

# Eine Smart City - eine Frage der Definition?

**Barthélémy Rochat, Chief Digital Officer der Stadt Biel**

Partizipation  
**TECHNOLOGIE**



**CITIZEN**  
Solutions



# Eine Smart City - eine Frage der Definition?

eGov Lunch 2022/3 BFH

Bottom-Up Innovation in Smart Cities

Barthélemy Rochat

Chief Digital Officer, Stadt Biel/Bienne

14.09.2022 Hotel Bern

# Smart City Day 2022 in Biel

**SMART CITY DAY 2022** SCD '22  
www.smartcityday.ch  
9<sup>ème</sup> édition: mardi 13 septembre 2022  
Vers des régions astucieuses

Le mot d'ouverture de  
notre ville hôte

Silvia Steidle, conseillère municipale

Stadt Biel  
Ville de Bienne

**SMART CITY DAY 2022** SCD '22  
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Vers des régions astucieuses  
Auf dem Weg zu smarten Regionen  
Mardi 13 septembre  
à Bienne / Biel

SCD '22 SMART CITY DAY #9 : 13 septembre 2022 à Bienne | 13. September 2022 in Biel  
Vers des régions astucieuses | Auf dem Weg zu smarten Regionen

**Quelles sont les priorités actuelles pour nos villes, communes et régions ?**  
TABLE RONDE | PODIUMSDISKUSSION  
**Was sind die aktuellen Prioritäten für unsere Städte, Gemeinden und Regionen?**

