Instituto Pedro Nunes

INSTITUTO PEDRO NUNES
Associação para a Inovação
e Desenvolvimento
em Ciência e Tecnologia
Rua Pedro Nunes
3030-199 Coimbra
PORTUGAL

INSTITUTO PEDRO NUNES
Association for Innovation
and Development
in Science and Technology
Rua Pedro Nunes
3030-199 Coimbra
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IPN
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Technology Transfer
Bridging the gap
between

Invention
& Innovation

IPN's Infrastructures

LABGEO Laboratory of Geotechnique

FITOLAB Laboratory of Phytopathology

LAS Laboratory of Automation and Systems

LEC Laboratory of Electroanalysis and Corrosion

LED&MAT Laboratory of Wear, Testing and Materials

LIS Laboratory of Informatics and Systems

IPN's Business incubator

GAPI Industrial Property Promotion Unit

Laboratory of Automatics and Systems

IPNlas is one of the laboratories of IPN, being one of the laboratories founders, where are developed projects in partnership with companies, the community and entities of the public domain.

IPN answers to concrete subjects and find solutions for problems on different subjects such as Automation, Robotics, Image Analysis and Instrumentation, including Medical Imaging and Instrumentation.

IPN
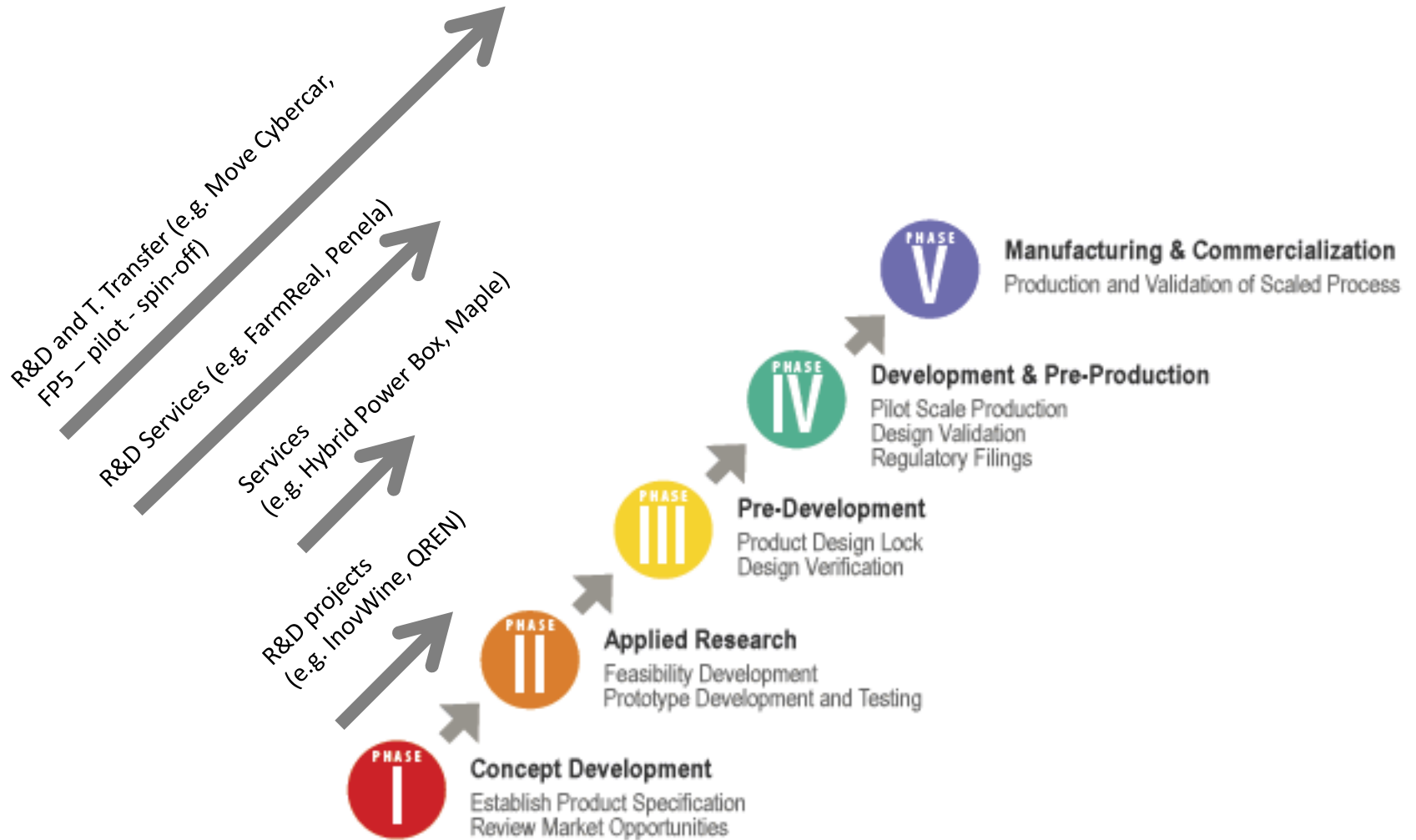**INSTITUTO PEDRO NUNES**

Laboratory of Automatics and Systems

IPNlas activities are consequence from the activities and collaboration from investigators of Department of Electrical Engineering and Computers (DEEC) and the Institute of Systems and Robotics (ISR), from de University of Coimbra.
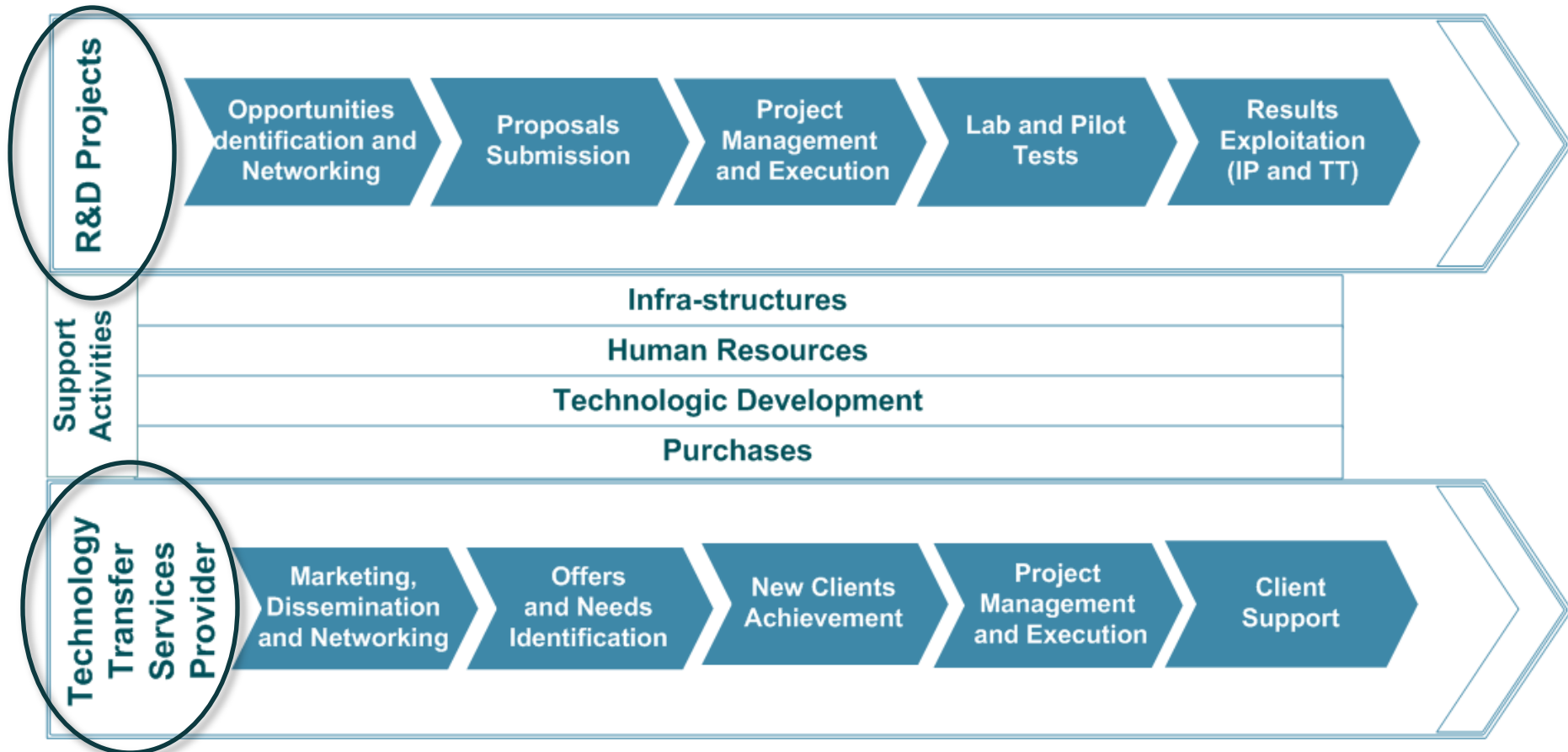
The laboratory is responsible for activities of technology transfer, consultancy and incentive for foundation of spin-offs.

