How water digital innovations can benefit to River Basin Organisations?
The on-going experience of Fiware4Water

10 November 2020

Setting the scene

How the water sector can benefit from digital innovation?

Philippe Cousin, EGM

Drivers to innovation

- Innovation helps organizations to grow. Growth, though measured in turnover and profit, can also occur in knowledge, experience efficiency, and quality.
- Innovation is the process of making changes to existing, and it can be radical or incremental, applied to products, processes, or services.
- It can happen at all levels, from management teams to departments to individual.

Changing ICT landscapes and trends

impacting the water sector

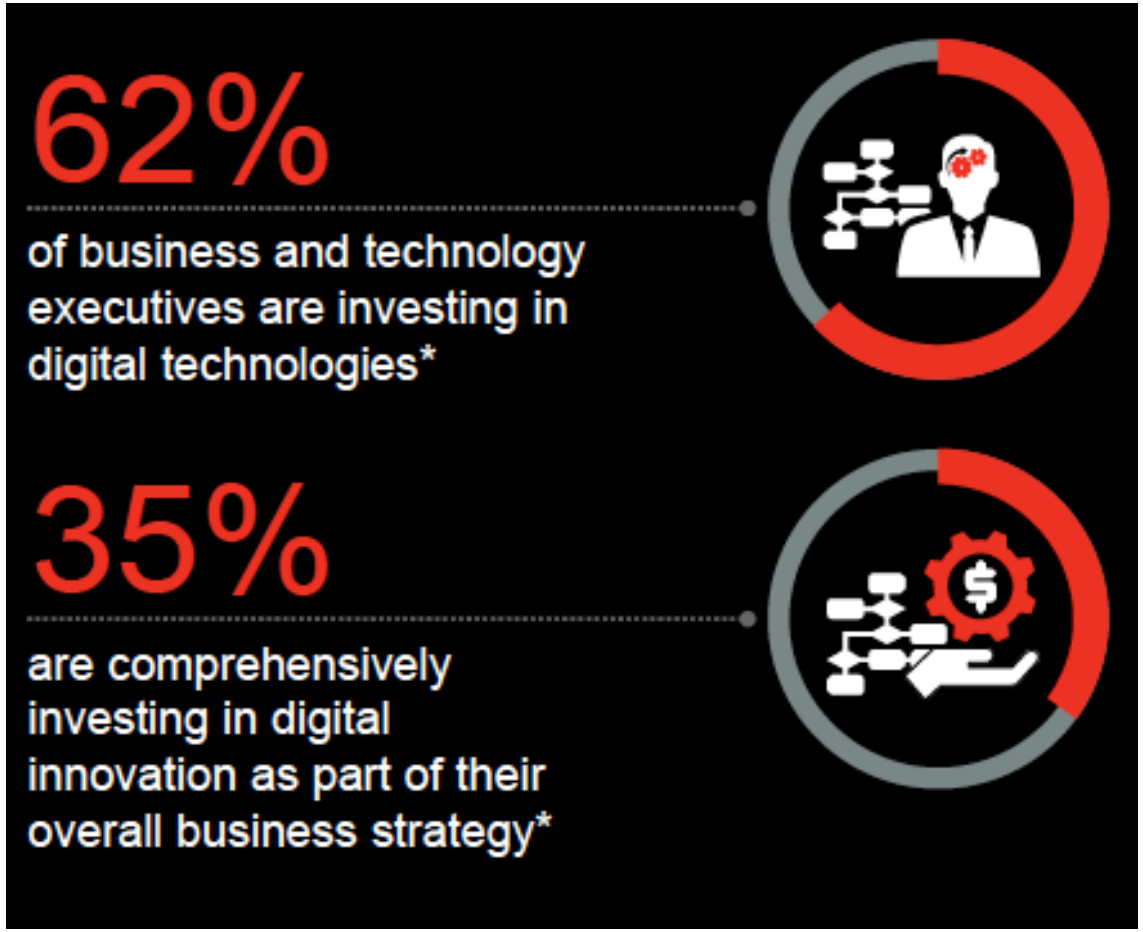
- On-going industrialisation of IT - cloud computing – open service delivery platforms
- On-demand , pay per use of provisioning models
- increase capacity and bandwidth (FTTH,4G , 5G ..) to new Realtime applications
- Virtualisation of classical carrier network will lead to new applications
- Internet of things
- Internet of services
- New agile and dynamic business relationships & environments

