TABLE OF CONTENTS

WEEK 9 – Smart Liveability

Livibility

Livability is the sum of the factors that add up to a community's quality of life—including the built and natural environments, economic prosperity, social stability and equity, educational opportunity, and cultural, entertainment and recreation possibilities.

Intergovernmental organizations

The exercise of political, economic and administrative authority in the management of a country's affairs at all levels. Governance comprises the complex mechanisms, processes, and institutions through which citizens and groups articulate their interests, mediate their differences, and exercise their legal rights and obligations.

Good governance is among other things participatory, transparent and accountable. It is also effective and equitable and it promotes the rule of law. Good governance assures that political, social and economic priorities are based on broad consensus in society and that the voices of the poorest and the most vulnerable are heard in decision-making over the allocation of development resources.

Governance includes the state, but transcends it by taking in the private sector and civil society. The state creates a conducive political and legal environment. The private sector generates jobs and income. The civil society facilitates political and social interaction Emobilizing groups to participate in economic, social and political activities. Because each has its weaknesses and strengths, a major objective of our support for good governance is to promote constructive interaction among all three.

The regularized ways of ordering human societies at all levels of organization from family units to entire societies

Good governance occurs when societal norms and practices empower and encourage people to take increasingly greater control over their own development in a manner that does not impinge upon the accepted rights of others

Quality of Life Survey (Mercer)

The Quality of Life Survey of Mercer is one of the best-known contemporary livability rankings. The survey exists out of 39 criteria, among others: safety, education, hygiene, health care, culture, environment, recreation, political-economic stability and public transportation. The audience of the 'Quality of Life Survey' are expatriate business elite (S. Cairns, 2015).

Most Livable City Index (Monocle)

The Most Livable City Index of Monocle is one of the best-known contemporary livability rankings. Criteria in this survey are safety/crime, international connectivity, climate/sunshine, quality of architecture, public transportation, tolerance, environmental issues and access to nature, urban design, business conditions, pro-active policy developments and medical care. The audience of the 'Most Livable City Index' are the global creative middle class (S. Cairns, 2015).

Global Livability Survey (EIU)

The 'Global Livability Survey' of the Economist Intelligence Unit is one of the best-known contemporary livability rankings. Criteria in this survey include: availability of goods and services, low personal risk, and an effective infrastructure. The ranking provides scores for lifestyle challenges in 140 cities worldwide. The audience of the 'Global Livability Survey' are policy and business communities (S. Cairns, 2015). Critics: EIU does not take into account the cost of living as a factor in 'livability'.

Better Life Index (OECD)

The 'Better Life Index' of OECD is one of the best-known contemporary livability rankings. The OECD states that there is more to life than the cold numbers of GDP and economic statistics. This Index allows to compare well-being across over 30 countries worldwide, based on 11 topics the OECD has identified as essential, spanning material living conditions and quality of life. The audience of the 'Better Life Index' are the government, business and civil society (S. Cairns, 2015)

Human Development Index (OECD)

The 'Human Development Index' of OECD is one of the best-known contemporary livability rankings. A criteria of this index is among others the life expectancy at birth. The HDI als measures the education index (mean years of schooling and expected years of schooling) and the standard of living (GNI per capita). The audience of the 'Human Development Index' are the government, business and civil society (S. Cairns, 2015).

Internet of Things (IoT)

The internet of things (IoT) is the internetworking of physical devices, vehicles, buildings and other items—embedded with electronics, software, sensors, actuators, and network connectivity that enable these objects to collect and exchange data. In 2013 the Global Standards Initiative on Internet of Things (IoT-GSI) defined the IoT as "the infrastructure of the information society." The IoT allows objects to be sensed and/or controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit. When IoT is augmented with sensors and actuators, the technology

becomes an instance of the more general class of cyber-physical systems, which also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. Experts estimate that the IoT will consist of almost 50 billion objects by 2020.

British entrepreneur Kevin Ashton coined the term in 1999 while working at Auto-ID Labs (originally called Auto-ID centers, referring to a global network of objects connected to radio-frequency identification, or RFID). Typically, IoT is expected to offer advanced connectivity of devices, systems, and services that goes beyond machine-to-machine (M2M) communications and covers a variety of protocols, domains, and applications. The interconnection of these embedded devices (including smart objects), is expected to usher in automation in nearly all fields, while also enabling advanced applications like a smart grid, and expanding to the areas such as smart cities.

"Things," in the IoT sense, can refer to a wide variety of devices such as heart monitoring implants, biochip transponders on farm animals, electric clams in coastal waters,automobiles with built-in sensors, DNA analysis devices for environmental/food/pathogen monitoring or field operation devices that assist firefighters in search and rescue operations. Legal scholars suggest to look at "Things" as an "inextricable mixture of hardware, software, data and service". These devices collect useful data with the help of various existing technologies and then autonomously flow the data between other devices. Current market examples include smart thermostat systems and washer/dryers that use Wi-Fi for remote monitoring.

As well as the expansion of Internet-connected automation into a plethora of new application areas, IoT is also expected to generate large amounts of data from diverse locations, with the consequent necessity for quick aggregation of the data, and an increase in the need to index, store, and process such data more effectively. IoT is one of the platforms of today's Smart City, and Smart Energy Management Systems.