



IoT na Inovação e Formação de Engenheiros: O Papel da Academia



Meaning of Things



Meaning of Things

✓ In the context of the Internet of Things, a “thing” may be defined as a real/physical, digital/virtual entity that exists, move in time and space, and is able to be identified.

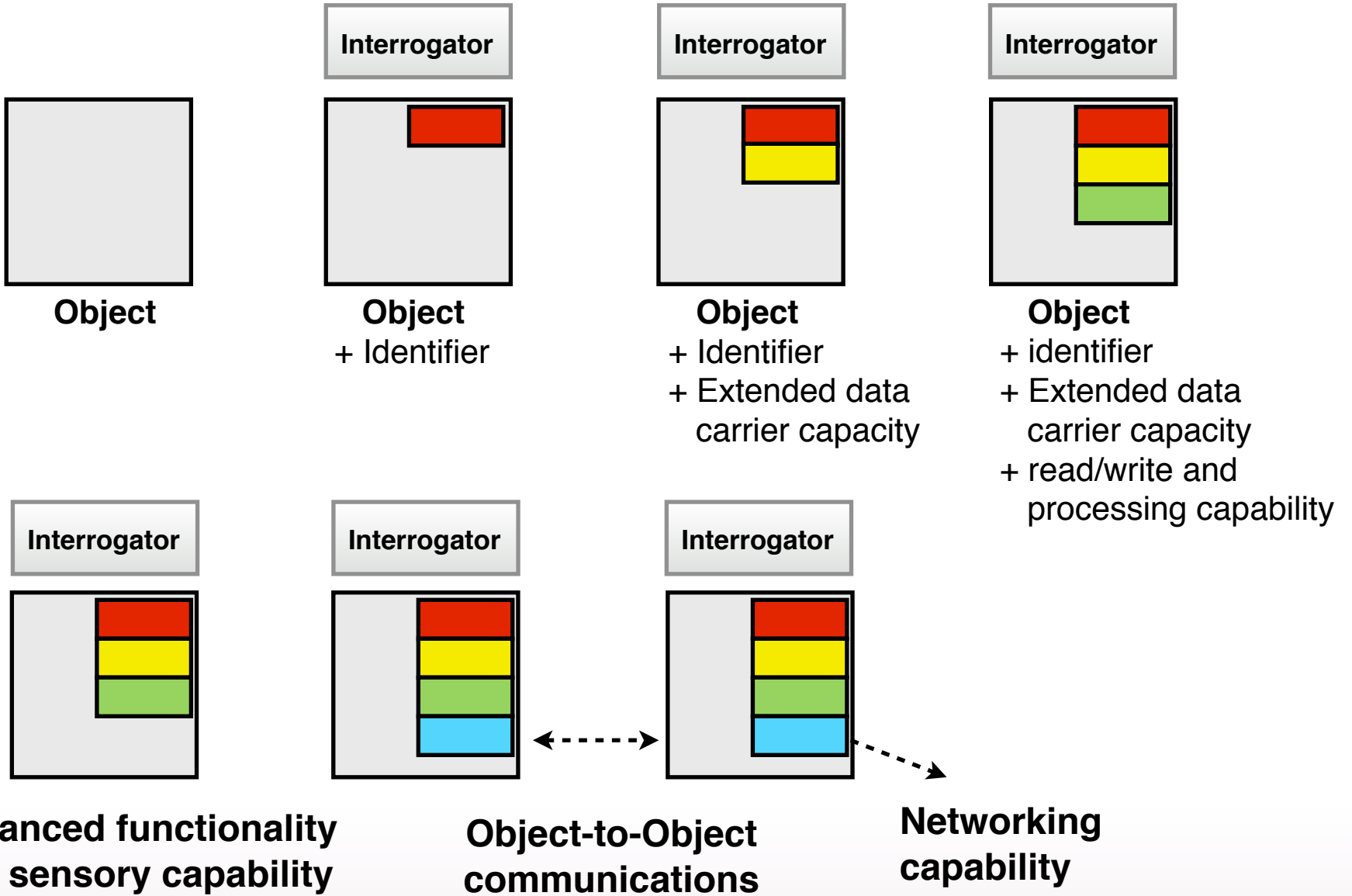


Meaning of Things

- ✓ In the context of the Internet of Things, a “thing” may be defined as a real/physical, digital/virtual entity that exists, move in time and space, and is able to be identified.
- ✓ The identification can be made by means of assigning identification numbers, names or localization addresses.