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IPNlas contribution in Product Development Life Cycle

R&D and T. Transfer (e.g. Move Cybercar, FP5 – pilot - spin-off)

R&D Services (e.g. FarmReal, Penela)

Services (e.g. Hybrid Power Box, Maple)

R&D projects (e.g. InovWine, QREN)

PHASE V — **Manufacturing & Commercialization**
Production and Validation of Scaled Process

PHASE IV — **Development & Pre-Production**
Pilot Scale Production
Design Validation
Regulatory Filings

PHASE III — **Pre-Development**
Product Design Lock
Design Verification

PHASE II — **Applied Research**
Feasibility Development
Prototype Development and Testing

PHASE I — **Concept Development**
Establish Product Specification
Review Market Opportunities

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IPNIas Business Model

R&D Projects

Opportunities Identification and Networking → Proposals Submission → Project Management and Execution → Lab and Pilot Tests → Results Exploitation (IP and TT)

Support Activities

- Infra-structures
- Human Resources
- Technologic Development
- Purchases

Technology Transfer Services Provider

Marketing, Dissemination and Networking → Offers and Needs Identification → New Clients Achievement → Project Management and Execution → Client Support

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IPNlas Business Model
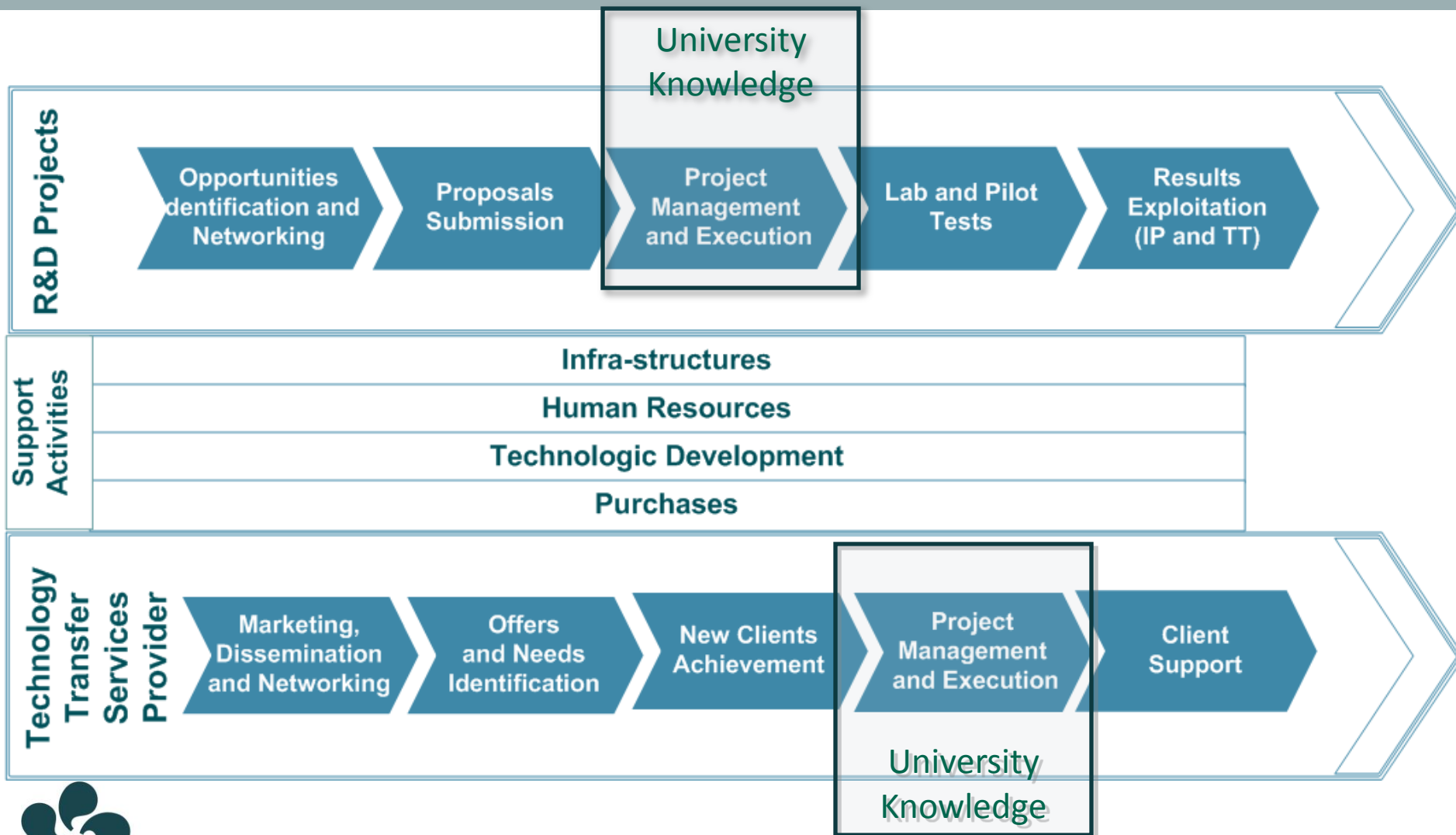
IPNlas Strategic areas

