

Redefining the Smart City: Smart and liveable cities through participatory Geodesign

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At present, 50% of the world's population lives in cities. In another 30 years this figure is expected to reach 70%. This increase in urban populace is a source of opportunities for future cities, for instance, people's move to urban life is concentrating economic activities in urban environments. As a result, the world's 100 largest cities generate almost 40% of global GDP. While many cities are welcoming this trend, urban growth needs to be managed effectively as it burdens the city's physical and social infrastructures.

One model proposed to address these challenges is the vision of a Smart City in which smart grids, sensor networks and analytical models fed by feedback loops are managing the various urban flows. The goal is to increase the efficiency of a city by automating the management of its infrastructure thereby reducing operational costs, waste of resources and pollution, etc. and increasing the city's sustainability. This vision, however, does not take a vital urban layer into account: citizens.



Recent developments in personal and on-line communication technologies have connected citizens in unprecedented ways thereby creating the so-called networked society. These self-organizing, assertive and engaged citizens are crucial for a healthy and financially sustainable urban future as they create new types of value by building innovative (urban) services and are actively pursuing good living by caring for their city. They are a counterforce to the ongoing decentralisation and deregulation of traditional governing bodies. This urban layer is, however, highly volatile, difficult to control and predict, and quick to move on if a city does not provide the right living conditions.



Reconciling the necessary top-down management and governance strategies needed to create efficient and sustainable cities with the bottom-up forces created by the new citizens who seek good urban living is an open challenge: how do we make sure that the technology we deploy to manage our infrastructure answers the citizens' needs? How do we adapt governance models such that citizens become co-owners of the city instead of mere consumers?

Geodesign ties all aspects of future cities - people, design, geographic sciences and information technologies - together and makes for a powerful framework. This presentation outlines our views on geodesigned future cities that go beyond technocratic dystopias.

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