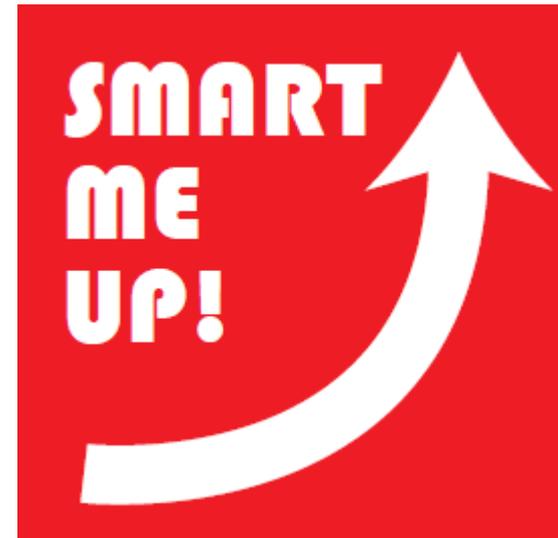


Rania El Messeidy

Assistant Professor

Faculty of Architectural Engineering,
Beirut Arab University, Beirut, Lebanon

**Potable Streets:
Smart Urban Solution**
Intelligent Mobility Solutions



FACTS

Cities and communities around the world face intractable challenges, including:

Increased populations:

More than 50 percent of the world's population lives in cities, placing massive pressure on city infrastructures (transportation, housing, water, power, and city services)

Polarized economic growth

Increased greenhouse-gas emissions (GHGs):

GHGs are forcing cities to develop sustainability strategies for energy generation and distribution, transportation, water management, urban planning, and eco-friendly (green) buildings.

Decreased budgets

The economic climate continues to place huge budgetary constraints on cities, which are becoming limited in their ability to respond to these pressures.

What is Smart City ?

“The Smart Energy City is highly energy and resource efficient, and is increasingly powered by renewable energy sources; it relies on integrated and resilient resource systems, as well as insight-driven and innovative approaches to strategic planning.

The Smart Energy City, as a core to the concept of the Smart City, provides its users with a liveable, affordable, climate-friendly and engaging environment that supports the needs and interests of its users and is based on a sustainable economy.

According to Transform

(EU FP7 TRANSFORM) a **Smart Energy City**

is defined as follows:

What is Smart City ?

A **city is smart** when investments in human and social capital and traditional (transport) and modern (ICT) infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance.

This because there has been a need to measure the level of “**smartness**” and at the same time there has been a need to find some key elements which are crucial for becoming a Smart Energy City; These 8 key elements are:

Also according to Caragliu (2009)

Smart Energy City

is defined as follows:

Key Elements of Smart Cities

These 8 key elements are:

- Resource system integration
- Access to energy services
- Resilience
- Energy Efficiency
- Renewable Energy
- Active and engaged users
- Sustainable Economy
- Smart Governance



Also according to Caragliu (2009)

Smart Energy City

is defined as follows:

Smart Cities: More Complex !!!

Smart and Sustainable Cities:
more complex than you may
think?



