

Trustworthiness in Data-driven Artificial Intelligence of Things (AIoT)

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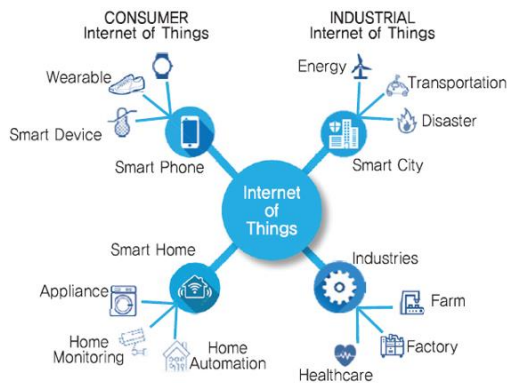
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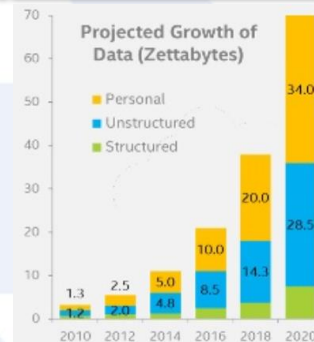
IoT and Data – Artificial Intelligence of Things (AIoT)

Leverage **the massive amount of data**

Extension of IoT Applications



Data Explosion



Artificial Intelligence of Things



AI: Data-based learning



Big Data: Capture, storage, analysis of data



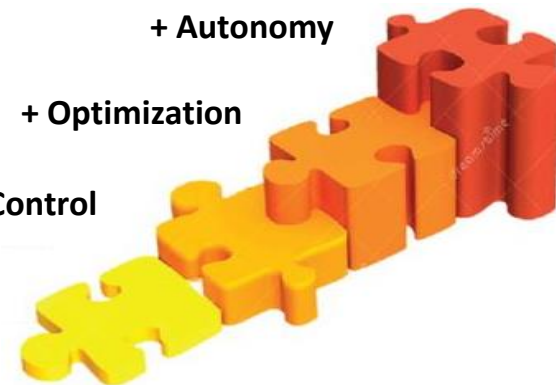
IOT: Data Collection through IoT

From
Connecting
Devices to
**Creating
Value**



+ Remote Control

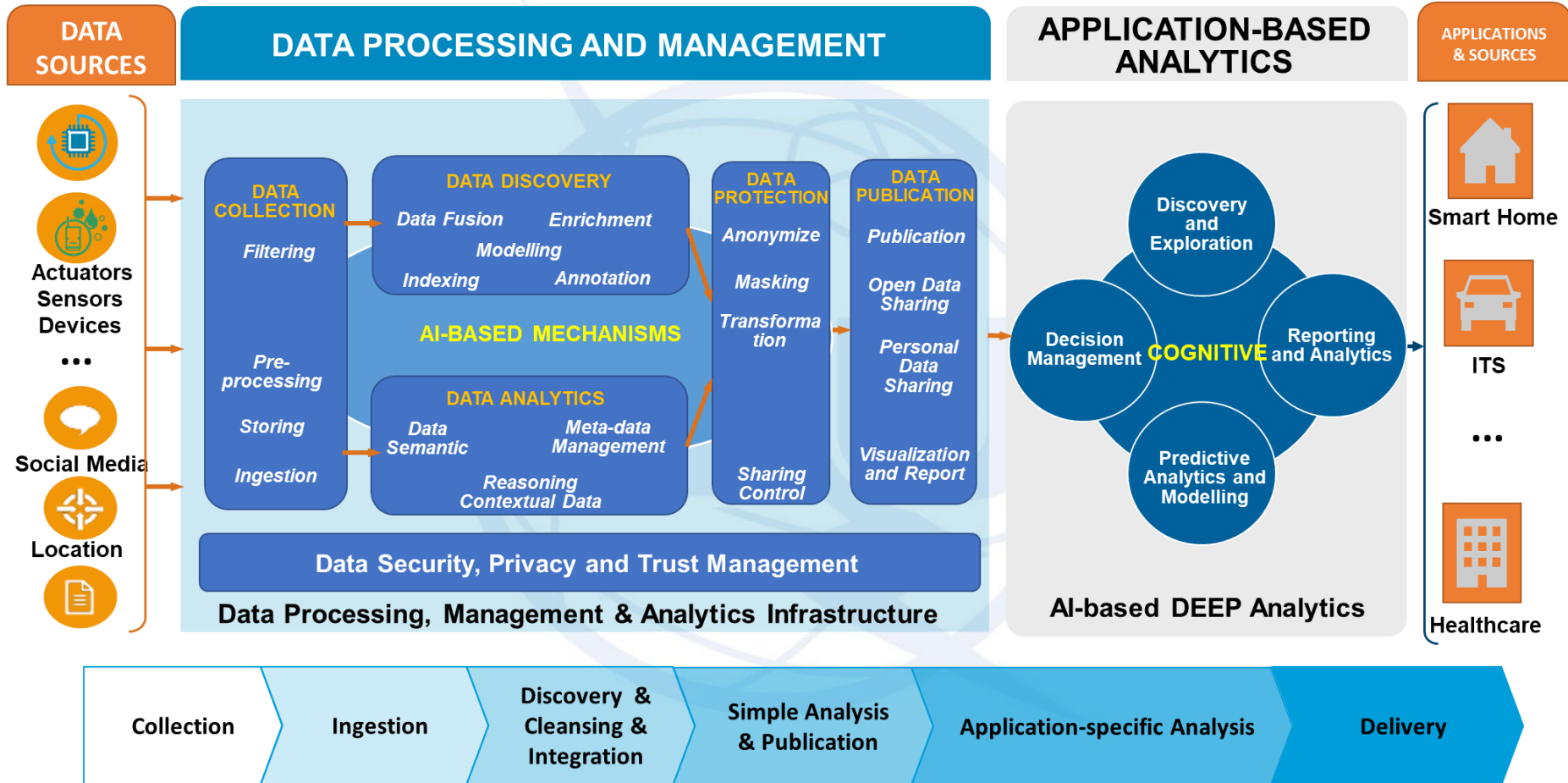
Identification/Sensing



+ Optimization

+ Autonomy

Data-driven AIoT



Data Security, Privacy, Trust and Governance for trustworthiness in AIoT

Trustworthiness encompasses the concerns of **security, privacy, safety, reliability and resilience**, which are too often addressed separately and in isolation in risk management approaches. (NIST CPS Framework)

