

FP7 Project Preparation

*from an industrial company
point of view*

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Short Introduction ...



Petr Stluka

**Lead Research Engineer
Honeywell Prague Laboratory**

- **MSc in 1995, PhD in 1998 from the Prague Institute of Chemical Technology, field of Technical Cybernetics**
- **Joined Honeywell in 1999**
- **Since 2004 leading the Data-Centric Technology group**
 - **Technologies**: statistical modeling, data mining, decision support, optimization, pattern recognition
 - **Applications**: energy efficiency for homes, buildings, and energy-intensive industries, industrial decision support systems, security of infrastructures and utilities
- **Since 2007 involved in preparation of FP7 research projects**
 - **BASS, ARISE, MASA, OSMOSIS, E4EU, ENERsip, e-BENEFIT, RICH**

Checklist before Starting a Project

- **Business strategy**
 - How will we leverage the results in our business?
 - Our core business or a new opportunity?
- **Technology strategy**
 - Is it aligned with our technology roadmaps?
 - Incremental improvement or a disruptive research?
- **Strategic partnership**
 - Will we have interesting partners for building strategic alliances? Could we have a win-win future collaboration?
- **Intellectual property**
 - Who will own the results? Will we extend our IP?
 - Interesting licensing opportunities?
 - Must not disclose any sensitive know-how!
- **Resources**
 - Do we have resources to be committed? (50% cost share!)

Two Topics for Today's Talk

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- **Building Project Teams**
 - Energy Efficient Buildings, Smart Grid
 - Security of Infrastructures
- **Intellectual Property**

Smart Grid & Energy Positive Buildings

1 Residential or non-residential buildings



- Load management:
- domestic networks
 - interoperability of electric appliances
 - user interfaces to influence people's behavior
 - intelligent gateways for remote access

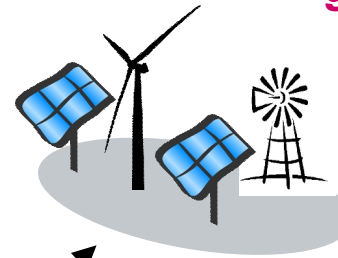
- Future trends:
- coalescence of communication networks and energy grids
 - homes and businesses actively participate in the control of the network

"Prosumer" = Producer + Consumer of electricity

Micro-storage
Vehicle-to-grid



2 Distributed renewable generation



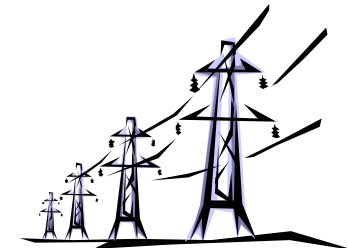
- Different forms of ownership:
- single owner
 - shared in a district
 - leased by ESCO
 - owned by the utility

