

ikaas

INTELLIGENT KNOWLEDGE-AS-A-SERVICE
PLATFORM

IoT Guildford meetup, 17/02/2015

Stylianos Georgoulas



Partners

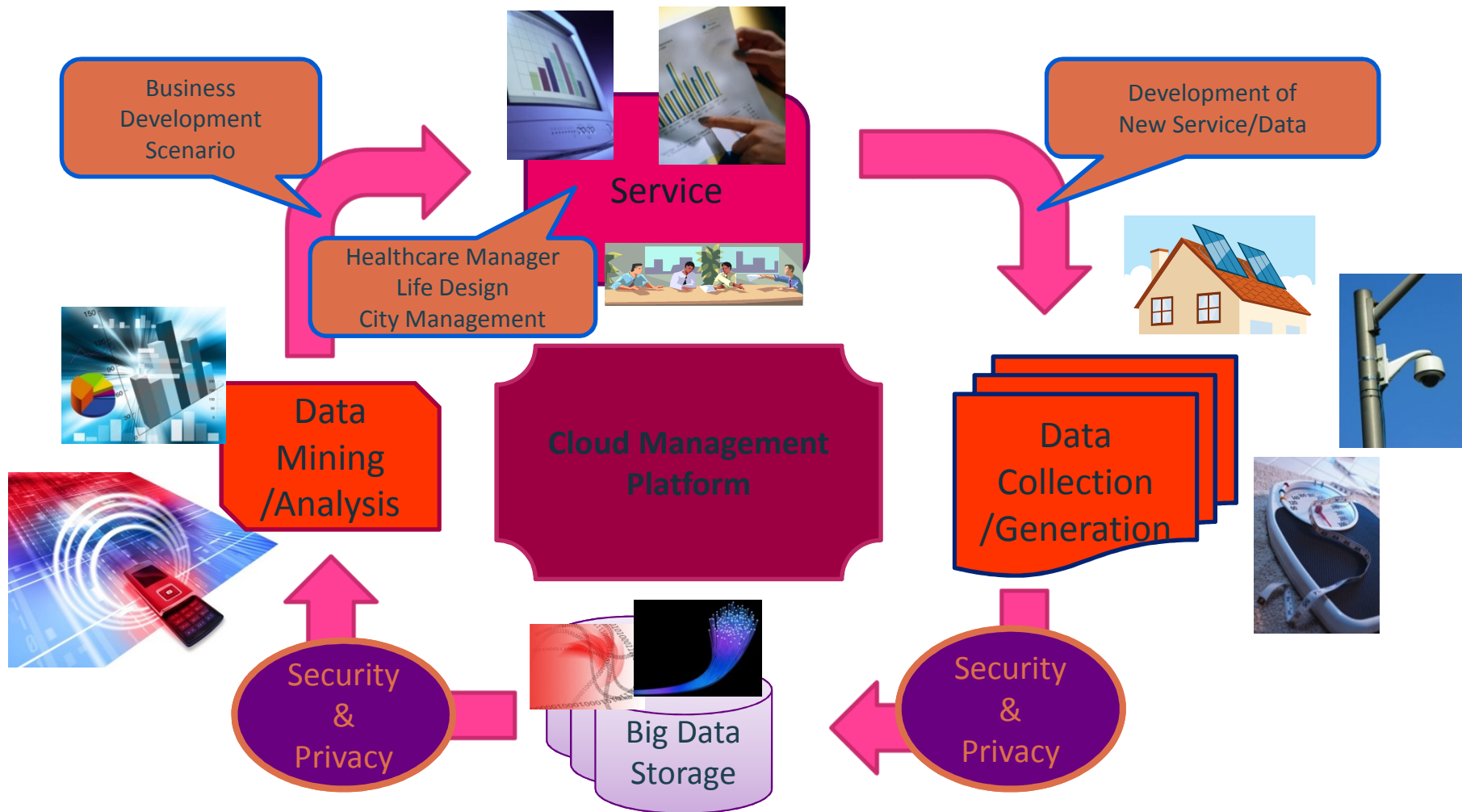
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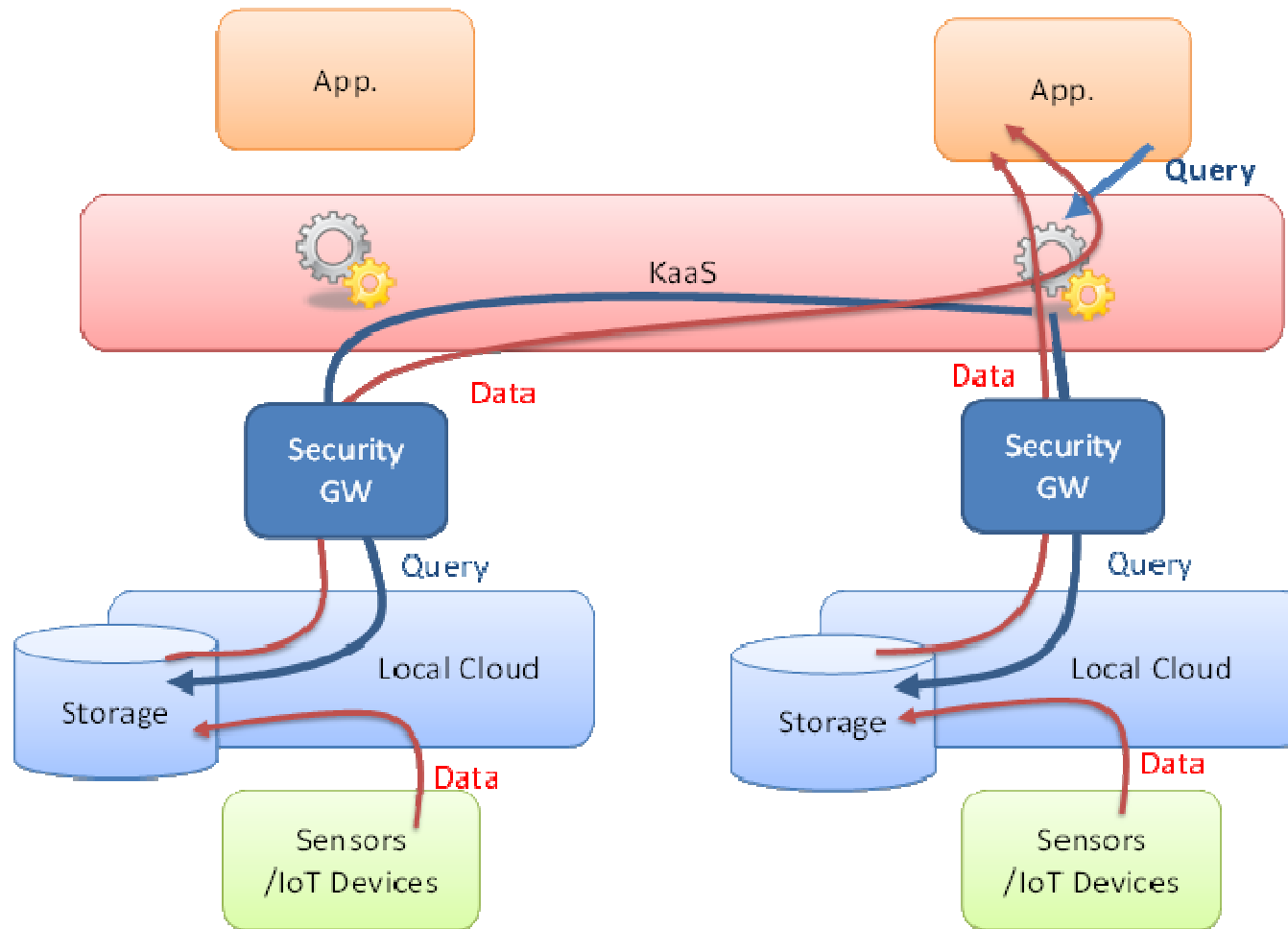