AAL, Health and Quality of Life

Mobility of people and goods

Agriculture

Robotics & Automation

WEB Sensing
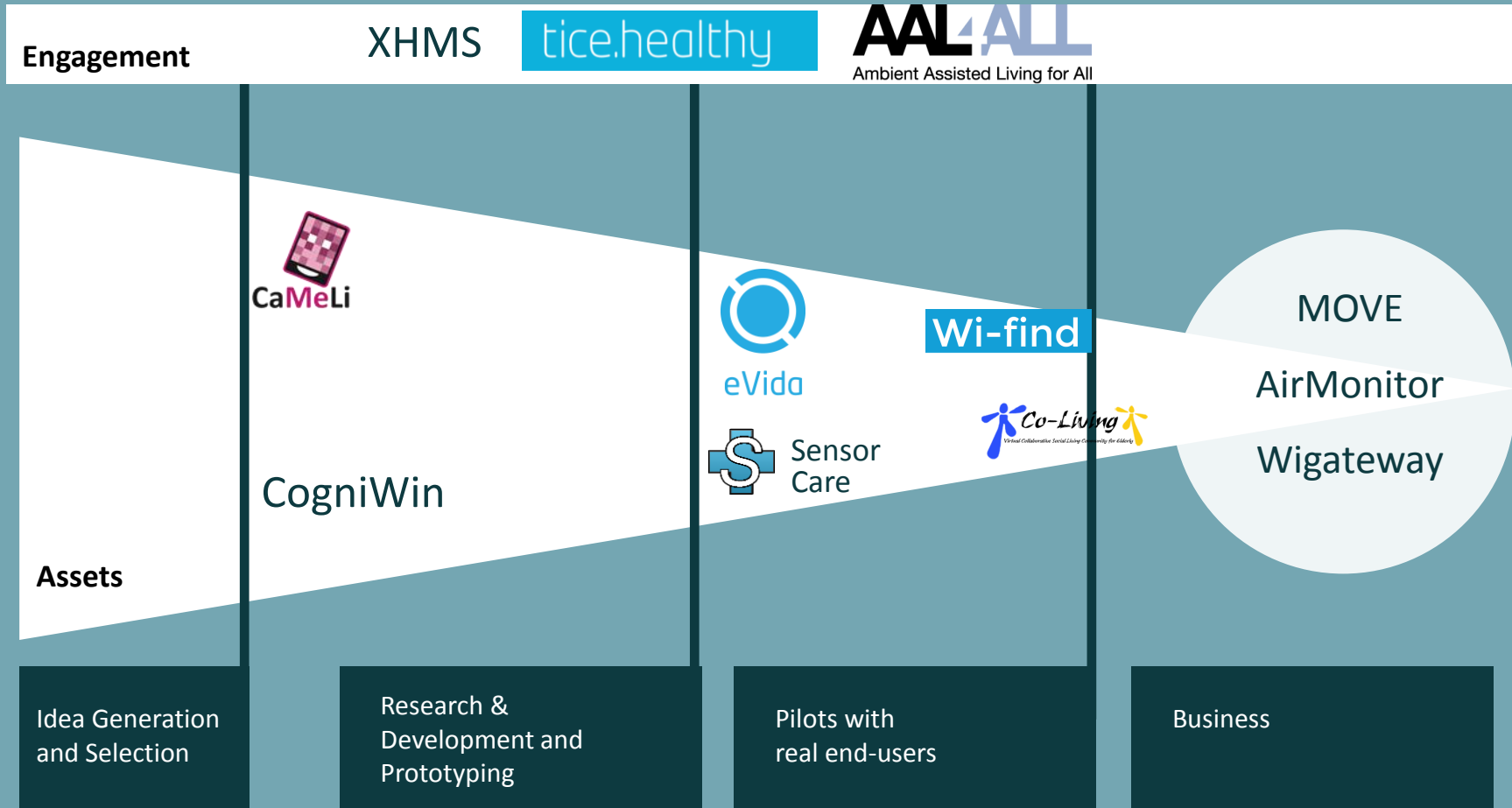
Engineering for Sustainability

IPNlas
LABORATÓRIO DE AUTOMÁTICA E SISTEMAS

IPN HEALTH AND AGEING INNOVATION FUNNEL

Engagement

XHMS   tice.healthy   **AAL4ALL** Ambient Assisted Living for All

CaMeLi

eVida

Wi-find

Co-Living
Virtual Collaborative Social Living Community for Elderly

MOVE

AirMonitor

CogniWin

Sensor Care

Wigateway

Assets

Idea Generation and Selection	Research & Development and Prototyping	Pilots with real end-users	Business

Products

CaMeLi

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CaMeLi

CaMeLi

Provide a system that simulates the way the elder was used, or would like, to interact, collaborate and dialogue, with a human life partner, understanding his emotions and assisting him/her in carrying out daily life activities at home, expressing emotions that will motive the elder to act.