Championing innovation

If agility accelerates growth, innovation is the driving force to achieve it

Speed matters in a digital economy:

- Customers expect products and services to be instantly available through whatever channel they choose
- New competitors are springing from unrelated industries or new, low-cost, technology-powered digital business models
- Value chains of established companies, or industries, are being disrupted



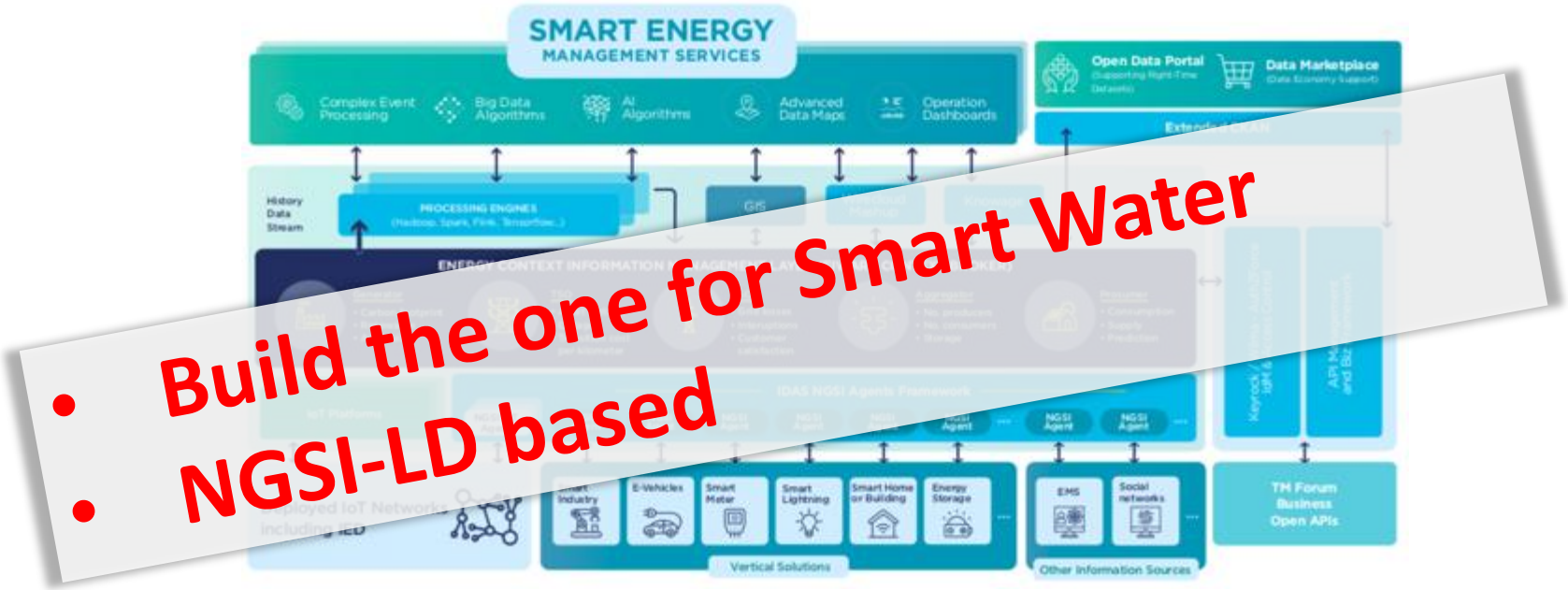
Source accenture 2015

Market stakeholders perspectives

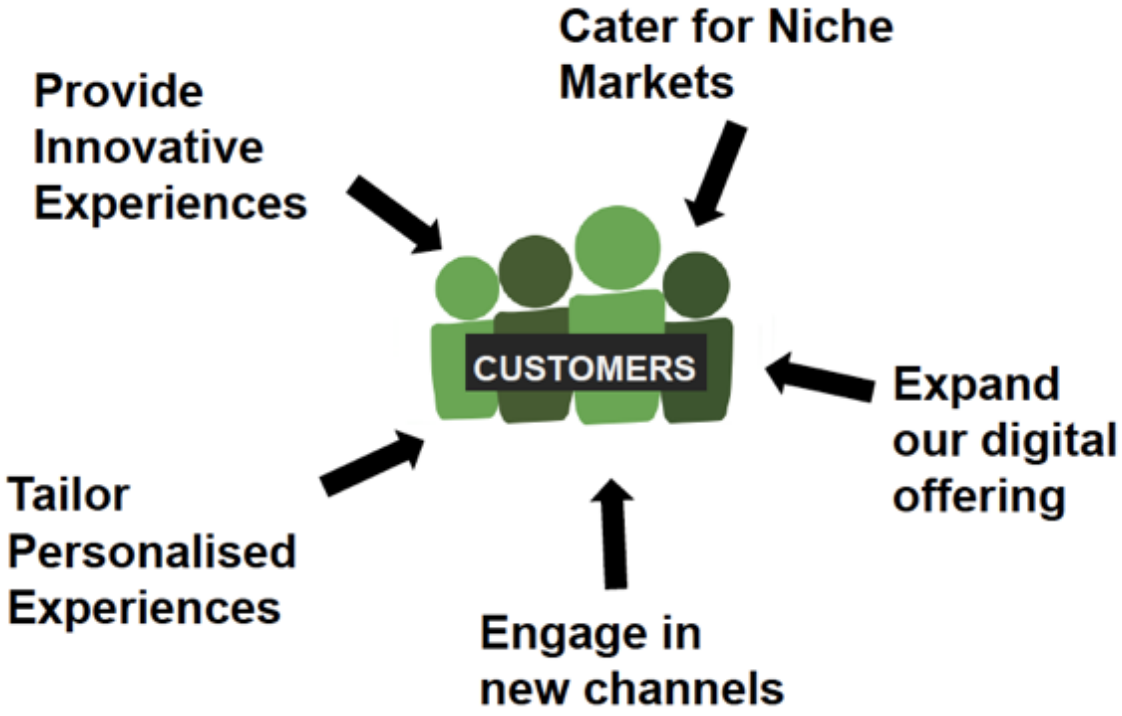
- **end customers** want to gain access and easily consume applications
  - How to management ever-growing data and information ?
  - How to improve means for communication and collaboration within their social networks ,families,…?
  - How to transform communities, homes and cities into safer and better places to live and leverage the Internet as an additional societal utility ?
- **Entreprises and organisations**
  - How to get closer to customers to deliver more compeling user experience and better service
  - How to provide more personalization and services
  - How to speed up services time to market

