Our world of Smart Objects of Tomorrow

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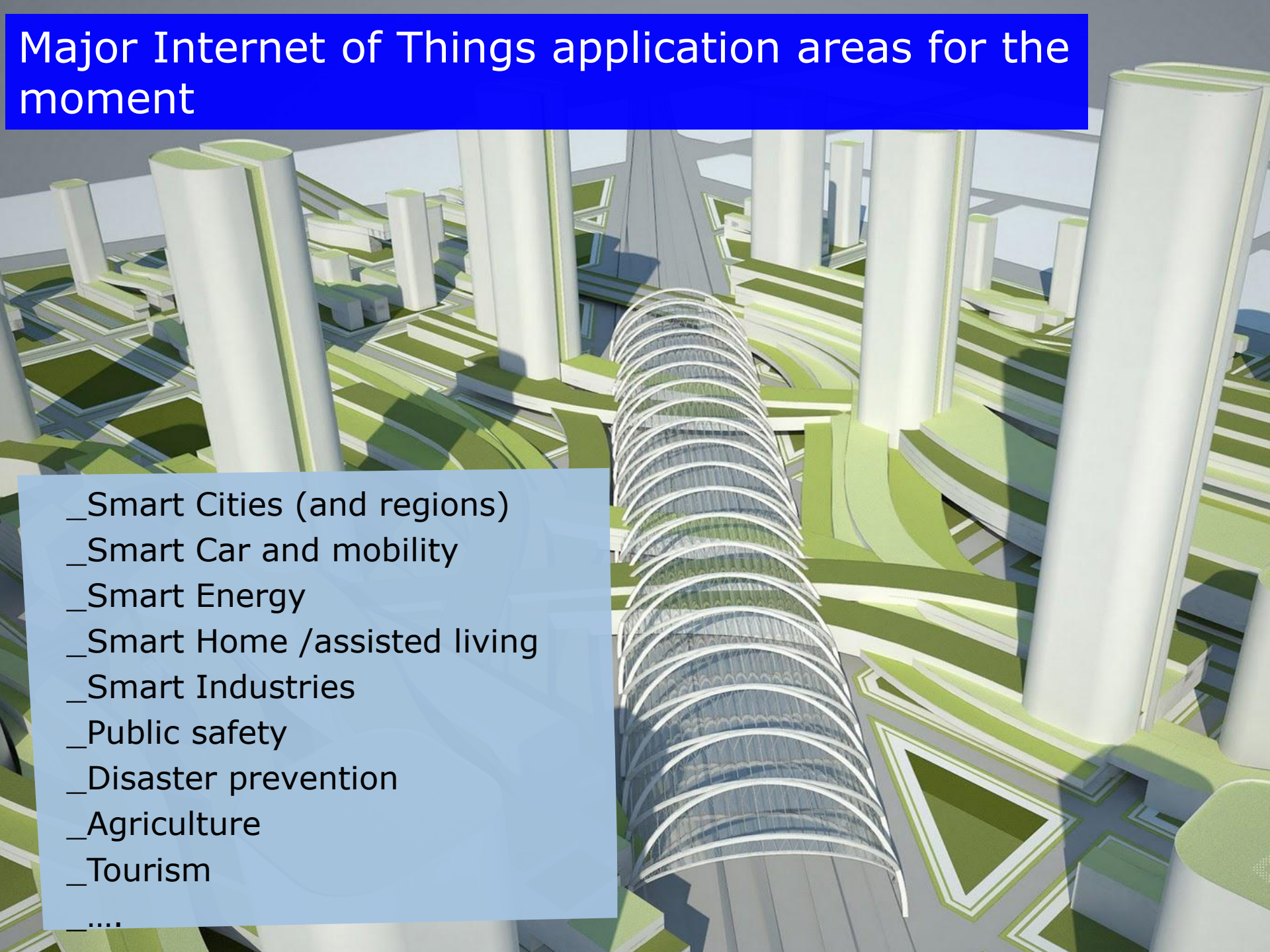# The Internet of Things has finally arrived