4 Real-Time Data & Decision Support

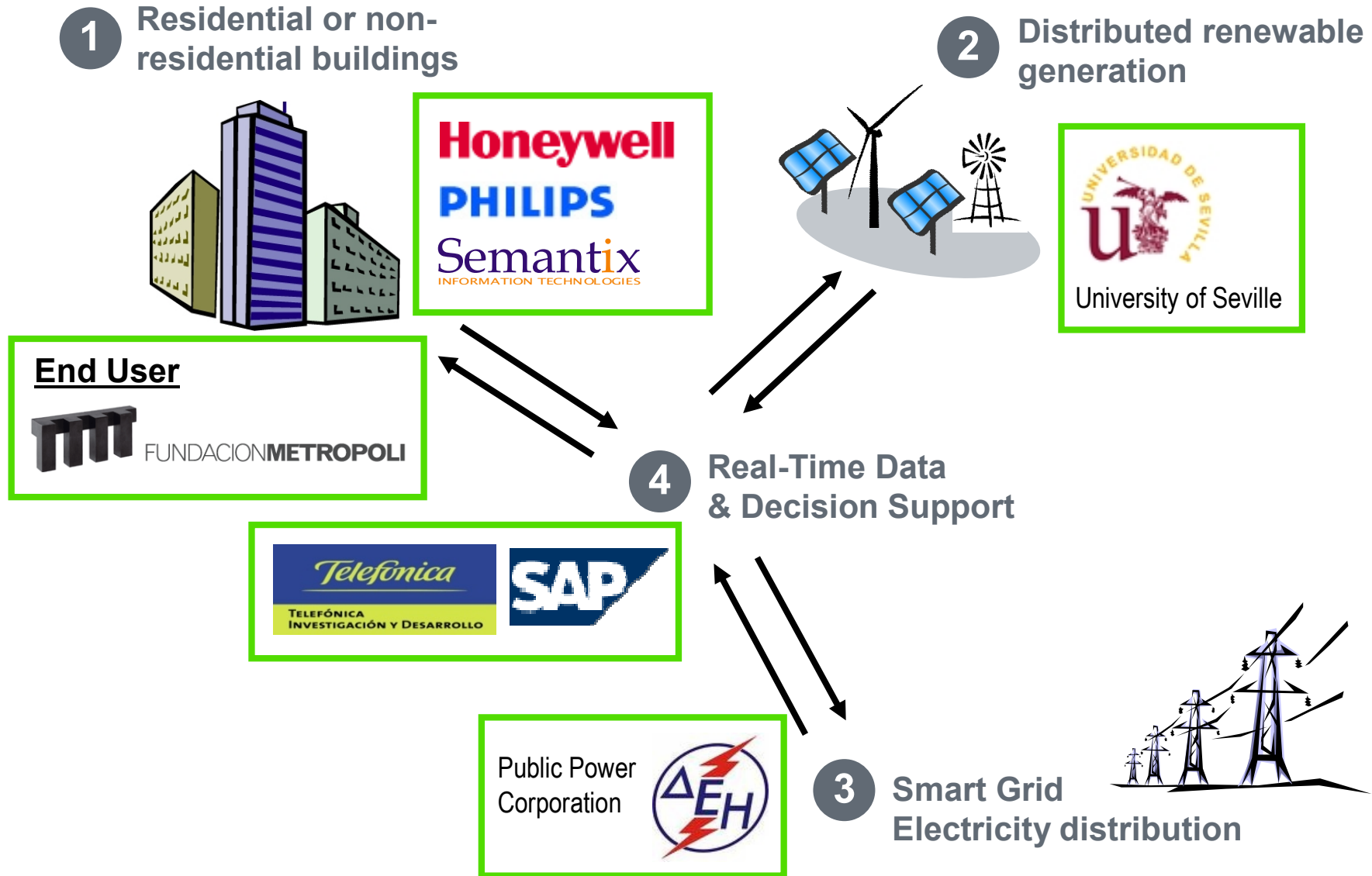
- New business models:
- energy brokers
 - virtual power plants
 - aggregators (representing multiple consumers)

- Needs:
- stability of the network
 - optimal resource scheduling
 - coping with uncertainty

3 Smart Grid Electricity distribution



Smart Grid & Energy Positive Buildings



Security of Infrastructures

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Large Industry (1)

Universities (3)

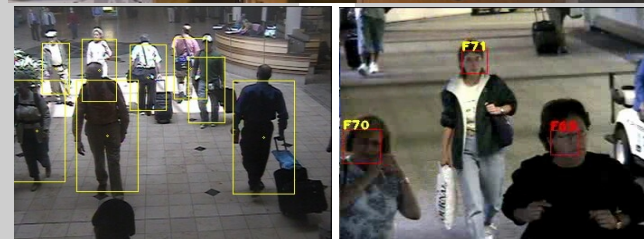
Czech Technical University

Queen Mary University of London

INRIA - The French National Institute



Queen Mary
University of London



Project Automation

SME (1)

End Users (3)

Comune di Milano
British Home Office
Schiphol Airport Amsterdam

Schiphol Group



- **A highly sensitive aspect for an industrial company participating in FP7 projects**
 - Research programs critical for the core business are preferably run as internal activities ... i.e. some areas not be suitable for joint research
- **Access rights to background**
 - Is OK for implementing the project
 - Must be carefully negotiated for exploitation
- **Additional project-specific rules may be needed**
 - Restricted fields of use
- **IPR usually not addressed in detail during proposal preparation ... but CA negotiation can be tough**
- **Sharing some ideas even during the proposal preparation may require Non-Disclosure Agreement**

Thank you for your attention!

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