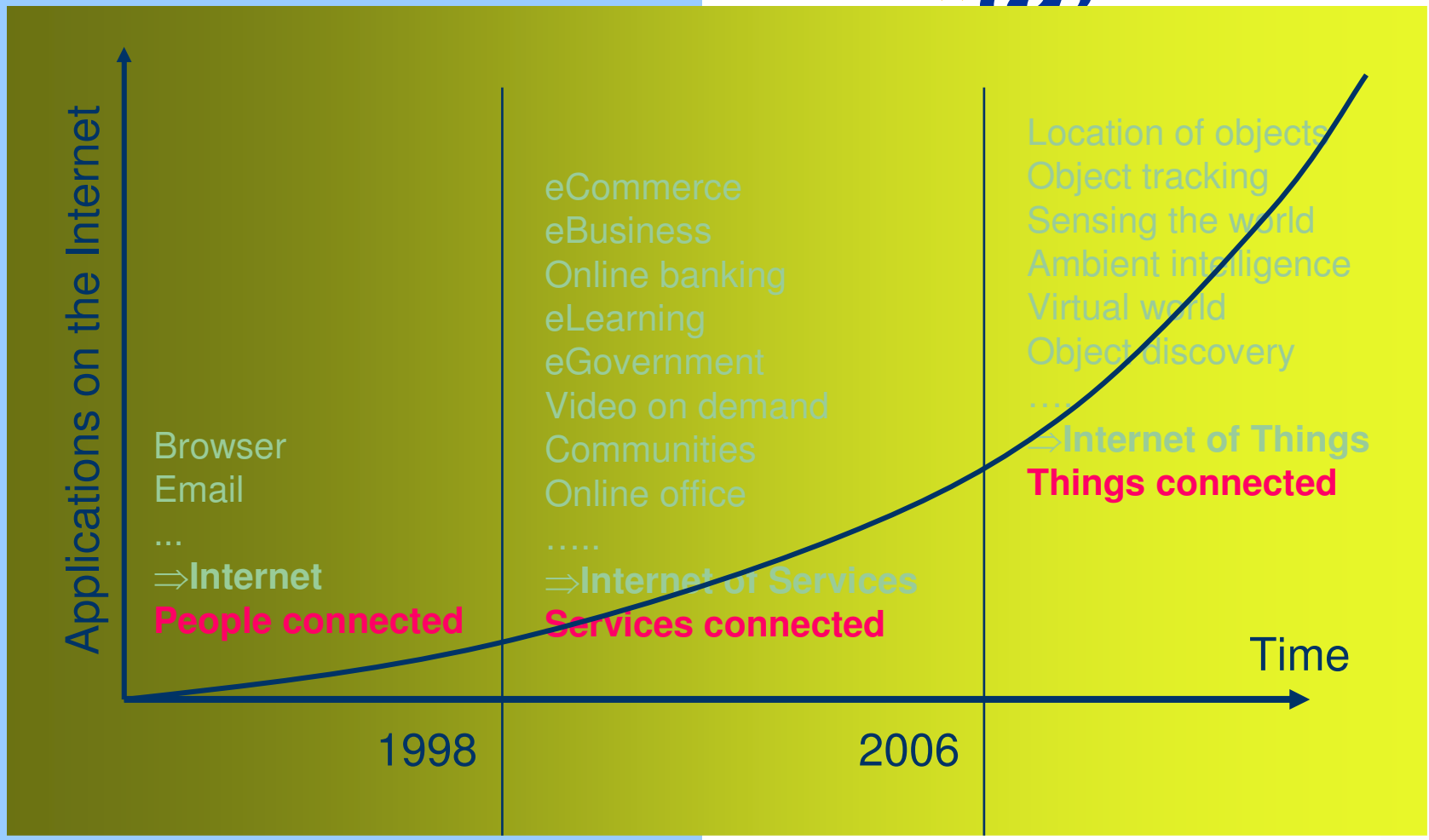
Real World Internet

FIA Madrid, 9th December, 2008

Internet of Things: ASPIRE and Beyond

Outline

- ASPIRE Project
- CTIF Easy Life Lab
- What we need from FIRE


Applications on the Internet
Browser
Email
...
⇒Internet
People connected
eCommerce
eBusiness
Online banking
eLearning
eGovernment
Video on demand
Communities
Online office
.....
⇒Internet of Services
Services connected
Location of objects
Object tracking
Sensing the world
Ambient intelligence
Virtual world
Object discovery
…
⇒Internet of Things
Things connected
Time
1998
2006