**Barthélémy Rochat**  
Chief Digital Officer  
Ville de Bienne

**Susanne Sahli**  
Wirtschaftsförderin  
Stadt Grenchen

**Olivier Ferilli**  
Innovation Manager  
Innovillage Seeland

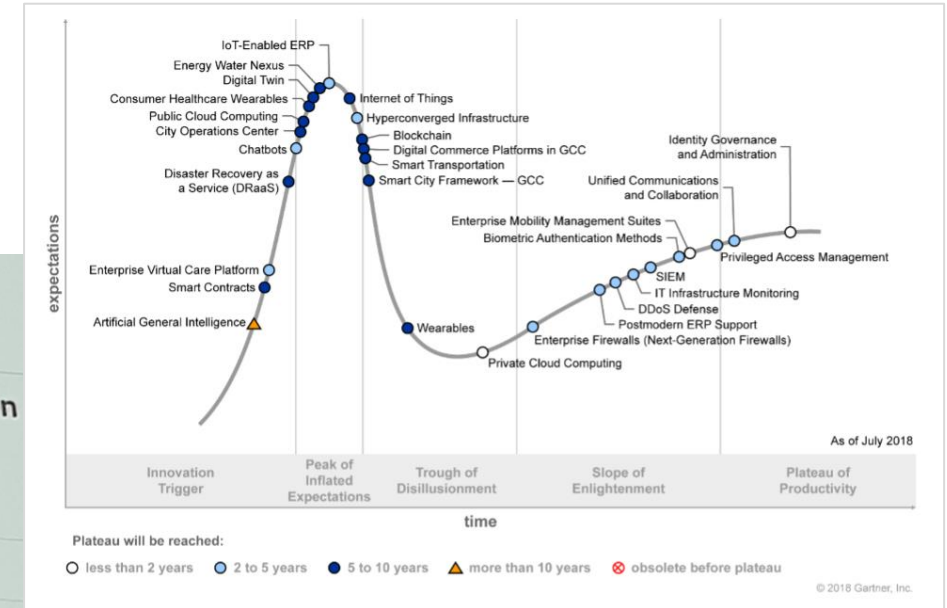
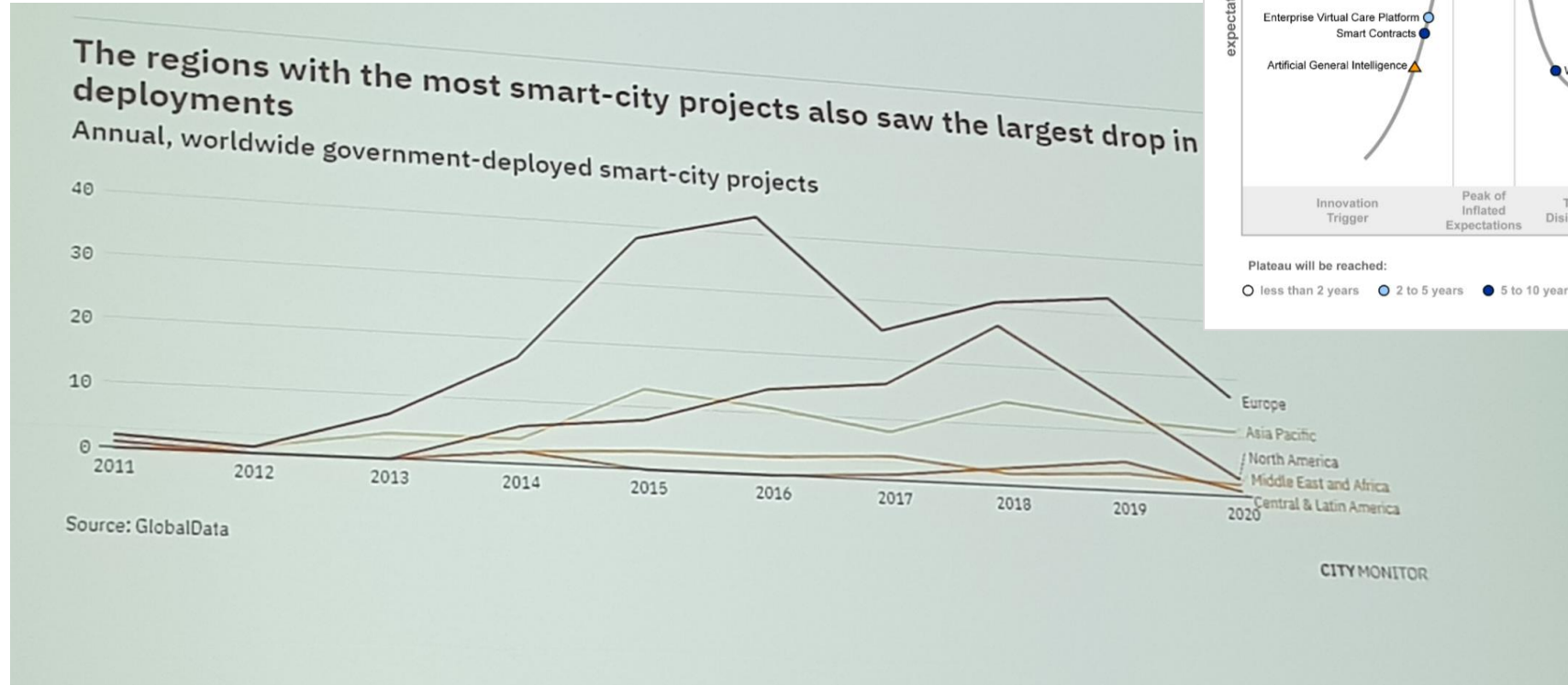
**Didier Boillat**  
Conseiller communal  
Ville de Neuchâtel

**Denis Gerber**  
Maire  
Commune de St-Imier

Stadt Biel Ville de Bienne | Neuchâtel | Stadt Grenchen | SAINT-IMIER | Innovillage Seeland



# Smart City Day 2022 in Biel



Gartner 2018 Hype Cycle

Comment une administration peut-elle faire face à la tendance lourde de la numérisation ?  
 Christophe Egger, Délégué au Développement technologique et à l'Agglomération, Ville de Neuchâtel

# Eine Frage der Definition ?

« beschreibt Ideen und Konzepte für urbane Räume, mit denen Städte durch Einsatz moderner Technologie effizienter und damit klimaschonender sowie lebenswerter werden sollen » (enbw.com)

VS

A city connecting the physical infrastructure, the IT infrastructure, the social infrastructure, and the business infrastructure to leverage the collective intelligence of the city. Harrison et al. (2010)



