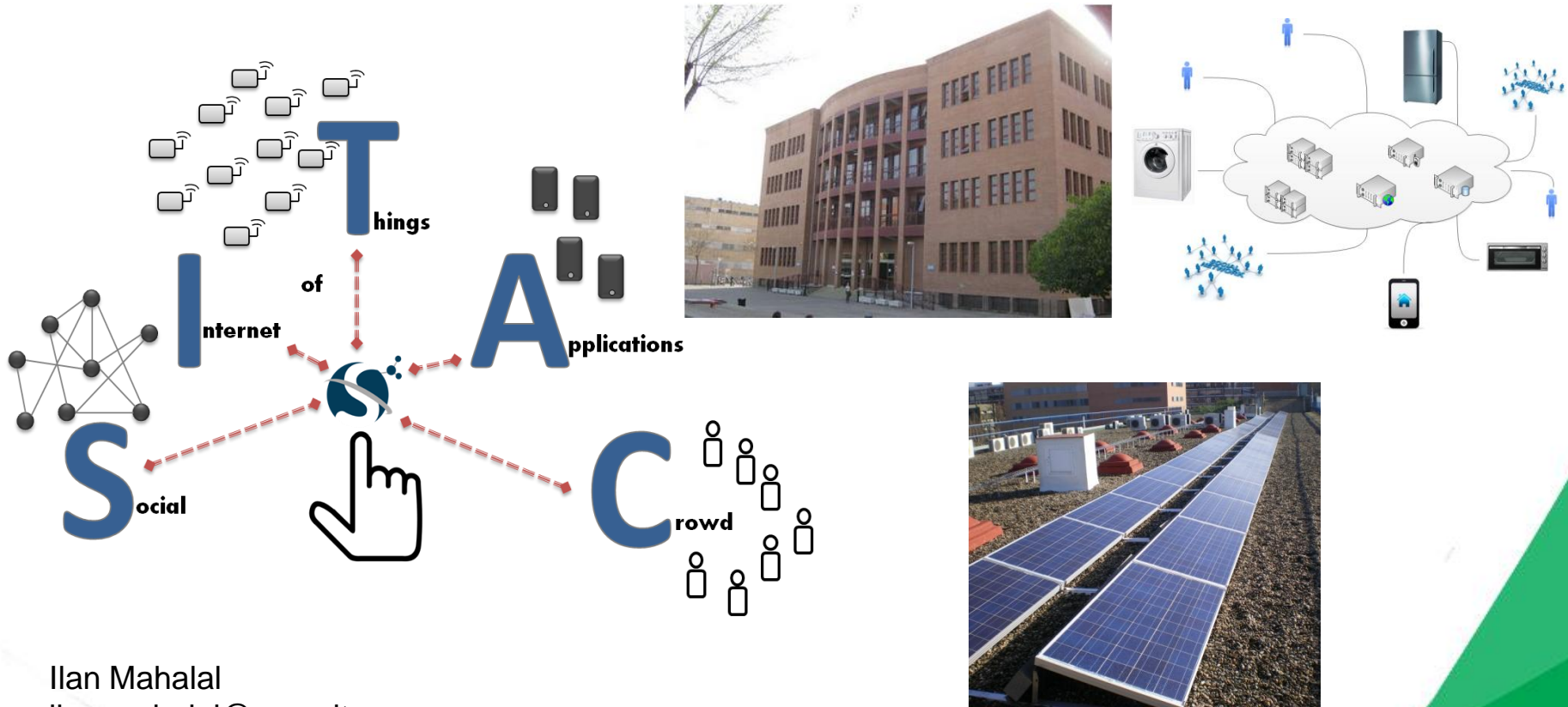


SITAC

Social Internet of Things: Apps by and for the Crowd



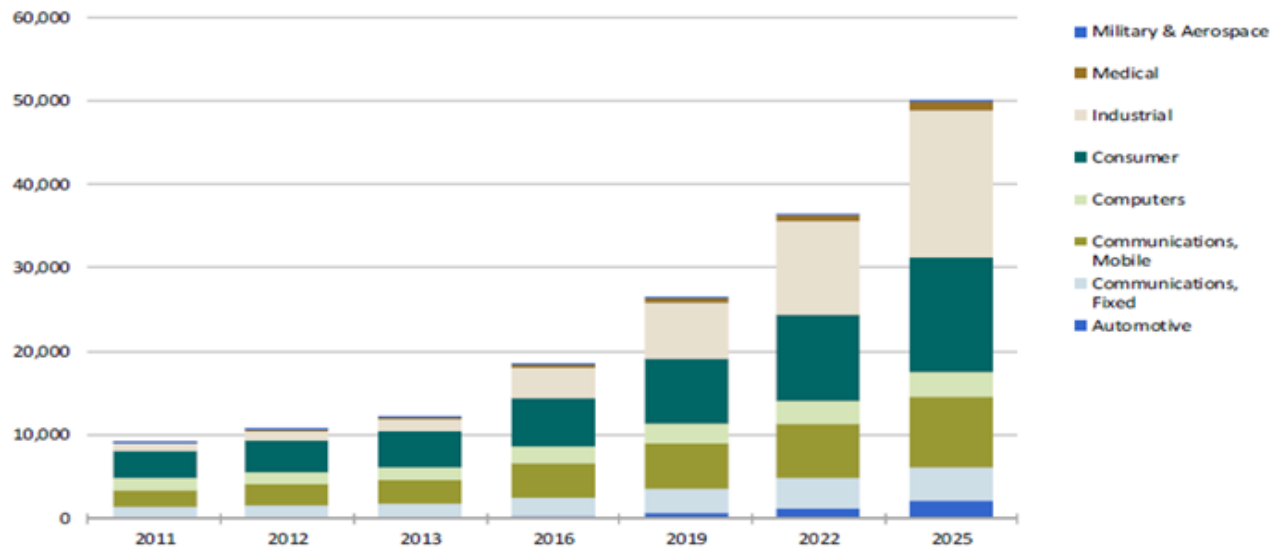
Ilan Mahalal
ilan.mahalal@gemalto.com

SITAC market relevance

IoT related market analysis

Executive Summary

Figure ES.1
World Market for Internet Connected Devices - Installed Base
Connected Devices (M)



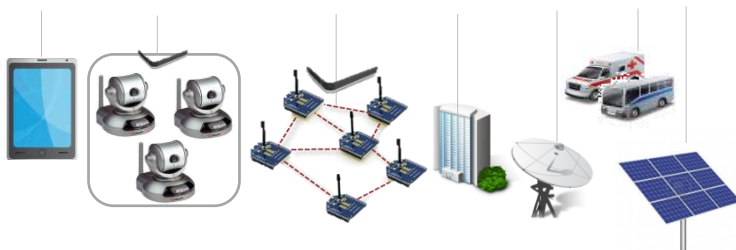
Source: IHS

Aug-13

- Exponential growth in the number of connected "smart things" is expected
- Will bring a tidal wave of data, driving communications, storage and advanced analytics
- In many cases the value of the data will outweigh the value of the device collecting the data, transforming the value proposition

SITAC main objectives

- Create a platform & eco-system that enable new service innovation
 - Secure IoT data sharing with social network paradigm
 - Crowd (i.e. social network users) participation in collaborative development of new applications & services
 - Deliver data analysis and recommendation techniques