_Attention of many governments

_Industrial stakeholders are taking up the subject

_End-users get more used to smart devices

_Powerful combination with various approaches –
  Cloud, Future Internet, Big Data, robotics…
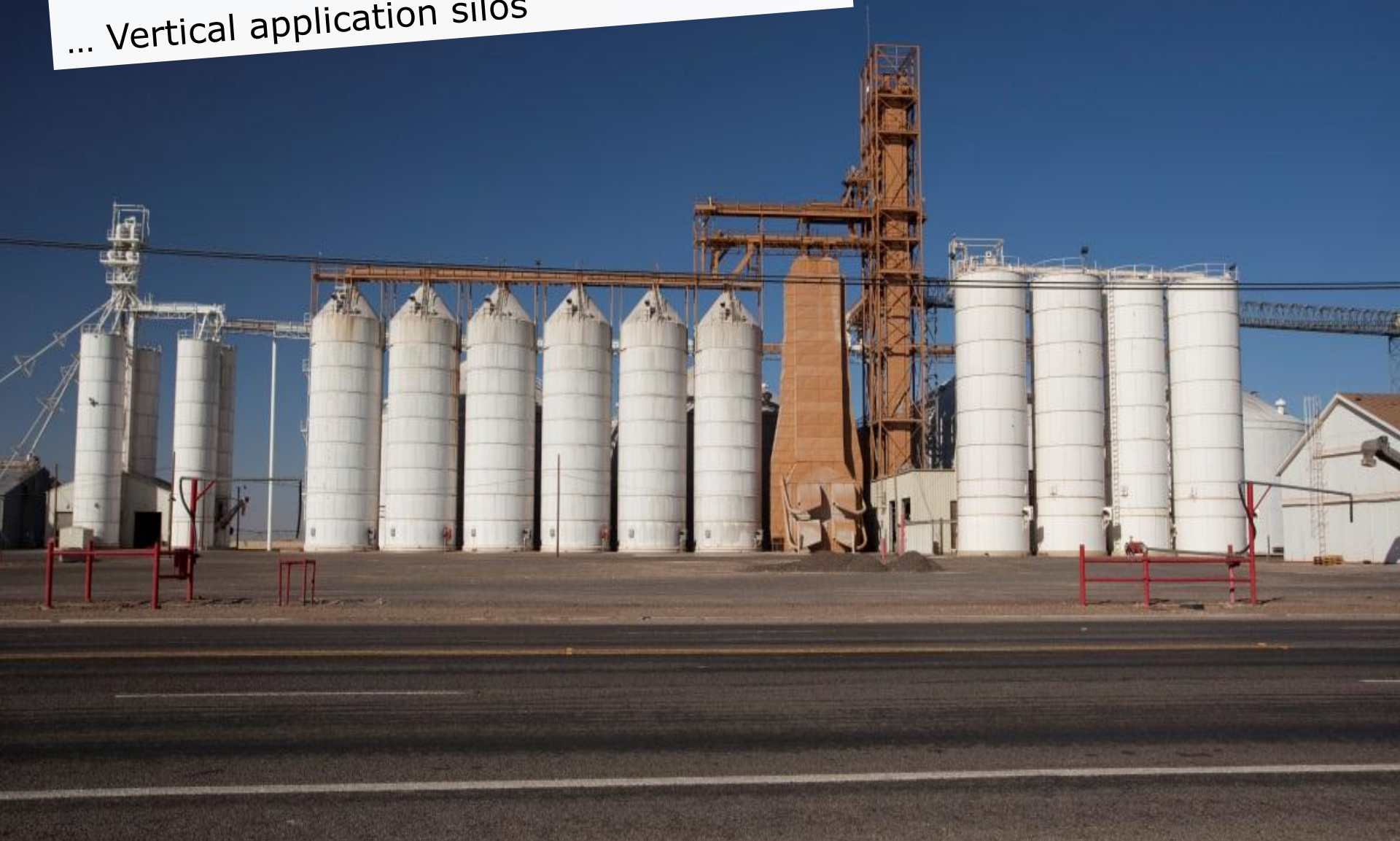
_Emerging business models like M2M, ,IOTS, IOE…

Major Internet of Things application areas for the moment

_Smart Cities (and regions)

_Smart Car and mobility

_Smart Energy

_Smart Home /assisted living

_Smart Industries

_Public safety

_Disaster prevention

_Agriculture

_Tourism

_….