Table 1: Definitions of a smart city

Definition	Source
Smart city as a high-tech intensive and advanced city that connects people, information and city elements using new technologies in order to create a sustainable, greener city, competitive and innovative commerce, and an increased life quality.	Bakıcı et al. (2012)
Being a smart city means using all available technology and resources in an intelligent and coordinated manner to develop urban centers that are at once integrated, habitable, and sustainable.	Barrionuevo et al. (2012)
A city is smart when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life, with a wise management of natural resources, through participatory governance.	Caragliu et al. (2011)
Smart cities will take advantage of communications and sensor capabilities sewn into the cities' infrastructures to optimize electrical, transportation, and other logistical operations supporting daily life, thereby improving the quality of life for everyone.	Chen (2010)
Two main streams of research ideas: 1) smart cities should do everything related to governance and economy using new thinking paradigms and 2) smart cities are all about networks of sensors, smart devices, real-time data, and ICT integration in every aspect of human life.	Cretu (2012)
Smart community – a community which makes a conscious decision to aggressively deploy technology as a catalyst to solving its social and business needs – will undoubtedly focus on building its high-speed broadband infrastructures, but the real opportunity is in rebuilding and renewing a sense of place, and in the process a sense of civic pride. [...] Smart communities are not, at their core, exercises in the deployment and use of technology, but in the promotion of economic development, job growth, and an increased quality of life. In other words, technological propagation of smart communities isn't an end in itself, but only a means to reinventing cities for a new economy and society with clear and compelling community benefit.	Eger (2009)
A smart city is based on intelligent exchanges of information that flow between its many different subsystems. This flow of information is analyzed and translated into citizen and commercial services. The city will act on this information flow to make its wider ecosystem more resource-efficient and sustainable. The information exchange is based on a smart governance operating framework designed to make cities sustainable.	Gartner (2011)
A city well performing in a forward-looking way in economy, people, governance, mobility, environment, and living, built on the smart combination of endowments and activities of self-decisive, independent and aware citizens. Smart city generally refers to the search and identification of intelligent solutions which allow modern cities to enhance the quality of the services provided to citizens.	Giffinger et al. (2007)
A smart city, according to ICLEI, is a city that is prepared to provide conditions for a healthy and happy community under the challenging conditions that global, environmental, economic and social trends may bring.	Guan (2012)
A city that monitors and integrates conditions of all of its critical infrastructures, including roads, bridges, tunnels, rails, subways, airports, seaports, communications, water, power, even major buildings, can better optimize its resources, plan its preventive maintenance activities, and monitor security aspects while maximizing services to its citizens.	Hall (2000)
A city connecting the physical infrastructure, the IT infrastructure, the social infrastructure, and the business infrastructure to leverage the collective intelligence of the city.	Harrison et al. (2010)

(Continued)

source: [Smart Cities: Definitions, Dimensions \(2015\)](#)  
source: [google presse](#)