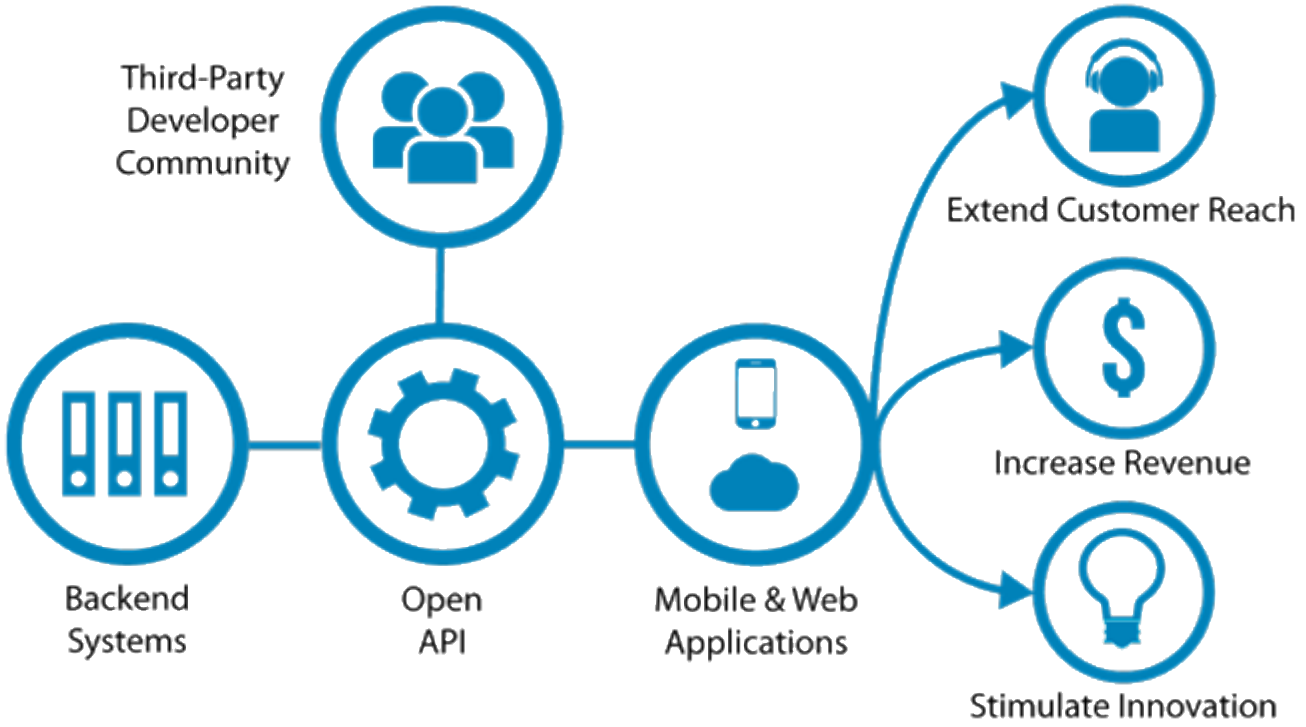
Market stakeholders perspectives

- **Application/service developers and providers** Challenges to build smart applications covering needs for consumers
- Importance of APIs or. Generic Enablers standards based , offering flexible deployment and provisioning means



Drivers for open API





Towards strenghtening innovation-enabling capabilities

- Applications are still made in silos per vertical sectors such as health, transportation and logistics, energy and urban management.
- applications are developed multiple times for particular purposes with proprietary interfaces.
