

**Digital Frontiers Seminar:
“The Power of Self-solving in the
Singapore Digital Village:
Sharing Economy as a Case Study”**

**Friday, 18 September 2015
Conference Room, Level 1, Oei Tiong Ham Building**

Digital Frontiers Seminar: “The Power of Self-solving in the Singapore Digital Village”

Participation, Innovations and Challenge

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IPS Digital Frontiers Seminar : 18th Sept 2015
The Power of Self-Solving in the Singapore Digital Village:
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Cities: from sustainable to smart to regenerative
Lai Choo Malone-Lee



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**Our Home
Our Environment
Our Future**

**Sustainable Singapore
Blueprint 2015**

**Sustainable Singapore Blueprint
2015:
Sustainable Land Planning
Principles**

- **Develop an efficient city** and adopt innovative ideas to improve our living environment and optimise land use
- **Promote the use of public transport** by providing an extensive rail network and intensifying land use around rail stations
- **Decentralise commercial centres** to provide more jobs near homes, as well as to reduce the need to travel and peak hour traffic congestion
- **Provide a quality living environment** by offering a wide variety of housing choices and comprehensive amenities within each new town
- **Conserve our natural and built heritage** by safeguarding Nature Reserves and Nature Areas and carefully conserving buildings with outstanding architecture and historical significance
- **Foster community spirit** through the provision of public spaces and by facilitating active civic participation in sustainable development

Towards Being World's First Smart Nation

Singapore is building a Smart Nation that functions beyond the capabilities of a Smart City. With an ultra-high speed, pervasive, intelligent and trusted ICT infrastructure, as well as a vibrant ICT ecosystem with a ready pool of tech talent, which are achievements of the IN2015 masterplan, Singapore is ready to be a Smart Nation.



DELIVERING E-GOVERNMENT

1st


in the use of "digital government", a comparative study by Accenture in 2014.



DOING BUSINESS IN SINGAPORE

2nd

most competitive economy and most networked country in the World Economic Forum's "Global Information Technology Report" 2014.



LIVING IN SINGAPORE

1st

in Asia with the highest quality of living in 2014 report by Mercer Survey.



“In a Smart Nation, we seek to create an **anticipatory Government** that can better serve our citizens and better able to use technology to enhance public services, **empowering citizens** to able to be more participatory in engaging government, as well as **businesses**, to make more **informed decisions** and meaningful choices in their daily living”

Dr Yaacob Ibrahim, Minister for Communications and Information

Source: Panagiotis Tsarchopoulos at 11 July 2014 <http://www.urenio.org/2014/07/11/singapores-smart-nation-vision/>

“Smart is the New Green”

The initiatives of making a city smart have emerged as a model to mitigate and remedy current urban problems and make cities better as places to live.

Hence some commentators view “smart city” as a new icon for a sustainable and livable city.



Being smart is the means or ways to solve problems of cities, make them more livable, more sustainable

Smart cities are cities where investments in human and social capital, and traditional and modern communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance (Caragliu, Del Bo and Nijkamp 2011, 6)




CORE DIMENSIONS OF A SMART CITY

"a city is smart when investments in human/social capital and IT infrastructure fuel sustainable growth and enhance a quality of life, through participatory governance"

- **Technology** (infrastructures of hardware and software),
- **People** (creativity, diversity, and education), and
- **Institution** (governance and policy)






Human Factors

- The role of **human capital** and education in **urban** development
- “**Smart people concept**” advocates factors like affinity to life long learning, social and ethnic plurality, flexibility, creativity, cosmopolitanism or open-mindedness, and participation in public life.
- **Urban problems can be solved** by means of creativity, cooperation amongst stakeholders
- **Social learning**, and education, and **smart workforce**, - importance of a creative environment
- **Social inclusion** of urban residents in public services, soft infrastructure (knowledge networks, voluntary organizations,), **urban diversity**, cultural mix, social/human/relational capital, and knowledge base such as educational institutions and R&D capacities .

People Wellbeing Liveability

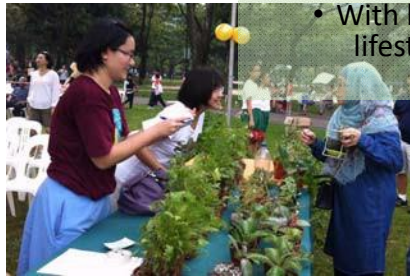
Wellbeing: ...beyond basic needs to include other aspects of life such as family life, work relationships....to also embrace people’s ability to pursue their goals, to thrive and “feel satisfied” with their life (OECD, 2011)



Neighbourhoods and Community



- Neighbourhood is locale- and proximity based
- Community - a network of people with common interests and the expectation of mutual recognition, support and friendship.
- With high mobility, internet and individual lifestyle choice propinquity is no longer a prerequisite for association

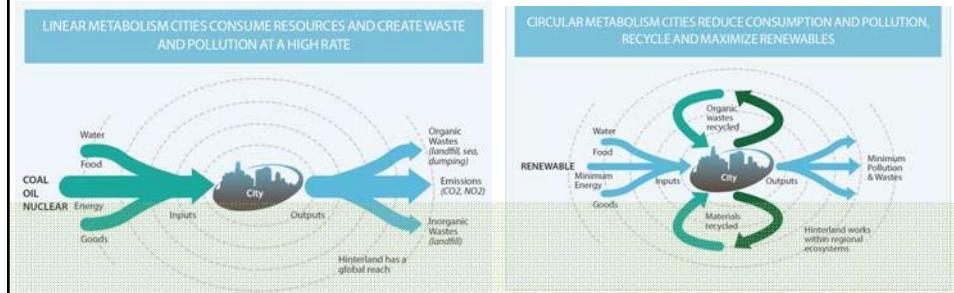


The centrality of resource : using resources smartly , doing more with less



The smart city concept can only help a city to reach sustainability if it allows it to function within the natural boundaries of the Earth

Promoting Closed-Loop Metabolism

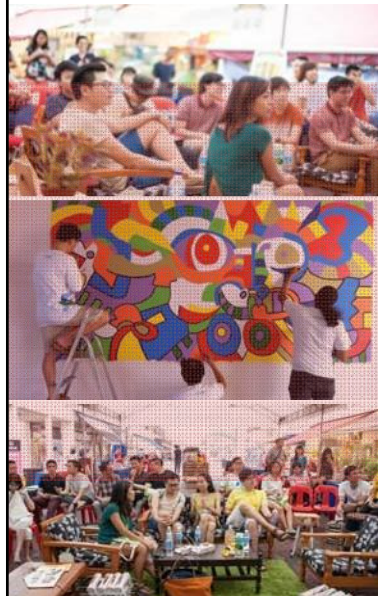


Source: Girardet, H., Schurig, S., et. al. (2013), Towards the Regenerative City, for the Expert Commission on Cities and Climate Change of the World Future Council

From sustainable/smart city to regenerative city



Top-down or Bottom-up



A smart city can be built from top down or bottom up, but active involvement from every sector of the community is essential, to create synergy, allowing individuals to build upon each other for faster progress, resulting in involved, informed and trained critical mass necessary for social transformation

Government's Role

- The support of government and policy for governance is fundamental
- Smarter government will do more than simply regulate the outputs of economic and societal systems.
- It **interconnects** dynamically with citizens, communities, businesses to spark growth, innovation, and progress.
- Means collaborating with communities—to become more transparent and accountable, **to manage resources more effectively**, and to **give citizens access to information about decisions** that affect their lives.



THANK YOU



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