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eVida

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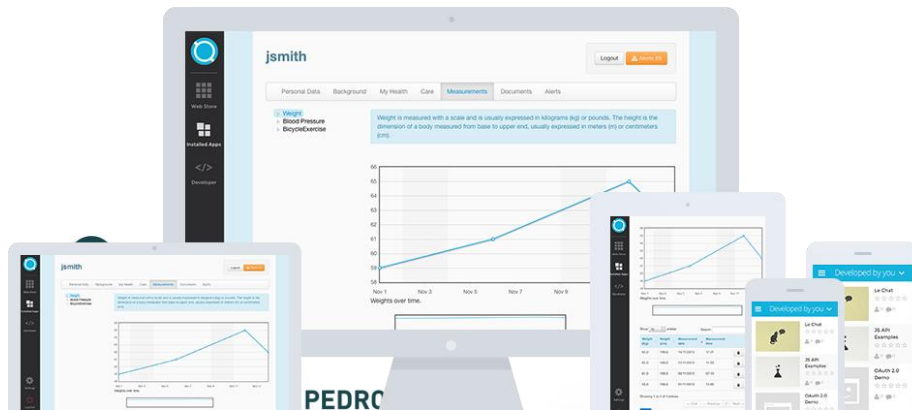AirMonitor

Wigateway

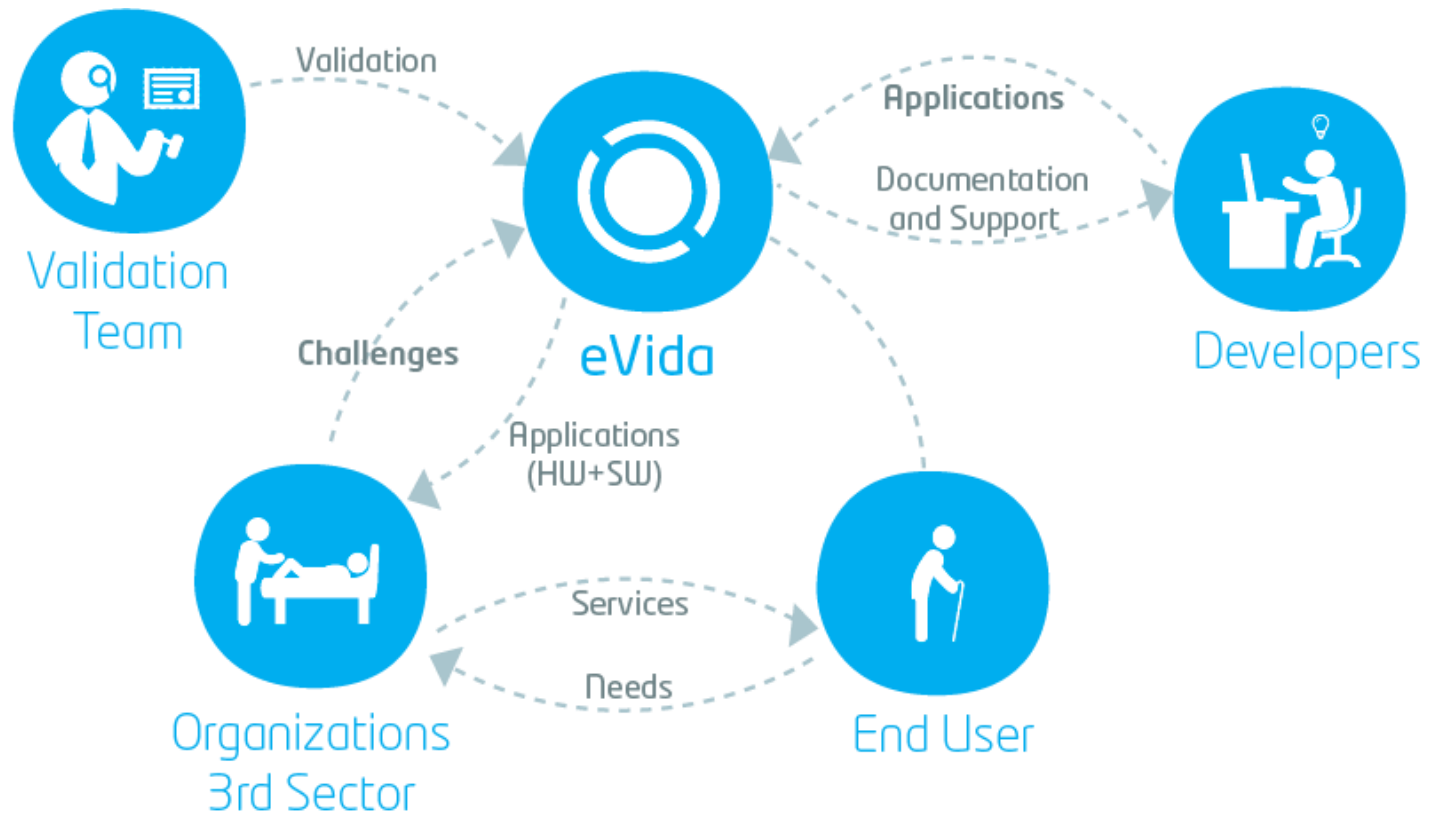| Idea Generation and Selection | Research & Development and Prototyping | Pilots with real end-users | Business |

