

PALESTRA – Dia 08/03/18 – 19:00 hs - LASSU-PCS-EPUP

**"Explorando Cidades Inteligentes para Melhoria de Vida:
Perspectivas de Inovação e Sustentabilidade"**

Por : Florent Pratlong, Universidade de Sorbonne, Paris 1 - França



Local:
Auditório do PMT - Departamento de Engenharia Metalúrgica e de Materiais da EPUSP
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Professor na Universidade de SORBONNE, PARIS 1. Diretor do Mestrado IMT (Inovação e Gestão Tecnológica). Secretário científico na Academia das Tecnologias na França. Vice-Diretor da Cátedra SORBONNE ETI (Empreendedorismo, Território e Inovação).

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Projetos de Smart Cities

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Connected operations

Deeper insight for end users & operators



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Work
Smart
not **hard**

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Trend: Smart Everything		
 Smart Watch	 Smart TV	 Smart Car
 Smart Health	 Smart Home	 Smart Kegs
 Smart Space	 Smart Industries	 Smart Cities
<p>Washington University in St. Louis http://www.cse.wustl.edu/~jain/talks/iots_ssc.htm ©2016 Raj Jain</p>		

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Global cities are expected to do more with less

Facing financial pressure, global climate and technological challenges

City must define their smart city **strategy and policy** that fits their need, enhances operational performance and enables them to take better fact-based decision.



What's Smart?

- Old: Smart = Can think
- Computation= Can Recall, Storage
- Now: Smart = Can find quickly, Can Delegate
- Communicate = Networking
- Smart Grid, Smart Meters, Smart Cars, Smart homes, Smart Cities, Smart Factories, Smart Smoke Detectors, ...



Not-Smart Smart

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How to define Smart Cities ?

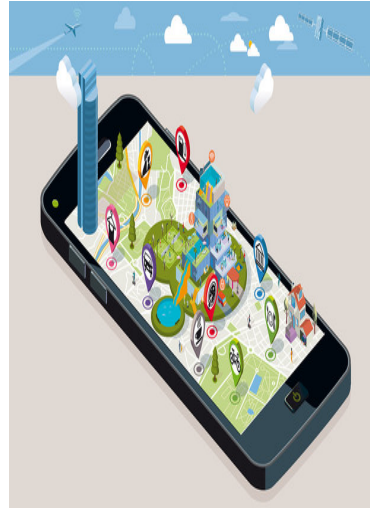
- Digital City"
- "Interactive City"
- "Smart city"
- "Hybrid City"
- "City 2.0"
- "Ubiquitous City"
- "Augmented City"
- "Pervasive City"
- "Connected City"



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How to define Smart Cities ?

- Networking of the actors of the daily of the whole of a city by...
- ... the development of information flows and exchanges and...
- ... valuing the city's "Information capital"
- the increase in the supply of shared knowledge



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Serving the Citizen « Citizen Centric »,



- Access to daily services in the urban area / gaining fluidity in mobility situations
- Adapt to its lifestyle, movements, its constraints to exchange with the other (social) "I want a global offer of services"
- Associating a territorial continuum with a continuum of services and objects around the user

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Intelligent objects in the urban area

- Disseminate networks of interconnected objects in the urban space and in the basement
- Increase the user's daily environment
- To offer an open and contributory platform of information and digital resources linked to the life of the citizen (travel, trade, transport,...)



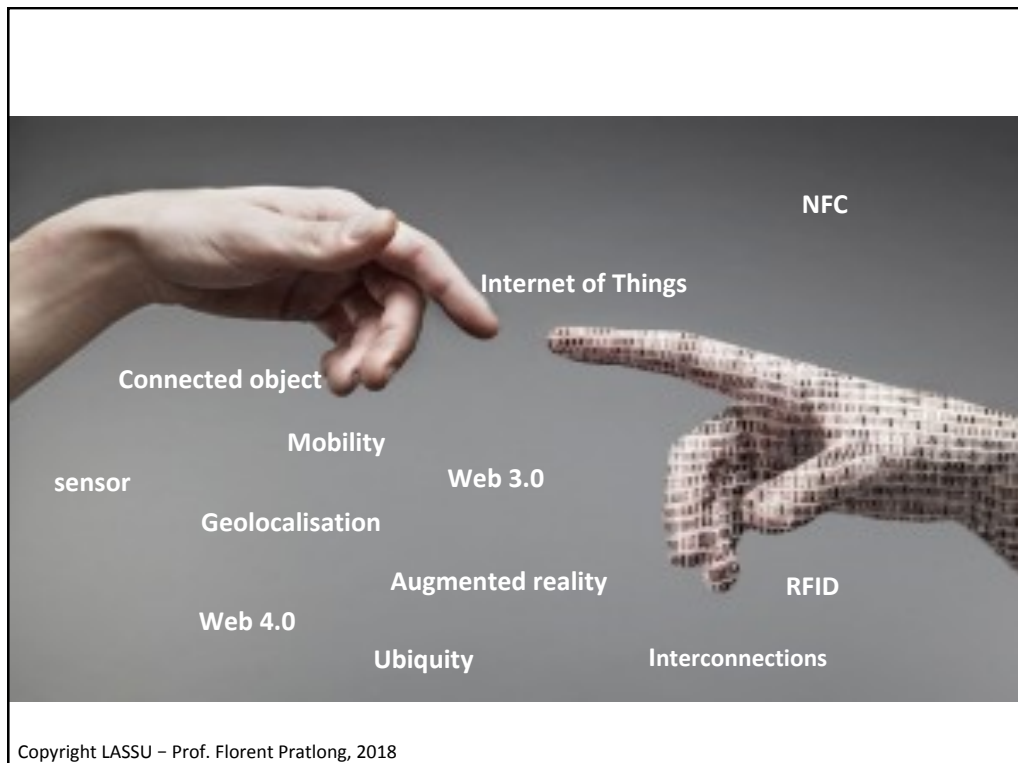
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List of smart cities in the world

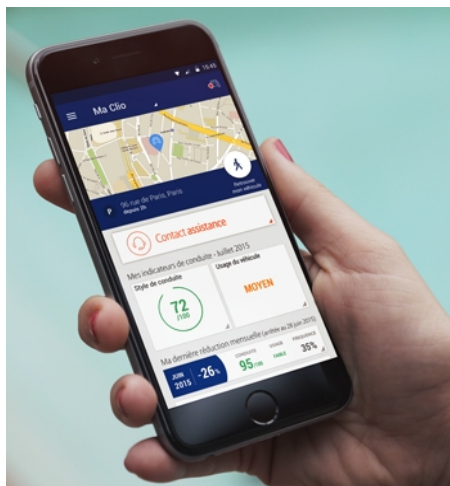
City	Country	Year	Level
Amsterdam	Netherlands	2014	Aspirational
Helsinki	Finland	2014	Aspirational
Johannesburg	South Africa	2014	Aspirational
Shanghai	China	2014	Aspirational
Buenos Aires	Argentina	2014	Gold
Makkah	Saudi Arabia	2014	Gold
Melbourne	Australia	2014	Gold
Barcelona	Spain	2014	Platinum
Boston	United States of America	2014	Platinum
Dubai	United Arab Emirates	2014	Platinum
London	United Kingdom	2014	Platinum
Rotterdam	Netherlands	2014	Platinum
Toronto	Canada	2014	Platinum
Los Angeles	United States of America	2015	Platinum

Ref: <http://www.dataforcities.org/registry>

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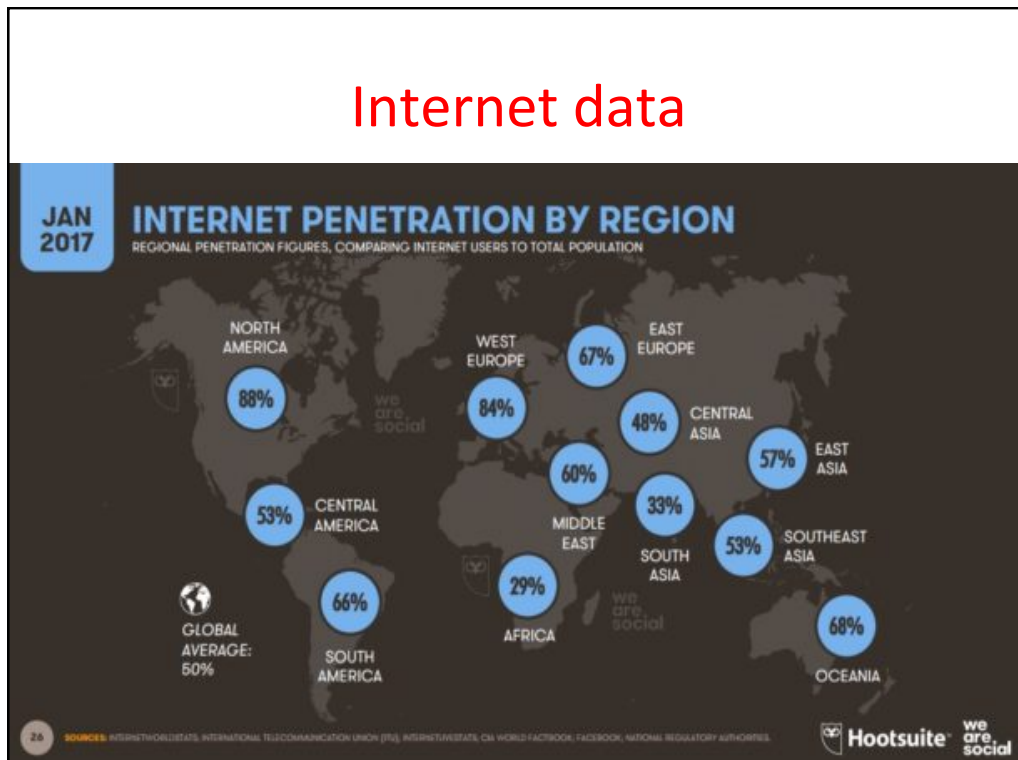
Hyperconnectivity



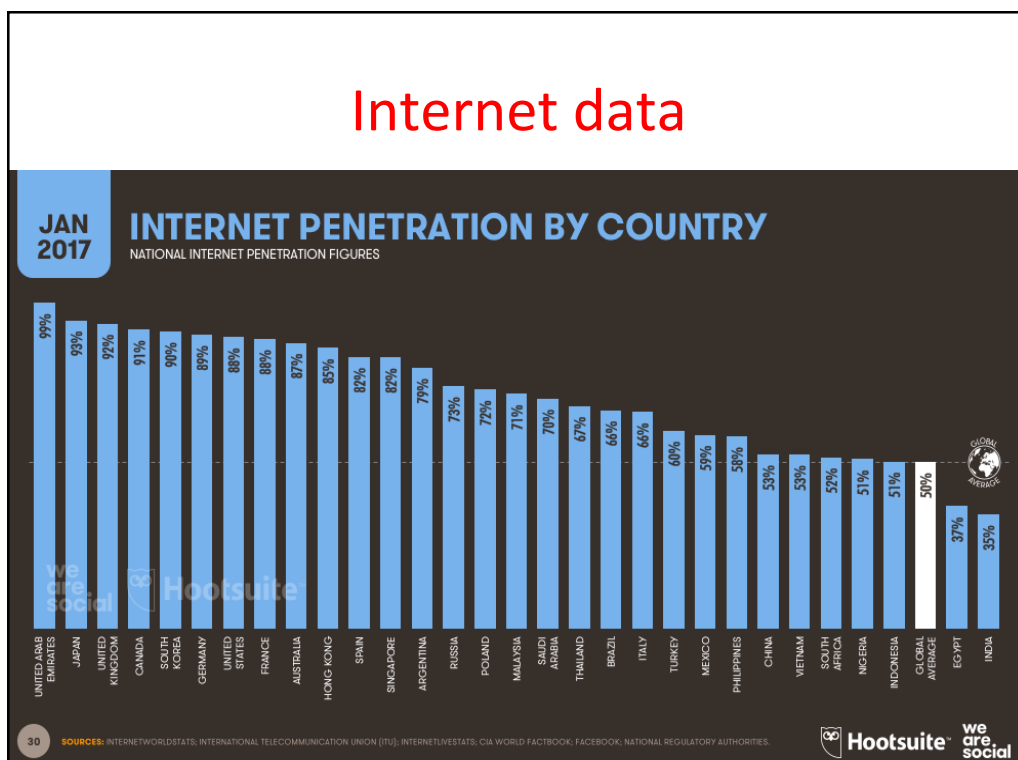
- Hyperconnectivity vision disrupts and transforms through geo-location and connected objects.
- What kind of hyperconnectivity ?
- Techno for what ?