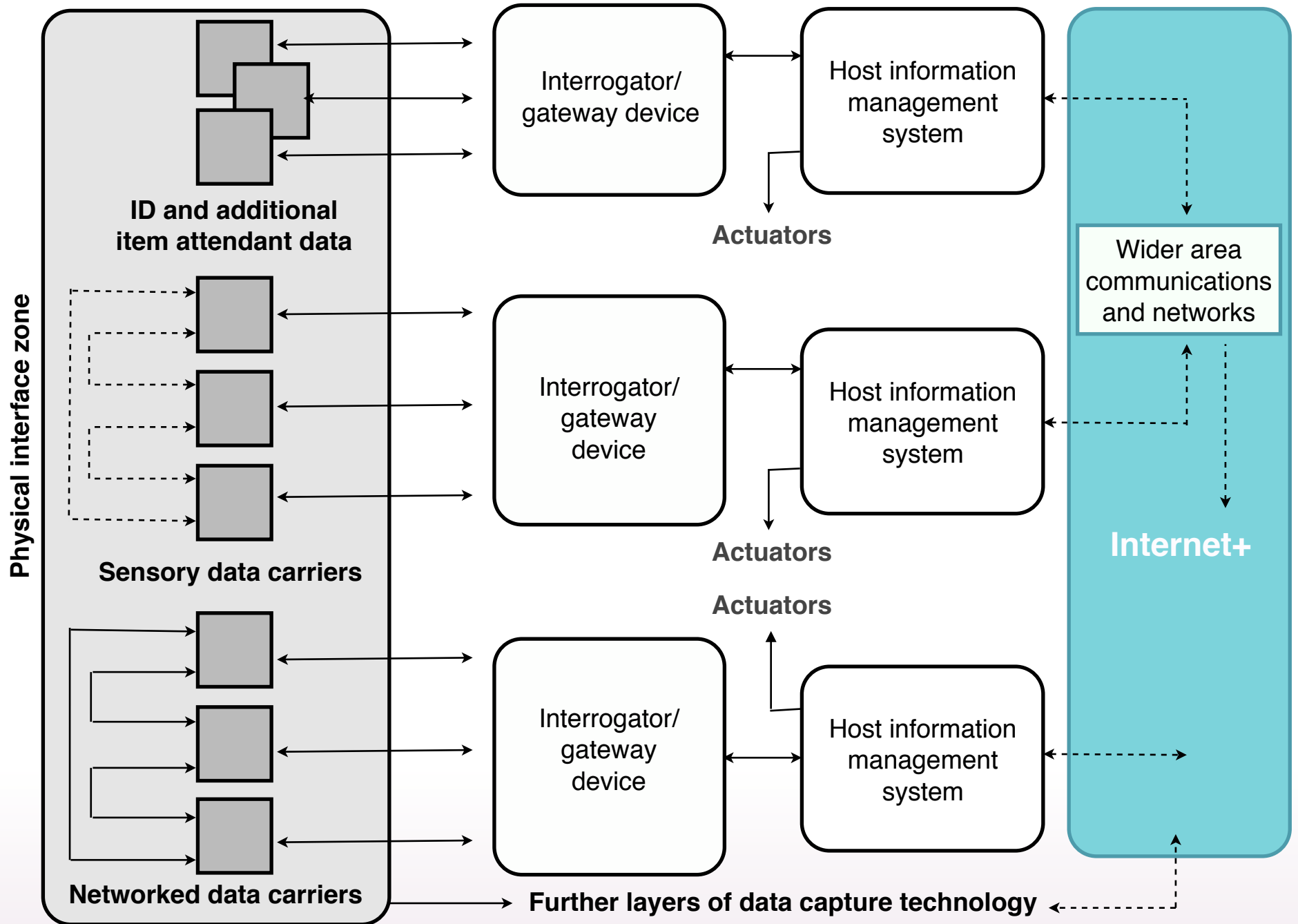


Adding intelligence to objects





CASAGRAS inclusive model





Internet of Things key concepts and enabling technologies

AIDC in the Physical Interface Zone

Context awareness

Network access

