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VICINITY 2020

IoT-enabled eHealth: The VICINITY Way to Smart and Inclusive Cities

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Public

IoT European Platforms Initiative

IoT ecosystem

- **Optimise** total load balance
- **Peak consumption** management
- **Charging** Plan
- Leverage **predicted** use
- Energy **flexibility**
- **Neighbourhood** level

- **IoT** enabled **energy services**
- **Energy cluster** effect, knowledge transfer
- **Shared assets** performance
- Demand **response analysis**
- **DER RES** IoT enabled services management

- Quick **response team**
- Shared resources - **multimodal** integration
- **Multi-domain** integration
- On-demand **assignment**
- **Area** management
- **User access** management

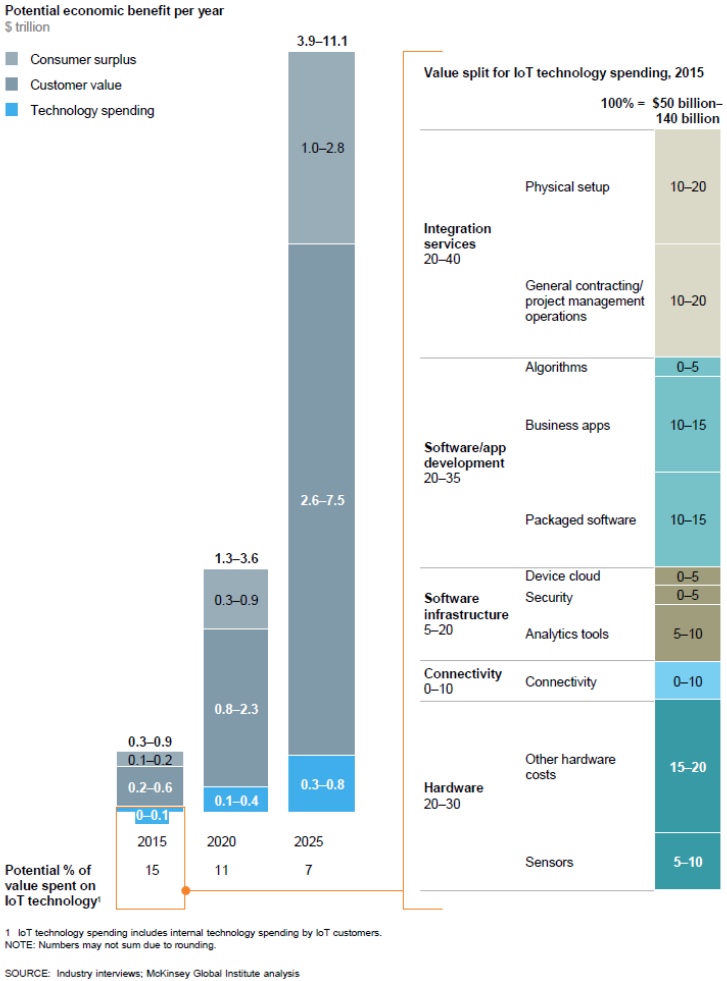
- **Analyse** buildings and **eHealth** IoT info
- **Correlate** information
- **Identify** "abnormal behaviour"
- Introduce **preventive medicine**
- **Promote** fit lifestyle
- **Urban-scale** competition

IoT powering the eHealth Revolution

Using IoT systems to convince healthy people to change their living habits and to help sick patients adhere to doctors' prescriptions would be a true breakthrough.

$1.1T

Potential annual value of IoT from monitoring and treating patients with chronic diseases