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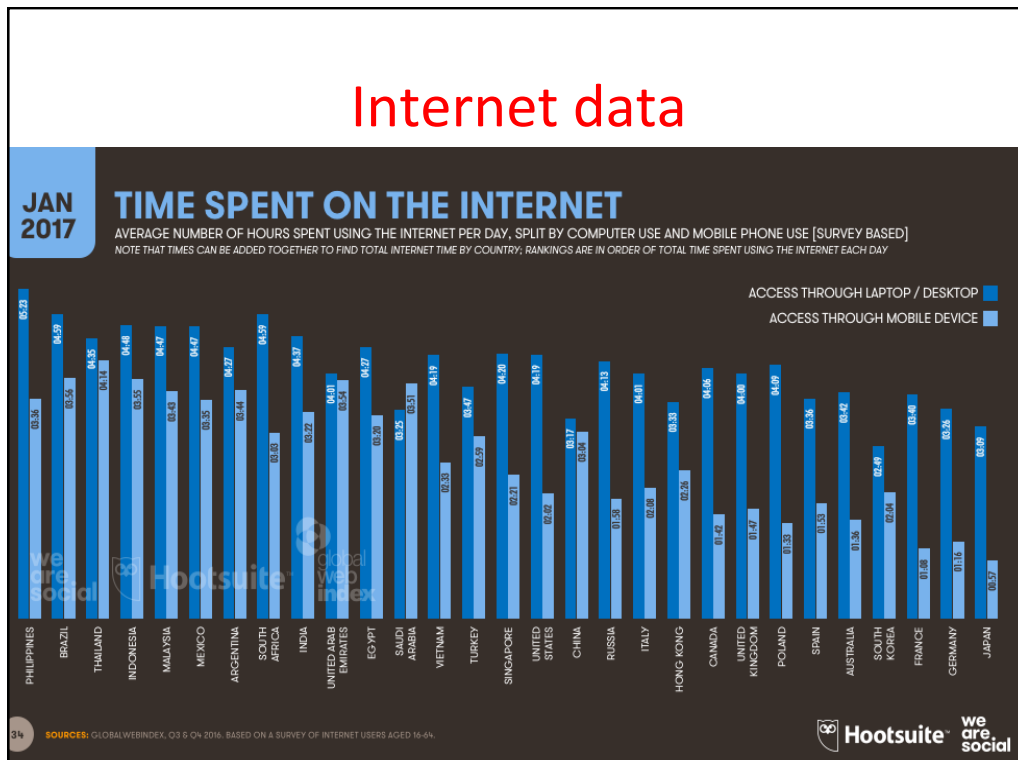
Internet data



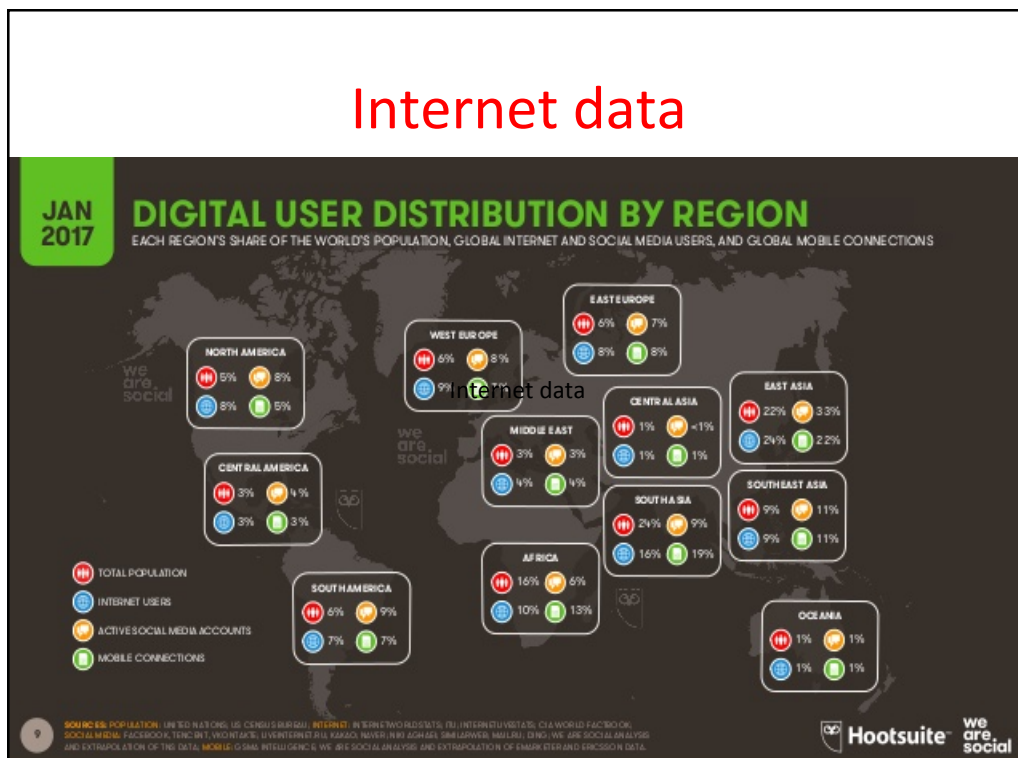
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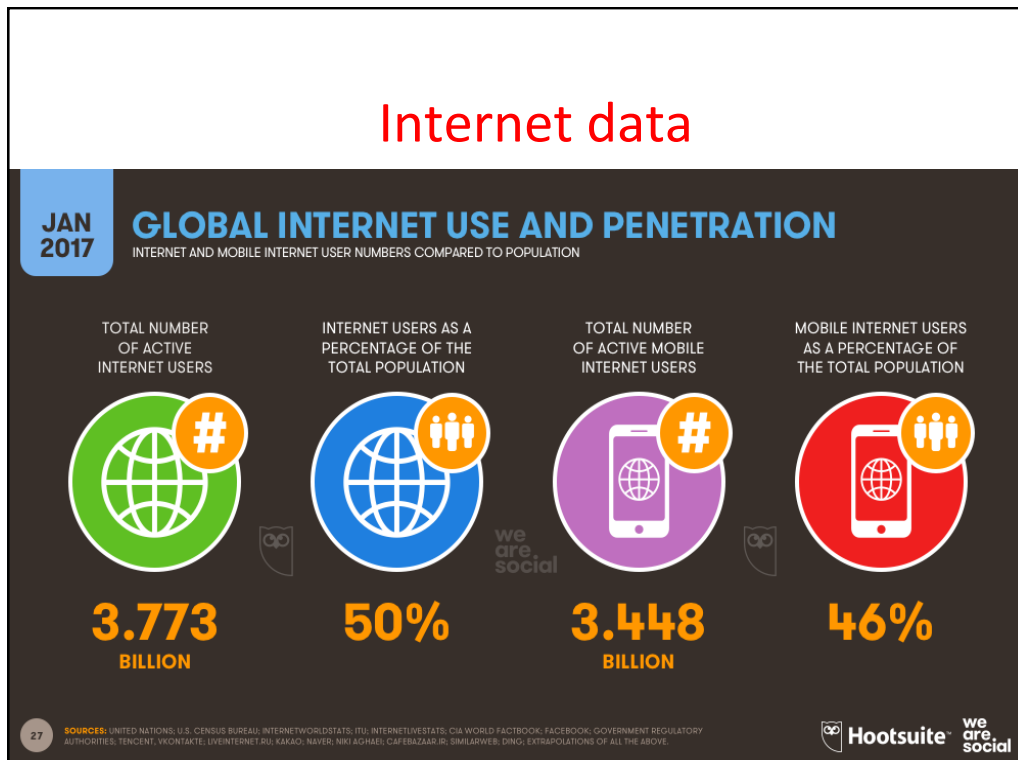
Internet data



Internet data



Internet data



Zombi - Geek



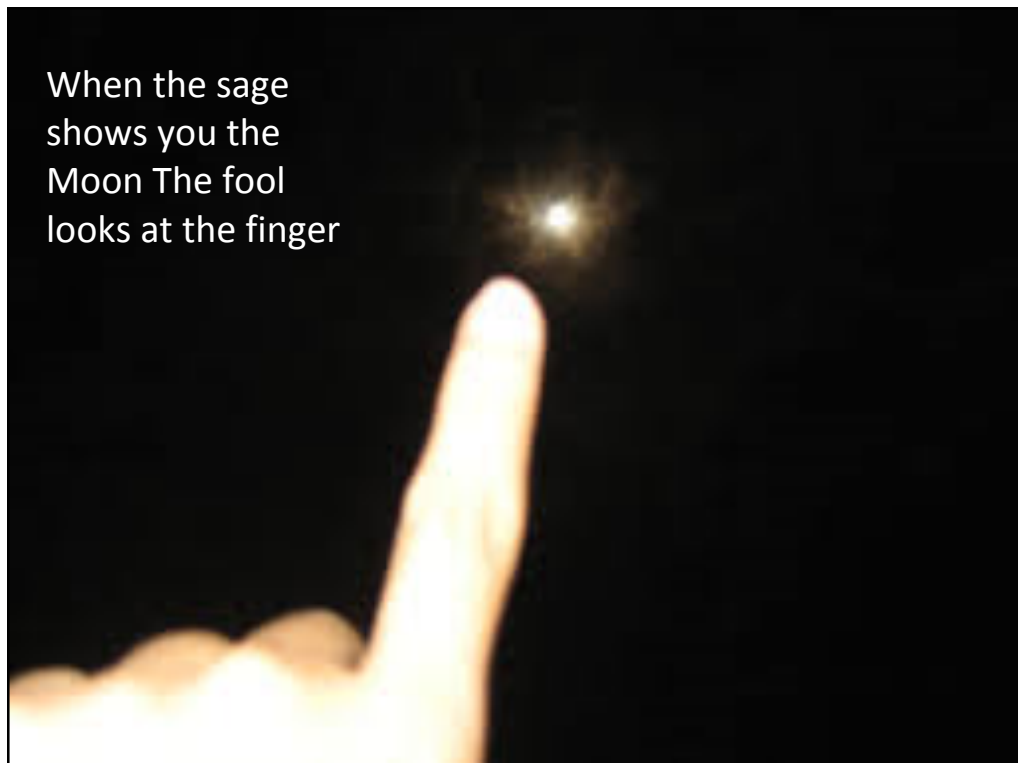
- Geek Zombies are hyperconnected but they have no social link !
- A socialization process
- This dehumanization of the social bond through urbanization has cut off all links with cultural practices.