Key concepts

AIDC: RFID, NFC, bar codes, biometry

Cloud computing

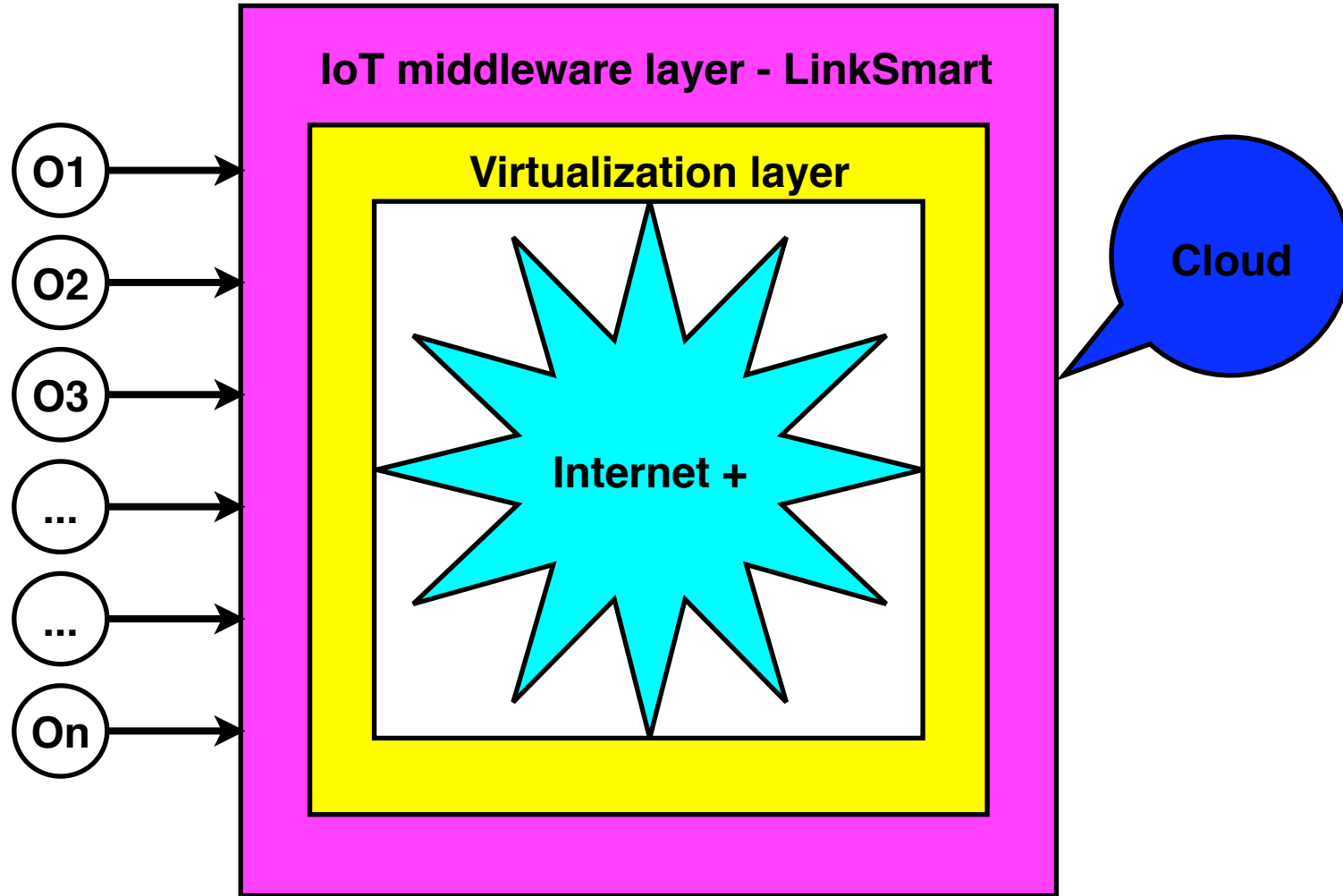
Network virtualization

Semantic web

Enabling technologies

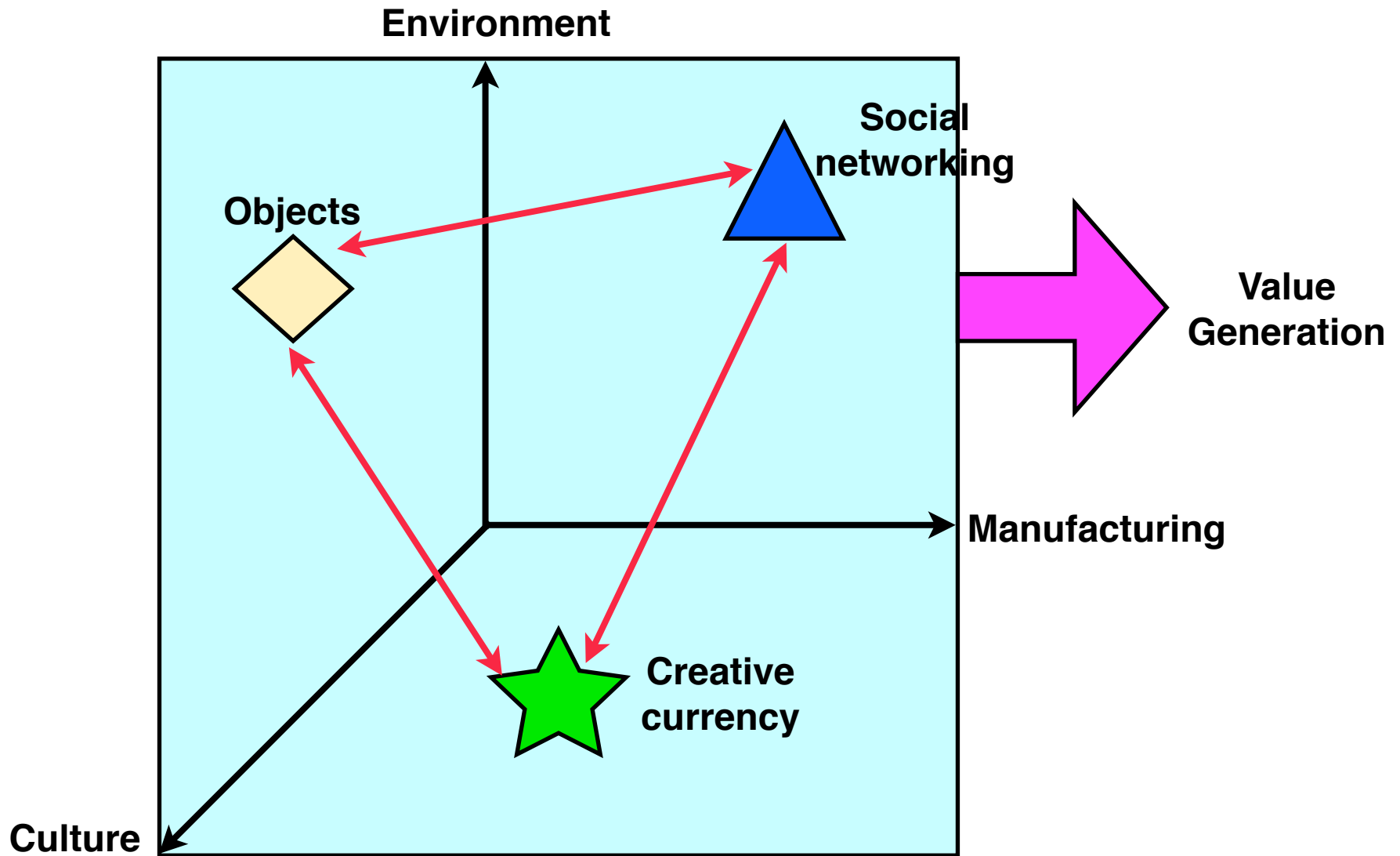