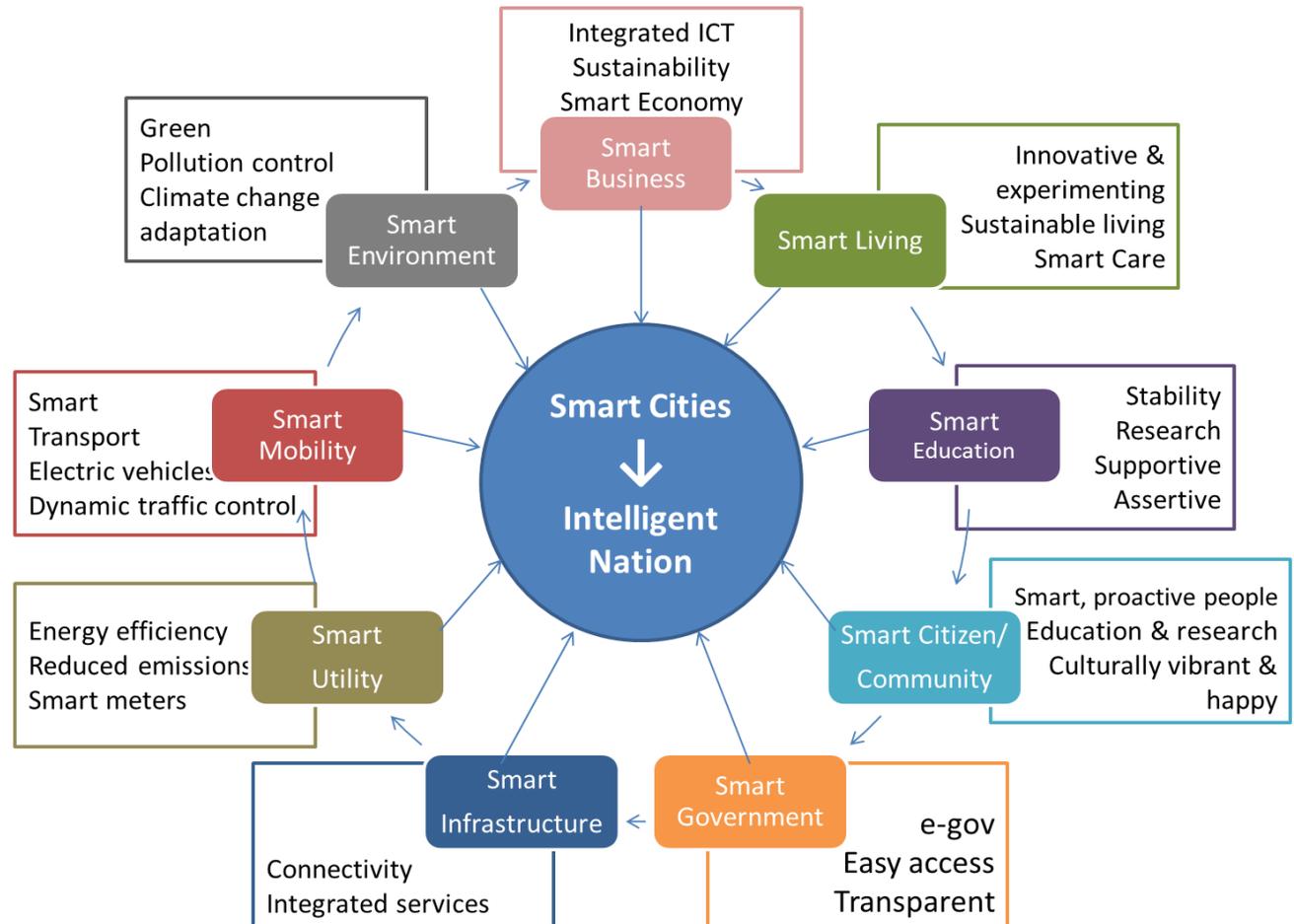
Ricardo
Energy & Environment

Posted by Tim Curtis - Director, Operational Development on 16 May 2014

Smart Cities: Intelligent Nation

TECHNOLOGY EVANGELIST

Business Strategist and Commercialisation of any new, Disruptive and Emerging Technology



Smart Cities in India

Date: [10/12/2014](#) Author: [Inder Barara](#)

New Trends in Urban Development

Three new global trends in urban development the 21st century has brought it:

The first trend

which has emerged against the background of an international consensus on the need to adopt low-carbon lifestyles on a global basis in response to the threat of global warming, is toward “low-carbon cities” that reduce the amount of CO₂ (carbon dioxide) emitted by urban activity.

New Trends in Urban Development

Three new global trends in urban development the 21st century has brought it:

The second

a consequence of the economic progress happening in the emerging markets of Asia, particularly China, as well as in South America and elsewhere, is the concentration of population in cities and the associated new construction of large cities.

New Trends in Urban Development

Three new global trends in urban development the 21st century has brought it:

The third trend

is the trend toward health-focused urban development in response to the aging of urban populations in Japan and other developed economies which emphasizes medical and welfare considerations and seeks to eliminate intergenerational disparities.

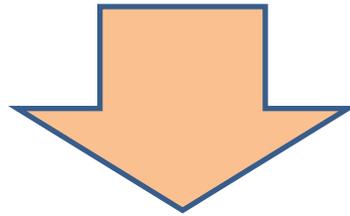
BUT

1. Innovative and smart solutions are available in some cities while in others the uptake is low because the impacts of these solutions have not been objectively verified and there is a lack of confidence that the solutions can also be applied in other contexts and cities

2. The development of smart solutions in cities is largely dependent on procurement decisions made by city administrations and local governments.

3. The complexity of the current major societal challenges, in urban centres, demands the wide-scale deployment of solutions and services based on accurate and timely information.

4. Urban planning is traditionally perceived as a complex and time-consuming process. Unclear plans, possible misunderstandings and decision-making without stakeholder participation may cause complaints and delays even in long-prepared projects.



New visual smart city planning solutions

for illustrating urban projects are needed.

Smart, Low-Cost Solutions

Cities are
not
problems.
They are
solutions.

-Jaime
Lerner

“Every time we try to create a solution, we have to have a good equation of co-responsibility with the public. That means it’s not a question of money and it’s not a question of skill; it’s how do we organize the equation of co-responsibility? We need to work with **low-cost solutions**”