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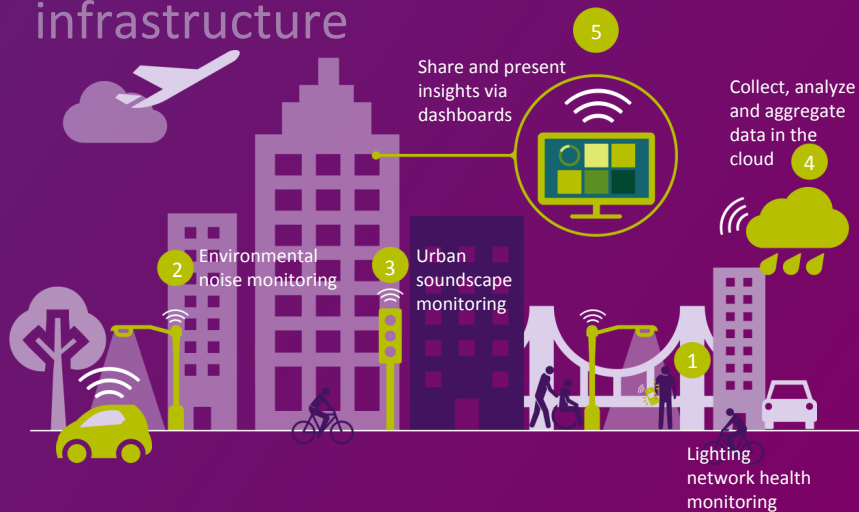
World wide flow of transmission



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Exploring new value by leveraging existing, ubiquitous infrastructure



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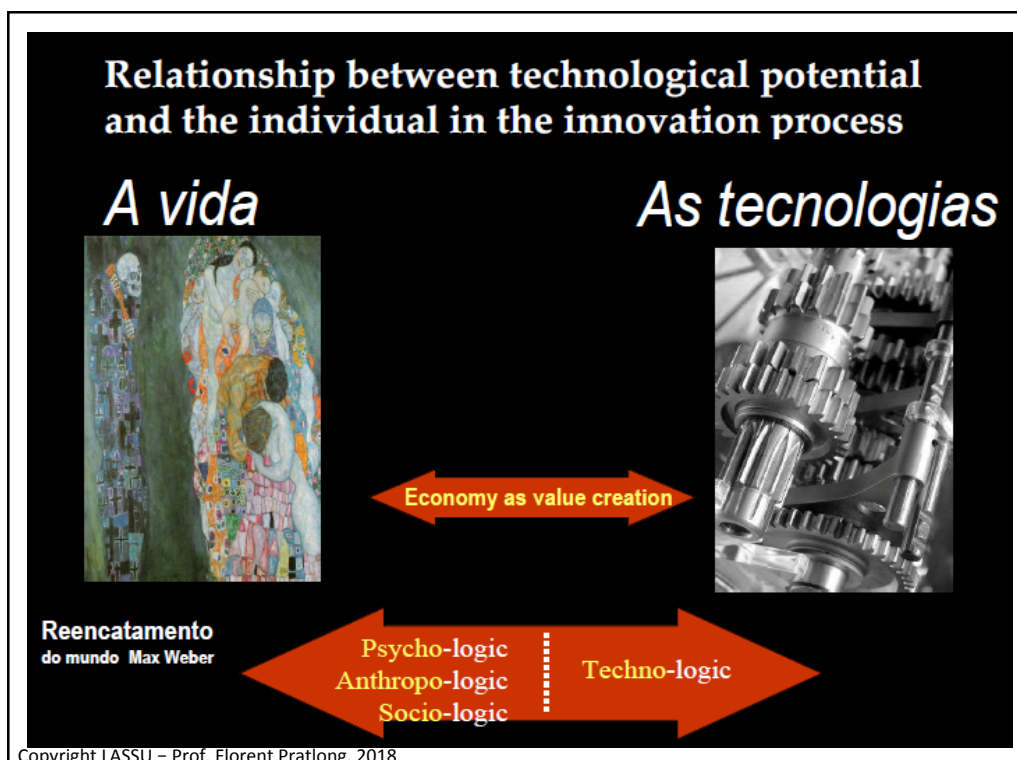
Evolving smart city applications Responding to changing needs



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WHERE is life in the city ?

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Water shortage in Sao Paulo



- Resource scarcity, global warming, population explosion, urban concentration, increase in the number of megacities, disruption of major global economic balances ... The scale of the issues related to the urban phenomenon that our generation and those who will follow will have to face is NO more to demonstrate.

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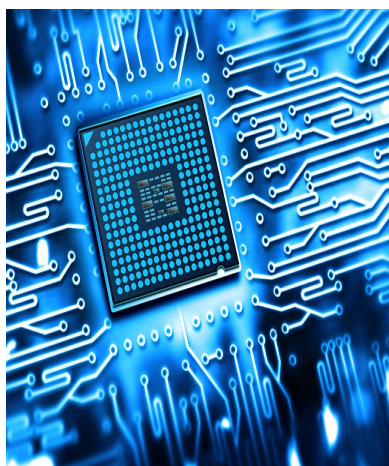
The Agora

- The essence of the city is to be a place of life and sharing, a collaborative space par excellence in which we are in relation to the environment, infrastructure, users, and services that develop.



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Ubiquitous Technology



- The revolution of uses and the ubiquity made possible by the permanent geolocation and the intelligence systems embedded in all our devices.
- In computing, the term ubiquitous refers to an environment in which computers and networks are "buried", "integrated" and "ubiquitous" in the real world. The user has access to a set of services through intelligent distributed interfaces, which he/she is surrounded by.

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Ubiquitous Technology



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City is a metabolism



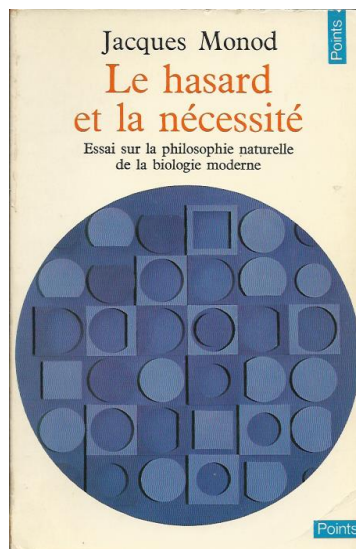
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Mobility in the city



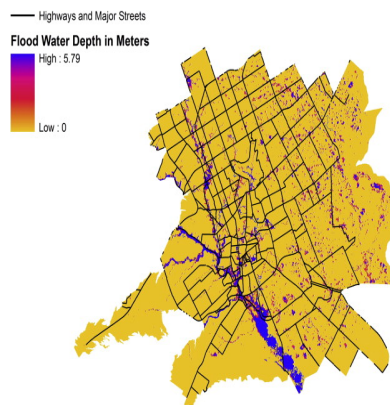
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Need vs hazard



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Vulnerability in the city



- On the other hand, it is subject to a number of hazards that make it fragile: storms, breakdowns, fires, attacks, epidemics etc. The city must therefore be resilient, that is to say, be able to overcome these hazards.

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Topos vs Chora

- The city is an aggregation of human beings whose vital needs, fulfillment and development intersect in many ways. On the one hand, it must meet its needs to grow: every city has the function of satisfying the vital needs of its inhabitants and their quest for well-being.



**V FORUM DE INOVAÇÃO E TECNOLOGIA
VII PRÊMIO DO COMÉRCIO EXTERIOR
FRANÇA - BRASIL**

**CIDADES DIGITAIS
humanas**

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PROGRAMA PRELIMINAR:

08:30 às 09h
09h às 10:30h

Abertura | CCFB e UFRANCE
Parceria com autoridades francesas e brasileiras
Denis Pratlong - Embaixador da França no Brasil
Glaucio Arbo - Presidente da FINEP
José Mauricio Bustani - Embaixador do Brasil na França
Nora Giges - Presidente - European Institute for Creative Strategies & Innovation
Nelson Figueira - Secretário de Inovação do Ministério do Desenvolvimento, Indústria e Comércio Exterior
Virgílio Almeida - Secretário de Política de Informática, Ministério Ciência, Tecnologia e Inovação

10:30 às 11h
11h às 12h

Meios redondos simultâneos:
• Cidades Inteligentes
• Finanças
• Telecomunicações
• Inovação Industrial

12h às 14h30 | Almoço convivial | Entrega do VII Prêmio Comércio Exterior

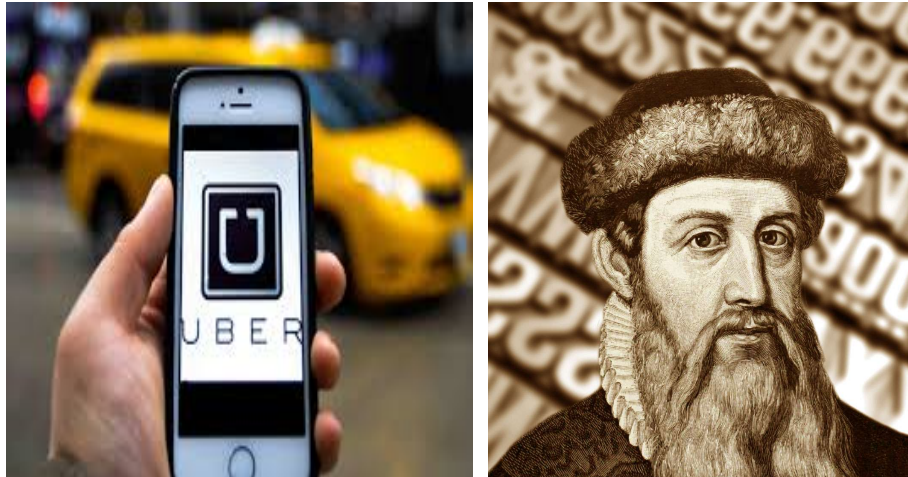
Valores | Associados: R\$ 200,00 | Não Associados: R\$ 300,00

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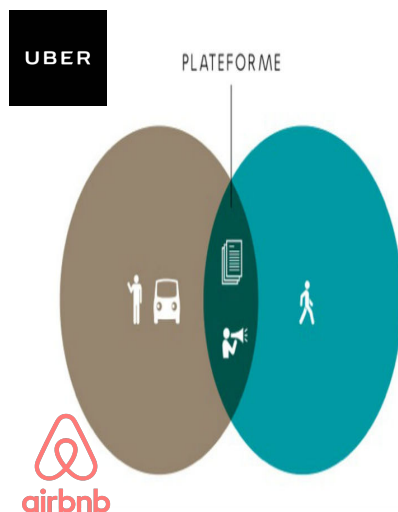
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Changing world



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Desintermediation



- The service economy that affects all sectors of activity will deepen its developments with new user behaviors, - become producers and consumers of data.
- Major disruptive successes such as Facebook, Uber, AirBnB are based on their ability to transform data into a simple and accessible social use, through hybridization platforms, to produce services that transform our lives and our cities.

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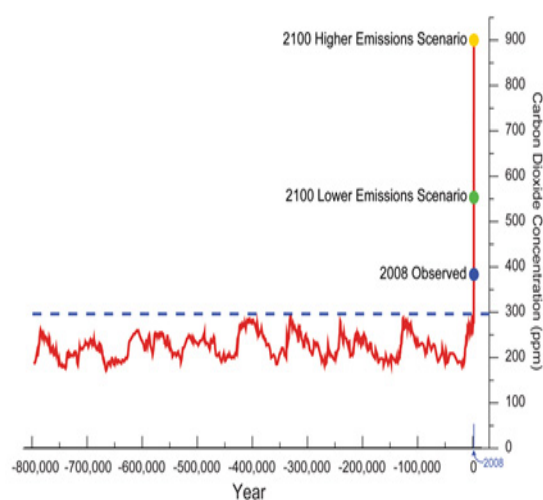
The man in the city

- The notion of territory is today at the heart of urban issues and the evolution of urban transformation. Cities that have deployed real urban intelligence are cities where a bisection has been made between citizens and the territorial entity, uses and services.



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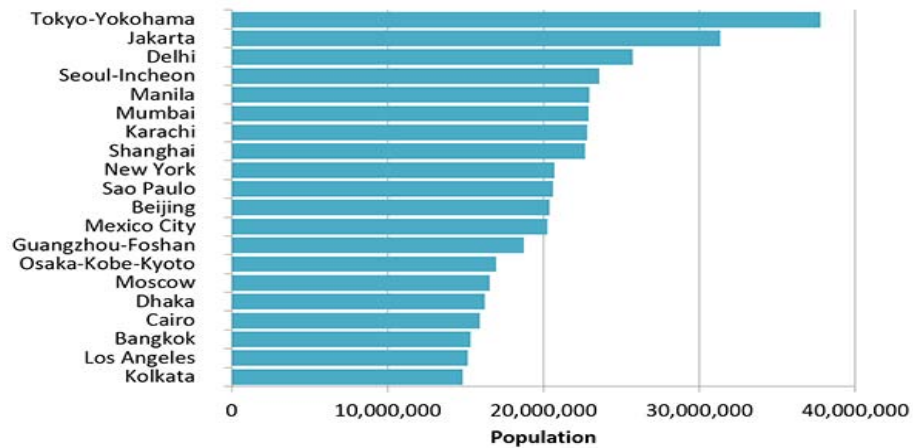
The reality



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XXIth century for cities

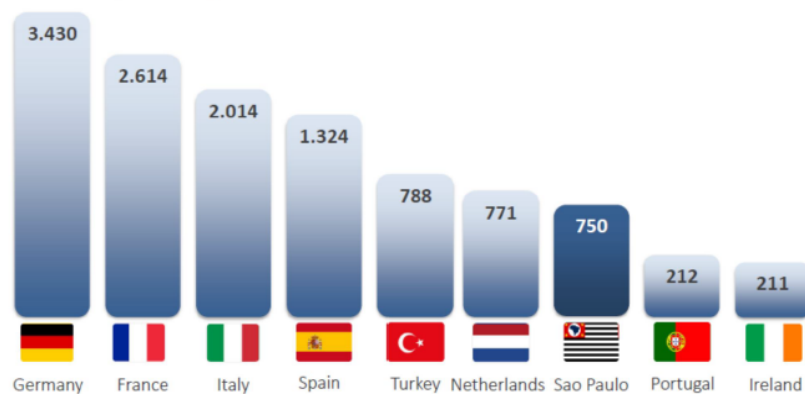
World's Largest Cities: Population BUILT-UP URBAN AREAS: 2016 ESTIMATES



