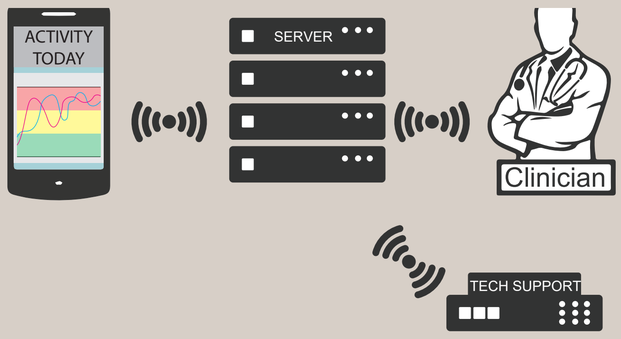
XoSoft

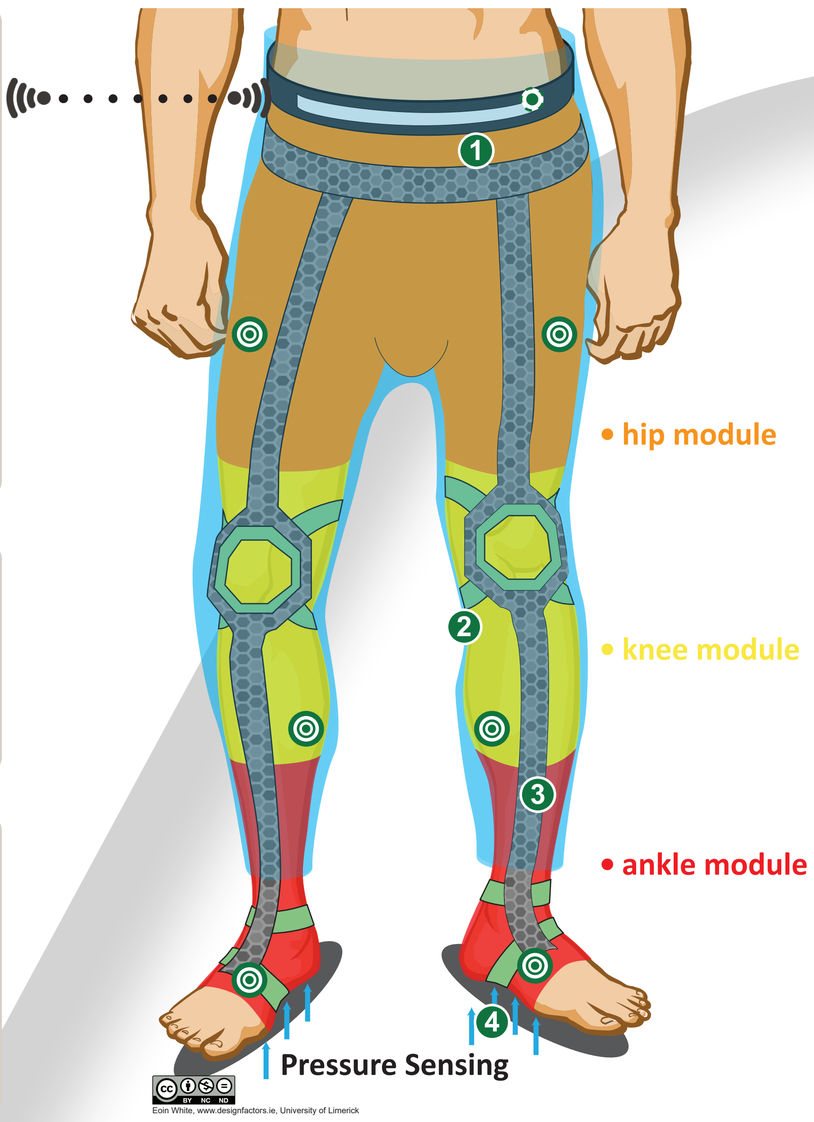
Soft modular lower-limb exoskeleton to assist people with walking impairments

Communication and connected health



1 Central processing hub
Data gathering
Actuator control
Communication
Power

Soft sensing and actuation
2 Variable stiffness joint
3 Multi-joint actuation
4 Smart soft mechanical sensing
◎ Inertial sensors (for 3D kinematics)



User Groups

As a medical device, XoSoft assists people with low to moderate levels of reduced mobility. The XoSoft soft exo-skeleton will support people with mobility issues in order to improve health and quality of life.

Primary Users
- Older adult
- Individuals with mobility impairments
- Stroke patient

Secondary Users
- Doctor
- Physiotherapist
- Carer
- Family member

Tertiary Users
- Social welfare
- Health insurance
- Policy maker
- Advocacy group

Business Case

Together with XoSoft's Innovation Manager (OSSUR) and other XoSoft partners, an initial business model has been developed based on the Business Model Canvas.

Key activities
- Component development
- Manufacturing
- Production cost reduction
- Product certification
- User centered design

Costumer relationship
- Primary users
- Secondary users
- Tertiary users

Key partners
- Primary users
- Secondary users
- Tertiary users
- XoSoft consortium members and their networks

Value position

Enable user to increase their mobility and independence in order to improve their well-being, quality of life and to ensure healthy aging.

XoSoft is easy to use, convenient and comfortable at an affordable price.

Costumer segments
By 2020

Stroke Patients
16 million/year
5% market penetration **800,000**

Elderly Persons
74.4 million
1% market penetration **744,000**

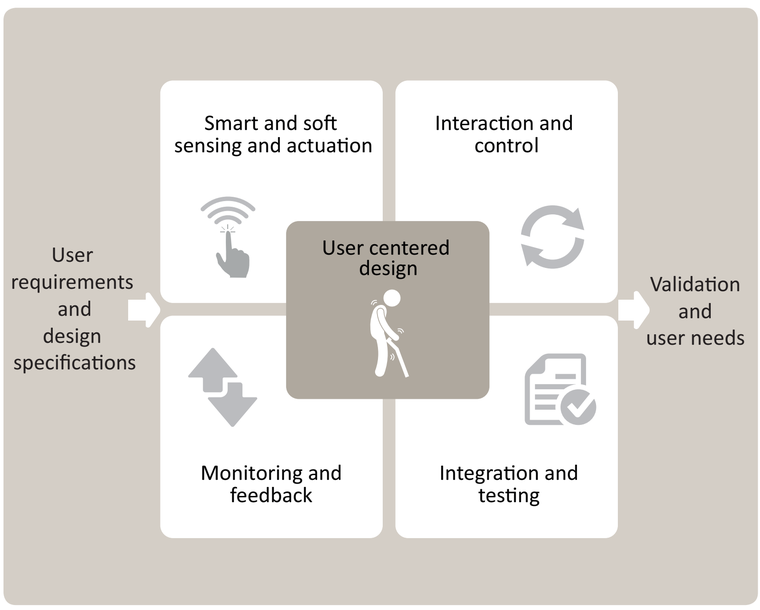
Healthy Population
496 million
0.1% market penetration **496,000**

Key resources
- Sensors, actuators & materials
- Mechatronic development
- Movement lab & test partners
- Cloud infrastructure

Channels
- OSSUR`s worldwide distribution network
- Orthotics and Prosthetics workshops

User Centred Approach

The user requirements and design specification are established before development starts. The technologies are selected and developed based on users' needs.



About the XoSoft Project

Duration: 1 February 2016 - 31 January 2019
Budget: 5.4 million euro
Funding Programme: Horizon 2020
Area: ICT Robotics
Contact:

Jesus Ortiz
XoSoft Scientific Coordinator
jesus.ortiz@iit.it

www.xosoft.eu

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