

Digital Municipalities - Moving Toward a Participatory Democracy

Abstract

Direct democracy has its roots in ancient Greece, where citizens played an active role in debating and deciding governance related matters. Over time, societies have transitioned toward a representative style of governance where citizens exercise political power indirectly through elected representatives who formulate public policies and legislations, and oversee implementation. While this model is popular, it is far from participatory governance where citizens directly impact policy formulation and execution.

This article focuses on how local governments (that is, municipalities) across countries can embrace new technologies to address operational challenges and leapfrog existing governance paradigms through a system-wide transformation.

Introduction

The widely prevalent three tiered governance structure – federal, state, and local – is based on the philosophy of shared and distributed power, with local governments (like municipalities) typically being the first point of contact for citizens. The services they deliver, such as sanitation, local infrastructure, and water, impact a citizen's day-to-day life. It is therefore essential for municipal governance to be participative in nature to drive greater collaboration between administrators and citizens.

Unfortunately, most municipalities are plagued with problems like limited budgets, poor prioritization of infrastructural development plans and related spends, weak grievance redressal mechanisms, and high workforce attrition. All these combined make it considerably challenging for municipal bodies to meet service delivery expectations, while ensuring desired outcomes with minimal schedule slippages and cost overruns. In addition, the absence of a system that provides a comprehensive visibility into citizens' views, preferences, and grievances has created a visible disconnect between authorities and citizens, thereby hindering effective governance.

These challenges are further complicated by the fact that most municipal services are still delivered manually. However, pushing sweeping national e-governance strategies to municipalities is unlikely to solve all their problems. Municipalities have already invested in basic systems for departmental functions but are confronted with issues such as poor information sharing, unorganized data across departments, lack of integrated systems, and inefficient processes. What they need now is an advanced, well-integrated governance and administration system based on digital technologies.

The Digital Evolution in Governance

There are four stages involved in the digitization process as government departments embark on a transformation journey. These include: (i) information display, (ii) partial service delivery, (iii) fully integrated service delivery, and (iv) participatory democracy. In the first stage, government department portals are treated as static mechanisms to display information, with no scope for two-way communication between citizens and the government. In the partial service delivery stage, government portals start to deploy some services online but departments still continue to operate in isolation and have no processes for inter-departmental collaboration and data sharing. By the third stage, automation

has taken place in most departments, with a one-stop portal allowing access to a host of services. Departments are integrated and a range of fully executable services are available to citizens and businesses. In the participatory democracy stage, government departments move toward a goal of system-wide political transformation. The collaborative potential of the internet helps facilitate the type of empowerment needed for participatory models; this helps establish direct democracy in the real sense.

Our engagements with multiple governments across the globe lead us to believe that the majority of municipal bodies are currently at the partial service delivery stage and need to rapidly deploy the participatory democracy model to drive further development and transformation.

Transforming into a Digital Municipality: Key Services Offered by a Citizen Portal

Over the last few years, there has been a meteoric rise in the adoption of, and preference for, online citizen services due to the myriad benefits they offer as against in-person interactions. A report shows that the average cost to municipalities in Copenhagen is 80 kroner for an inperson interaction and just 3 kroner for a digital interaction¹. The UK government's 2013 Digital Efficiency Report suggests that online transactions in the UK can be as much as 50 times cheaper than face-to-face transactions.² Apart from being cost effective, digital services tend to be quicker, error-proof, more convenient, and give citizens the flexibility to avail services as and when required.

A digital municipality can offer multiple citizen services through a single window. This allows citizens to access digital public services through a single personalized account instead of having to visit individual websites of local authorities. The solution must, however, establish trusted electronic identity verification and management through advanced levels of identity and access management. Single sign-on standards can help ensure that the information management systems of disparate government departments use the same dataset for a given citizen, resulting in consistent information across the universe.

Typically, on signing into such a portal, the homepage will display a citizen's personal details, the basket of services being

[1] Regjeringen.no, "Digitizing Public Sector Services: Norwegian eGovernment Program" (July 2012), accessed August 31, 2015, https://www.regjeringen.no/globalassets/upload/fad/kampanje/dan/regjeringensdigitaliseringsprogram/digit_prg_eng.pdf

[2] Gov.uk, "Government Digital Strategy" (December 2013), accessed August 31, 2015

<https://www.gov.uk/government/publications/government-digitalstrategy/government-digital-strategy>

offered, and the services that the citizen has availed. An ideal citizen portal should have the following features:

Open Data: All information related to the city and municipality must be openly displayed on the portal, and should be available for unrestricted use, reuse, and distribution. Moving data from numerous websites to a single portal will enable app developers, entrepreneurs, and others to innovate, by gleaning insights from the consolidated data. This data can be leveraged to build high-quality applications for new and innovative citizen services. The backend cloud infrastructure provides the flexibility and scalability needed to run these applications. 'Transport for London' is a prime example of a department that has led the way in the use of open data for innovation.³ App developers, using large volumes of real-time data, have designed and built state-of-the-art travel applications that cater to millions of active users simultaneously.

