



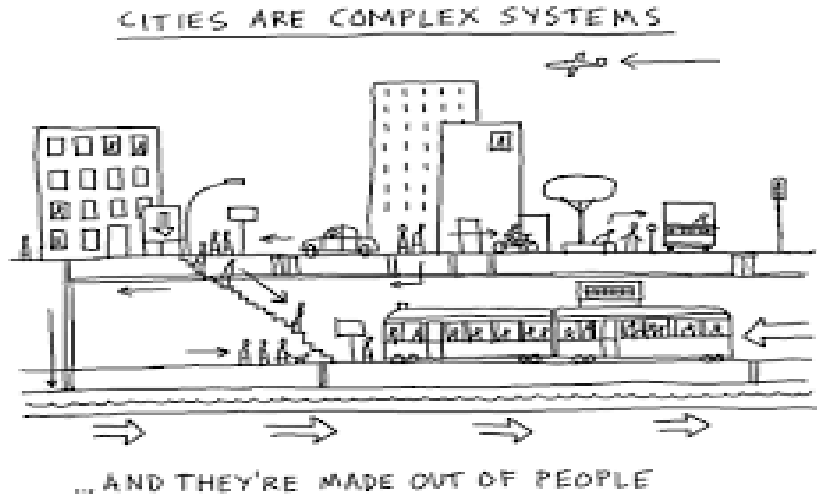
Smart Solutions to City Challenges

Kyoto Smart City Expo – Panel 1st June 2016



UN ÉCOSYSTÈME D'INNOVATION SCIENTIFIQUE
POUR UNE VILLE
INTELLIGENTE ET DURABLE.

City Challenges



City challenges – Urban Sciences



Joint Research Unit in Urban Sciences



- **Consortium** of Universities, Industries and (city) Government
- Promoting **innovation** – transfer of technology and knowledge
- **Synergy** between researchers, developers and end-users



THALES

INRS
Université d'avant-garde



Québec



Joint Research Unit in Urban Sciences



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Québec – Urban lab



Quebec Techno Park – Catalyst



- | | |
|---------------------------------------|-------------------------------------|
| 1. MULTILOCATIF | 29. GRIG |
| 2. BPR GROUPE-CONSEIL | 30. FP INNOVATIONS FORNITEK |
| 3. MULTILOCATIF | 31. COMPLEXE SCIENTIFIQUE |
| 4. SO3 | 32. MARIAG - LAB PATHOLOGIE ANIMALE |
| 5. MULTILOCATIF | 33. OPTIL VISION |
| 6. DECTRO INTERNATIONAL | 34. CORPORATION SCIENTIFIQUE CLASSE |
| 7. HOBEL BIOPHARMA | 35. APN |
| 8. CRF BICO CANADA | 36. CPT LES P'TITES PÂPILLONS |
| 9. ASEA BROWN BOVERI (ABB) | 37. MEDICAGO |
| 10. MAXTECH | 38. BILCYCLE |
| 11. MULTILOCATIF | 39. BARS |
| 12. CENTRE DE RESSOURCES | 40. BD DIAGNOSTICS GENEOMM |
| 13. MULTILOCATIF | 41. INDUSTRIES ROCAND |
| 14. INSTITUT NATIONAL D'OPTIQUE (INO) | 42. ANAPHARM |
| 15. CORRE LENSES | 43. GAZ METRO |
| 16. MULTILOCATIF | 44. GLAXOSMITHKLINE |
| 17. TERAXION | 45. HYDRO TECHNOLOGIES |
| 18. MULTILOCATIF | |
| 19. ALLSTREAM | |