Main innovation aspects

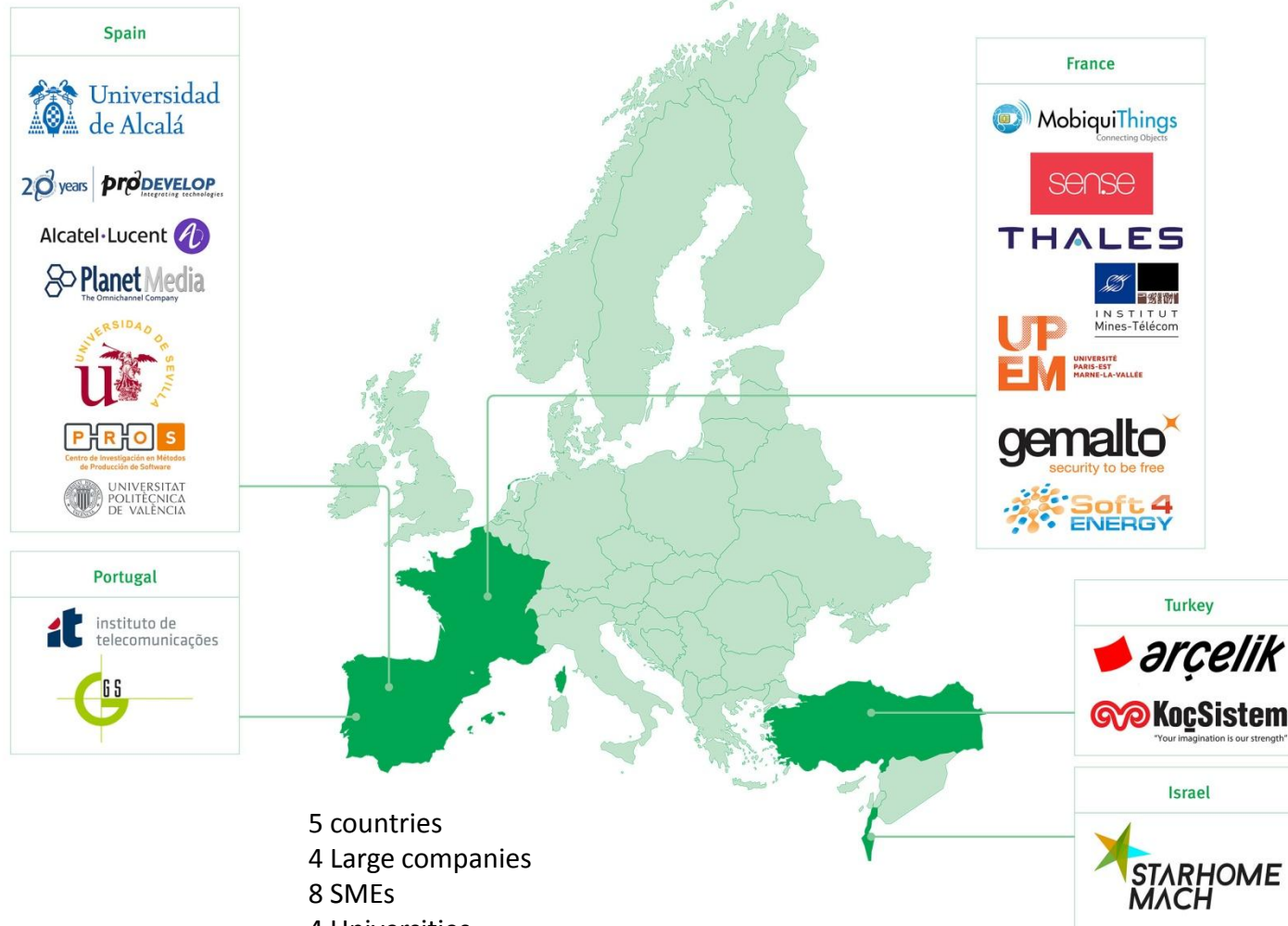
- Integration of three successful paradigms (*social network, data analysis, crowd based applications*) in a common IoT platform and with mutual interchanges
 - Allow individuals and industries to create personalized and **secure resource sharing** (physical, data, services...)
 - Ease **Crowd based** applications & services **development**
 - Ease integration with **data analysis** and **recommendation techniques**