Offers an **infrastructure** to support an ecosystem of intelligent services and innovative **ICT applications** and products for **Health and Active Ageing (informal care)**.

eVida

Wi-find

IPN HEALTH AND AGEING INNOVATION FUNNEL

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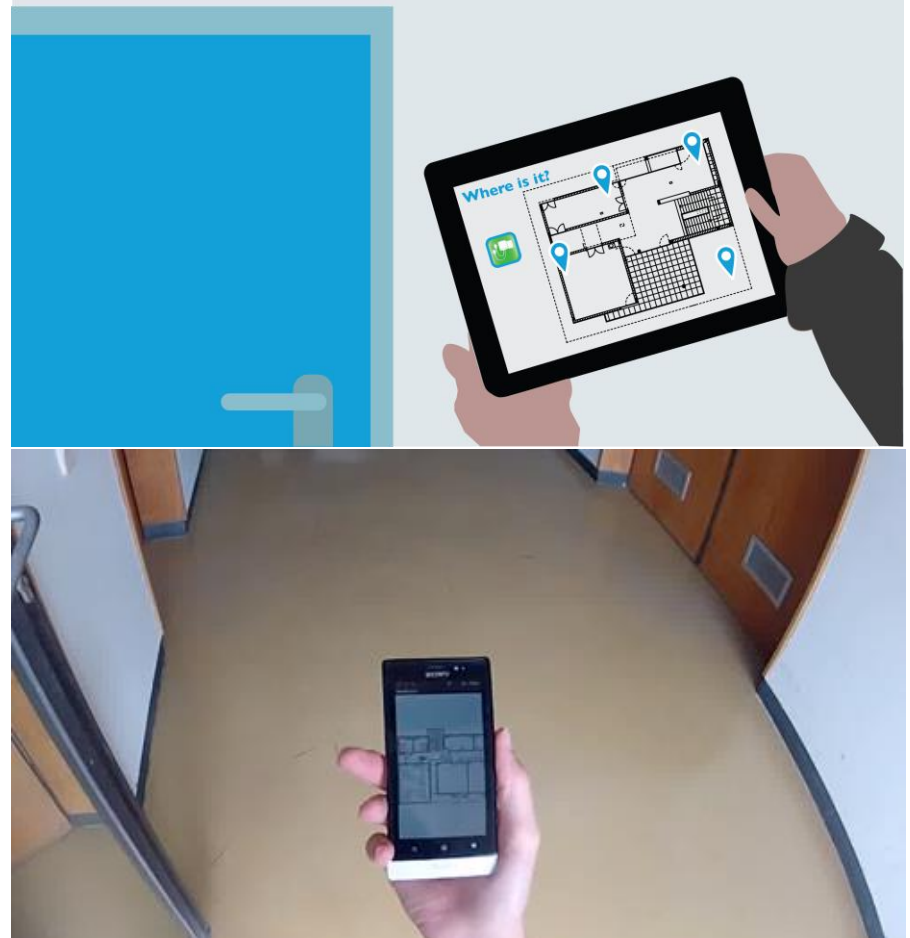| Idea Generation and Selection | Research & Development and Prototyping | Pilots with real end-users | Business |
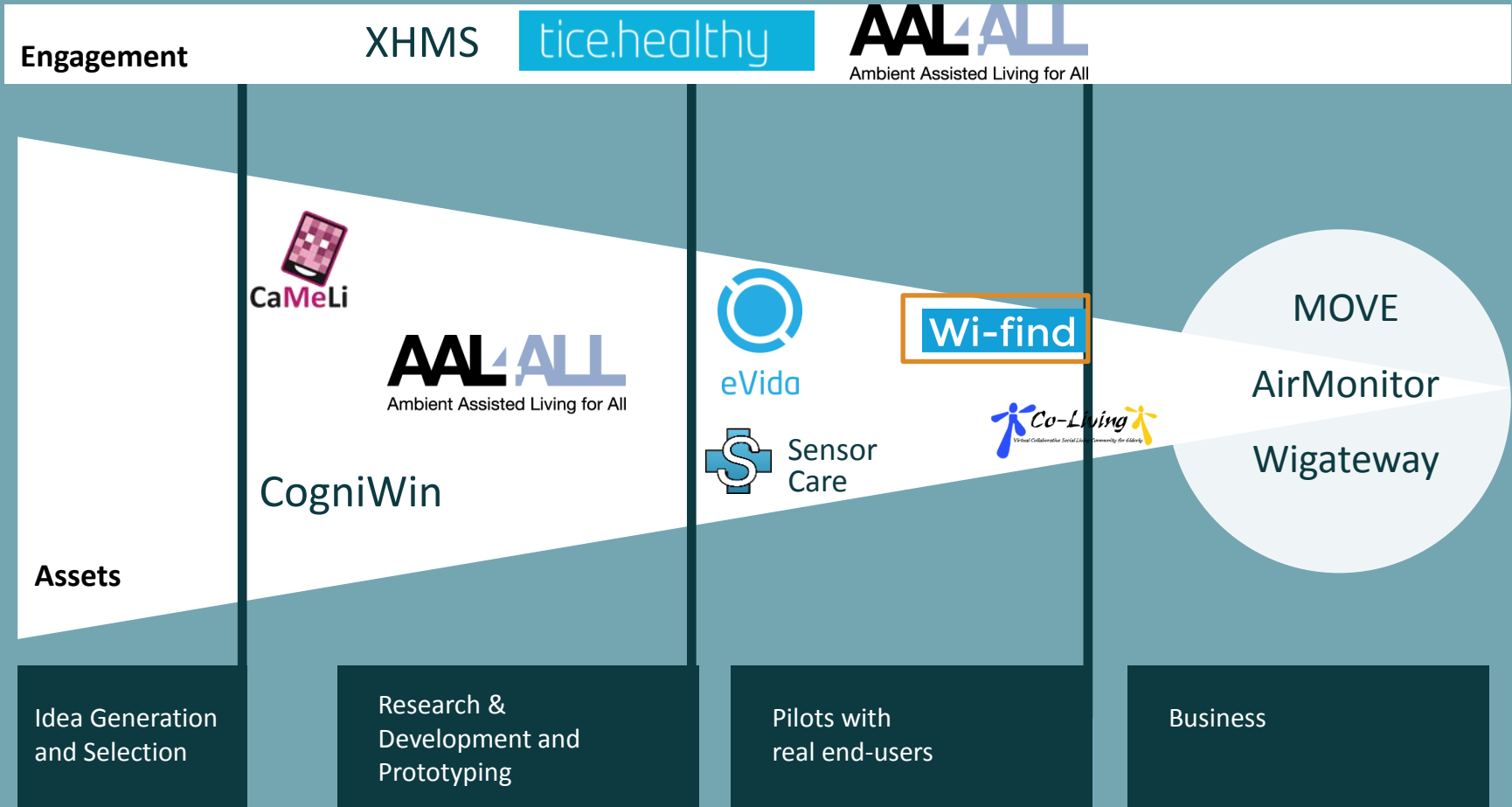
Wi-find

