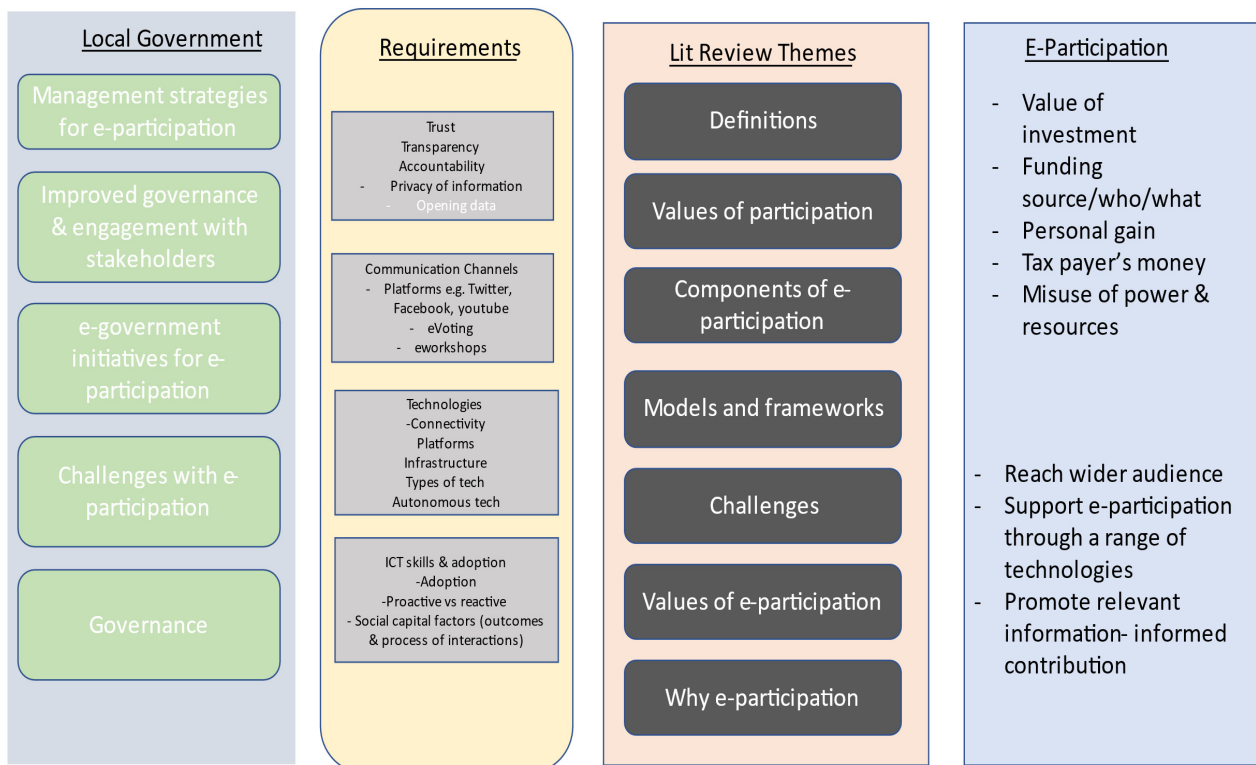


Fig.1. Summary of the literature that was reviewed to inform the drafting of the framework for e-participation in local municipalities., Source: [Adapted from articles 3-7; 9-19]

There are many models of e-participation that have been implemented in various contexts. These frameworks were based on the United Nations declaration on good practices in public governance [1]. This declaration states that e-participation consists of three dimensions: e-information, e-consultation, and e-decision-making [1]. Some examples are the E-participation Scoping Framework [14], which contains five layers where e-participation can occur either in a top-down or bottom-up manner [15]. Another framework is presented by [1], which entails e-participation as an overlap between e-enabling, e-engaging, and e-empowering. These frameworks assisted in identifying the components for the conceptual framework below.

6. The framework for eParticipation in local municipalities that resulted in the requirements list for local governments to apply

The following framework was developed after the scoping review and investigation of various elements and components of other e-participation frameworks (section 5). The themes emanating from the literature review (left column) allowed for identifying the e-participation concepts linked with the local municipality concepts (middle column). These culminated in the requirements list (right column) that local municipalities can use to prepare for e-participation.