Projects architecture - conceptual view



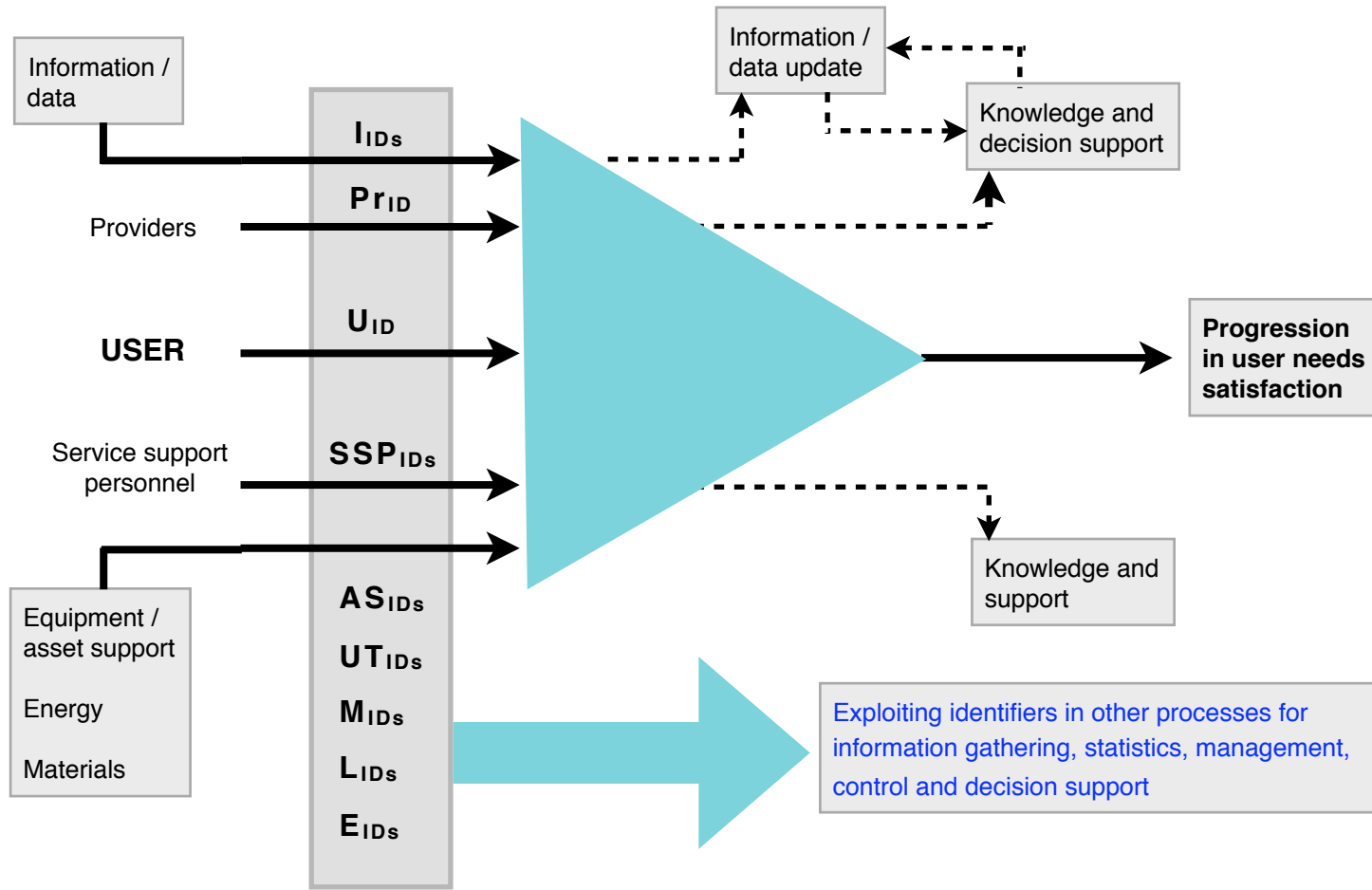


Axes of the new economy - creative currency mediation: business model





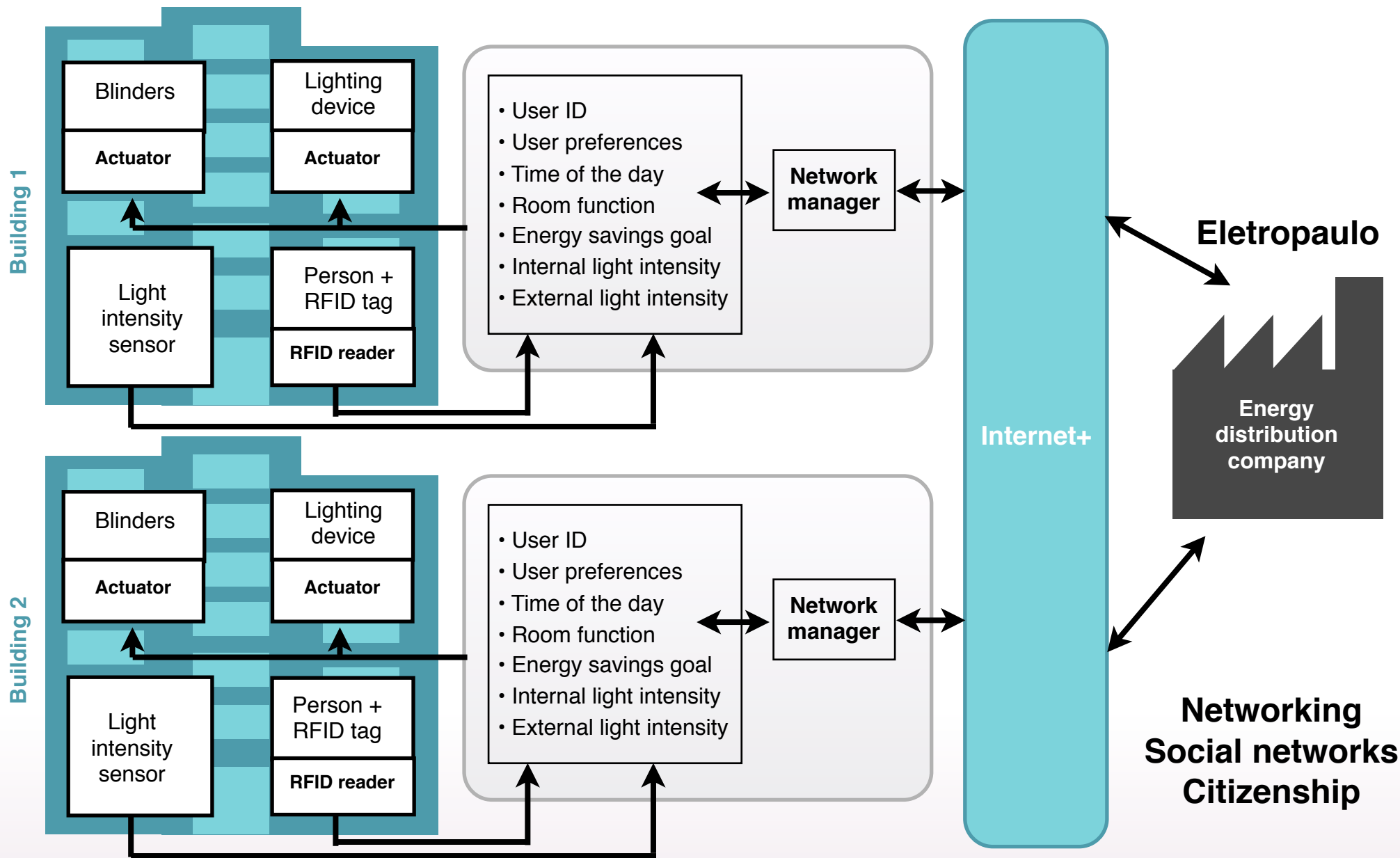
User-centered process or procedure



- IIDs** - Information identifiers
- PrID** - Providers IDs
- UID** - User IDs
- SSPIDs** - Service Support Personnel IDs
- ASIDs** - Asset IDs
- UTIDs** - Utility IDs
- MIDs** - Materials IDs
- LIDs** - Location IDs
- EIDs** - Event IDs (time stamps)

