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Cities Without Slums

DIGITAL TECHNOLOGIES AND ACCESS TO BASIC SERVICES IN THE GLOBAL SOUTH

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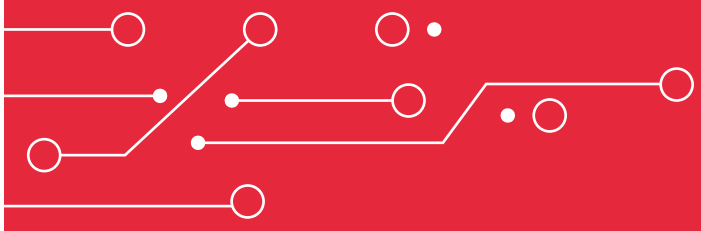
The concept of 'smart city' has gained significant traction in recent years and has influenced development approaches and policy responses by local governments in rapidly urbanizing countries. This has spurred the development of projects that seek to leverage the deployment of Information and Communications Technologies (ICT) and data to solve challenges experienced by rapidly urbanizing cities. At the core of the smart city concept lie various understandings and components, including:

- Sensing
- Data driven urban systems designed to improve government service
- Enhancing local economies
- Reducing natural resource consumption and waste
- Enhancing citizen's engagements with governments and each other

While digital innovation remains central to the smart city concept, a key question is whether investment in smart technologies and digital innovations ultimately contributes to improving the well-being of citizens in order to 'leave no one behind'. Standardized application of technology-driven approaches to data monitoring in cities without due consideration of the local context may create adverse developmental effects, such as exclusionary governance practice.



However, a collaborative approach in the deployment of digital technologies can positively impact the provision of urban services, livelihoods, and living standards of the urban poor. This is the main conclusion from the Cities Alliance's *Secure Tenure Call in African Cities: Micro Funds for Community Innovation Call of 2019*[93] and a recent publication on *Smart technologies for more equitable city economies*[94]. Services that can be leveraged by a collaborative approach in deployment of digital technologies (and were supported by the innovation call and investigated in the publication) include waste management, access to electricity, and land management. Transformative effects of digital technologies in access to these services unfolded into three main functions:

1. Operational uses by removing barriers to entry on formal markets
2. Transactional uses by reducing transactions costs and asymmetries of information
3. Informational uses by bringing evidence and putting on the map informal dynamics

The Secure Tenure Call for Proposals provided some evidence on successful initiatives that use digital technologies to solve some of the challenges faced by municipal and national authorities in developing countries. Lack of tenure security, land and property rights in informal urban settlements remains one of the biggest challenges in improving access to basic services and living conditions of the urban poor. It has a direct impact on investment decisions made by households in upgrading their own dwellings and the private sector, and governments in investing in infrastructure and access to basic services. Similarly, tenure insecurity directly impacts the livelihoods of the urban poor as the constant threat of eviction discourages vendors and small businesses reliant on the public space to sell their goods and services to further invest in their ventures and market stalls. The call provided small grants of up to US$50,000 to support local innovative solutions that deploy modern technologies to improve tenure security, land, and property rights in African cities.

[93] Cities Alliance, *Call for Proposals - Secure Tenure in African Cities: Micro Funds for Community Innovation*, (2019), Available at https://www.citiesalliance.org/newsroom/news/business-opportunities/call-proposals-secure-tenure-african-cities-micro-funds.

[94] Cities Alliance, *Smart technologies for more equitable city economies*, (Brussels, Cities Alliance/UNOPS, 2020), Available at https://www.citiesalliance.org/resources/publications/publications/smart-technologies-more-equitable-city-economies.

A key finding from this Call was the need to embed technology into social interaction and social dialogue. This has proven to be crucial not only to ensure that the technology will fit local practices and needs, but also to create acceptance and adherence from both users and beneficiaries. All five projects funded under the Secure Tenure Call have demonstrated the transformative effects of collaborative deployment of digital technologies in alleviating urban challenges.

For instance, the project in Zanzibar[95] used new data collection and processing methods to solve the challenge faced by the Government of Zanzibar in providing certificates of occupancy to landowners. Working closely with the government, Spatial Collective (the grant recipient) set up a data model and data collection protocols, developed a field guide and criteria for selection of tools and methods, created customized technology to collect data, trained Zanzibar stakeholders on data collection and management, carried out data collection in a pilot area, and supported the Zanzibar Commission for Lands (COLA) with data processing. The collaborative approach in the deployment of digital technologies in the land management system resulted in the review of the existing adjudication process, redesigning the paper-based adjudication form, and building a platform for digital land data collection to be used by the government.

Another interesting example was the initiative implemented by Association 3535 (the grant recipient) in Côte d'Ivoire[96] in partnership with the technical services department of the municipality of Cocody. The project created an open-source software application that speeds up issuance of permits for occupation of public space benefitting informal vendors and small business in the municipality of Cocody. The platform's key functionalities are modelled after the existing steps in the process to obtain a permit, but it uses online alternatives to replace most steps requiring in-person interactions and visits to the technical services' local office. The process equally leverages other digital solutions such as mobile money to allow vendors to make payment for the permit. These innovations, which were conceived considering literacy challenges, support transparency and accountability. Deployment of these digital solutions during the pilot project resulted in a significant decrease in the processing time of requests for permits from eight weeks to 22 working days.

The cases of use of digital technologies to improve access to basic services and rights highlighted here are small, incremental, replicable, and driven primarily by civil society and private actors. However, ensuring community engagement and collaboration with local governments in the early stages of the initiatives have proven to be key for the successful adoption of the technologies proposed. Promoting similar initiatives and scaling-up existing ones will require creating an enabling environment to spur investments in digital technologies and a demand driven approach, based on a willingness to consider grassroots technological uses and innovations.

[95] Cities Alliance, *Secure Tenure on Zanzibar: creating a new methodology for collecting data on land,* (2020), Available at https://citiesalliance.org/resources/knowledge/global-knowledge/secure-tenure-zanzibar-final-report.

[96] Association 3535, *eServices Techniques: a tech solution to help street vendors get access to the public space*, (Cities Alliance, 2019). Available at https://citiesalliance.org/resources/knowledge/global-knowledge/eservices-techniques-report.