Smart Campus





Thales – Smart City Experience



Network of SMEs



FORWARD SIM



Primodal
Earth Essential Technologies



WaterShed
Monitoring

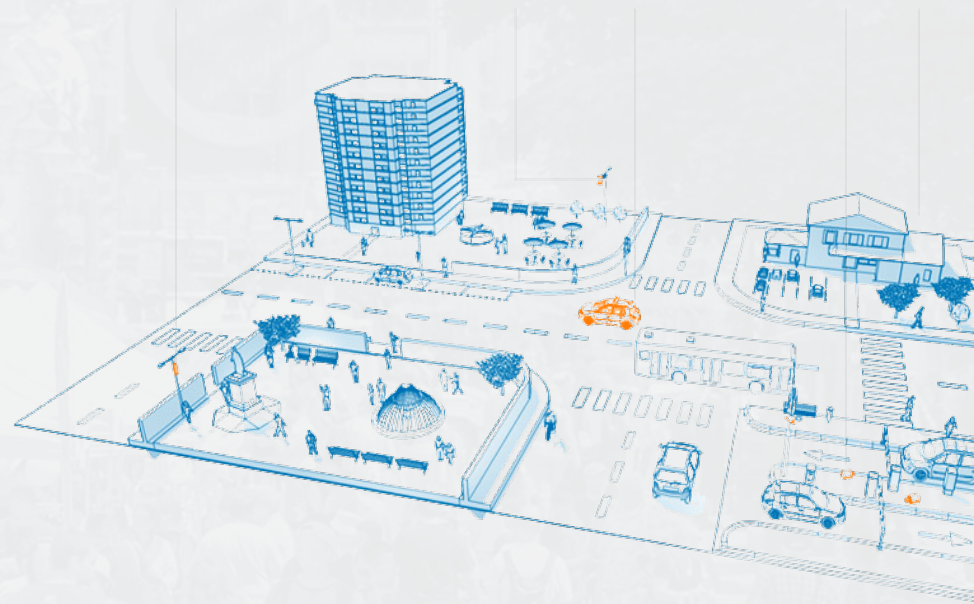


Co-construction and innovation

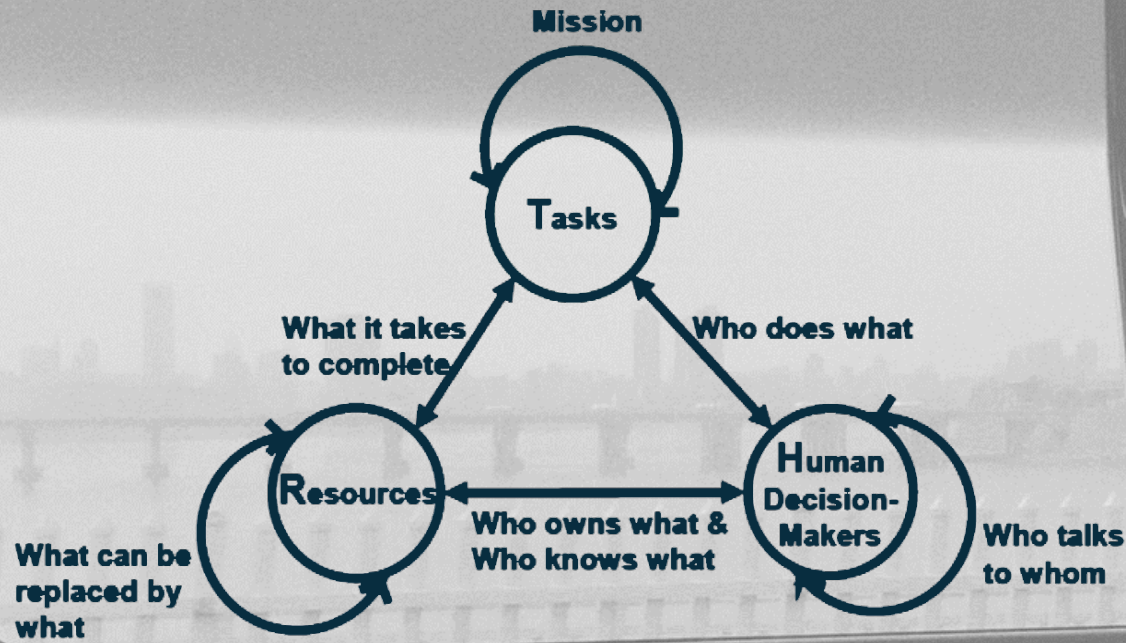


Efficiency and Fluidity

- Optimization of city **logistics**: From sustainable mobility to security;
- Smart **resources management**: Energy, Water, Space and Infrastructure;
- Improve **governance**: decision-making, policy making and planning;
- Development of new solutions from a **citizen perspective**



Socio-Technical Approach

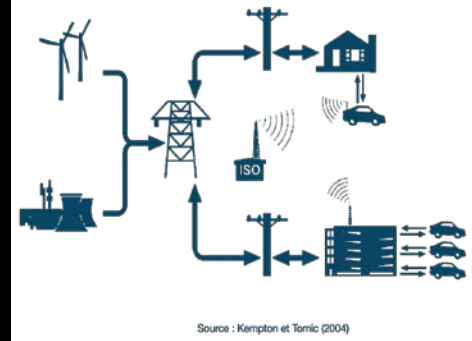




Digital Age, Big Data and Intelligence



R&D Projects



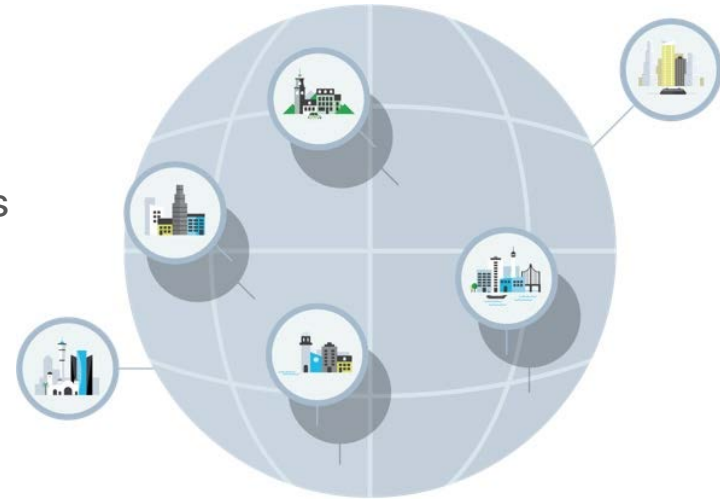
Source : Kempton et Tomic (2004)



Roles of the Joint Research Unit



- Breaking down the Silos
- Mobility of Highly Qualified Personnel
- Attractor of Talent
- Leadership from large Cities – transfer to Regions
- Scalability : Campus – city within the city
- Openness : From data sharing to collaboration





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