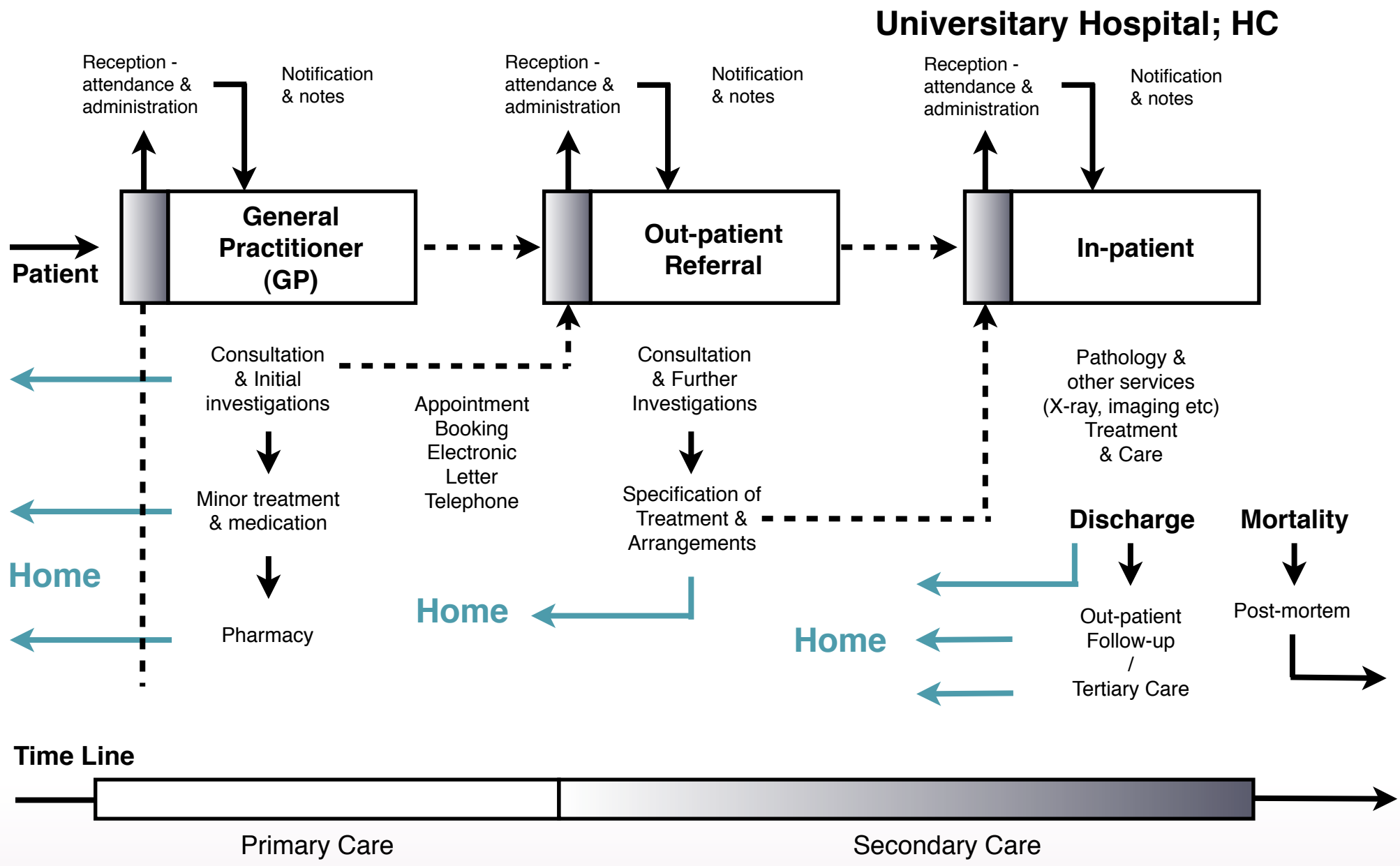


Energy Efficiency in the Internet of Things: Ubiquitous Energy Awareness (manufacturing)