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The importance of city

GDP current prices compared to selected EUROPEAN COUNTRIES 2012 USD billion



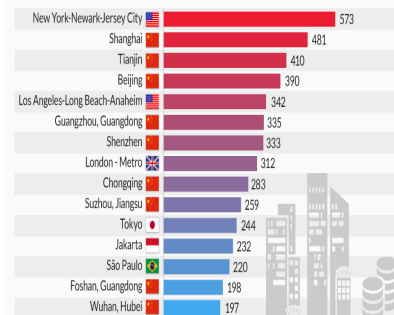
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The importance of cities

- By 2030, the 750 largest cities should account for more than 60% of global GDP. In the century of cities, the next decade is decisive because competition is no longer the responsibility only between states but also, and increasingly, between cities

The cities contributing most to global GDP by 2030

Top 15 cities worldwide by GDP in 2030 (in billion GBP)



Converted from USD to GBP on 13/10/15
Source: Oxford Economics

100 THE INDEPENDENT statista

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World cities

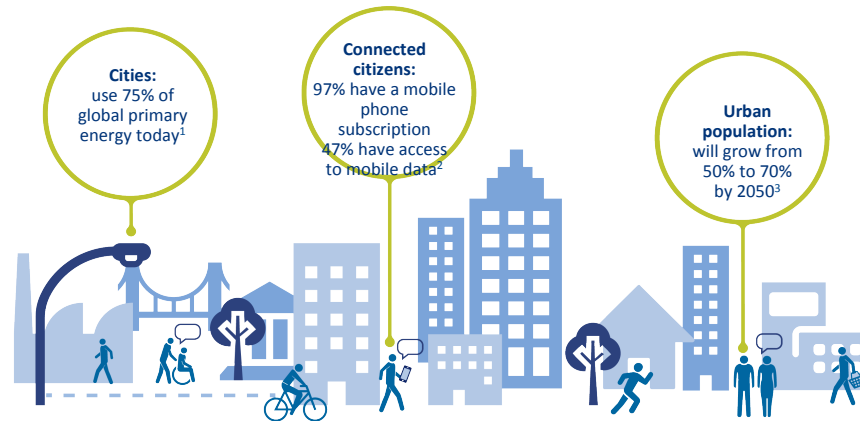


- Popularized by the American sociologist and economist Saskia SASSEN in the form of global cities, this term refers to metropolises at the top of the urban hierarchy on a global scale.

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Cities and communities are on the rise

Many dimensions to urbanisation



Residents looking for better services and City Officials need smart + sustainable solutions that can transform their ageing infrastructure

¹ UN Habitat

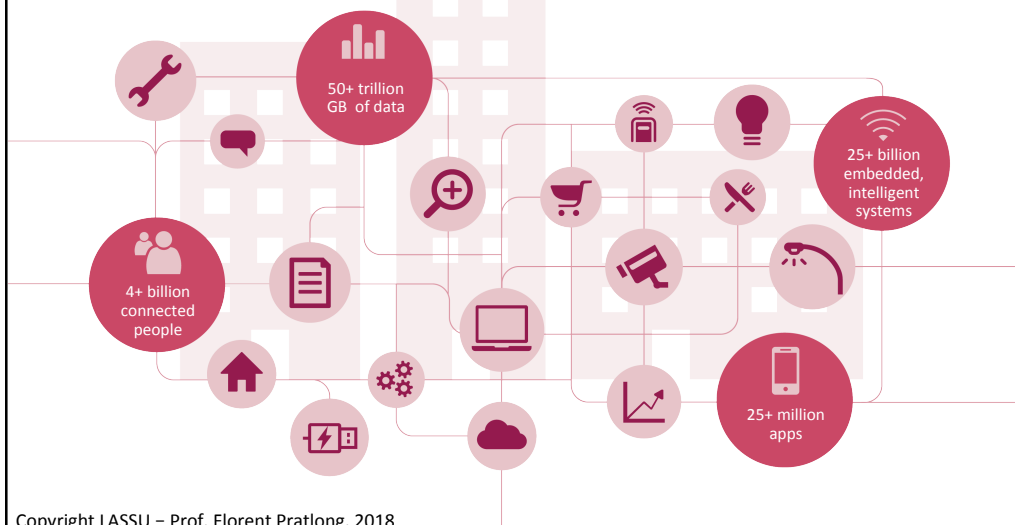
² World Bank and ITU, World Telecommunication/ICT Development Report and Database, 2015

³ United Nations – Department of Economic and Social Affairs, "World Urbanization Prospects", 2014

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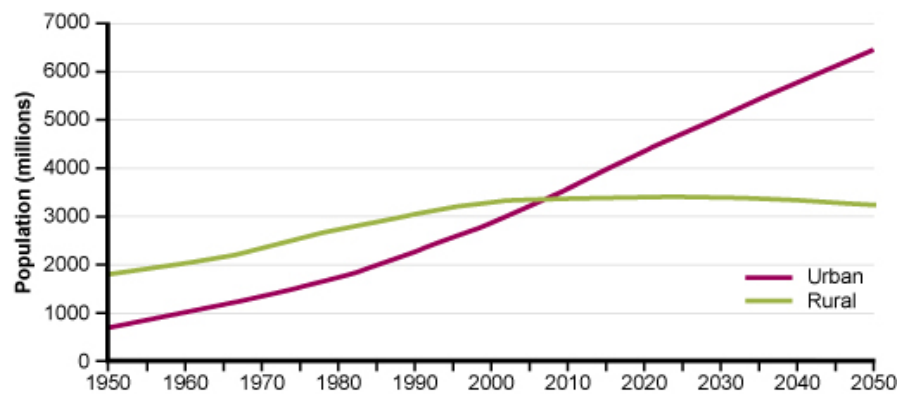
With rise in digital, by 2020 most system needs

To be connected, scalable and open



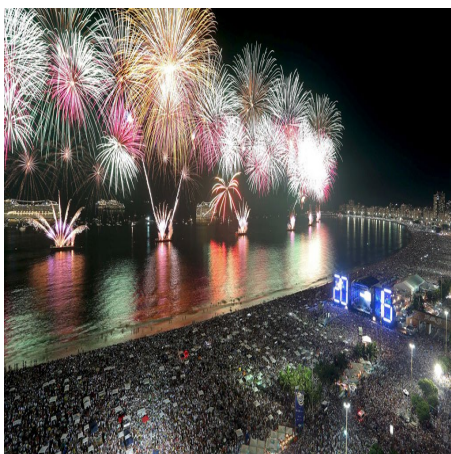
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Growing urbanisation



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Understand the city



- A territory obeys its own conditions in different social, economic, cultural, religious contexts. Thus, not one city is like another, even within the same country. This component of emotional intelligence is essential to understanding the mutations that occur in urban cities.

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Lively cultural identity ?

- The Chinese middle class has gained a purchasing ability, and a social position that has led it to develop what I conceptualize as "fuzzy mirrors".
- This middle class wants to adopt a Western way of life; This desire was born of social acceptability, but does not create a social connection.



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Human city !



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Human city ?



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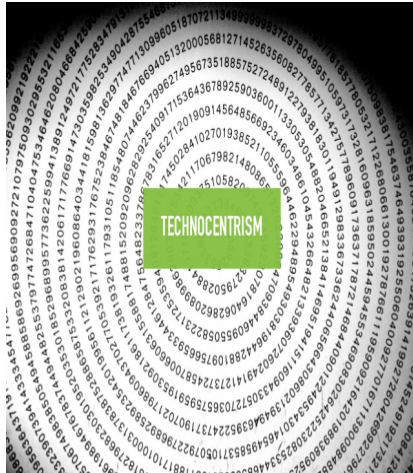
Fragility of life in the city

- However, the city is very fragile; The event is life, but life is also a series of events, sometimes unpredictable.
- Whatever the power of simulation software, or the quality of algorithms that can be developed to prevent situations on the scale of the city, the own of this complex system is the impermanence, fragility, and hazard.



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The technocentrism is the death of the city



- Technology is a way for me to understand how urban spaces respond to functionality.
- The technological revolution changes the relationship between the public space and the territorial entity. Throughout the world, this territorial identity is built and created. The new element in the 21st century is ubiquity (embedded intelligence, meshes, data production). The real challenge is to succeed in hybridizing social behavior and ubiquitous use.

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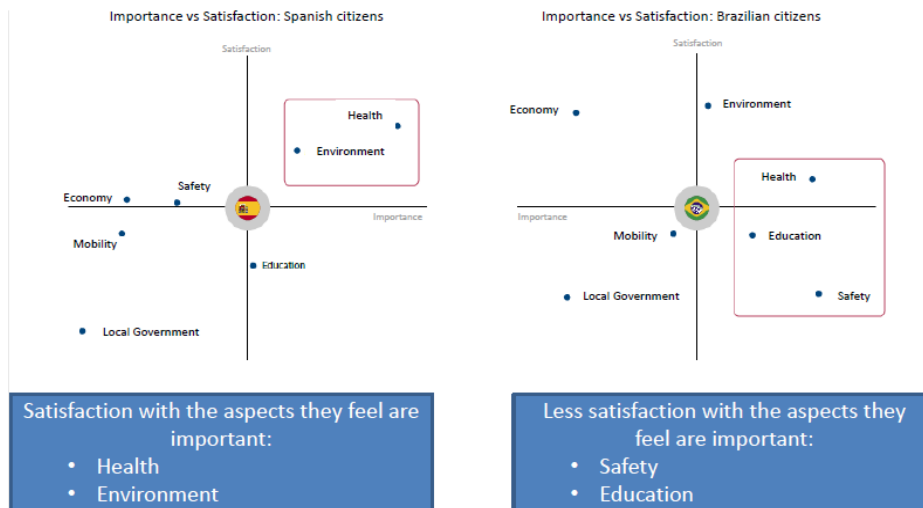
Smart Cities: digital transformation of cities

- Objective: To understand the variables of major impact for smart cities projects, the perceptions and priorities of citizens, public managers and experts
- IE – Madrid/Spain
Fundação Getulio Vargas (Brazil)
Telefónica
- Cities – 15 Brazil, 10 Spain
Interviews - More than 100 experts: mayors, public executives, public managers, urban experts, professors
Survey - More than 3000 citizens
- Results: a book, more research projects



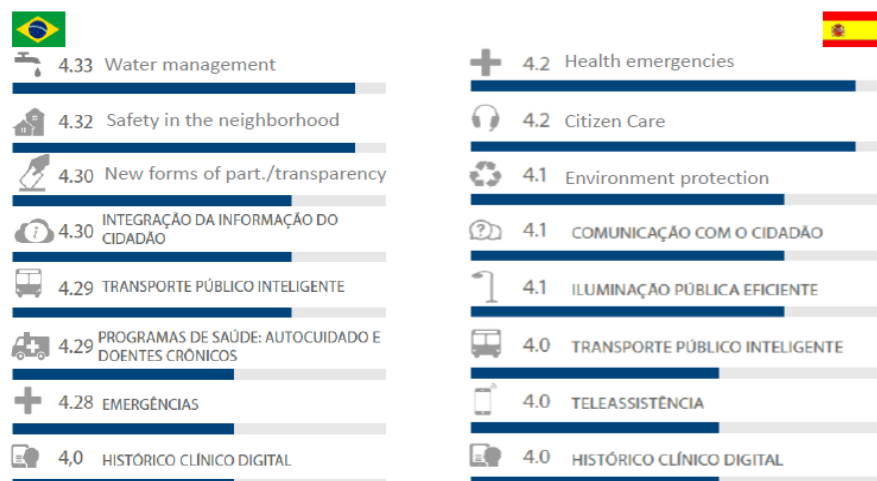
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To understand the citizen's priorities



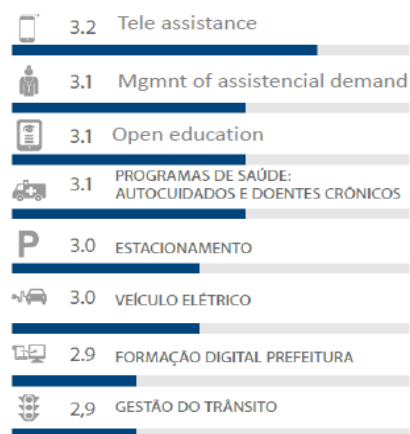
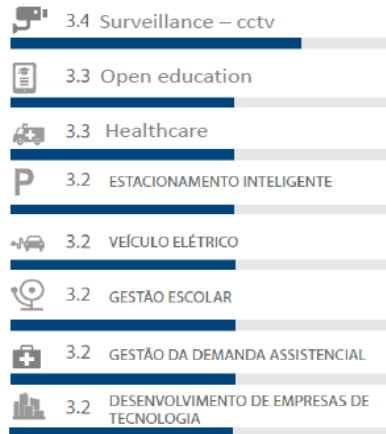
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Priorities – Use of technology



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Willing to pay for ...