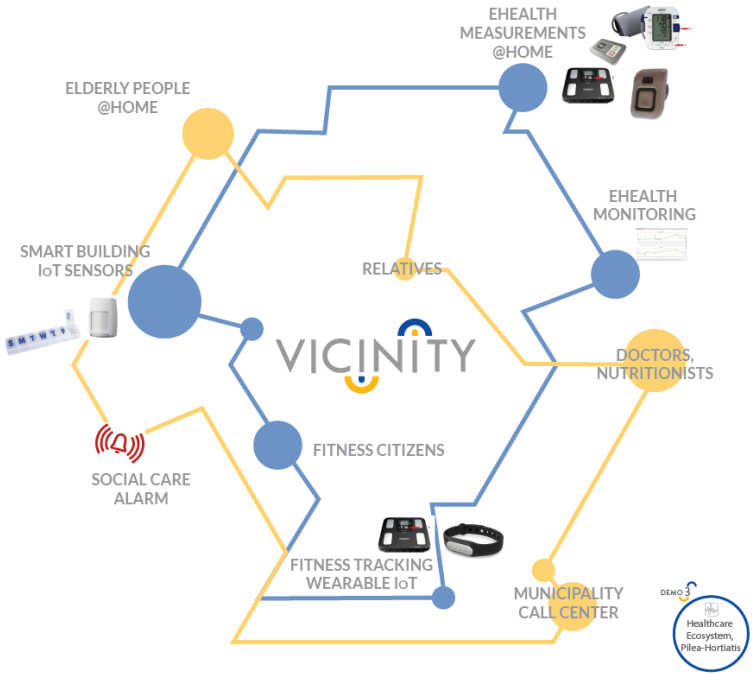


1 IoT technology spending includes internal technology spending by IoT customers.
NOTE: Numbers may not sum due to rounding.