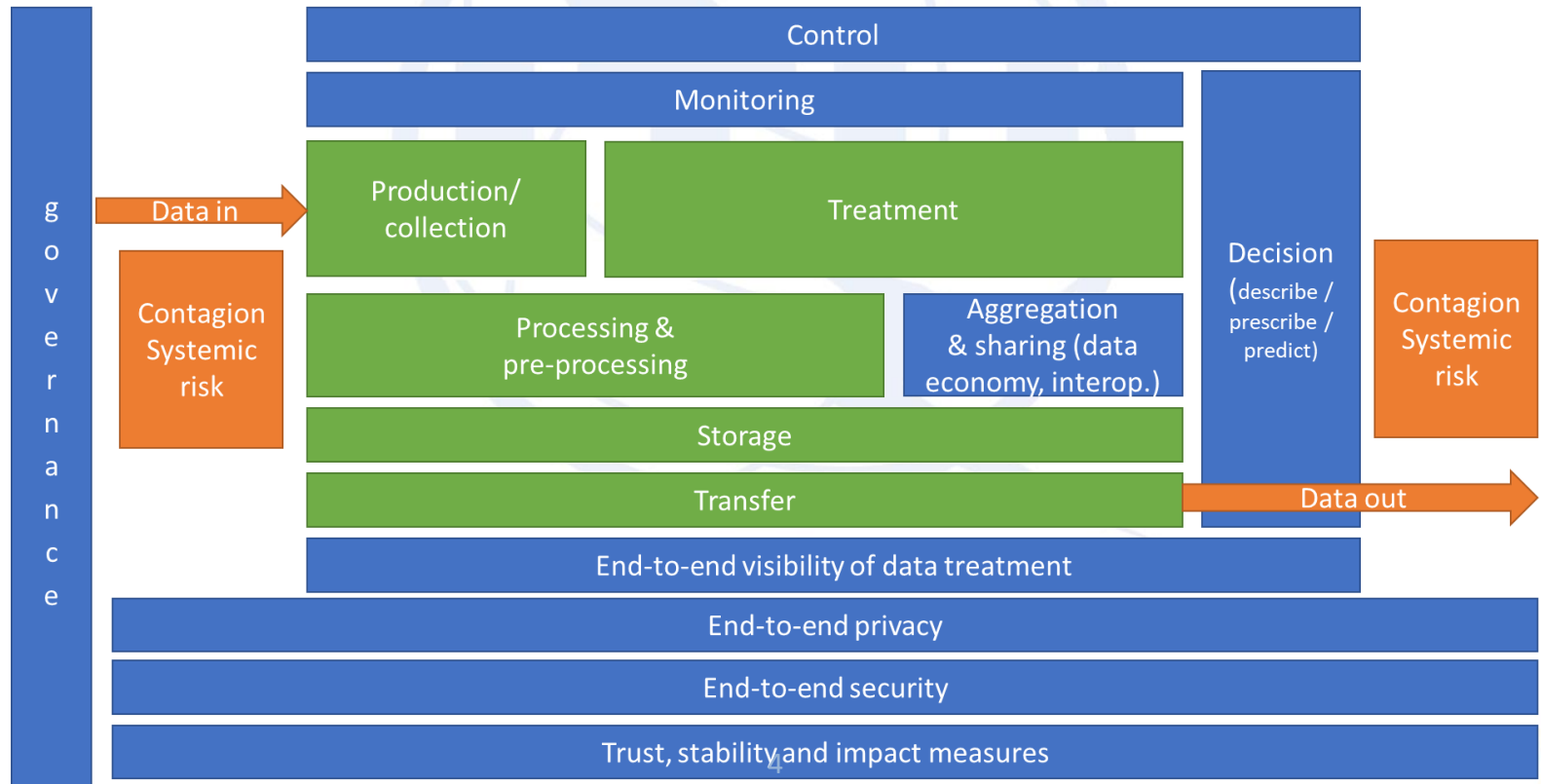


Trustworthiness in AIoT



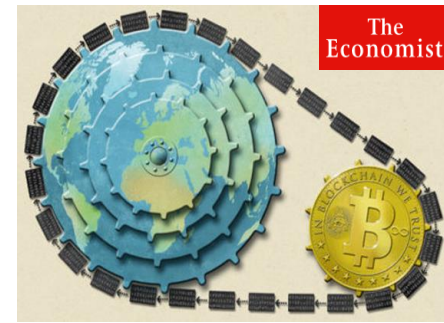
Trust is an essential element in Big Data and Analytics for **Intelligence**.

“Trust is the **oxygen** which will breathe life into the IoT. Industry needs to show **data** is safe and that it is properly treated.” (source: www.techuk.org)