# Eine Smart City ist?

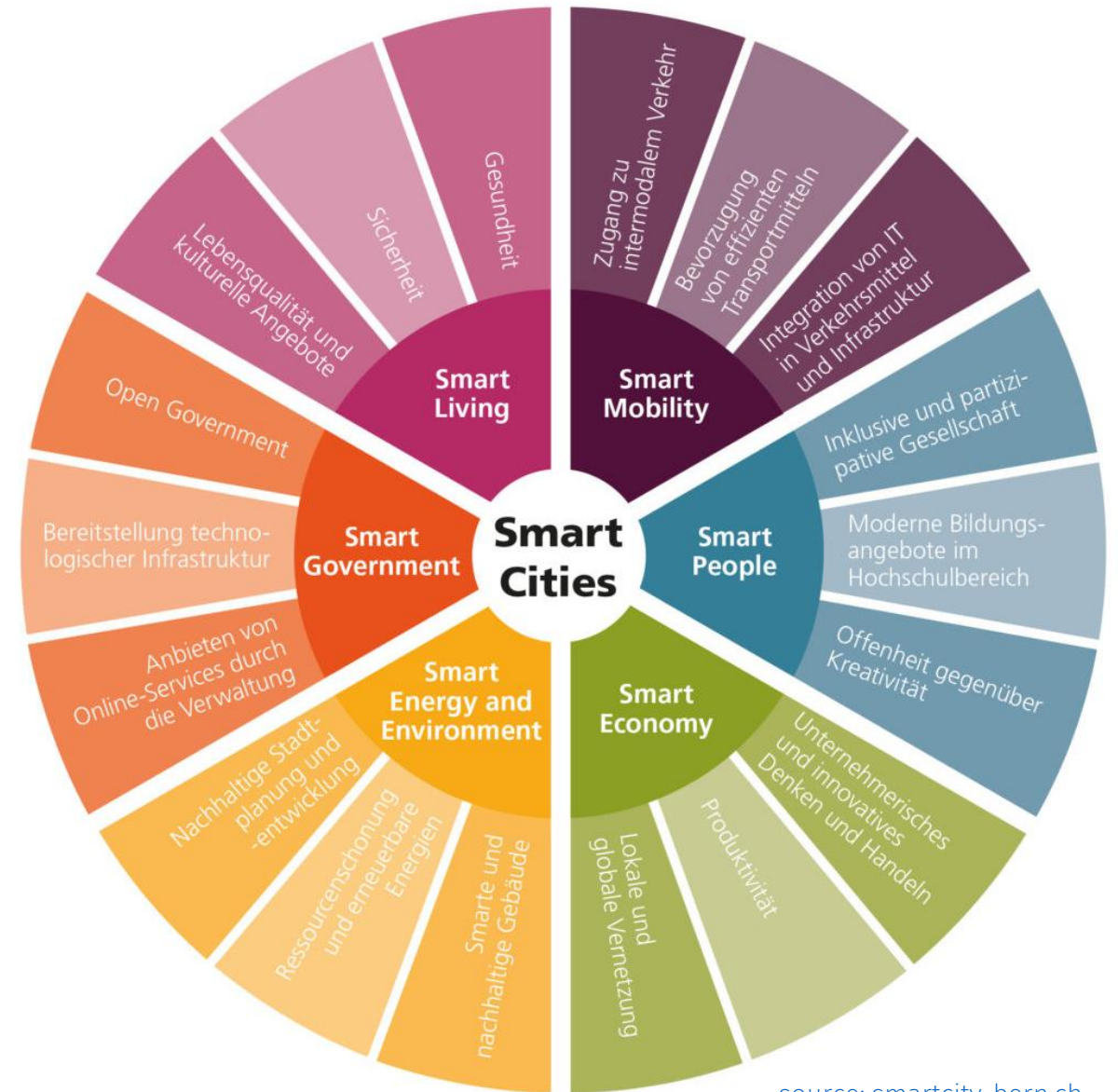


# The famous wheel

- Farbig
  - Einfach zu verstehen
  - Funktioniert mit Silos
- aber
- Vollständig?
  - Transversal?
  - Es gibt andere Frameworks