But what about the current mind set...

... Vertical application silos

Why does the Internet of Things not really work today?

No forward approach towards universal numbering

Not enough push on multi purpose sensor networks

No solid IOT architectures

Missing semantic interoperability

No clear models for ownership of data

No augmented and rich interfaces

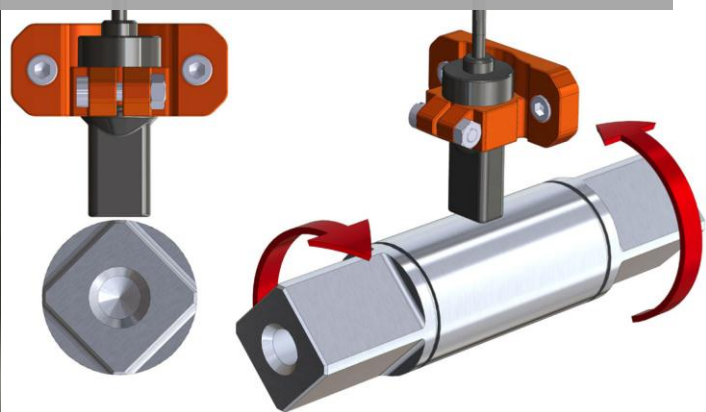Too much focus on existing technology / business approaches
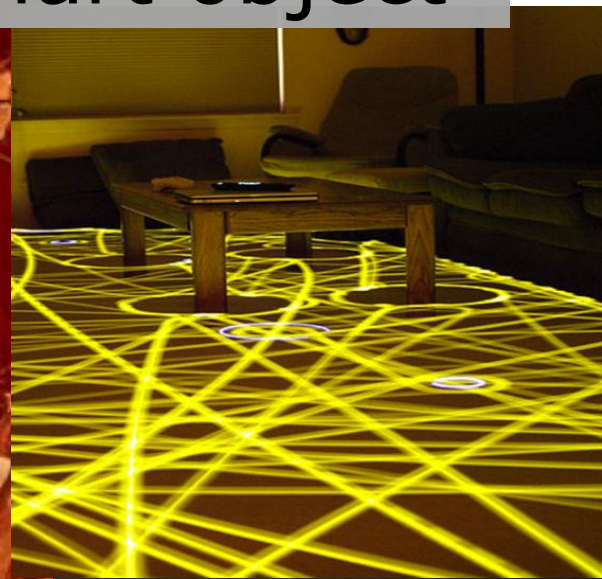
Future research and innovation

