Smart Cities: A Socio-Technical Experiment

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Agenda

1. The definition of Smart Cities

2. From products to projects and standards

3. Hurdles and risks

4. Emerging trends
Definition

Please give me one sentence definition on smart cities

Smart cities are urban areas that leverage advanced technologies and data-driven solutions to enhance efficiency, sustainability, and quality of life for residents.
Smart, connected street lighting

1. High efficiency LED lighting
2. Sensors
3. Auxiliary services
Product to projects

“What is ‘Smart’? What do we want to achieve?”
Standardization: Smart Cities

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Smart city standards inventory and mapping, Part 1: Methodology
City Information Modelling

development of digital representations of a city made up of large quantities of geospatial data, often including real time data, which enable better city planning and management

-IEC SRD 63273: Use Case Collection and Analysis: City Information Modelling
Stakeholders of CIM

- **Utilities**
  Services Planning

- **Regulators**
  Compliance Enforcement and Verification

- **Owners**
  Project Progress and History Tracking

- **Practitioners**
  Project Benchmarking and Compliance Assurance

- **Councils**
  Development Approval and Project Assessment

- **City Planning**
  Digital Twinning

CIM Platform
Hurdles and risks

1. Understand the needs
2. Coordination of city departments
3. Planning and financing projects

2. Security
2. Privacy and trust
Hurdles and risks: From body temperature detection to identification

1. Smart Infrastructure to control Covid
2. Software upgrade that enables identification
3. Consent, trust and human rights
Hurdles and risks: Data Management

1. Creation
2. Collection
3. Storage
4. Use
5. Analysis
6. Reuse
7. Archive
8. Deletion

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Emerging trends

1. Interoperability

2. Advanced analysis