

# Adamantic

A Sustainable Data Management Approach for Smart Cities

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### **Problem: Smart Cities and Their Data**

Smart Cities are based on a smart usage of the data they produce.

- An **enormous** quantity of data  $\rightarrow$  hence the term "Big Data"
  - IoT devices
  - People, Organisations, Processes, Documents
- Unrelated and unclassified
  - Different producers, businesses, purposes, and ethics
- Who trusts...
  - ... the Data Producer?
  - ... the Data Consumer?
  - ... the Intermediary?



### **Problem: Smart Cities and Their Data**

Common (current) approach: establishing trusted Point-to-Point relationships between selected producers and consumers

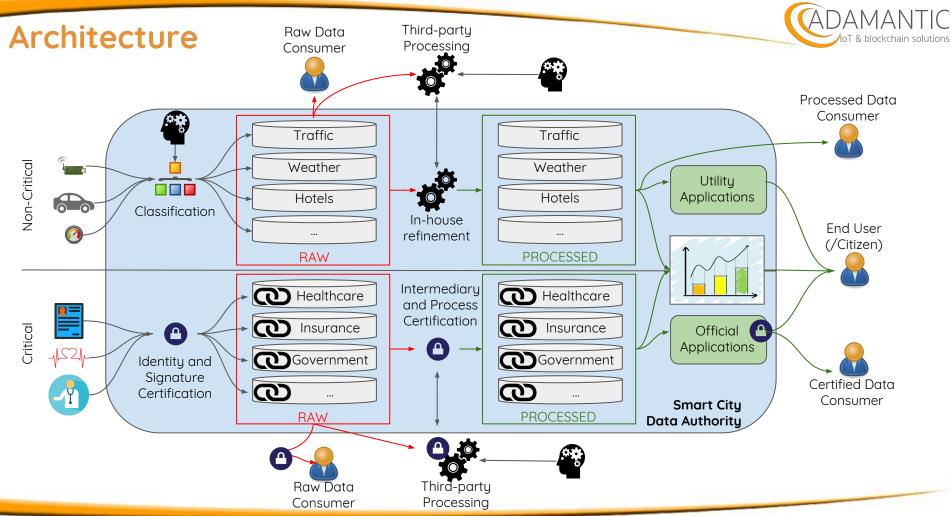
- Too many links
- Total loss of control over data
- $\rightarrow$  **NOT** sustainable for mission-critical businesses
- Healthcare
- Government
- Insurance
- ...

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### A Different Approach Is Possible

Divide data in two categories:

- Non-critical
  - Statistics
  - Traffic Management
  - $\circ \longrightarrow$  tagged, loosely-coupled Big Data
  - Approach: topic-based, categorized and Al-reconciled Big Data
- Critical
  - Official documents and procedures
  - Health Information
  - Personal Data
  - Approach: blockchain-backed certification of
    - Data
    - Actors (producers, consumers, intermediaries)
    - Processes (data manipulation)



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### Adamantic Technologies are supporting Smart City initiatives of the following Technological Partners





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& blockchain solutions