_Real-time interoperability of real and virtual objects

_Generic IOT platforms for smart connected objects

_Security and Privacy design related to less controlled environments

_Integration of results from nano, bio and neuro sciences

_Application of autonomous/self-organising system behaviour

_Real-time models and design methods for service development

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From sensor…

…to smart object

Towards the IOT universe(s)…

Explore new worlds
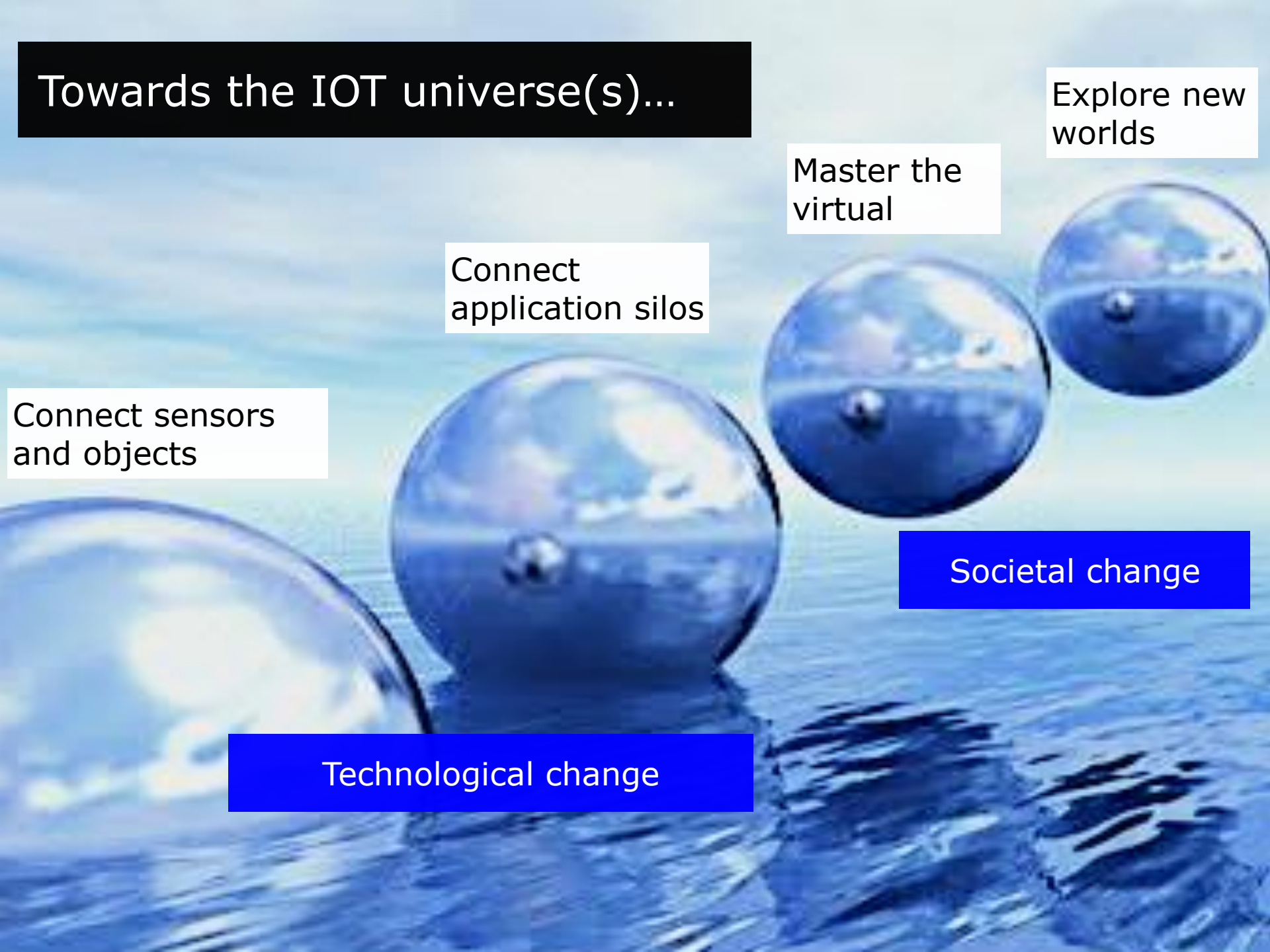
Master the virtual

Connect application silos

Connect sensors and objects

Societal change

Technological change

EC support

Research

_FP: 70 MEUR direct funding in three calls

_H2020: IOT cross-objective and related to networks

_IERC – Internet of Things European Research cluster

_IOT Pan-European research area

Innovation / take-up

_Encourage industry initiatives

_Build public sector leadership

_Venture capital funding

Politics / society

_Promotion of standardisation and interoperability

_Advancement in competive mobile access

_Promotion and orientation of EU values and norms (privacy by design, data protection directive)

www.internet-of-things-research.eu