Wi-find

Localization method based on common Wi-Fi networks (IEEE 802.11), with server side logic to do and monitorize locations inside buildings.

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IPN HEALTH AND AGEING INNOVATION FUNNEL

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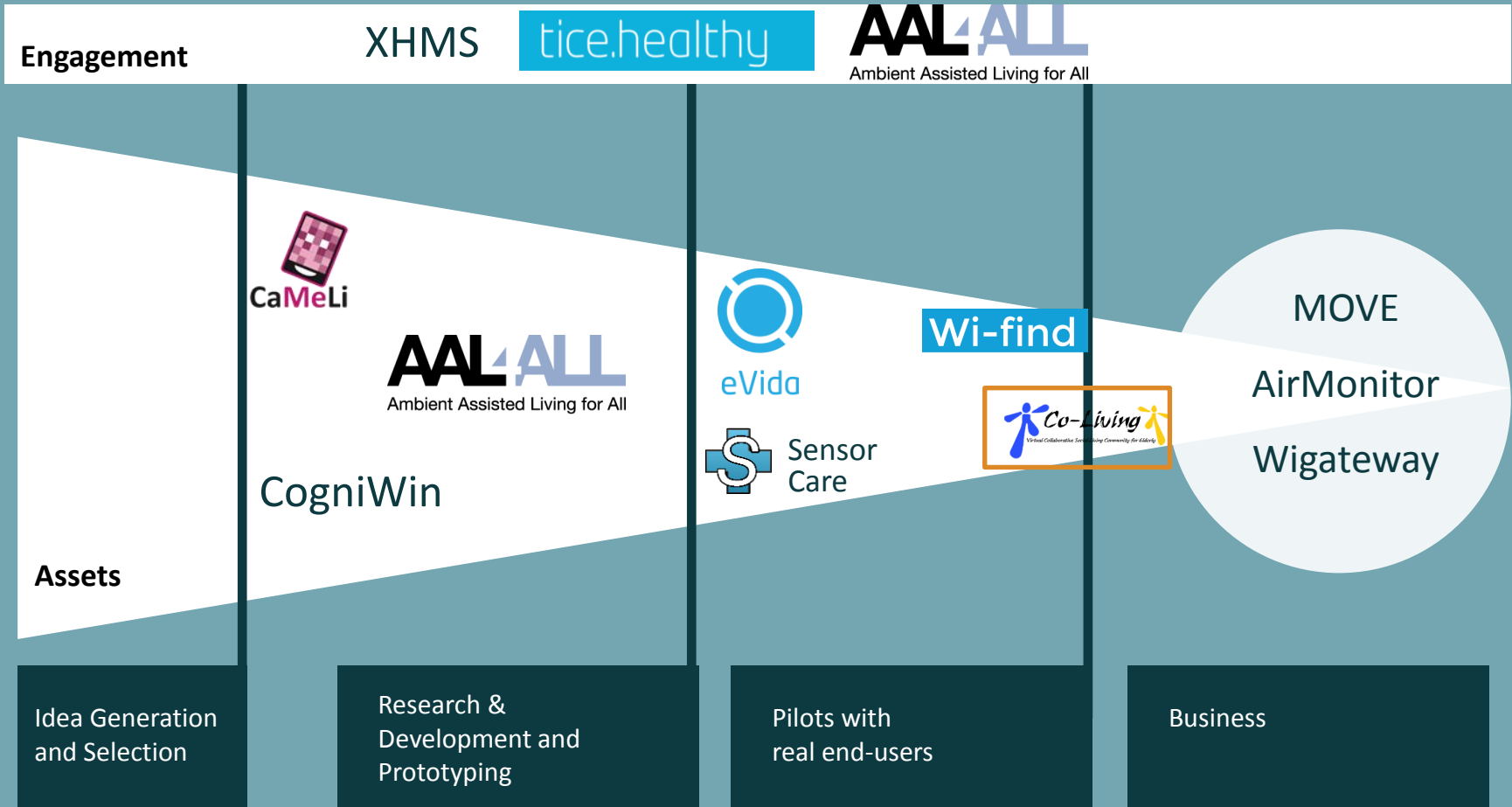
Co-Living