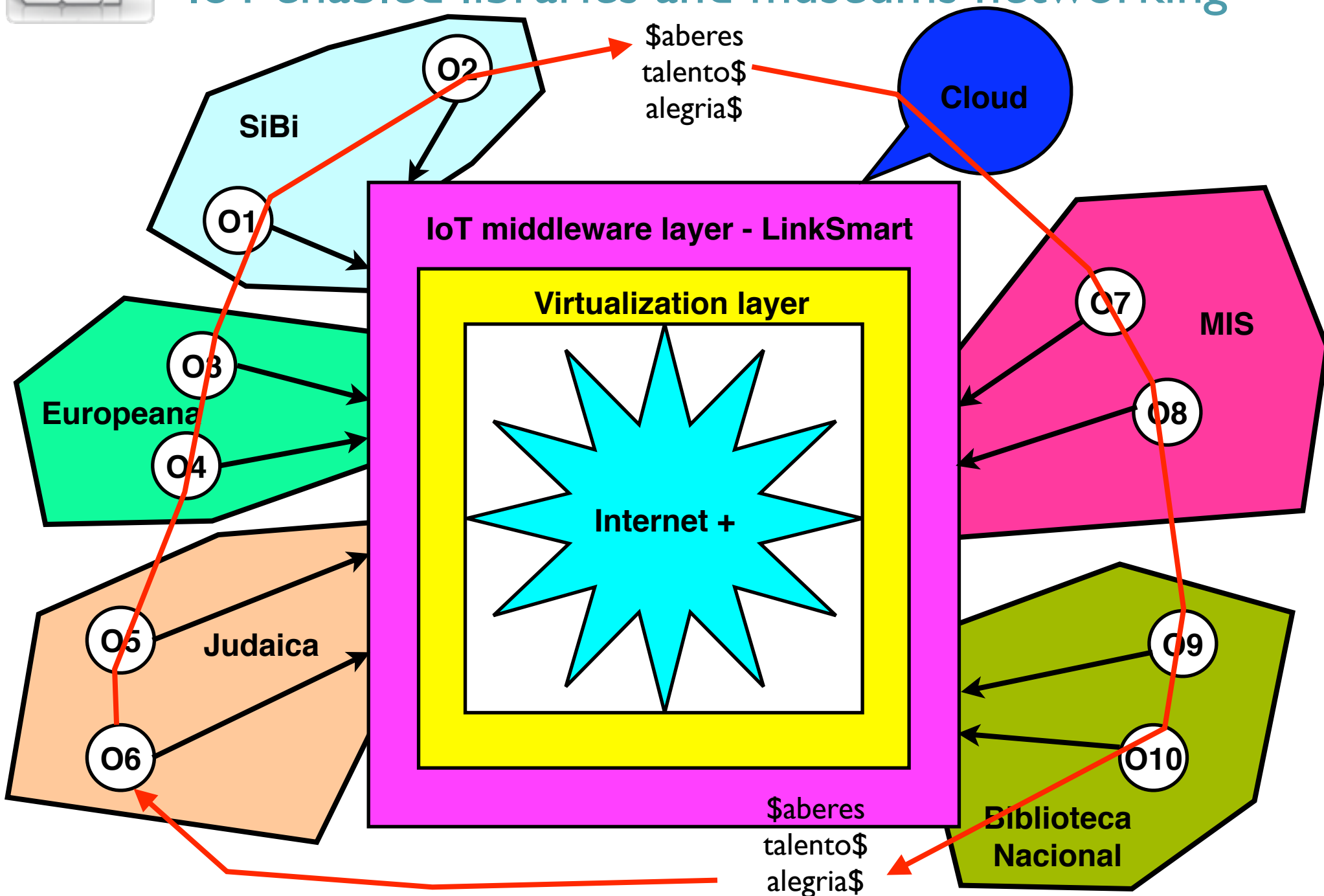
General Patient Pathway (environment)



