

Smart cities should be people-centric, but is that really the case?

The promise of smart cities is appealing, but technology too often takes centre stage

Seoul has just become the first city to launch its own metaverse. As Singapore, Dubai and Shanghai prepare to follow suit, the world holds its breath in anticipation of a new chapter in the history of human settlements. At the very least, immersive technologies such as virtual, augmented, and mixed reality (VR/AR/MR) might be expected to facilitate and lighten resident interaction with the cities' 3D digital twins.

But tech enthusiasts say that cities as we know them could eventually be transformed, with AR and VR simulations revolutionizing urban planning and mobility modelling (improving traffic safety and congestion), as well as healthcare and education services. For instance, a Singaporean deep-tech startup specializes in creating virtual patients for MR and VR medical simulations, to be used in the training of healthcare professionals. Singapore Institute of Technology's future Living Lab at Punggol Digital District is to serve as a testbed for academics and industry working on state-of-the-art immersive technologies, such as those used to create the SIT campus' own 3D digital twin.

To be sure, new smart technologies (not only those linked to VR, AR and MR) sound very exciting in that they promise to improve public services and tackle wicked urban problems easily and efficiently. However, the jury is still out on whether smart cities truly live up to their original ambition of offering their citizens a better quality of life. And that is more than the promise of easy, safe, and ecological living.

Voices of concern are raised on how more and more smart cities are falling out of touch with their human dimension whenever stories emerge like that of Sidewalk Labs' Quayside. The sensor-laden development project in Toronto recklessly disregarded the residents' concerns over the use of data, which eventually led to its demise. In the current context of urban digital transformation, warnings of progressive dehumanization of cities sounded by Jane Jacobs (1916-2006) in her 1961 book "The Death and Life of Great American Cities", the toughest critic of city planning trends of the day, sound more prophetic than ever.

But the technology creep continues unabashed. Geared at wealthy foreign elites, the Forest City project in Johor (Malaysia) has largely ignored the local community's needs for affordable housing and jobs, while at the same time damaging the coastal wetlands and habitats, adversely affecting the livelihoods of local fishermen. Unable to fill its buildings due to a mix of government pushback (the foreign-funded project is often seen as neocolonial) and pandemic-related travel restrictions, Forest City is now a spooky ghost town with an occupancy rate of below 5%.

Occupancy levels are not as low in New Songdo, South Korea's premier tech-utopian dream, but still below expectations. Songdo has been described as a cold, soulless and antiseptic place, while existing residents have reported feelings of loneliness and estrangement. But instead of promoting serendipitous meetings in a space ruled by algorithmic prediction, the megacity is filled with advertisements and technologies which fail to address the needs of its inhabitants.

Smart city projects which rely on top-down decision-making and miss large sections of the community cannot claim to be people-centric. Disregarding community inclusion is worrisome not only because such decisions have far-reaching impacts on people's lives: the lifeblood of smart cities is data, extracted in mass quantities from residents. It is thanks to this data that smart city technologies operate, and tech companies turn a profit. And one thing is certain: cities shifting to the metaverse will require unprecedented amounts of residents' data, collected through private technology.

As the tech companies become more powerful, residents may become disempowered, losing their autonomy (and control over their data) amid the potentially limitless behavioural nudging. That power needs to be kept in check, unless we want "smart citizens" - i.e., ourselves - to be reduced to passive consumers and a harvesting ground for data. Therefore, greater accountability of the urban-tech companies is crucial. These themes are at the heart of the new research project on governance and accountability in mass data sharing in SE Asian smart cities, undertaken by the SMU Centre for AI and Data Governance (CAIDG) together with the Konrad Adenauer Foundation (KAS) Rule of Law Programme Asia.

Ignoring people's needs, choices and input spells doom for the digital transformation of cities. Smart technologies, however shiny and promising they may be, are a means to an end. Let us not allow ourselves to lose that end from sight – particularly if we hope to avoid dystopian urban futures where people are merely an afterthought.

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