The main goal of the proposed project is the development of an ICT-based Virtual Collabora- tive Social Living Community for Elderly (Co-LIVING) people, aiming to stimulate and prolong their independent and active living in an outward environment through an advancement in elderly people social interaction, contributing thus positively to their wellbeing.

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MOVE

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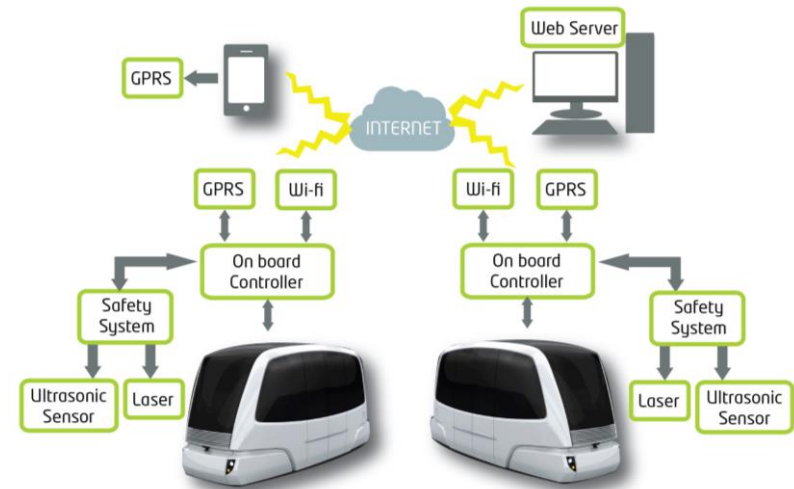| Idea Generation and Selection | Research & Development and Prototyping | Pilots with real end-users | Business |

MOVE

The Intelligent Transport System (ITS) developed by IPNlas, use electric vehicles built with leading edge technology, designed to be easily used for small trips at low speed in urban or private environments, to complement regular public transports.

The vehicle exclusive feature is its autonomy - **it is a vehicle without a driver, fully automated**.

Wigateway Physiosensing

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Pilots with real end-users

Business

Wigateway Physiosensing

This system brings data from sensors through a WLAN (Wireless Local Area Network) to a client application.

This system performs functions as acquisition, amplification and transmission of data from a set sensors simultaneously.

The communication between the sensors and the client application is near real-time and based on the standard Wi-Fi.

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sensingfu+ure

H2020
Ageing topics

Engagement

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Ambient Assisted Living for All

Technologies:
- New sensors development
- Behaviour Analysis

Applications:
- Rural areas
- User empowerment
- New applications for www.evida.pt concept

ICT Impact:
- InformalCare/Prevention
- SME / EU market

eVida

Sensor Care

Wi-find

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Ageing@COIMBRA

Ageing@Coimbra

Regional Ecosystem
Reference Site of the EIP on Active and Healthy Ageing

143,396 people
28,786 +65 old people (20.07%)

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Ageing@COIMBRA

Ageing@Coimbra

Regional ecosystem.
Reference Site of the EIP on Active and Healthy Ageing

Social Care

Environment

Knowledge

Health Services

Innovation

143,396 people
28,786 +65 old people
(20.07%)

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Thank You!

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