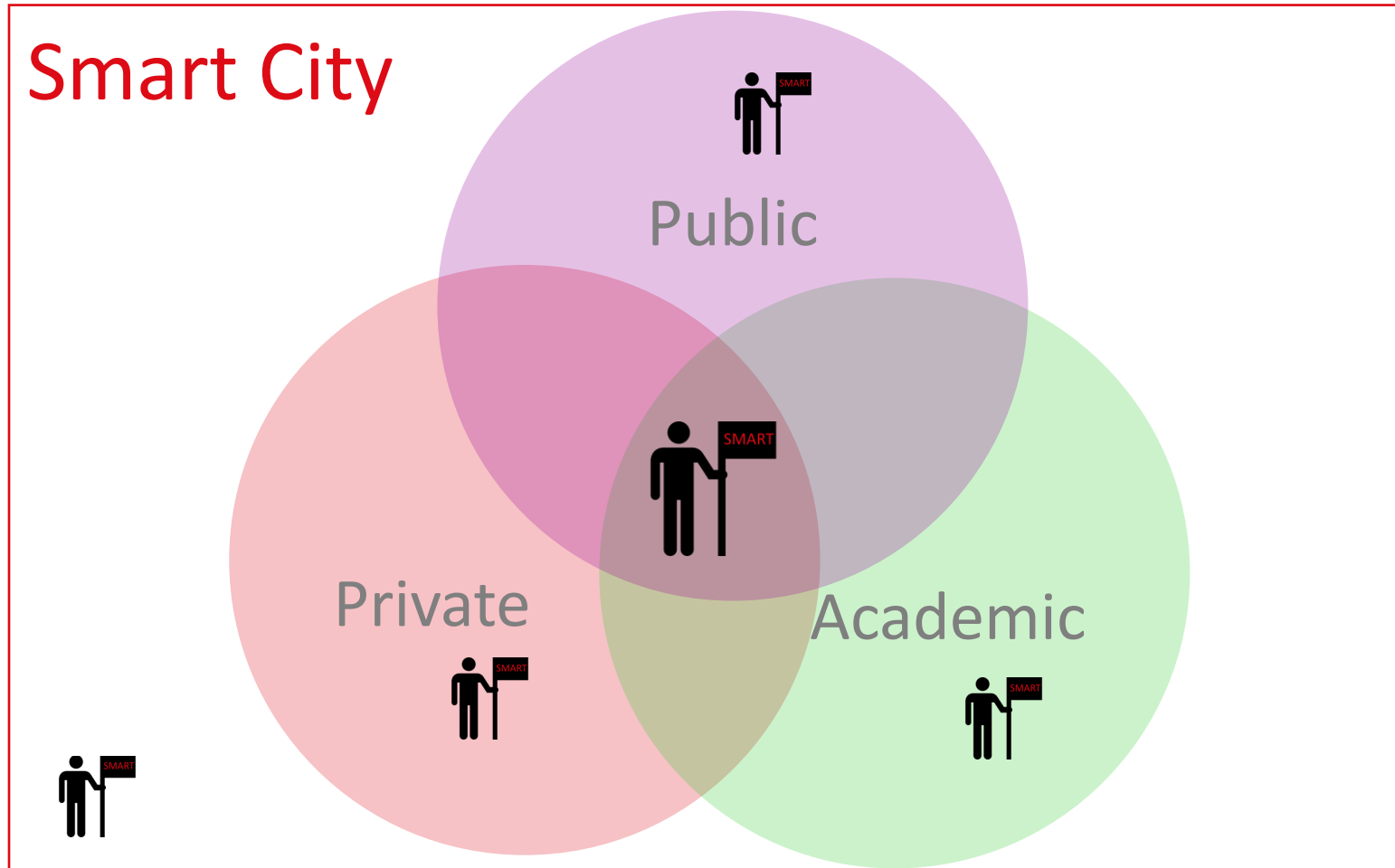


source: [the global goals for sustainable development](https://www.un.org/sustainabledevelopment/)



source: [smartcity-bern.ch](https://www.smartcity-bern.ch/)