Source: Prof. A. Furness

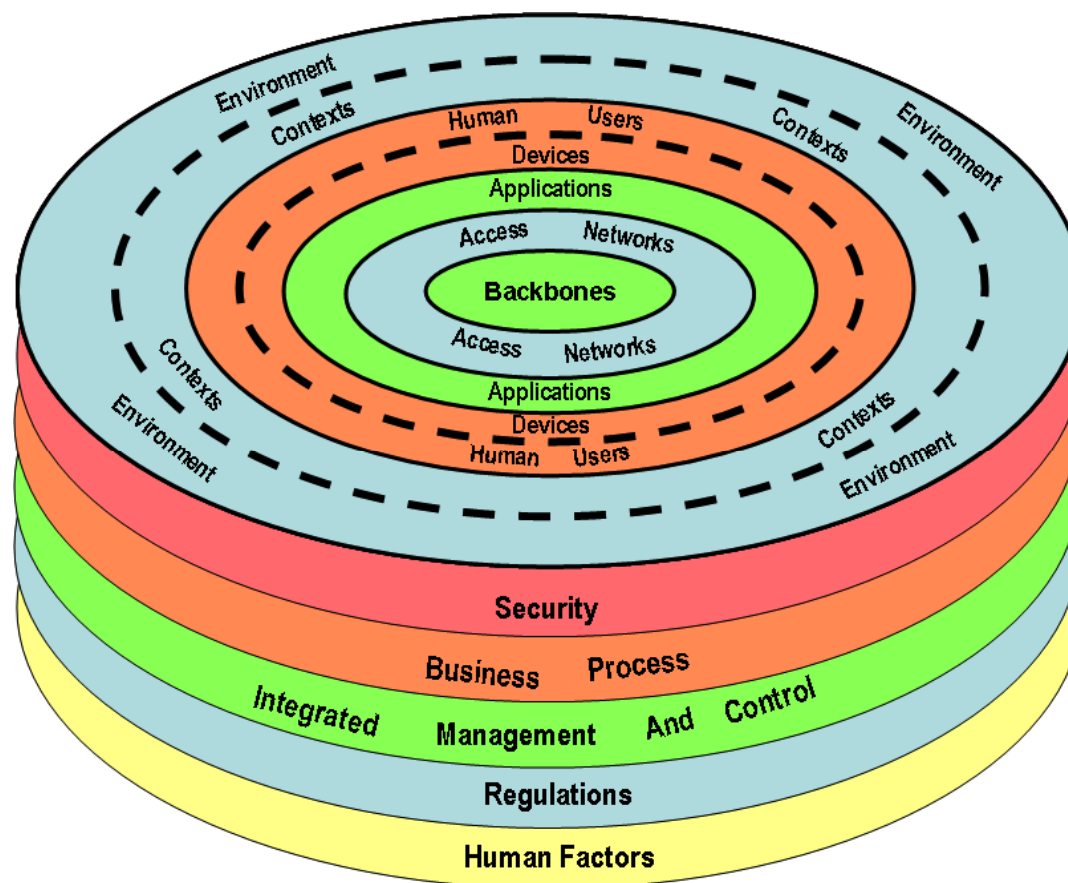


IoT-enabled libraries and museums networking





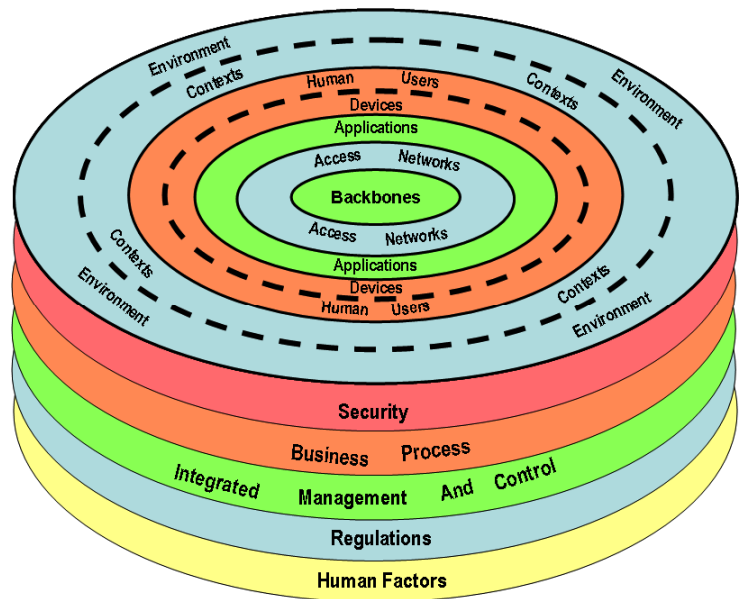
Building blocks of Research for the Internet-Connected objects BRICS



Harmonized and Integrated Architectural Framework
leading towards realistic Roadmaps



BRICS



Formação do Engenheiro

Realidade a ser considerada:

➡ Interdisciplinar

➡ Multidimensional

Resposta da Academia

iRloT: Interdisciplinary Research for the Internet of Things



Resposta da Academia

iRIoT: Interdisciplinary Research for the Internet of Things

- ▶ Faculdade de Direito da USP
- ▶ Escola de Comunicações e Artes da USP
- ▶ Escola Politécnica da USP

Parcerias:

www.iotbrasil.com.br

www.smart-iot.com.br

www.iotzine.com.br

SMART INTERNET OF THINGS

Manchester United FC
Conference Centre,
Old Trafford, UK
September 3 - 6 2012

THE INTERNET OF THINGS - *Changing the way we live!*

Over the coming years, the Internet of Things (IoT) will offer significant opportunities within a range of global developments. It will change the way we live.

SMART-IoT will provide a high-profile, leading edge forum for researchers, PhD students, engineers and practitioners to present state-of-the-art advances and innovations in theoretical foundations, systems, infrastructures, tools and applications for the Internet of Things as well as identifying emerging research topics which will help define the future.

The SMART IoT conference is brought to you by some of the world's leading authorities: People with special knowledge as a result of their involvement with projects sponsored by the European Commission. The conference is supported by the EU.

OUTLINE PROGRAMME

It will be held in England in the Conference Centre of the world famous Manchester United Football Club, Old Trafford, Manchester. It is a 3 day event with a range of optional add-on programmes. There will be plenary and break out sessions addressing the following topics:

IoT

Infrastructure

- IoT and Network Security
- Network Functionalities and Scalability
- Service Facilities in IoT
- Object Connected Identification
- Intelligent Processing and IoT
- Sensor Networks
- Energy Harvesting
- Self-functionality
- Mobile Fusion

IoT in

Global Developments

- IoT, Energy and Utilities
- IoT, and the Environment
- IoT, Food and Water Security
- IoT, Industry and Finance
- IoT, and Economic Impact
- IoT, and Social Impact
- IoT, Governance and Legal Underpinning

IoT in

SMART Developments

- SMART Cities
- SMART Transport
- SMART Manufacturing
- SMART Construction
- SMART Farmin

REGISTER AT www.smart-iot.org

PLANNED DEADLINES

- Online abstract submission deadline – May 22nd
- Provisional acceptance – June 15th
- Submission of final paper – July 6th
- Presenter registration – July 20th

SMART-IoT Summit 2012

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DRIVING THE DEVELOPMENT OF A SMARTER WORLD

CASAGRAS2
an EU Framework 7 Project



End!