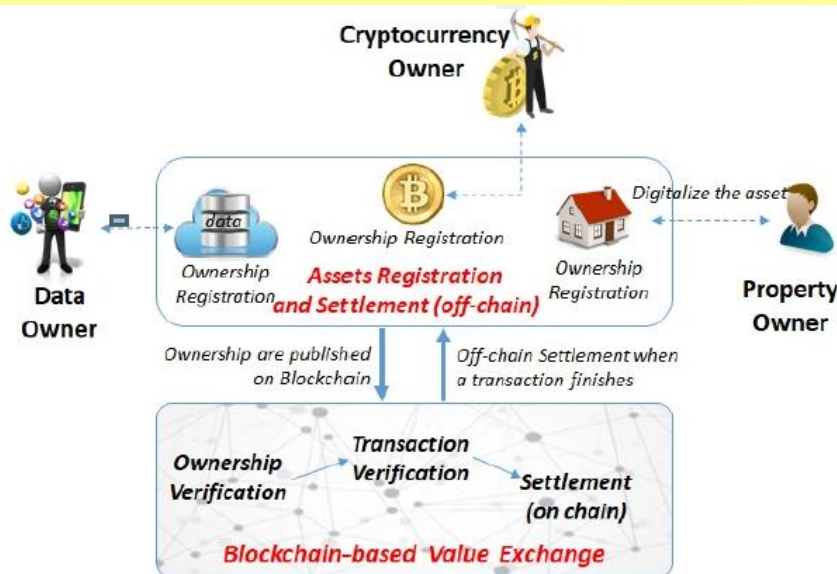
B BLOCKCHAIN - Internet of Value

A machine for creating trust

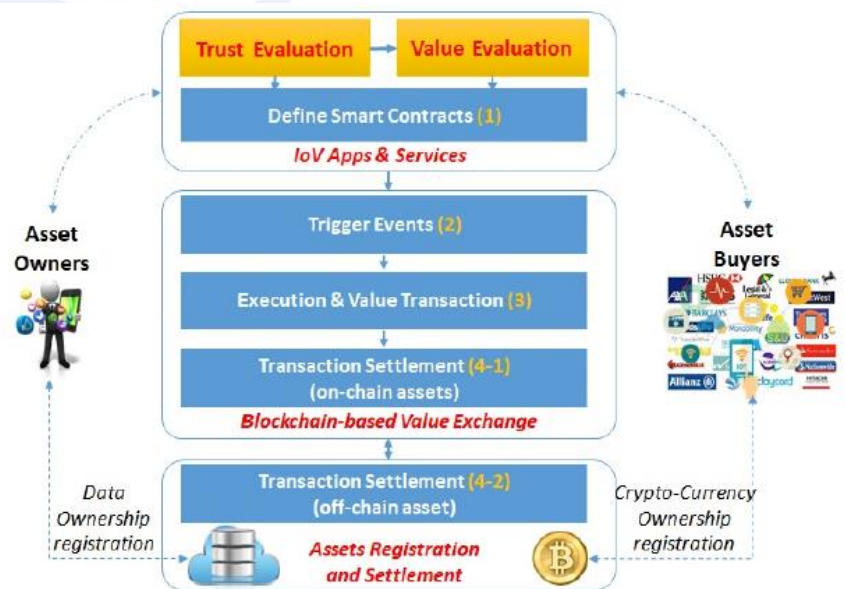


- The currency in the Internet is **data**.
- Revolutionizes how transactions are recorded
 - a **decentralized digital ledger** that records transactions
 - builds **trust** with **accountability** and **transparency**