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The technocentrism is the death of the city



- The digital platforms are tools to integrate and cross large volumes of information of different nature, which one comes to connect for new possibilities of uses.

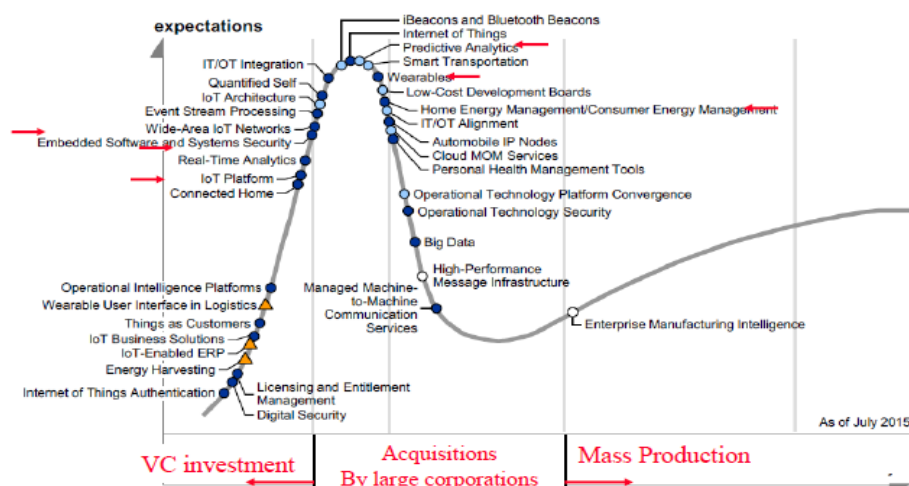
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Gartner's Hype cycle 2015



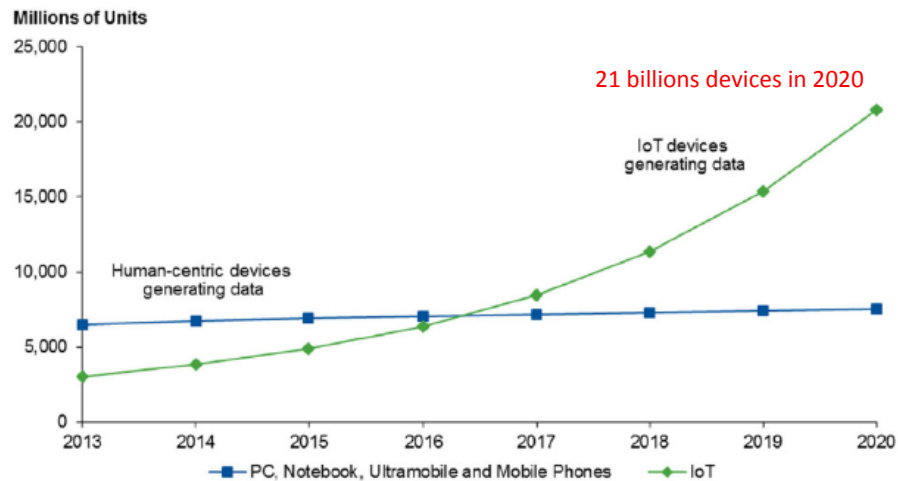
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Gartner's Hype cycle for IoT 2015



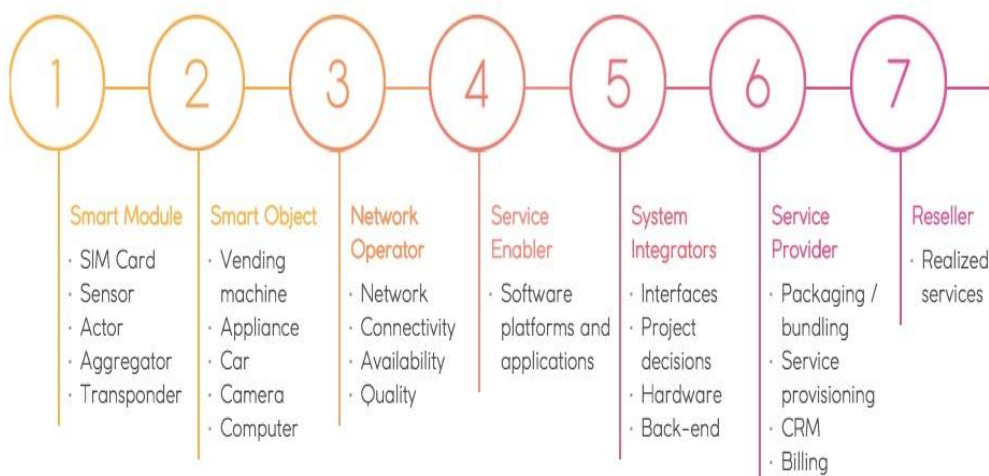
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Computing vs IoT



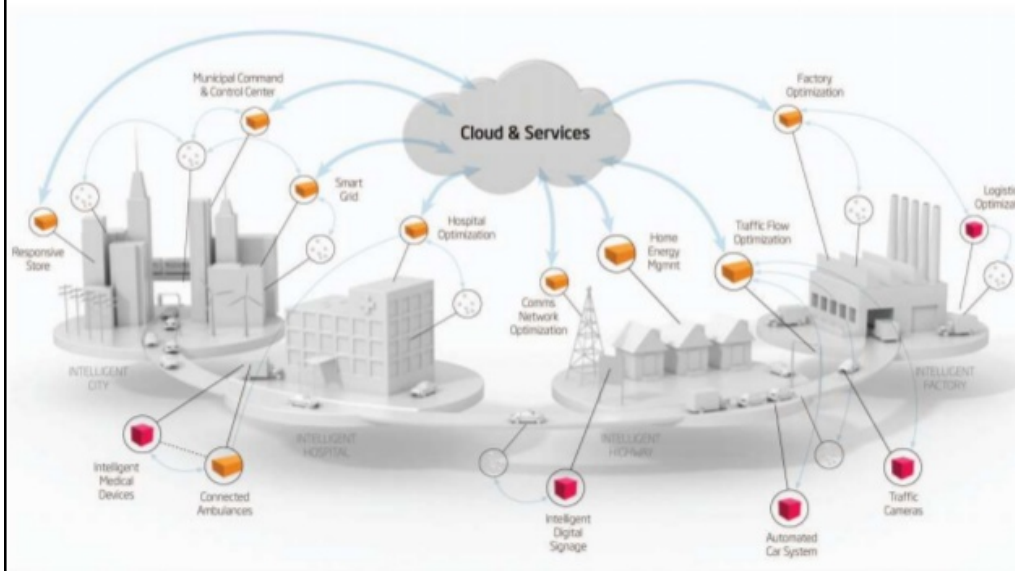
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IoT model



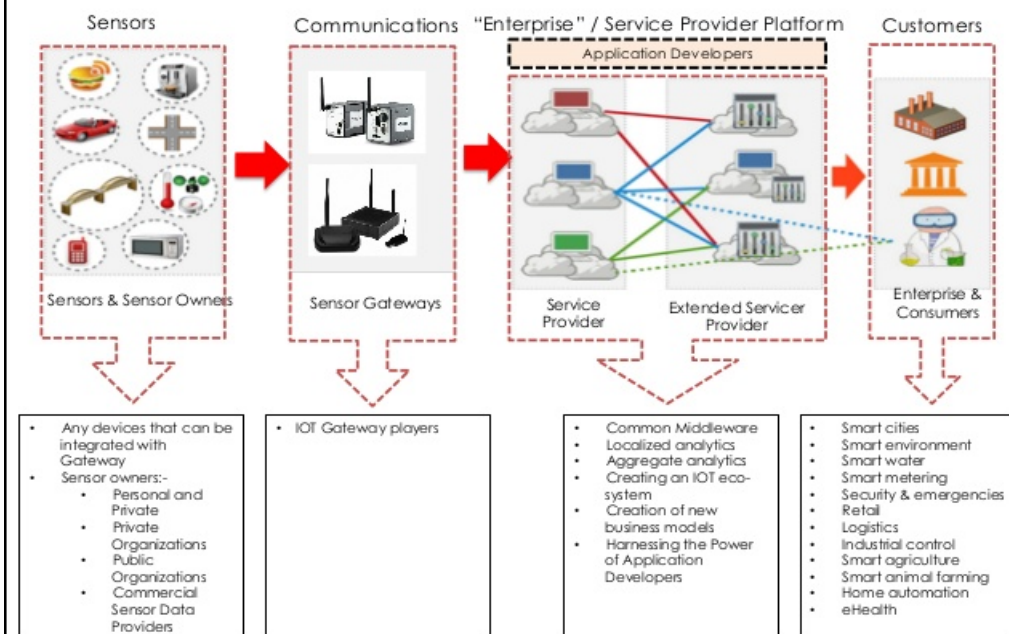
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Adoption of IoT in Business

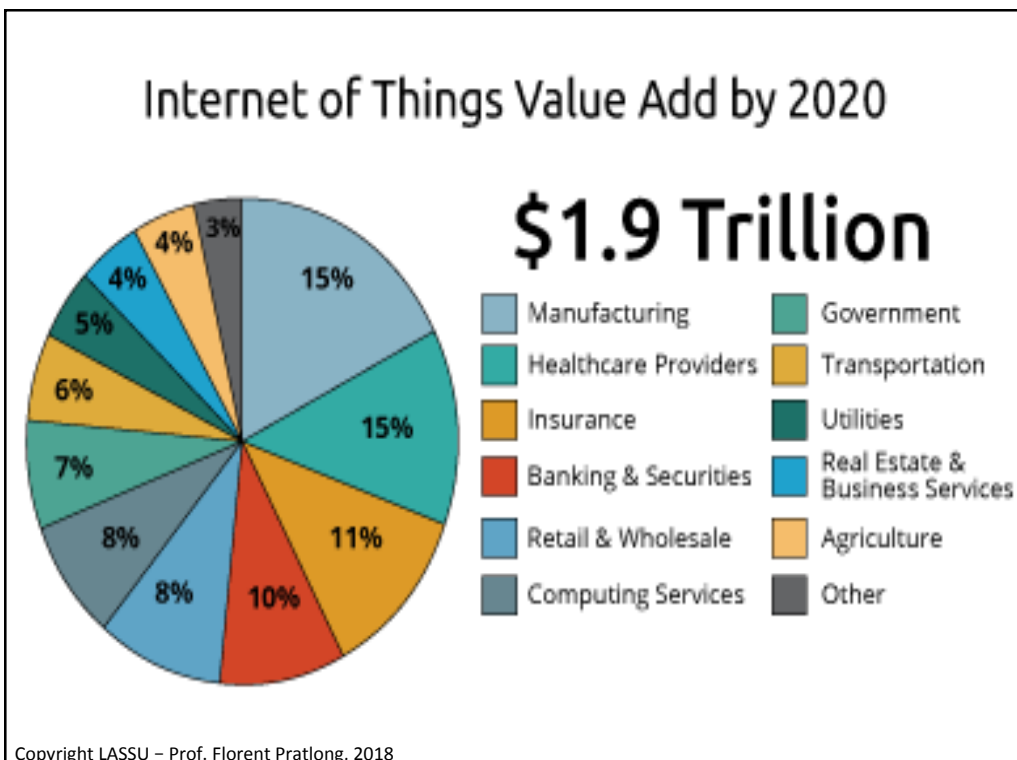
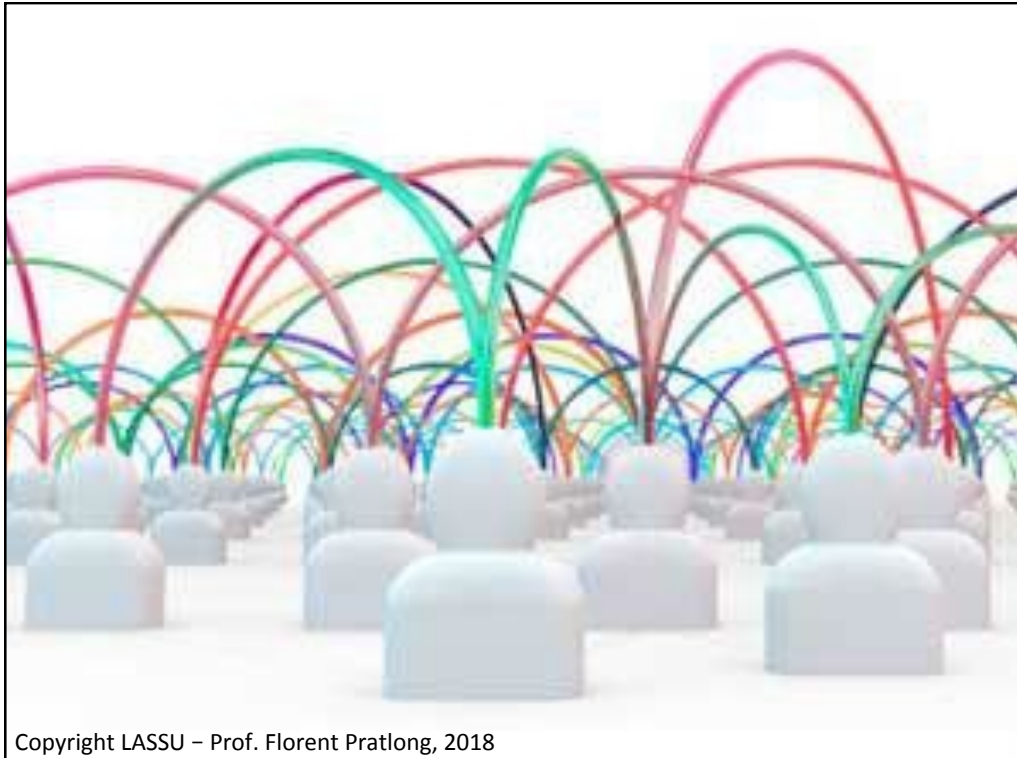