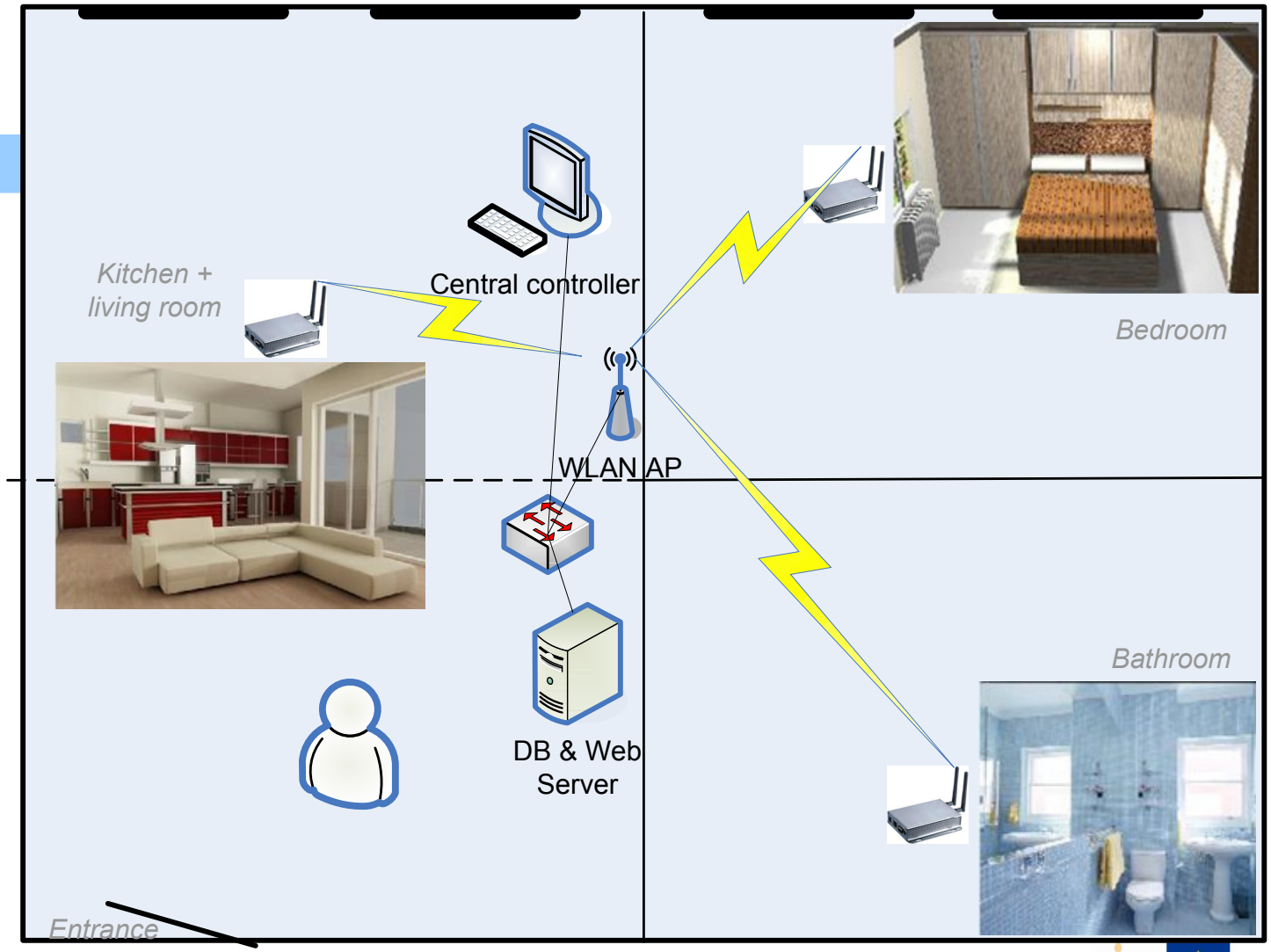
Applications and Scenarios

	RFID Application Fields	Description
Mainly Object Tagging	A. Logistical Tracking and Tracing	Solely identification and location of goods and returnable assets (e.g. pallets or containers)
	B. Production, Monitoring, and Maintenance	Smart systems in combination with RFID-Technology to support production, monitoring, and maintenance of goods and processes
	C. Product Safety, Quality, and Information	Application to insure quality (e.g. sensors to monitor temperature) and product safety (e.g. fight against counterfeiting.
Tagging with Reference or Potential Reference to People	D. Access Control and Tracking	Single function tags for identification and authorization applications for entries and ticketing
	E. Loyalty, Membership, and Payment	Smart Card based identification and authorization systems for multifunctional applications (e.g. loyalty, payment, and banking systems)
	F. eHealth Care	Systems for hospital administration and smart systems to support and monitor health statues
	G. Sport, Leisure, and Household	Sports applications, rental systems (e.g. cars or books), smart house
	H. Public Services	Systems mandated by law or fulfill public duties (e.g. ID-Cards, Health Insurance Cards, Road Tolling Systems)

CTiF Easy Life Lab

- **Definition: A system which is involving readers, sensors, wireless transmissions, data receivers and their interfaces for a radio enabled assisted living platform**
- **Motivation :**
  - **A person, usually an elderly or sick people, who needs some assistance but lives alone.**
  - **Wireless devices with tracking and sensing capabilities are available more and more in the market, thus makes it less expensive**
  - **An automated system based on wireless devices will enable the assistance of person's life**
- **Methods :**
  - **Build a generic platform that has functionalities and use cases as we defined ourselves**
  - **Find some specific research challenges exist in the platform**
  - **At the end, create a end-to-end solution ready for the market**

- Monitor a person position and movement
- Monitor the activity of a person, e.g. by monitoring vibration in the bed, etc
- Tracking of assets, i.e. personal stuffs
- House monitoring, e.g. room temperature, etc
- Reminding a person in case he/she has to do something regularly or leaving home without bringing some stuffs, etc



What we need from FIRE

How do we connect our experimental facilities to FIRE?

Thank you for your attention!

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