Chapter 22
Smart Labs and Innovative Learning Initiatives:
A Case of the Innovation Hub at UZ and Education 5.0

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ABSTRACT

This chapter seeks to explore an alternative approach that harmonises the concepts of smart cities, human capability upliftment, and sustainable development, using the case study of the Innovation Hub at the University of Zimbabwe and the Education 5.0 model as a lens. The concept of smart cities built around the ideals of sustainable, liveable and human-empowering city spaces is gaining global currency. From a rationalistic theoretical perspective of city mapping and geospatial allocation of urban spatiality for sustainable socio-economic development, it is envisioned that the construction of sustainable cities and innovative technological hubs would transform national economic grids and empower its citizens through smart solutions built on Information and Communication Technologies (ICT's) leading to smart transport systems, smart e-commerce and smart entrepreunship initiatives. Although this perspective is promising and utopian in its character and conceptual construction, it hardly leads to empowered cities and equitable city spaces offering spatial justice.

INTRODUCTION

The concept of smart cities, built around the ideals of sustainable, livable, and human-empowering urban spaces, has gained significant global traction in recent years (Angelidou, 2014; Meijer & Bolívar, 2016). From a rationalistic, technocratic perspective, the development of smart cities centered on the strategic allocation of urban space and the integration of Information and Communication Technologies (ICTs) is envisioned to transform national economic frameworks and empower citizens through innovative technological solutions (Mosannenzadeh & Vettorato, 2014; Neirotti et al., 2014). However,

this utopian vision of smart city planning has been critiqued for its potential limitations in achieving true spatial justice and equitable urban spaces, particularly for marginalised members of the community (Hollands, 2008; Yigitcanlar & Dur, 2013).

The narrow focus on technological advancement and rational urban mapping often fails to adequately address the complex socio-economic and cultural dynamics that shape urban environments (Vanolo, 2014; Kitchin, 2015). As a result, the promises of smart cities have, in some cases, fallen short of empowering all citizens and ensuring inclusive development (Hollands, 2008; Brenner & Theodore, 2002). This chapter seeks to explore an alternative approach that harmonises the concepts of smart cities, human capability upliftment, and sustainable development, using the case study of the Innovation Hub at the University of Zimbabwe and the Education 5.0 model as a lens.

The Limitations of the Dominant Narrative Surrounding Smart City Development

The dominant narrative surrounding smart city development has often revolved around the deployment of advanced technologies, data-driven decision-making, and the optimisation of urban infrastructures and services (Kitchin, 2014; Mora et al., 2017). While this technology-driven approach holds promise for enhancing the efficiency and sustainability of cities, it has been criticised for its potential to overlook the human dimension and exacerbate socio-economic inequalities (Hollands, 2008; Vanolo, 2014).

Scholars have argued that the technocratic focus of smart city initiatives can lead to the marginalisation of certain urban communities, as the benefits of technological advancements may primarily accrue to the affluent and tech-savvy segments of the population (Hollands, 2008; Vanolo, 2014). This suggests that the dominant smart city narrative has the potential to widen existing disparities within urban areas, as the implementation of smart technologies may disproportionately favour the needs and interests of the privileged over those of marginalised groups.

Furthermore, the emphasis on data-driven decision-making and the optimisation of urban systems can result in the prioritisation of efficiency and profitability over social justice and the needs of marginalised communities (Kitchin, 2015; Vanolo, 2014). This critique highlights the risk of smart city initiatives becoming more concerned with the optimisation of urban systems than with addressing the underlying socio-economic and cultural factors that shape urban environments and contribute to inequalities.

Building upon this concern, the dominant smart city narrative has also been criticised for its potential to reinforce the status quo and perpetuate existing power structures, rather than addressing the root causes of urban challenges (Brenner & Theodore, 2002; Hollands, 2008). This critique suggests that smart city initiatives may become tools for urban elites and corporate interests to consolidate their power and influence, rather than empowering diverse urban communities and promoting more equitable and inclusive urban development (Vanolo, 2014; Kitchin, 2015).

In conclusion, the dominant narrative surrounding smart city development, with its focus on technological solutions and data-driven optimisation, has been scrutinised for its potential to overlook the human dimension, exacerbate socio-economic inequalities, and reinforce existing power structures within urban environments. As the smart city concept continues to evolve, it is crucial for policymakers, urban planners, and stakeholders to critically examine the underlying assumptions and potential limitations of this narrative, and to prioritise the development of more inclusive, equitable, and community-centred approaches to urban transformation.

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