- These hinder the growth of economies of scale for application and service developers, and limits the size of the addressable markets
- most revenues in the ICT sector will be generated by products and services which have not yet been developed,

investments into the innovation-enabling capabilities are crucial for success in the global market competition.

Economic, societal and political

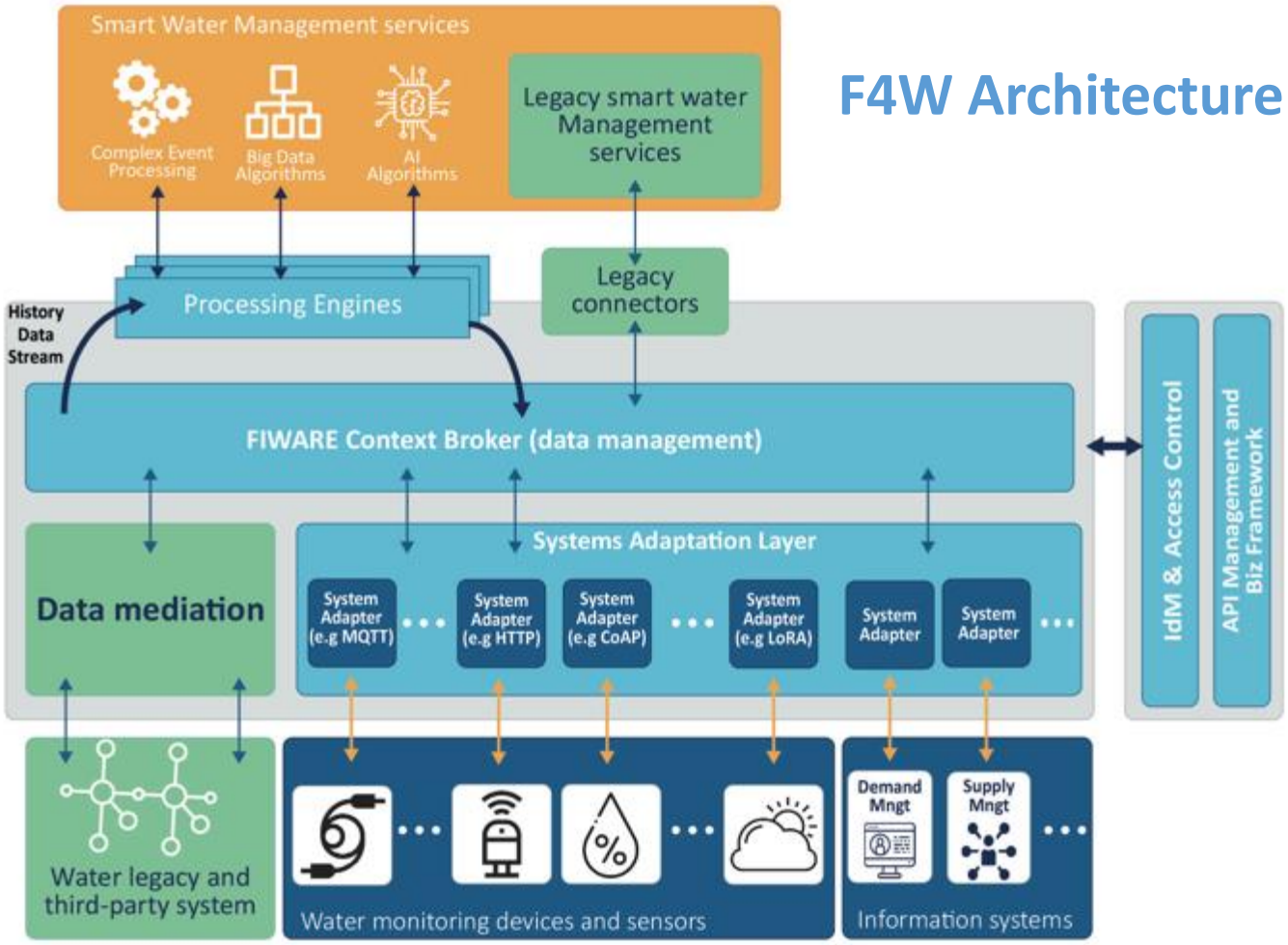
- Economic: difficulties for traditional sector to transform which requires a new framework

