

TRESCIMO: European Union and South African Smart City Contextual Dimensions

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Abstract:

Cities increasingly face challenges related to pollution, efficient use of resources (e.g. water, energy) and ensuring a good quality of life for its citizens. Solutions built on existing and emerging technologies such as Cloud computing, Internet of Things, Machine-to-Machine and data analytics can improve on or create services able to address these challenges. These solutions are seen as contributors in creating a Smart City. In Europe Smart Cities have been implemented, while South Africa has only recently started with Smart City initiatives. Current thinking has been to replicate international Smart City instances in South Africa. However, an open question is raised if this is an optimal strategy as differences in context might impact on the delivery of services. This paper extracts and compares contextual differences between Europe and South Africa, and based on those insights analyse whether full European solutions will deliver on the promise of a South African Smart City. Furthermore the question is raised if insights into a South African Smart City can strengthen European initiatives. A need for inter-continental automated testing facilities such as those developed by TRESCIMO is identified through which integrated experiments can be conducted to provide insight and answers.