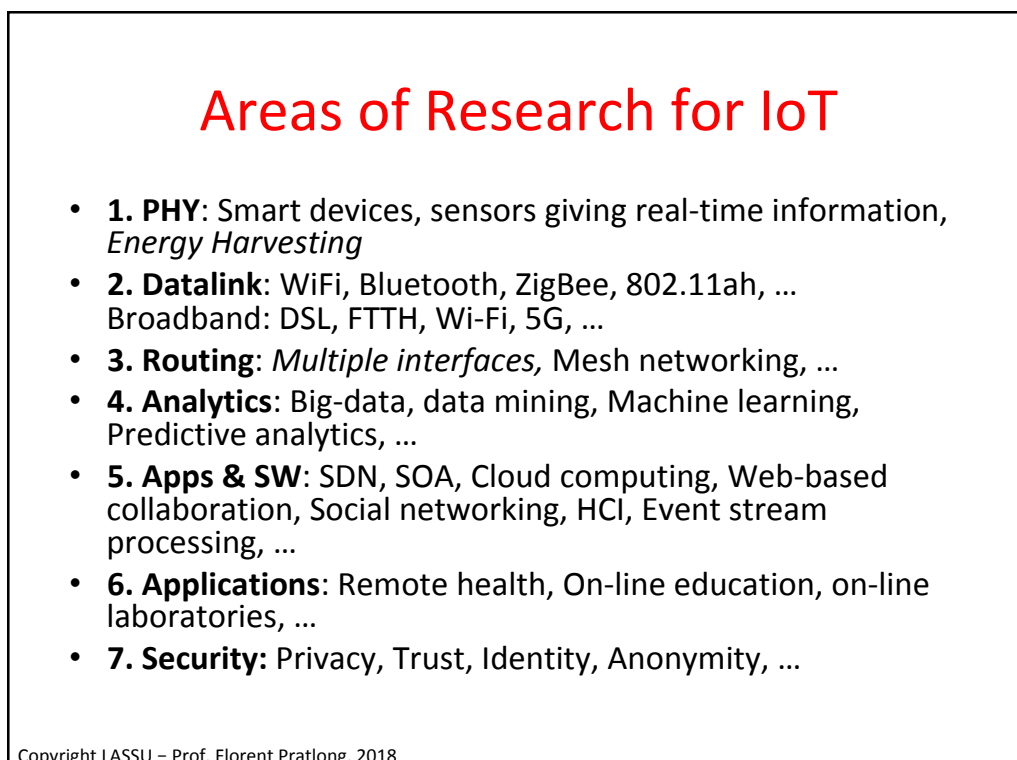
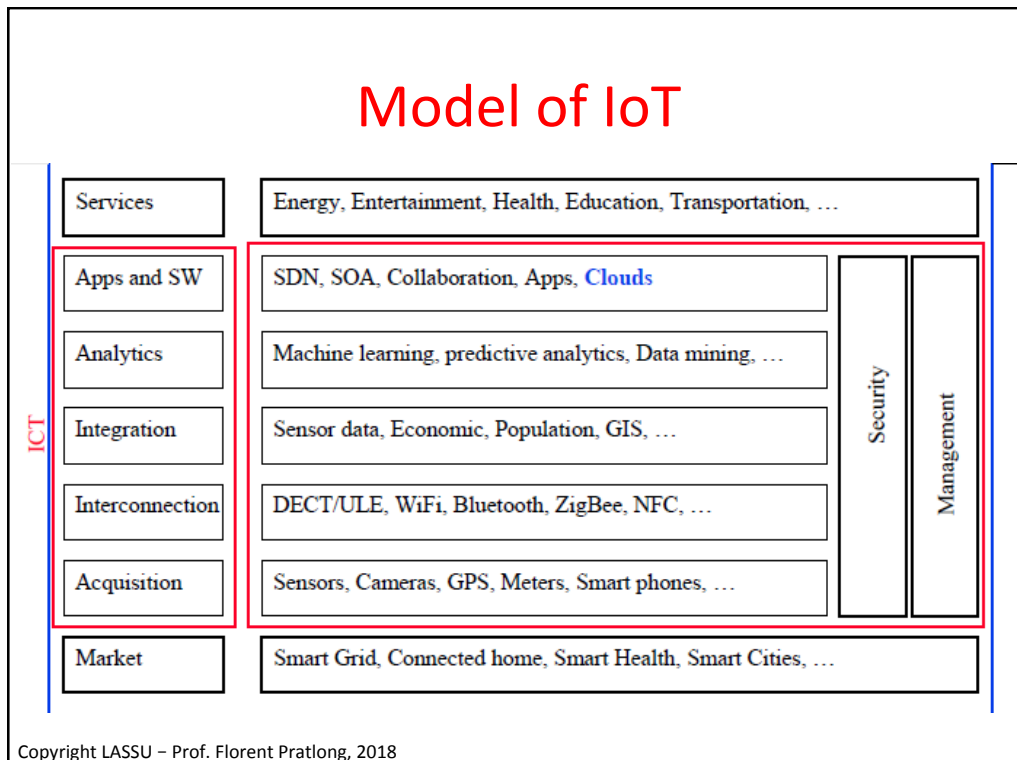
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Sensing-as-a-Service– A New Business Model



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Hype Cycle for Smart Cities



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The technocentrism is the death of the city



- Nevertheless, we will soon understand that the technocentrism represent the death of the city in the sense that it erased the place of the living and the social interactions that establish there.

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Não é um mercado, ou até mesmo um "uso" de banda larga !?



É uma necessidade de sair da solidão emocional

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The technocentrism is the death of the city



- The city is a major issue, but the primary goal is to feel good about it.
- The challenge today in our cities is to strive towards a new paradigm combining technology, infrastructure, and social intrusion into a polymorphic City approach: Sharing city.

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City IQ: Benchmark for Smartness

- ISO 37120:2014 Sustainable Development of Communities:
- Using 17 themes and 100 indicators for city services and quality of life, World Council of City Data (WCCD) give a city one of five levels.



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Areas of ISO city 37120

1. Economy
2. Education
3. Energy
4. Environment
5. Finance
6. Fire and emergency response
7. Governance
8. Health
9. Recreation
10. Safety
11. Shelter
12. Solid waste
13. Telecommunications and innovation
14. Transportation
15. Urban planning
16. Wastewater
17. Water and sanitation

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Indicators for City Services and Quality of Life

DOMÍNIOS (SMART CITIES)	DIMENSÕES (Inclui também indicadores estabelecidos na norma ISO 37120:2014)
AMBIENTE	TERRITÓRIO - AR - RUÍDO - ÁGUA - SANEAMENTO - ENERGIA, TELECOMUNICAÇÕES E COMBUSTÍVEIS - HIGIENE URBANA
MOBILIDADE	TRANSPORTES – INFRAESTRUTURAS - MOBILIDADE – ESTACIONAMENTO – TRÁFEGO
GOVERNAÇÃO	GOVERNAÇÃO – CIDADÃO
VIVÊNCIA	EQUIPAMENTOS - EDIFICADO - ESPAÇO PÚBLICO - SEGURANÇA, PROTEÇÃO E SOCORRO
PESSOAS	POPULAÇÃO – ALOJAMENTO
ECONOMIA	COMÉRCIO – EMPRESAS – EMPREGO - TURISMO

NORMA ISO 37120:2014 :

Sustainable Development of Communities (Indicators for city service and quality of life)

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Smart cities for what ?

SMART CITY ACTION FIELDS AND AREAS			
SUSTAINABLE CITY ASPECTS	CITY AXES	SMART CITY ACTION FIELDS	SMART CITY AREAS
<i>economic</i>	INSTITUTIONS	GOVERNANCE	PARTICIPATION TRANSPARENCY PUBLIC AND SOCIAL SERVICES
		ECONOMY	INNOVATION ENTREPRENEURSHIP TRAFFIC
<i>environmental</i>	HABITAT	MOBILITY	PUBLIC TRANSPORT ICT INFRASTRUCTURE LOGISTICS
		ENVIRONMENT	NETWORK AND ENVIRONMENTAL MONITORING ENERGY EFFICIENCY
<i>social</i>	CITIZEN	PEOPLE	DIGITAL EDUCATION CREATIVITY TOURISM & CULTURE
		LIVING	HEALTH & SAFETY TECHNOLOGY ACCESSIBILITY

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Smart cities for what ?

CITY CHALLENGES					
GOVERNANCE	ECONOMY	MOBILITY	ENVIRONMENT	PEOPLE	LIVING
Flexible governance	Unemployment	Sustainable mobility	Energy saving	Unemployment	Affordable housing
Shrinking cities	Shrinking cities	Inclusive mobility	Shrinking cities	Social cohesion	Social cohesion
Combination of formal and informal government	Economic decline	Multimodal public transport systems	Holistic approach to environmental and energy issues	Poverty	Health problems
Territorial cohesion	Territorial cohesion	Pollution	Pollution	Ageing population	Crime rate
	Mono-sectorial economy	Traffic congestion	Urban sprawl	Social diversity as source of innovation	Urban sprawl
	Sustainable local economies	Non-car mobility			
	Social diversity as source of innovation				

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Smart cities for what ?

ACTION FIELD	AREA	SMART CITY INITIATIVE
SMART GOVERNANCE	PARTICIPATION	Complaints and suggestions
		Participation in decision-making
	TRANSPARENCY	Open Data
		Municipal transparency
	PUBLIC AND SOCIAL SERVICES	e-municipality
		City Council on social networks
		GIS
SMART ECONOMY	INNOVATION	Social and City services information
		Smart Justice
		Innovation Centre
	ENTREPRENEURSHIP	e-commerce
		Business centre
		job-search resource centres

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Smart cities for what ?

ACTION FIELD	AREA	SMART CITY INITIATIVE
SMART MOBILITY	TRAFFIC	Variable Traffic Management
		Traffic monitoring
		Traffic control
	PUBLIC TRANSPORT	Public Transportation App
		Card of Public Transportation
		Intelligent bus stops
		Car sharing
		Public bicycles
		Electric bus
		Tramway
	ICT INFRASTRUCTURE	Parking sensors
		Parking information
		NFC payment
	LOGISTICS	Smart Logistics

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Smart cities for what ?

