

Research

Hart, et al. (2020) Found that there were significant challenges facing South African Governments when it came to getting the people to be engaged and involved in any innovation in the last decades with a notable 28% being aware of innovations done by government services. In their paper they further went on to outline two major roadblocks to this innovation. Those being organizational issues and technical issues.

Technical issues could be solved through the use of user engagement features in order to get people invested and involved in government projects according to Hart et al. (2020). For the purposes of this application there 5 possible methods to gain an increase in user engagement which follow as such: Transparency, fast response, community feedback, events and announcements and project compatibility with common user platforms. These 5 methods will be elaborated below.

Transparency:

The Department of Science, Technology and Innovation (2025) in a policy brief that one of the most important factors to consider when designing a digital platform for Governmental/Municipal services was open transparency. The department highlighted the need to be open and transparent with policies and information on any form of digital platform and its effect on user participation. Following this it is important for the application to be as transparent as possible regarding how they will handle all issues logged and brought up. This can be achieved through the use of small labels and messages on the platform detailing policies and procedures.

Fast Responses:

Questline (2025) outlined that response time was one of the largest contributing factors to user engagement on digital services. It is important to ensure that user issues are adequately responded to in a timely manner. The use of updating statuses on the application will give users a real time response to see where their logged issues are in the queue (For example the status will be changed from in progress to completed once the issue is completed).

Community Feedback:

Municipal World (2018) outlined the noticeable effect community engagement and feedback had on participation of municipal systems. Municipal World (2018) outlined that having a visible and measurable output based on the communities' concerns was paramount to keep the people engaged and interacting with the system. For the purposes of this application, a way to view work done through the user a tracking

system or a social media page showing work being done would help effectively give people feedback and keep them engaged with the system.

Events:

Another active engagement strategy highlighted by Municipal World (2018) was the creation and use of Events and announcements. By organizing community events such as general/town meetings where people can voice their concerns or events such as teaching/ educational days where people can come to learn about digital technologies you can keep the community actively engaged in the municipal system. The application will aid in this process by having an events announcement page (to be implemented in part 2) which will act as a place where people can announce events in the future.

Compatibility:

For an application such as this municipal service platform, it is important to design it to be accessible to as many users as possible. According to Questline (2025) most people actively use a device such as a cellphone to interact with most digital platforms thus it is important to design the application to work through these restrictions. This application is being designed using web app architecture and thus is usable by any device that has the ability to use a web-based browser.

For the purpose of the issue report section of the application: We will focus on Fast Responses. Each reported issue has a status attached to it. When the issue is first logged, this is set to "open". When the issue is being addressed this status will change in real time to "in progress". Once the issue is solved it will be changed to "complete" in real time. This allows for users to see a real time update on when and if a reported issue is being addressed and worked on.

Reference List:

- Department of Science, Technology and Innovation, 2025. Design and implementation strategies for e-participation in South Africa. [PDF] Department of Science, Technology and Innovation. Available at: <<https://www.dsti.gov.za/index.php/documents/knowledge-products/247-design-and-implementation-strategies-for-e-participation-in-south-africa/file>> [Accessed 8 September 2025]
- Hart, T. , Booyens, I., Sinyolo, S. Innovation for Development in South Africa: Experiences with Basic Service Technologies in Distressed Municipalities. [pdf] Strathprints. Available at: <Hart_etal_FDS_2020_Innovation_for_development_in_South_Africa_experiences_with_basic_service> [Accessed 7 September 2025]
- Municipal World, 2018. *13 Benefits of Online Engagement*. [online] Available at: <<https://www.municipalworld.com/feature-story/13-benefits-online-engagement>> [Accessed 8 September 2025]
- Questline, 2025. *Best Practices in Building Community Engagement: Social Media Examples*. [online] Available at: <<https://www.questline.com/blog/building-municipal-community-engagement>> [Accessed 8 September 2025]