The **IoV** is as a platform of the next generation Internet that enables various types of assets to be digitalized and represented as digital value using **Blockchain**.



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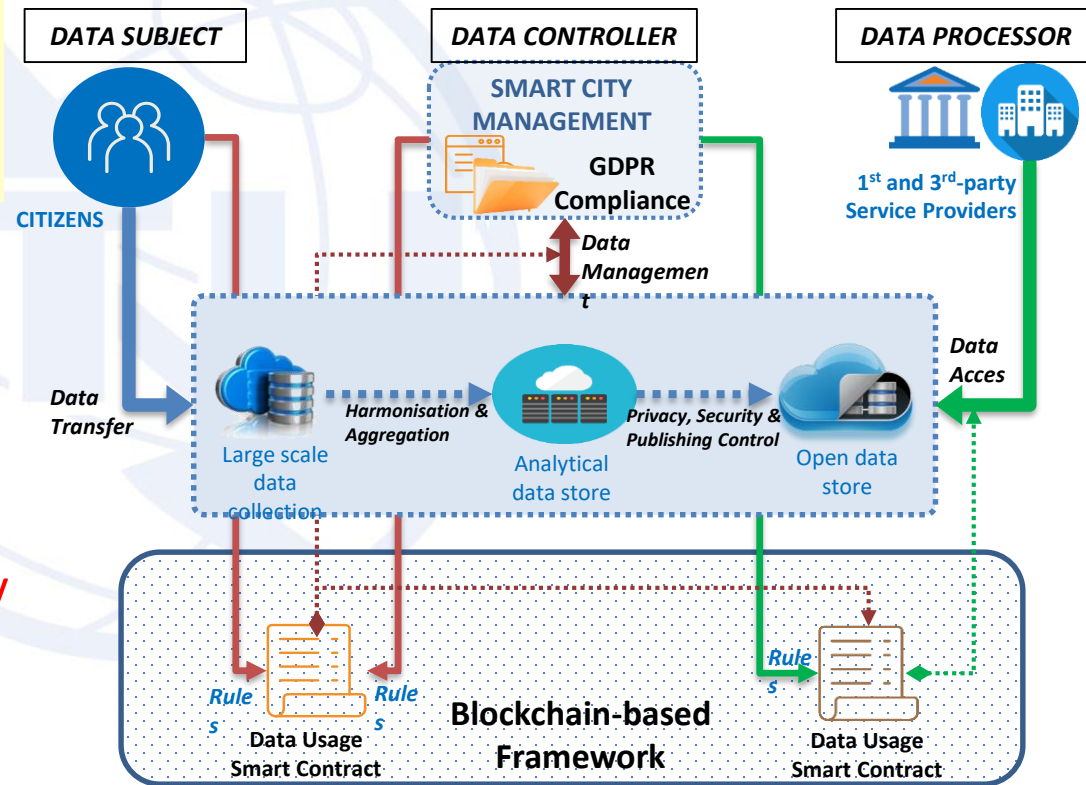
Data Economy - Data-driven services