# Collaboration is the new smart?

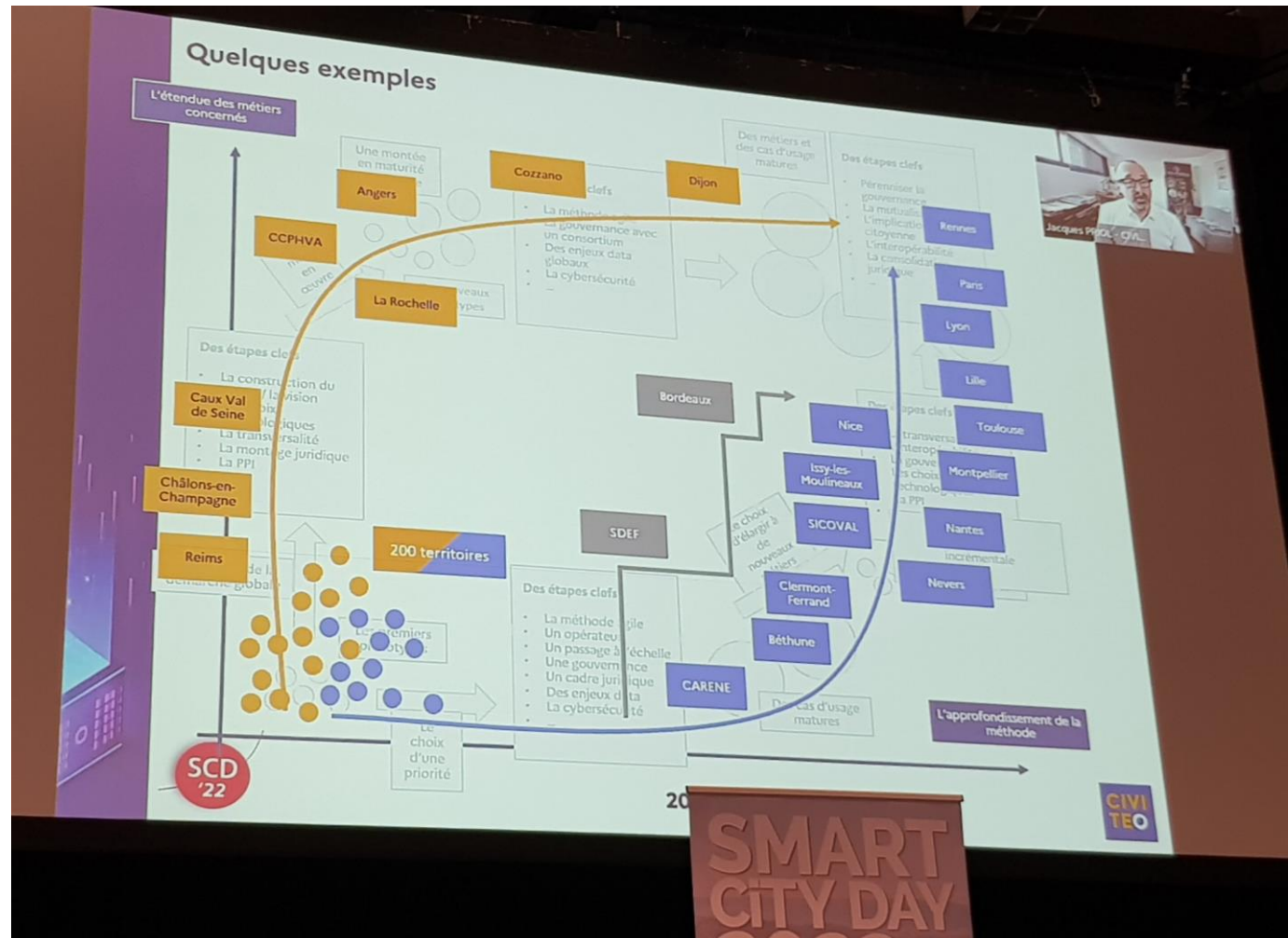


-  A city of happy creative and empowered citizens
-  The preferred place to live, work and visit
-  An inclusive and cohesive society
-  A pioneering and excellent government
-  A smart and sustainable city
-  A pivotal hub in the global economy

[source: kleptika.com](http://source:kleptika.com)



# Bottum-up oder Top-Down



Présentation du rapport «De la Smart City à la réalité des territoires connectés», Jacques Priol, CEO / Directeur de CIVITEO

# Shakespeare's Smart City framework

*Coriolanus: Act 3, scene 1* ☰

MENENIUS

Fie, fie, fie!

This is the way to kindle, not to quench.

☐ FIRST ☐ SENATOR

To unbuild the city and to lay all flat.

SICINIUS

What is the city but the people?

ALL ☐ PLEBEIANS ☐

True,

The people are the city.

BRUTUS

By the consent of all, we were established

The people's magistrates.

ALL ☐ PLEBEIANS ☐ You so remain.



# Wie mache ich mit, als Smart Citizen ?





# Smart City ist ein Sammelbegriff für (unter anderem)

- Eine Zusammenarbeit mit aktiven Stakeholdern, die innovative Lösungen einbringen.
- Effektive und nachhaltige Lösungen für die Herausforderungen unserer Zeit.
- Die Implementierung von Technologie dort, wo es Sinn macht.
- Übergreifende Zusammenarbeit und Kommunikation mit allen Akteuren in der Stadt oder den Gemeinden.
- Die Einbeziehung von Menschen mit gutem Willen: die Smart Citizens
- ...





Fragen ?