SOURCE: Industry interviews; McKinsey Global Institute analysis

The eHealth Pilot

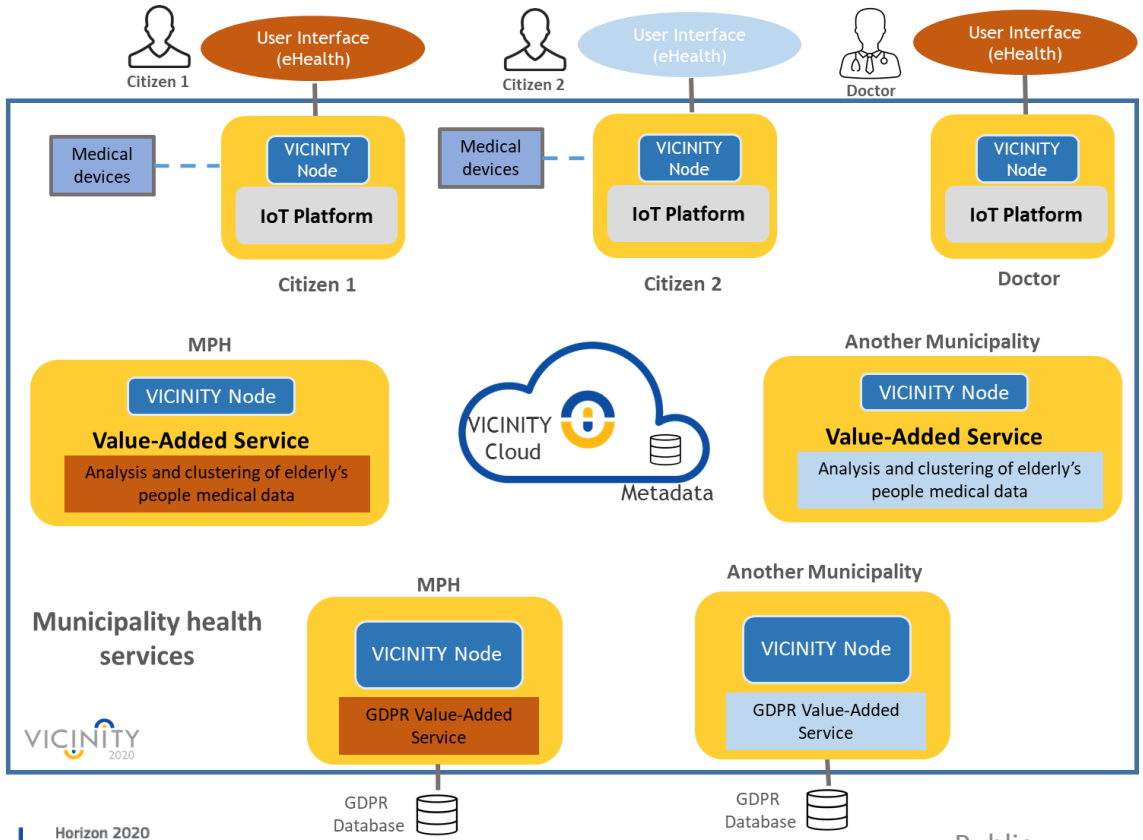
MUNICIPAL SCALE ASSISTED LEAVING & EHEALTH ECOSYSTEM, GREECE



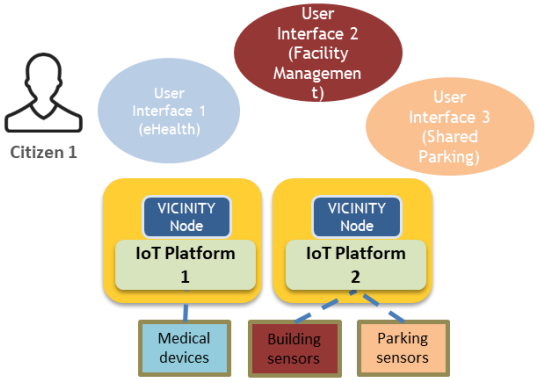
eHealth - Existing gaps

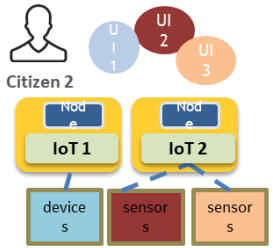
- Healthcare institutions have software which are not compatible with the hardware that is used. This means **lack of interoperability** and leads to **investing considerable funds** to make systems that operate with different standards interoperable
- Lack of **cyber security requirements** for medical devices. Handling personal data through the internet and new technologies have emerged the need to protect those data in order to use them only for medical purposes and not for commercial ones
- **Not** major investments in **interactive technologies** – static websites just providing health information
- 73% of Member States do not have an entity responsible for the regulatory oversight of mobile health apps for quality and safet despite widespread use of such technology
- 38% of Member States have yet to establish a dedicated telehealth policy

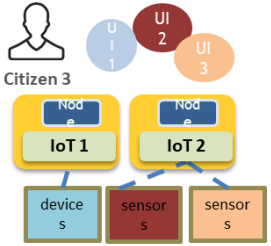
General concept of eHealth Domain



VICINITY Market Place

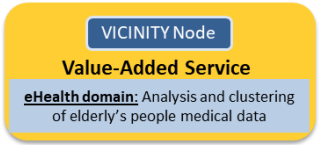






More Citizens can grant access of their devices to certain Value-Added Services. Although VICINITY Citizens register all their devices in VICINITY Platform, they can choose which data are accessible by which Value-Added Service by creating certain "friendships".

For example, a Citizen with medical devices and building sensors can authorize eHealth domain VAS to access only the medical devices.