THE FRAMEWORK FOR E-PARTICIPATION IN LOCAL MUNICIPALITIES THAT RESULTED INTO THE REQUIREMENTS

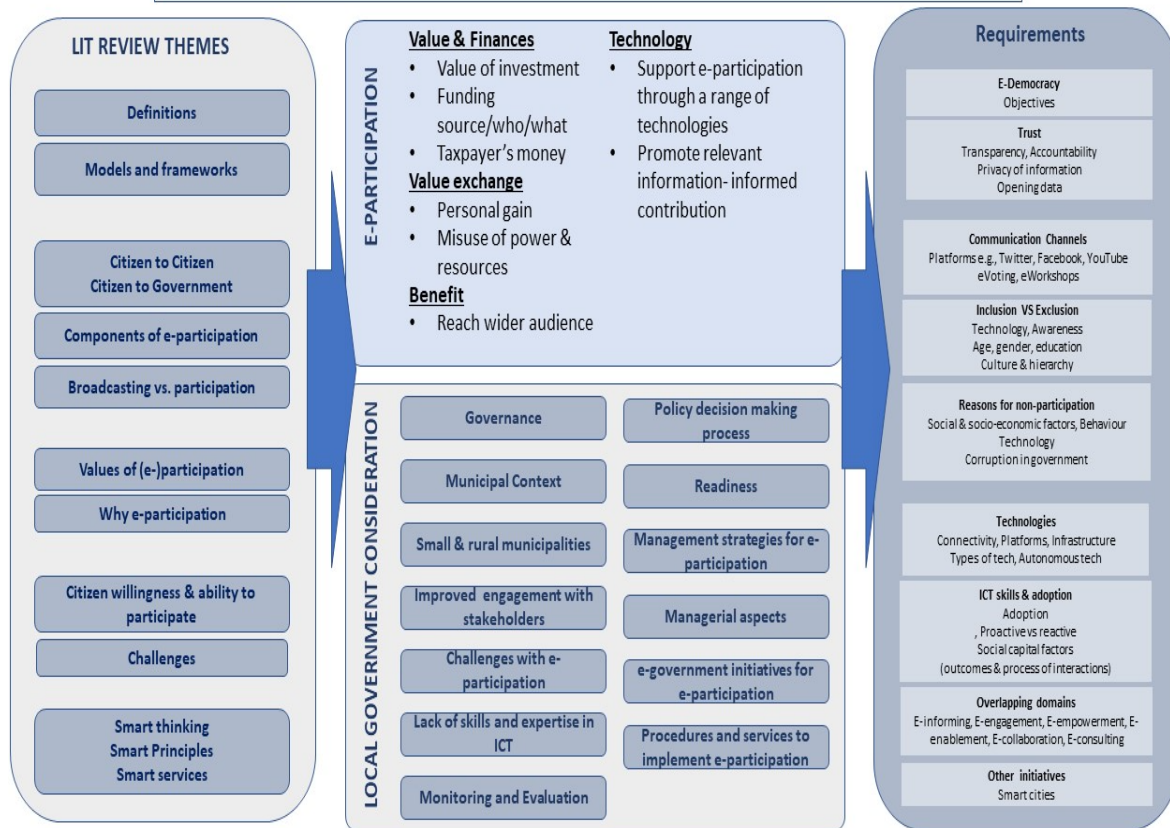


Fig.2: The framework for e-participation in local municipalities with requirements [Adapted from 3-7, 9-19]

The literature review themes included various definitions of e-participation and e-government, certain models and framework components of e-participation [1, 3, 14], C2C and C2G explanations [15], components for e-participation, broadcasting versus e-participation, the value of e-participation and the reason for having e-participation [13], citizen willingness and the ability to participate for citizens from all contexts [16-19], challenges experienced by citizens and what is necessary for smart thinking, smart principles to consider and smart services for e-participation. This resulted in the two separate focuses (e-participation components to consider versus local government considerations) and then having a section in the middle that combines the two [16-19].

Under e-participation, the focus is on the value for the citizen and the finances (funding, investment and taxpayer's money to make e-participation a reality. The value exchanged through personal gain in e-participation for the citizen and the citizen's concerns of the misuse of power and resources that breaks trust from the citizens. The benefits of e-participation include reaching a wider audience through e-service delivery. Finally, different technology should be considered for e-participation.

Under the local government, the following should be considered: governance changes, what municipal content to consider for e-participation, the different contexts and cultures in small and rural municipalities, improved engagements with stakeholders (NGOs, businesses, schools, libraries, etc.), challenges with e-participation (connectivity, transparency, accountability, communication), the lack of skills and expertise that exist in local governments to make e-participation a reality and to support it, monitoring and evaluating efforts to show impact and to improve, involving citizens in the policy-making processes, assessing the readiness of local governments to provide e-participation, developing management strategies to implement e-participation, identify managerial aspects needed for e-participation in each local government, identify e-government

initiatives that should be in place for e-participation to succeed and to develop procedures and services for the implementation of e-participation.

Aspects under these resulted in identifying the requirements for e-participation, as is evident in the last column of the framework.

The list of requirements is also evident in figure 2, the right column and it portrays the issues of trust, transparency, privacy of information, open data, reasons for non-participation, connected technologies, platforms for engagement, the issues of ICT skills and literacy and adopting e-participation. Other requirements involve the smart cities concept, e-informing, e-enablement, e-consulting, e-collaboration, e-engagement and e-empowerment.

7. Discussion and conclusions

This conceptual framework is based on a scoping literature review that local municipalities will evaluate. This will be done by interviewing government officials in three municipalities (still to be identified through negotiations). Their feedback will allow the team to refine the framework further and prioritise specific components. It will also enable the team to support municipalities with ideas, assistance and suggestions based on their different context on where to start with e-participation and to develop a plan with guidelines for implementation. Once the framework is refined, it can be used as a blueprint for other local municipalities to use when starting with e-participation.

E-participation is regarded as essential in most developed context and to some extent, the South African government at national and provincial levels have already started with implementation. However, local municipalities need more support and guidance as service delivery at this level is in dire straits. Therefore, the focus for the team is more on them for support to implement e-participation to benefit citizens and decision-making in the end.

Lessons learned: e-participation needs to have a conducive environment to be of value in municipalities therefore, there is a need to check the readiness of municipalities to ascertain that it has addressed all the necessary blocks to maximise citizen involvement when it comes to citizen engagement. Online platforms and traditional ways of citizen engagement are complimentary and can be used for e-participation. These platforms appeal to different age groups and each person can use whatever form of participation they feel comfortable with.

Future research: The conceptualised framework for e-participation will be evaluated in local municipalities as part of the bigger project mentioned in the introduction to ascertain that it can be rolled out nationwide and used as an e-participation tool or blueprint for South African local municipalities. Hopefully, the list of requirements can be further refined and improved based on the valuable feedback from local governments and citizens.

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