Online Transaction Services: The citizen portal must deliver public services such as the payment of utility bills and property tax, issuance of birth or death certificates, and maintenance of medical records. Citizens should be able to generate a single bill for multiple utilities such as electricity, water, and gas. The portal should also allow citizens visibility into all transactions made under their user profiles. However, shifting from a service delivery approach to a participatory democracy will be possible only if the portal takes advantage of the interactive and multilateral communication capabilities of the internet.

Grievance Redressal: The portal must serve as a platform to report community issues and empower citizens to play a significant role in resolving infrastructure problems in their neighborhoods. Once a complaint is raised, a workflow in the backend system should route requests to the appropriate government agency, display requests in a dashboard, and analyze request patterns. Citizens must receive a tracking number and a push notification at each stage until the problem is resolved. The citizen portal should also harness the power of mobility and social media to transform civic engagements and enable the delivery of more efficient services. For instance, citizens should be able to download grievance forms on their smartphones and upload photos of potholes, broken street lights, unwanted graffiti, and more, for quick resolution.

The application's integration with a geographic information system (GIS) takes grievance redressal a step further by allowing users to tag their neighborhood infrastructural issues on a map. Citizens should also have access to an online

[3] *theguardian.com*, "Open data and driverless buses: how London transport heads to the future" (August 2014), accessed August 31, 2015, <http://www.theguardian.com/uk-news/2014/aug/13/transport-london-tube-bus-oyster-data>
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collaborative platform to view and vote with respect to the complaints that have been raised by their locality. This will help government officials identify and prioritize areas that require immediate attention based on feedback.

Participatory Governance: A collaborative portal drives citizen participation in policy making and local governance. Citizens can vote and allocate spending priorities across sectors like construction, roads, and water supply, and propose specific initiatives. Councilors can then develop requisite business cases and proposals according to these priorities, which can be put to vote online, to ensure the most relevant project gets funded and implemented on time.

Leveraging Digital Forces for the New-Age Municipality

The effective use of social media, mobility, analytics, and cloud technologies can help fast track the move toward a participatory or interactive democracy. For this to happen, processes need to be designed with the end user at the core, and the default service channel must be digital. To achieve this goal, governments can consider the following:

Collaboration tools to facilitate exchange of ideas: An online, collaborative social media platform promotes sharing, creation, and exchange of information and ideas between citizens and governments. It enables government authorities to effectively gauge citizens' needs and identify top priorities.

Mobile platforms for improved engagement: The number of smartphone users worldwide will surpass two billion in 2016, and by 2018, over one-third of consumers worldwide will use smartphones.⁴ The use of mobility in participatory governance must extend beyond being just a delivery mechanism. Creating a complete mobile platform for citizen services strengthens participative democracy through better citizen-government interactions. It transforms government-to-citizen channels by including a full suite of online municipal services through a single customizable interface. Mobility also brings in new sets of capabilities such as applications for citizen engagement, GPS location services, and cameras to redefine service delivery and problem resolution.

Predictive analytics to facilitate effective planning: The data generated when citizens interact with the government through social media, online discussion forums, as well as application and grievance portals, can be fed into a predictive analytics platform to identify trends and draw insights for collaborative problem solving and effective policy formulation.

Historical analysis can support better budget forecasting to improve overall infrastructure. An analytics dashboard, accessible across all departments, extends predictive problem solving capabilities to each and every department of the local government.

Cloud-based platforms for improved service delivery: Municipalities can leverage a cloud-based platform for service delivery using packaged applications and then replicate it through an 'as-a-service' model. It helps improve service delivery while containing operational costs. A common platform will also help multiple systems interact with each other and gather a holistic view of citizen interactions. Cloud platforms offer municipal bodies greater flexibility and scalability to meet future governance requirements.

Achieving the Vision of a Participative Democracy

Governments across the world are dealing with a host of challenges such as changing citizen preferences, burgeoning public utility demands, and mounting fiscal pressures. Municipalities, being the lowest tier in the governance system, are allocated severely limited budgets. As a result, despite the growing need for advanced service delivery, characterized by comprehensive citizen interaction mechanisms, municipalities are struggling to keep pace with technological advancements. As they move toward the participative governance model, the challenge will lie in how well municipalities can balance the need for improved service delivery while containing operational costs. By shifting from traditional to digital channels, leveraging the right combination of emerging technologies, municipalities can deliver cost-efficient and citizen-centric services.

About The Author

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