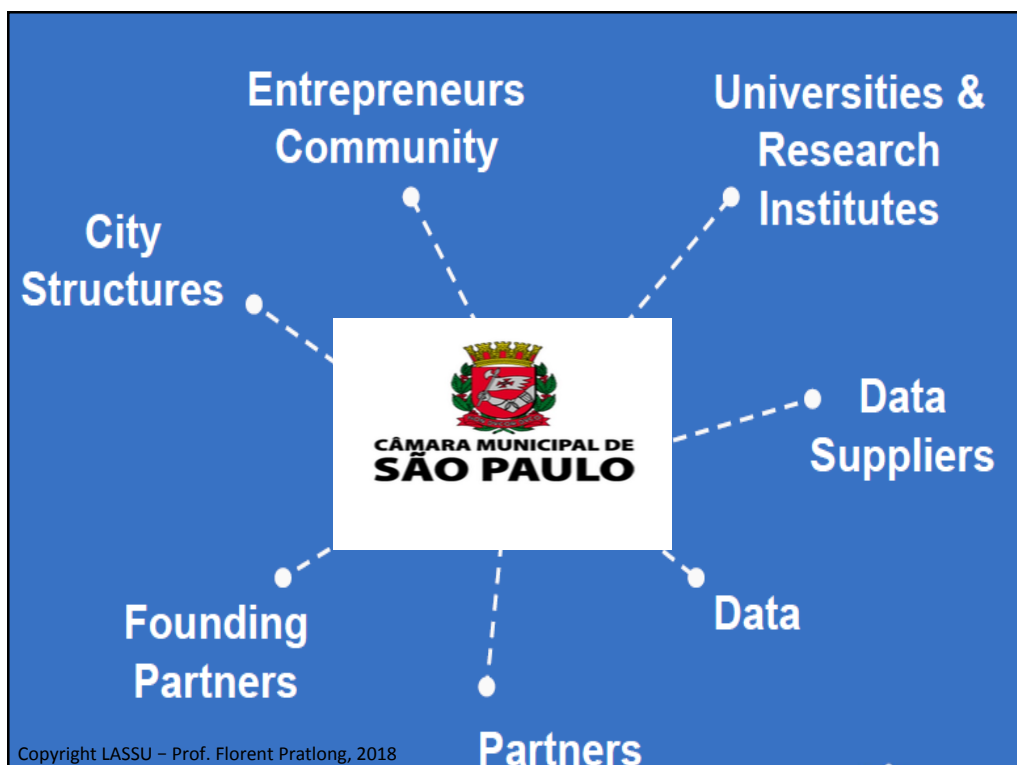
ACTION FIELD	AREA	SMART CITY INITIATIVE
SMART ENVIRONMENT	NETWORK AND ENVIRONMENTAL MONITORING	environmental Information and alerts
		Containers with sensors
		Monitoring distribution networks
		App with incidents
	ENERGY EFFICIENCY	Recharging electric vehicles
		Energy efficient in buildings
		intelligent Lighting
		Smart grids
		Irrigation remote control
		Renewables
		District heating and cooling

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Smart cities for what ?

ACTION FIELD	AREA	SMART CITY INITIATIVE
SMART PEOPLE	DIGITAL EDUCATION	Centre for learning new technologies
	CREATIVITY	Internet in schools
	TOURISM & CULTURE	Centre for creating apps event information tourism app
SMART LIVING	HEALTH & SAFETY	e-health
		accessibility in public places
		Telecare
		video surveillance
	TECHNOLOGY ACCESIBILITY	free wifi optical fibre citizen card

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Governance ?



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The democratic cropping: The brasilian innovation in 2013



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Social innovation in action: for democracy

Increase of 7% of prices in bus
and in the metro
0.20 reals = 7 cents of euros



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The expression of diversity



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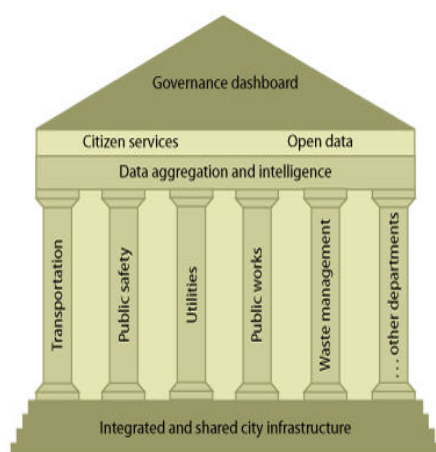
Real city and appropriation of space

- We must therefore be interested in urban construction not only in terms of infrastructure and digital interactions, but through the prism of the human, its needs and the social appropriation of space.



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Dialogue with Citizens in city



- In a world where man has developed hypercommunity and ubiquity, it is essential to establish a dialogue with the city's governance, while promoting a strong citizen involvement at all times, and all in a projection to medium and long-term.

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Citizen city

- The main objective is to bring quality of life to the inhabitants of the city, to fight against the inequalities – very many in the urban environment – and to develop social inclusion, in a city which must be in harmony with nature and respectful of its balances.



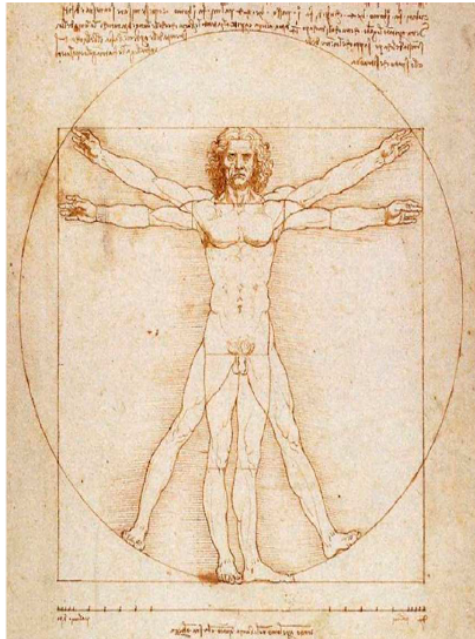
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Human city



- Rather than talking about smart city, considering that the city is by definition "smart", you prefer the notion of "living city".

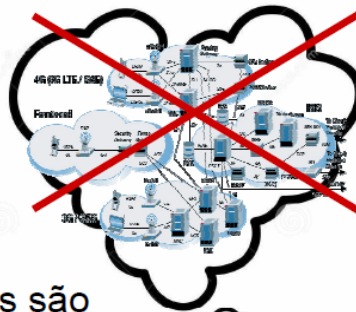
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The RENAISSANCE :

“The man is the
measure of all
things”

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Atenção!

As tecnologias são
meios, não
objetivos.
Ninguém se
apaixona por um
Protocolo de Acesso
Wireless



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For high value-added innovations for users, do not mix technology and society ..

As tecnologias



A vida



Utilização
Aplicação

Uso

Practice does not stem from technology, they are specific to a community !

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Metabolic capacity

- It is not enough to breathe to consider that one lives. It is only a metabolic capacity, as indispensable as it is. In the same way, it is not enough to be able to breathe in the city, to benefit from clean energies or low consumption buildings, or even to evolve in an environment free of any nuisance.



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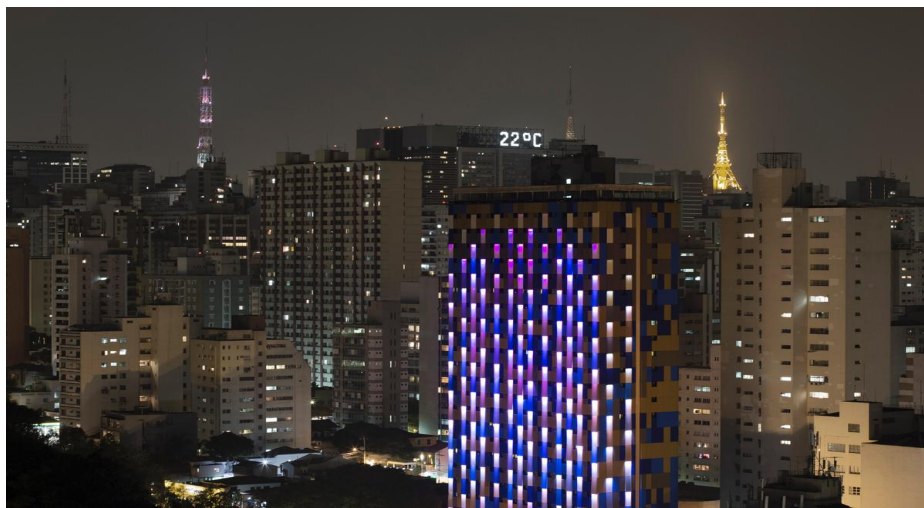
Life into a relationship



- The humanity takes to life when it enters into a relationship with society and a creative capacity, a possibility of co-construction, co-creation, is installed.

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Interactive city ?



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Evolution of the city

- The exchange of ideas is the basis for the emergence of the living as being, identified by a biological metabolism but also by the emergence of creative thinking, carrying new achievements. This is the basis of the evolution.



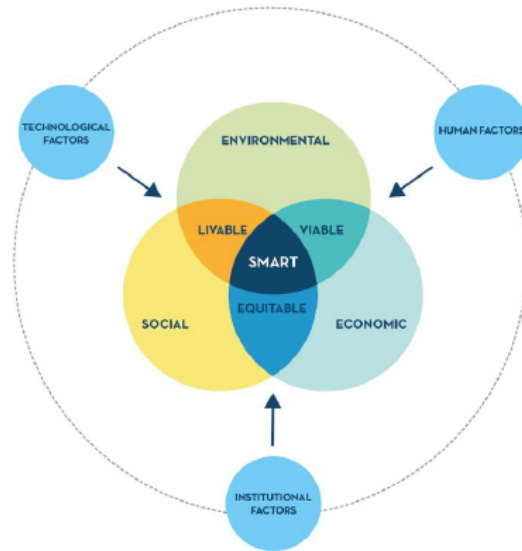
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Sustainable development



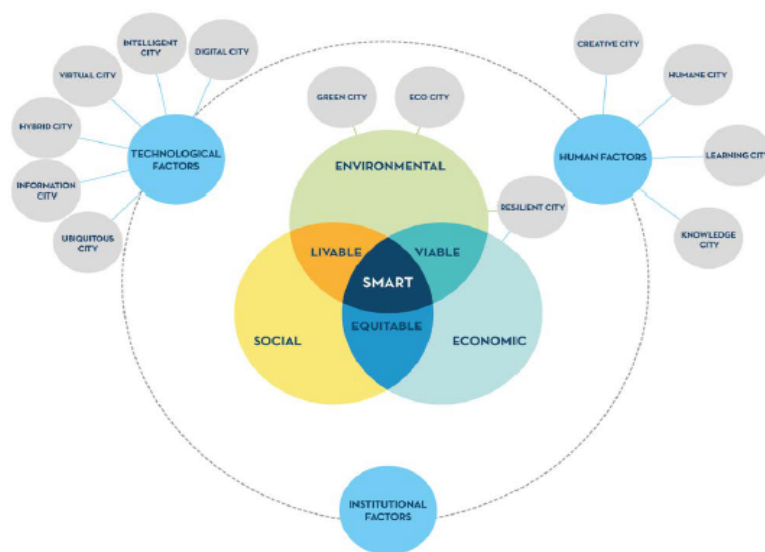
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Smart development



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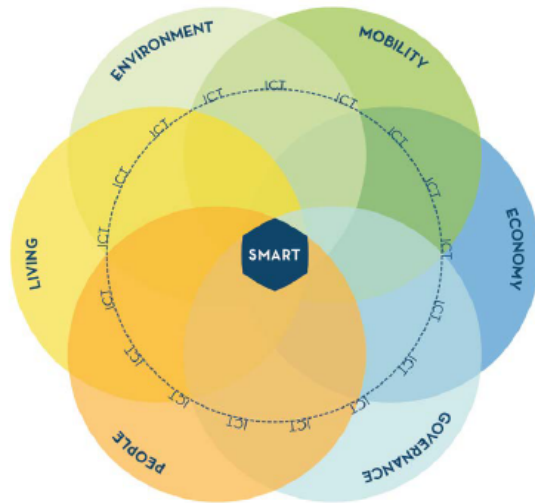
Relation between other concepts and the smart city idea