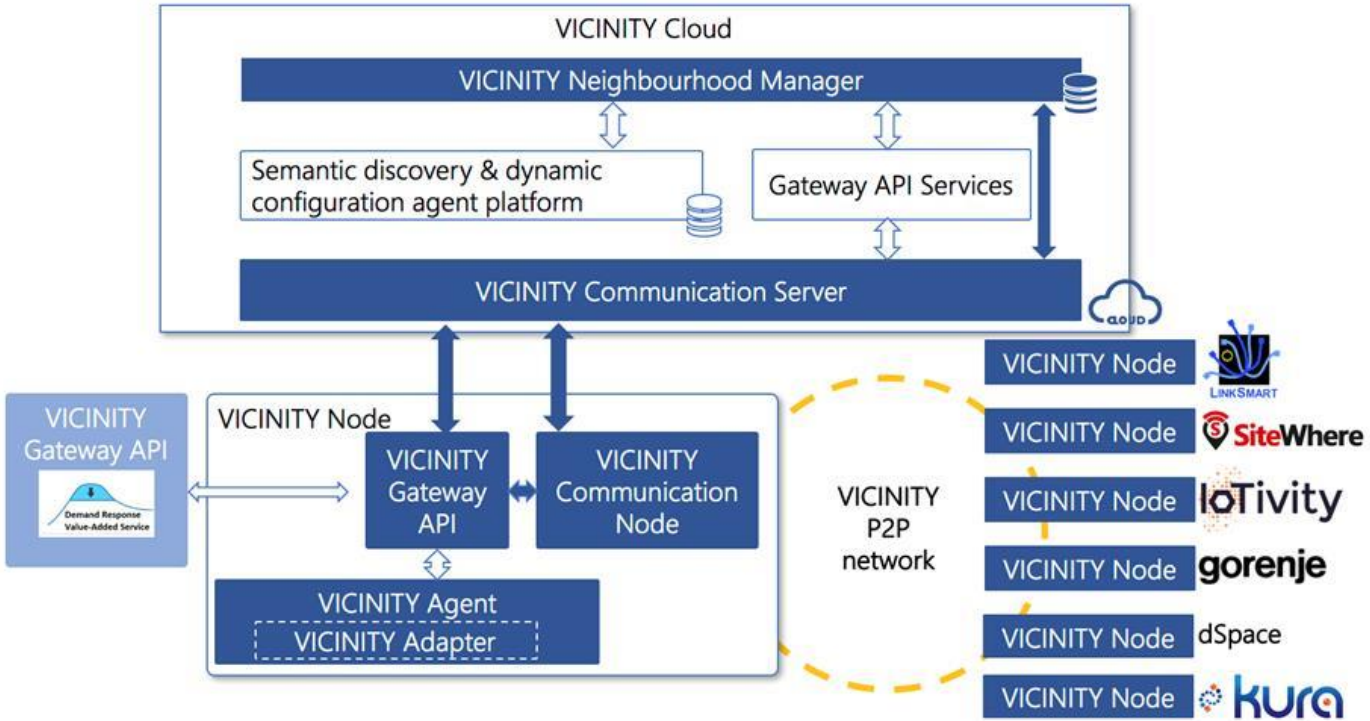


Municipality health services

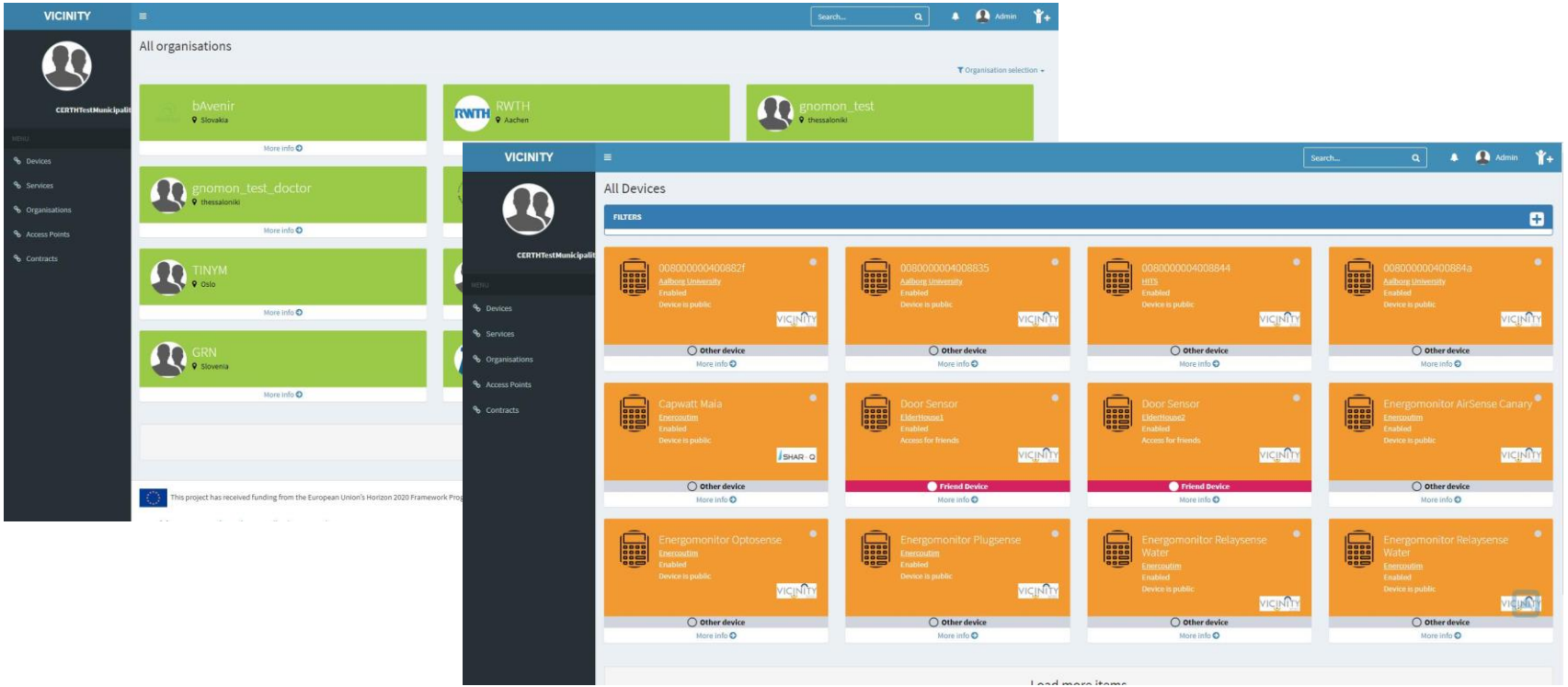
Building Facility Management Service

Shared Parking Service Provider

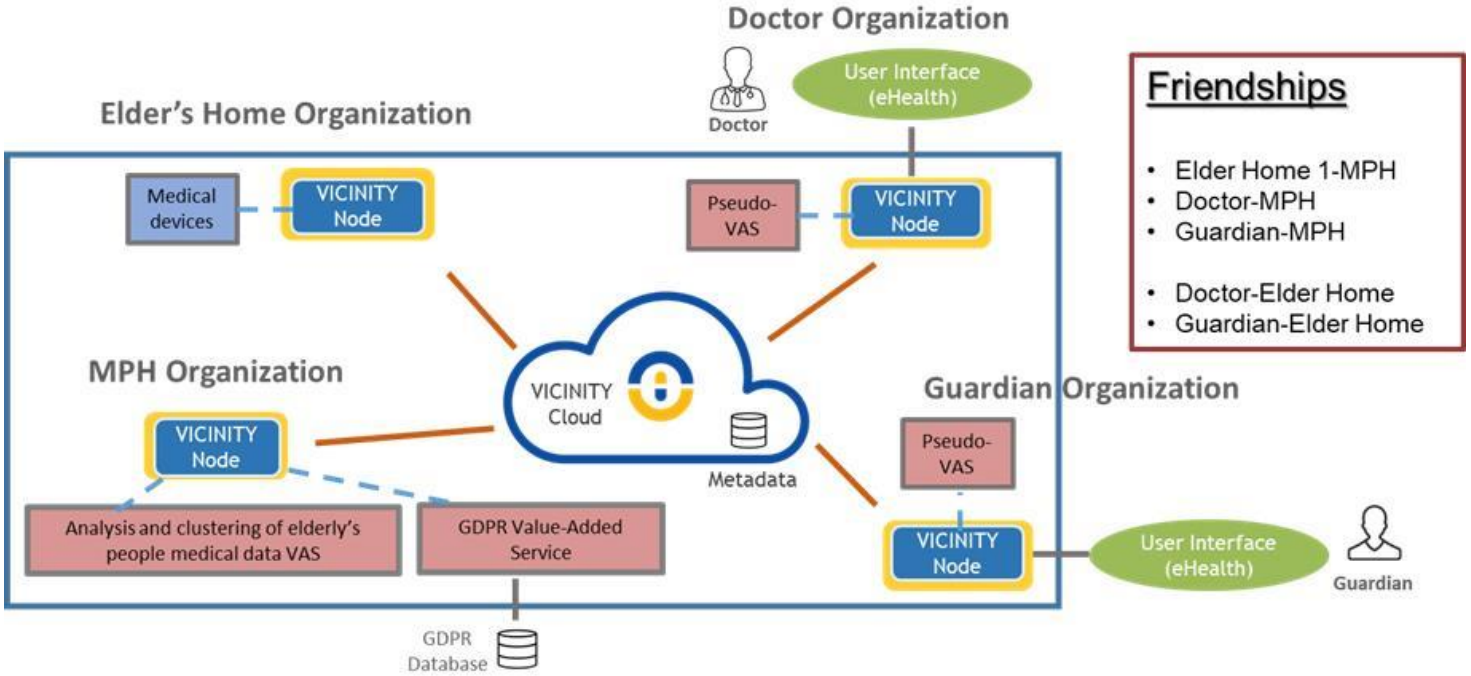
Key Value Point : Integration



Key Value Point II: Manageability



Key Value Point III: Extensibility



Service for semantic cross domain interoperability

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