

A SWOT Analysis of Smart Cities Frameworks

Portia Mupfumira

Namibia University of Science and Technology
Windhoek, Namibia
pmupfumira@hit.ac.zw

Professor Michael Mutingi, Ph.D.

Namibia University of Science and Technology
Windhoek, Namibia
mmutingi@nust.na

Abstract

During the last decade, the name smart city has been trending around the world playing a role in urban strategic planning. The concept has been recently introduced to embrace and contain modern urban challenges (Dameri, 2017). Chatterjee and Kar, (2015) said that the smart city definition varies concerning the context and perspective through which it is being conceptualised and applied. After a comprehensive literature review; Yin et al., (2015) defined it as 'A system integration of technological infrastructure that relies on advanced data processing with goals of making city governance that more efficient, citizens happier, business more prosperous and the environment more stable'. This is based on technical infrastructure, application domain, system integration and data processing. Smart cities contribute to urban sustainability, this urban sustainability relies on several elements and their mutual relationships, including natural resources, human, technological, social and cultural. Interactions of these have the economic growth, social equity and environmental issues. In their assessment of how future studies will be applied to cities, Miguel et al., (2016) noted that long-term planning for modern cities is difficult due to the increased complexity and diverse nature of the cities that rise due to cities' operational processes and diversity. Since cities differ from country to country and city to city the inception of smart cities has seen flooding of the literature with a plethora of frameworks. In order to develop a sustainable smart city, one needs to make no mistake in choosing the correct framework to work with, hence the purpose of this research is to carry out a swot analysis on different smart cities frameworks.

Keywords

SWOT Analysis, Cities and Framework.

Biography

Portia Mupfumira is a final year Ph.D. student at the Namibia University of Science and Technology, Windhoek Namibia who is currently engaged as a Lecturer and Acting School of Engineering and Technology Postgraduate and Research Coordinator at Harare Institute of Technology, Harare, Zimbabwe. She has a Bachelor of Technology in Industrial and Manufacturing Engineering, and Master of Engineering in Industrial Systems Optimisation. She has over 10 years of experience in the Higher Education Sector. Portia has practical experience in teaching and learning, academic administration and research, in the Higher Education Sector. She has a passion and interest in modelling and simulation and have since introduced System Dynamics Modelling as an Operations Management tool. She has developed Master of Technology in Industrial Engineering and Management curriculum that is under review at the Zimbabwe's higher and tertiary education quality assurance board (ZIMCHE).