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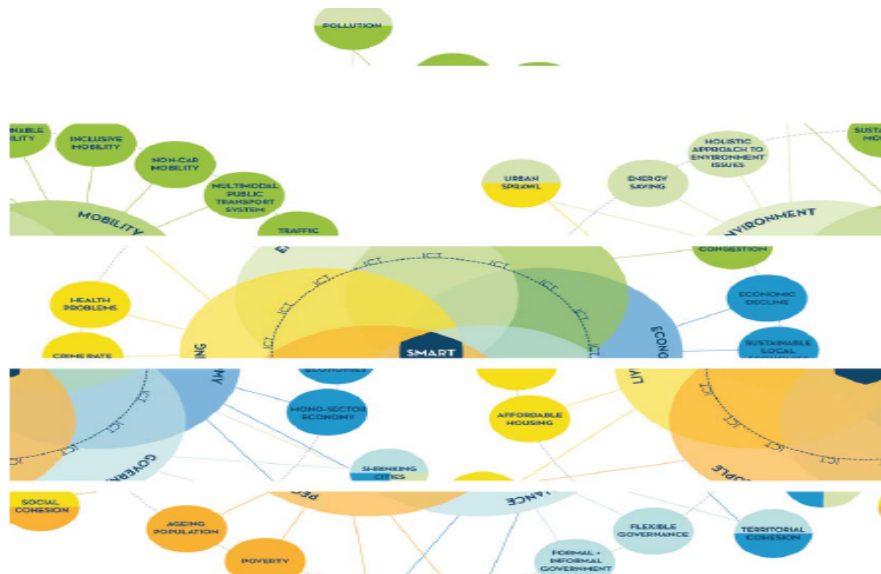
Smart city action field and ICT enabler

- Smart Governance
- Smart Economy
- Smart Mobility
- Smart Environment
- Smart People
- Smart Living



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Manage complexity



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Smart-City: The unique model trap

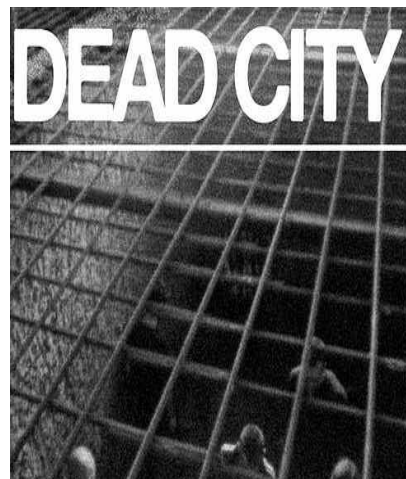


- To speak of Living City because we can be very opposed to Smart city in its techno-centered dimension, although we remain fully aware of the importance of these tools in urban transformation ..

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Technology is not all

- Make the bitter statement of an international reflection that considers the control of technology as the solution to all problems, even though it can lead to dead cities.



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Desert city



- In KOREA, major technological city projects such as SONGDO – the smart city by excellence – have been financial chasms and are already deserted by the population. More and more neighborhoods are being built by ignoring the human place and the importance of its relationships to others.

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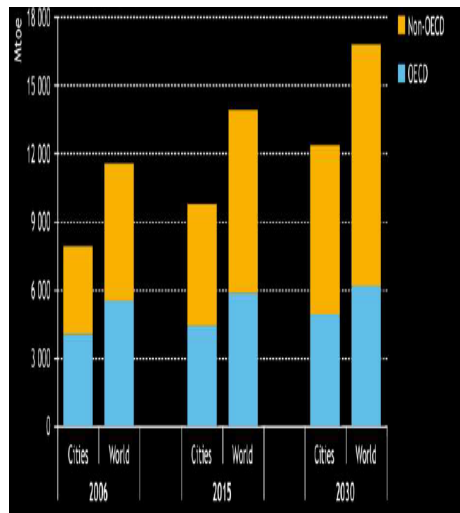
Cultural identity of each city

- The key issue is to find a cultural identity that makes you feel 'from somewhere'.



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Fragility and responsibility of cities



- It is essential to understand the fragility of the planet in which we live, and in the first place that of the city, since it accounts for 75% of energy consumption, 80% of CO₂ emissions and 85% of world wealth.

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Attraction of city ?

- While urban life is literally suffocating us, it remains an object of desire and tends to be generalized again and again.



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Threats on the city



- The peaks of pollution have become endemic, biodiversity is experiencing a new crisis of extinction, social inequalities are widening, access to water is increasingly unequal, the population is increasing, and with it the needs for food...

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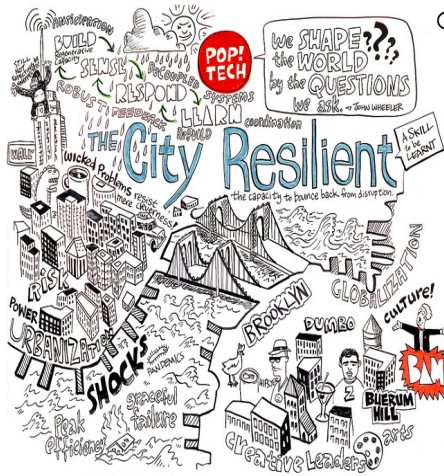
Weak cities ?

- In a world that is weakening, anything is enough to destabilize a city, as the study of the risks of a flood centennial in Paris proved it. A simple look at our planet from east to west and from north to south is informative, given the extent of the damage between floods, earthquakes, ecological crises, disasters.



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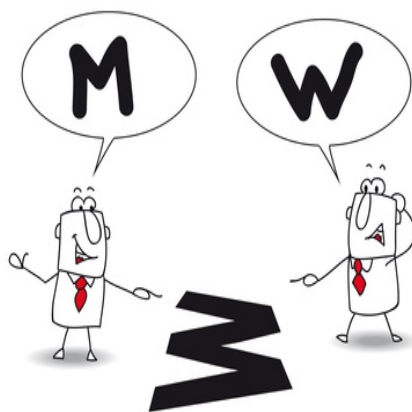
Resilience in city



- Hence the importance of taking into account the resilience, reinventing the common good and the approach of the living. Man is at the heart of the urban problem, he is the one, who holds the keys to improving his living conditions.

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Each city is a creative ecosystem



- The living city is the ability to understand the other and how it interacts with its socio-territorial-urban environment.

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Each city is a creative ecosystem

- We belong to a complex world, composed of transverse elements, of interrelations, of interdependencies. The Living city is no more than the city that considers all these relationships to allow the emergence of new ideas, practices and achievements.



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Smart city is human before it is technological

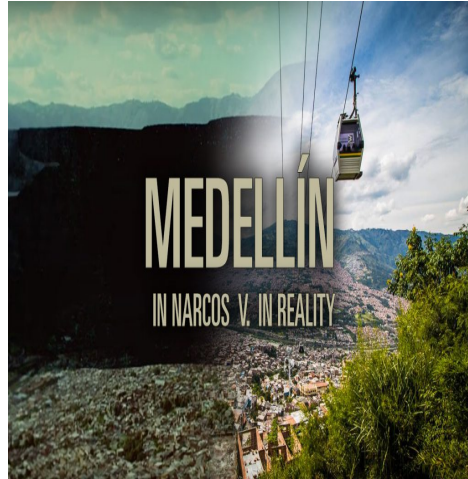


- Smart city is human before it is technological.

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Excellence of resilience

- A City like MEDELIN is an excellent example of resilience, reinvention, low tech creativity. The involvement of civil society in the identification of its ills and in the desire to appease one of the most violent cities in the world – because of its domination by the mafia – played a fundamental role. It rebuilt itself in favor of life and gave birth at that time to the movement Cities for life.



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The impermanence, who knows ?



- Nothing is acquired, the impermanence is an element to keep very present in the uncertainty of our becoming.

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Reappropriation

- There are also cities that die, like the industrial cities of Rust Belt, in the United States, which does not mean that they cannot be reborn – DETROIT is proof of this – through citizen reappropriation and according to the logic of the do it yourself.



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The creative living city out of verticality



- The Living city is a creative ecosystem in which citizens and governance can exchange in a transverse way, where the way of building is no longer dictated by a verticality of technology or architecture.

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The rythm of the city

- It is a city that listens, in search of its rhythm, of its breathing, according to a process in the long run.



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Fragile unpredictable life



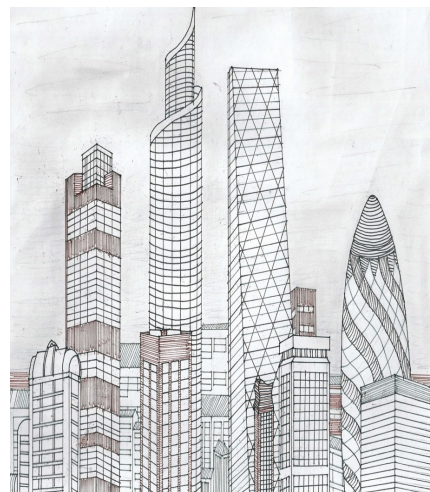
- However, the city is very fragile; The event is life, but life is also a series of events, sometimes unpredictable.

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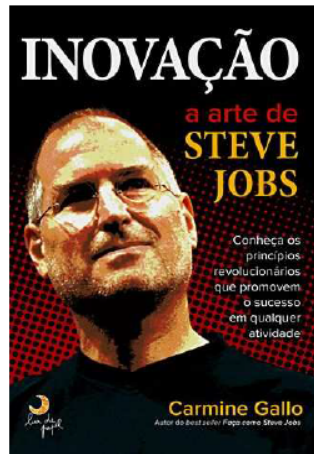


Scaling the city

- Whatever the power of simulation software, or the quality of algorithms that can be developed to prevent situations on the scale of the city .. The own of this complex system is the impermanence, fragility, and hazard.



A inovação é « **tecnologicamente neutra** », ela parte do indivíduo para retornar ao indivíduo



"You've got to start with the customer experience and work backwards to the technology. You can't start with the technology and try to figure out where you're going to sell it"

Steve p. Jobs

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USO

Definition of *USAGE*

a : firmly established and generally accepted practice or procedure

b : a uniform certain reasonable lawful practice existing in a particular locality or occupation and binding persons entering into transactions chiefly on the basis of presumed familiarity

c : the way in which words and phrases are actually used (as in a particular form or sense) in a language community

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utilização tecnológica

Definition of *USE*

1 to do something using a machine, tool, skill, method etc in order to do a job or to achieve a result

Using a computer is so much quicker.

What type of soap do you use?

Using all his charm, he managed to persuade them.

use something for something:

Psychological tests are used for selection purposes.

Use something for doing something:

Methane gas is used for heating and generating power:

use something as something:

I had to use a ski as a tent pole.

use something as an excuse/reason:

2 to get a benefit for yourself from something that is available to you

Only about 30 people regularly use the bus service.

Thesaurus entry for this meaning of use

3 to take an amount from a supply of something in order to do a job or to achieve a result

You've used all the hot water again.

Most of that paint was used on the kitchen.

Thesaurus entry for this meaning of use

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**Innovation is an initiative,
construction to changing codes of a trade,
sometimes redefine these codes**

- restore
- repair
- reproduce
- renovate
- rehabilitate
- remake

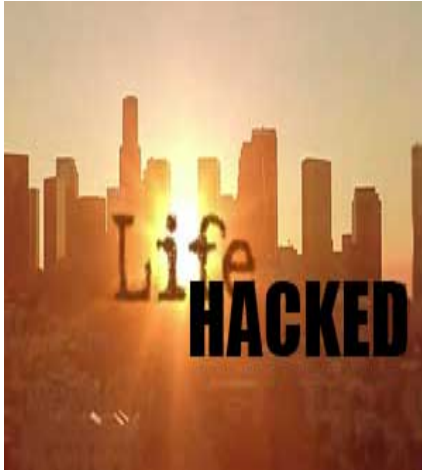
Progress of knowledge
Evolution of society

- invent
- innovate
- initiative
- introduce novelty

**Contribute to the evolution of the world
Creation initiative**

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Hack the live in the city



- The city in which the citizen lives with his territory, where the uses are rooted. A city in which the mesh of the device mobile in the Physical Web is a reality and where cities are themselves platforms.
- It's time for technology to stop hacking our lives and make it the city that hacks technology to overcome the five major challenges (social, economic, cultural, ecology and resilience).

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SMART means the LIFE in the city