Project consortium

PROJECT CONSORTIUM

START DATE DECEMBER 2012

PROJECT END NOVEMBER 2015



5 countries
4 Large companies
8 SMEs
4 Universities
2 Research institutes

Functional architecture

Sitac Core

Storage

NoSQL DB svc

Application
templates

Datasets

Device mgt

(Geo) Discovery

Device & Services
Registries

Identity mgt

Access Right Mgt

User/device Mgt

Role Mgt

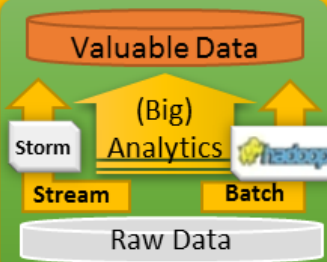
Key Mgt

Compute

Filtering

Aggregation

Application
Execution



Communication mgt

Receive

Push

Pub / Sub

M2M

Subscription

Sharing

Service Layer

Discovery

Creation

Composition

Sitac Frontend

Marketplace

Applications

Services

Dataset

Data Analysis

Visual Analysis

Dataset explore

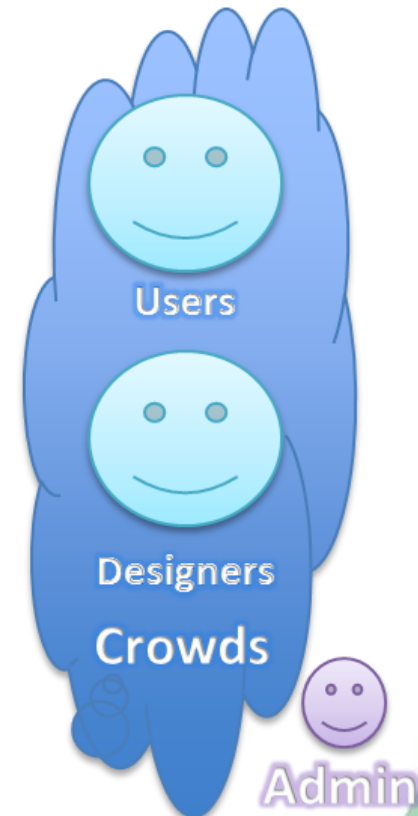
Apps & Svc tools

Creation

Sharing

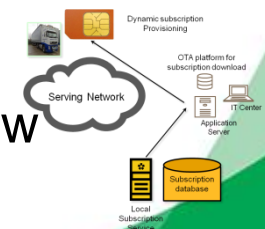
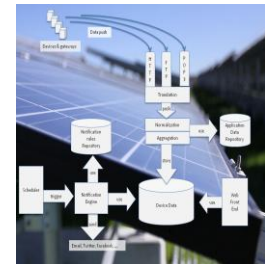
Co-Design

Mgt



SITAC demonstrators

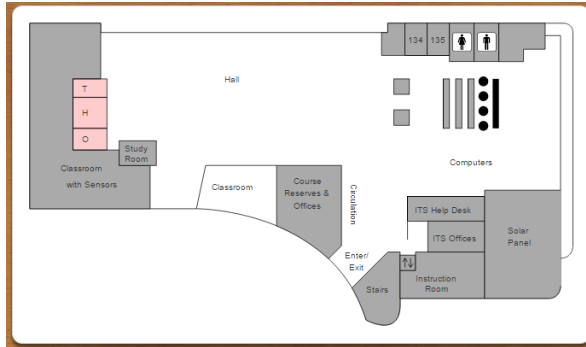
- Social Green Building
 - Services and data sharing with social circles, Service creation by the crowd
- Solar Energy production managed by users
 - Secure data collection & sharing, Social network of producers and their equipment, Applications by the crowd
- Controlling and Monitoring of Home Appliances
 - Control of operation & monitoring, energy monitoring
- Network identity & subscription management
 - M2M network enabler for connected objects introducing new business roles and solutions



SGB Story Board: student perspective

1

Check **study room** occupation and go



Participate in **temperature feedback** for efficient management

2



3

Searching notes uploaded by other users



math notes

Search



Circle of owner of the notes

4

Pickup and subscribe to new notes

Current achievements

- Platform architecture
 - components, functions & models
- Social and Crowd based
 - Crowd based service composition & creation
 - Crowd based application creation
- Data Analysis
 - Stream data processing environment
 - Batch data processing environment
 - Semantics based resources recommendations

Business opportunities

- ***Exploiting & selling data from physical resources***
 - Examples: port authorities, building owners, mall owners, preventive maintenance, etc.
- ***Offering suitable services/products***
for user profiles, based on user activity & preferences
- ***C2C & B2C business enabler***, allowing crowd to sell contents and services



Thank you for your attention
We value your opinion and questions