Jaime Lerner

Smart, Low-Cost Solutions



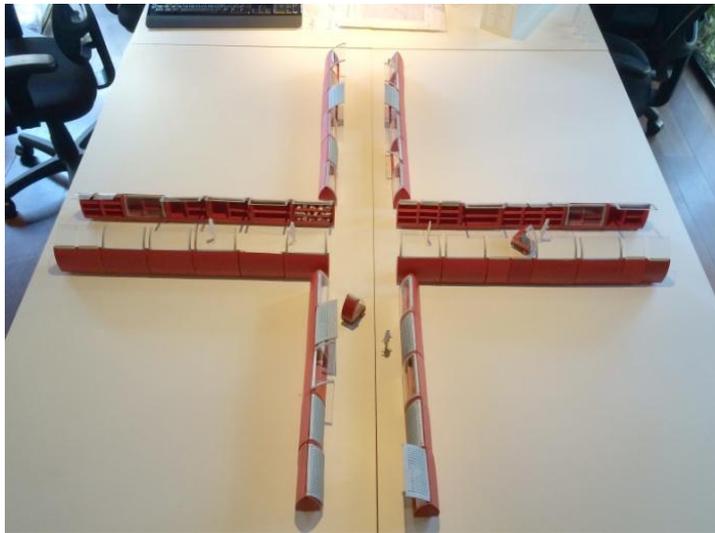
“Some places in some cities have become decayed. There’s no life. When that happens, it’s very difficult to bring back life because people don’t want to live in a place like that. However, the moment we bring street life, people will want to live there again. That’s why we designed the **portable streets**. On a Friday night, we can deliver a portable street and remove it Monday morning. **We can put a whole street life in front of a university or any place, bringing street life back**”

Jaime Lerner



Portable Streets as a Low Cost Urban Solution

“**portable street**” concept, a configurable, moveable piece of hardware that enables storefronts to be set up quickly.



The concept of the **portable streets** is based on the fact that a large portion of today's cities exists in informality, and that it is necessary to find ways to integrate the formal and the informal sectors.

This piece of urban furniture allows accommodating street vendors with quality and comfort, adding a new element to the urban landscape.

INSPIRED BY

➤ Inspired by the many **bouquiniste of Paris**, the portable streets are being tested in Cracolandia, a “tough” part of Sao Paulo, in an effort to bring back street life

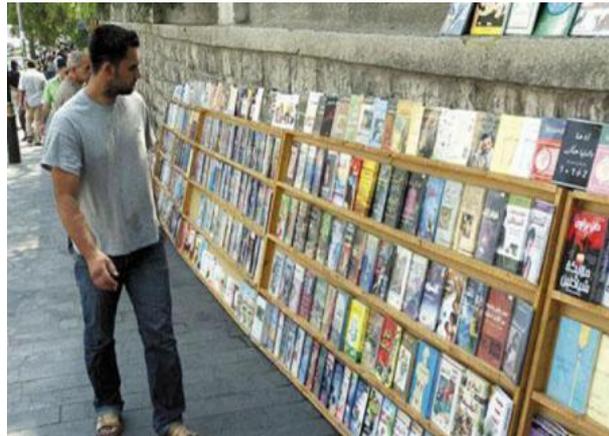
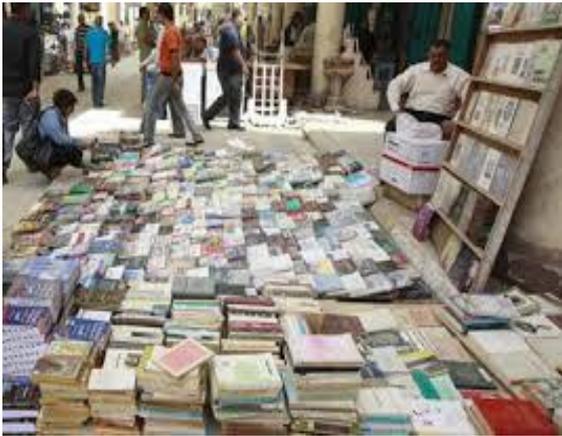


ALSO,

➤ **Altmarkt, Cottbus, Germany** in previous time was used as a parking lot, which was not an efficient use. Festivals and activities, brought life to it as most people choose to walk where there is a greater variation of walking, buying, interact.



- Infact it is found previously in some examples like bouquinistes of Paris, also it is be found in arabic countries like Syria and **Egypt**.
- **"Cairo University sidewalk"** could represent a simple example of portable street, it is a sidewalks bookstore which it's main activity is bying books, but as well it does not depend on any pieces but just puting books on the sidewalks.



ADVANTAGES

- **A Portable Street is a quick and easy solution to make a better life in the street in which is found.**
- **It brings life and activities to decayed streets and urban places which serve in the urban development of the city without costs.**
- **It does not need many procedures, insurance or bureaucratic processes to be done.**
- **It could be oriented to various kinds of products which can represent a source of trading for the street residents.**
- **It does not influence on traffic mobility as it depends on pedestrian mobility.**
- **It serves in and develops the social interaction between the street residents as it is a good way to integrate the formal & informal sectors.**

CONCLUSION

Cities and communities around the world are facing intractable challenges. The need to **reduce humanity's ecological** footprint to a sustainable level is now a must.

Unclear plans, possible misunderstandings and decision-making without stakeholder participation may cause complaints and delays even in long-prepared projects.

New visual smart city planning solutions for illustrating urban projects are needed.

A **Portable Street** can introduce a smart solution to put a whole street life in any place, it can be an innovative urban solution to transform transport, creating walkable and livable environments with better air quality.

A **Portable Street** can introduce a smart solution to transfer the informal streets or cities in a smooth and easy way to formality in a low cost, procedures and bureaucratic processes adding a new element to the urban landscape.

**Thank You for Your
Attention!**

Rania El Messeidy, PhD

rania_h2000@yahoo.com

raniaelmesseidy@gmail.com