- Societal : needs for platform whereby stakeholders across different sectors (e.g., water, logistics, energy management, sustainability, transport etc.) can cooperate

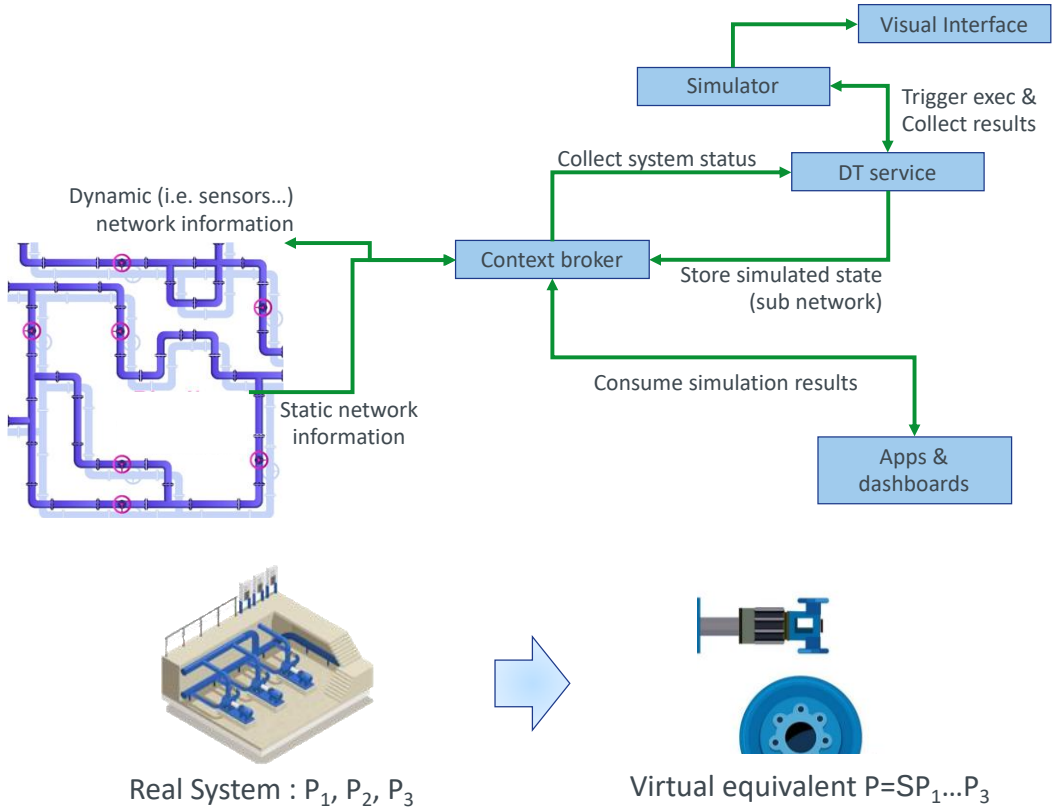
- Political : needs to remove barriers to innovation (eg complex or incompatible ICT policies in different countries and regions.)

Some current actions

F4W Architecture



Digital Twins in water distribution networks



Bringing success stories in water sector

Thank You

Philippe COUSIN,
philippe.cousin@eglobalmark.com

www.egm.io

www. stellio.io

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 821036.