An intelligent nerve that facilitates the **data trading, data exchange** and **data management** that facilitates the **business** development, at the same time that satisfies the **regulations**

Build a **Data Economy Ecosystem** that offers **lawfully** and **GDPR compliance by default**

- a **Distributed Ledger Technology (DLT)** to empower with a responsible use of data, establishing **trust** through **transparency** and **accountability**

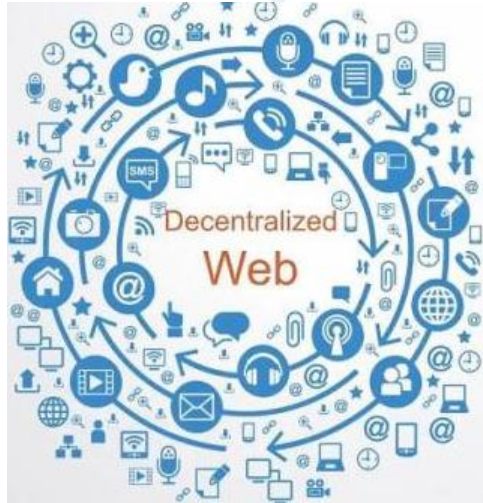
Blockchain-based Data Management in Smart Cities



Toward Decentralization



Tim Berners-Lee



Decentralisation: the next big step for the world wide web

The decentralised web, or DWeb, could be a chance to take control of our data back from the big tech firms. So how does it work and when will it be here?

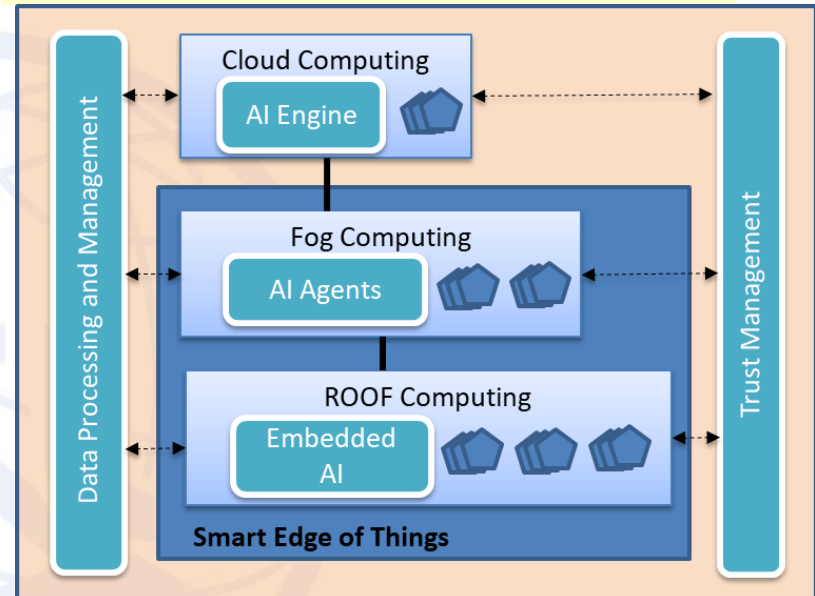
the
guardian



The Guardian: September 2018

▲ Illustration: James Melaugh

Distributed Computing - Edge Intelligence



NOTE - ROOF: Real-time Onsite Operations Facilitation



Concluding Remark

Secure Decentralized Artificial Intelligence of Things (AI + Blockchain + IoT)