Project Data

- EU-JP collaboration
- Coordinators: UniS (EU), KDDI Labs (JP)
- Duration: 36 months (1st October 2014 - 30th September 2017)
- Total budget: ~3.1 million euro
- Website: www.ikaas.com

- Overall scope
 - Combine sensing, smart objects, semantics, big data analytics and cloud computing technologies in a platform
 - Cloud-based IoT service offering
 - Data and software engines can be offered as fundamental building blocks for cross border application development
 - Lifestyle recommendation
 - Future city planning
 - Academic research and analysis
 - Location and behaviour-specific services
- iKaaS project focus
 - Knowledge as a Service (both IoT service and platform oriented)
 - Smart health/security applications (Smart City)



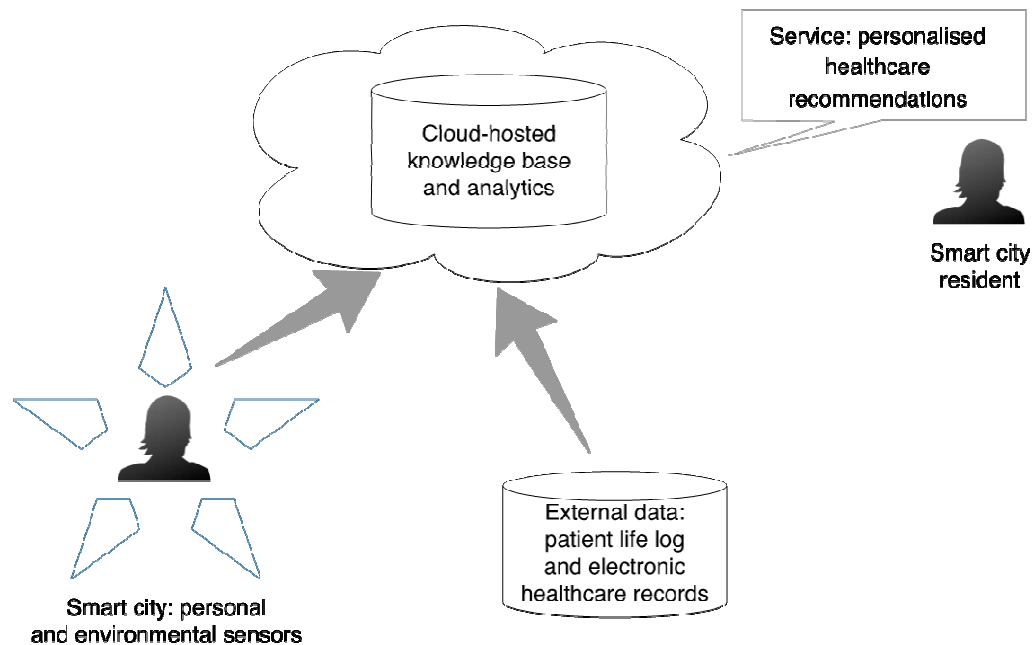


- Define a universal data model based on the Semantic Web for data collected from IoT devices and stored in cloud platforms
- Define and develop the various concepts in trust-management-by-design for data
- Develop and implement a decentralized heterogeneous secure multi-cloud environment spanning across borders
- Develop a Knowledge-as-a-Service platform
- Develop applications and scenarios for validation of the iKaaS mechanisms
- Validate through experiments in model smart cities and smart homes

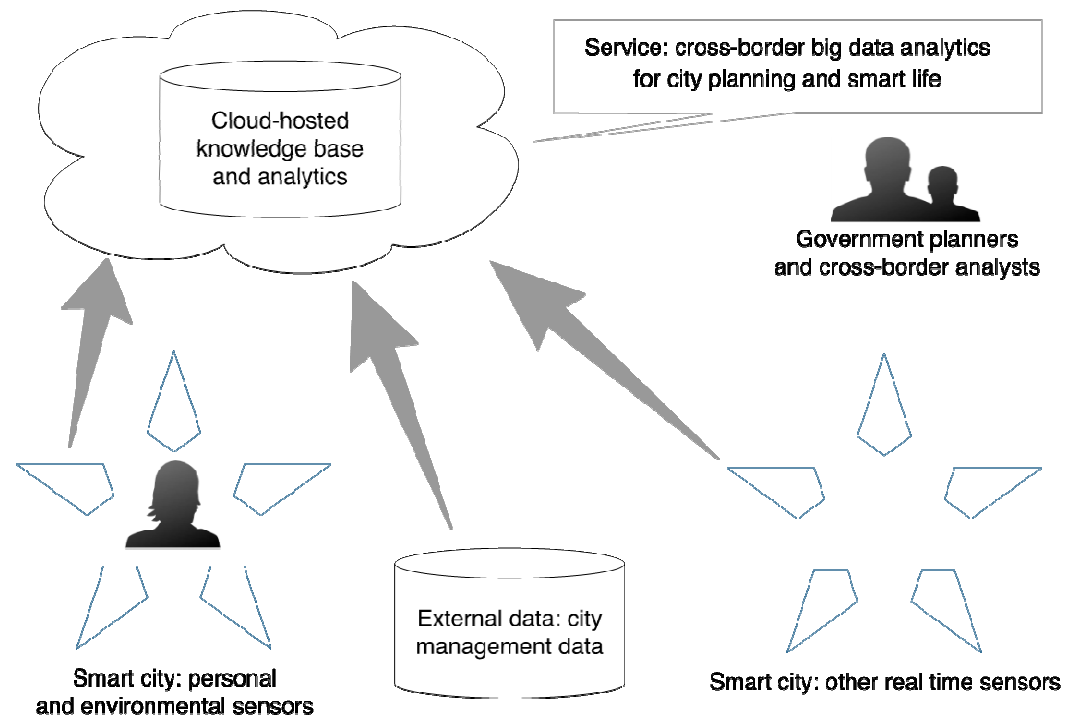
- 5 Technical Work Packages
- Technical Foundations I
 - Data modelling, annotation, storage and query of big data
- Technical Foundations II
 - Learning and knowledge building, decision making for deployment of services (IoT & cloud optimization)
 - Security and Privacy
- Platform Design and Implementation
 - Architecture design
 - Platform development, integration and “transfer”

- Platform Instantiation, Cross-border Application Design and Business Modelling
 - Use case analysis and business modelling
 - Cross border application design
 - Pilot application prototyping and validation
 - Two installation sites identified
 - Madrid city
 - Tago Nishi village (~200 houses)
- Impact Generation
 - Dissemination, awareness, standardization and go-to-market strategy

- Personalizing self-management of health and safety for citizens
 - Environmental monitoring and alarms
 - Elderly health care



- Improving big data analysis for smart life
 - Disease control
 - Epidemiology



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- Want to get “involved”?
 - Workshop to be held in the 12th International Conference on Autonomic Computing (ICAC 2015)
 - 3rd International Workshop on Self-Aware internet of Things
 - <http://clout-project.eu/international-workshop-on-self-aware-internet-of-things-2015/>
 - Deadline April 15 2015