

Interreg 
2 Seas Mers Zeeën
EDUCAT
European Regional Development Fund

KU LEUVEN

EDUCAT

- An open, modular and adaptive framework for clinical trials
- Application: Obstacle Alerting System (OAS)

KU Leuven team

10/11/2020



1

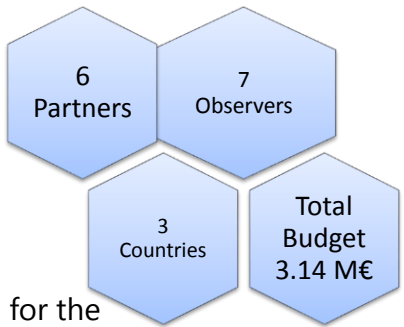
EDUCAT


Empowerment of **Disabled** people through the **User**
Coproductio**n** of **Assistive Technology** (2016-2020)

European Project co-funded by Interreg VA 2 Seas


Objective: develop and deliver Assistive Technologies (ATs) for the health sector that are open, modular and able to adapt their assistance (or to be adapted by the user) to the user's needs.
For that we need clinical trials, so a versatile measurement framework!

Start date: 01/09/2016, it runs for 4.5 years
Team: Yncréa HdF/ISEN, KU Leuven, Un. of Kent, UK hospitals, Voka Oost-Vlaanderen
Website: www.educat2seas.eu



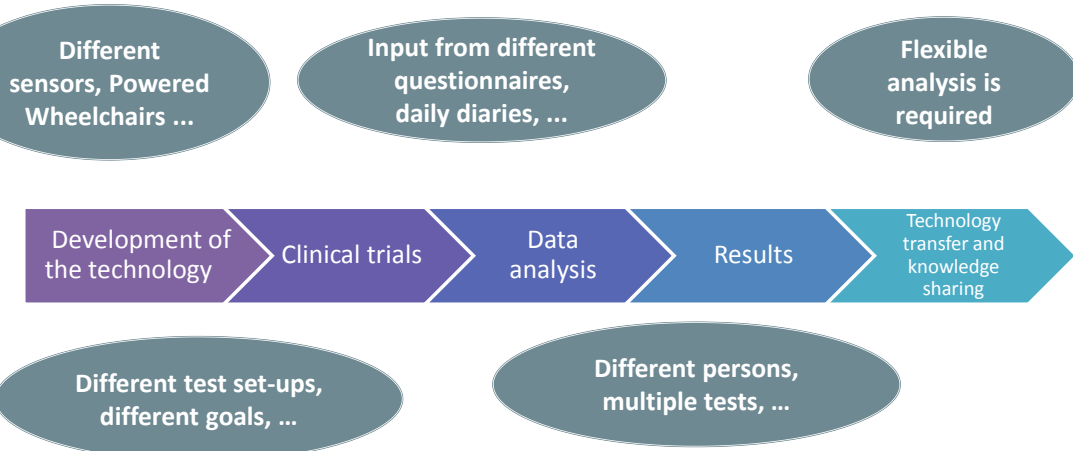


The document reflects the author's views. The INTERREG V 2 Seas Program Authorities are not liable for any use that may be made of the information contained therein.



2

Problem description – Market need for a framework

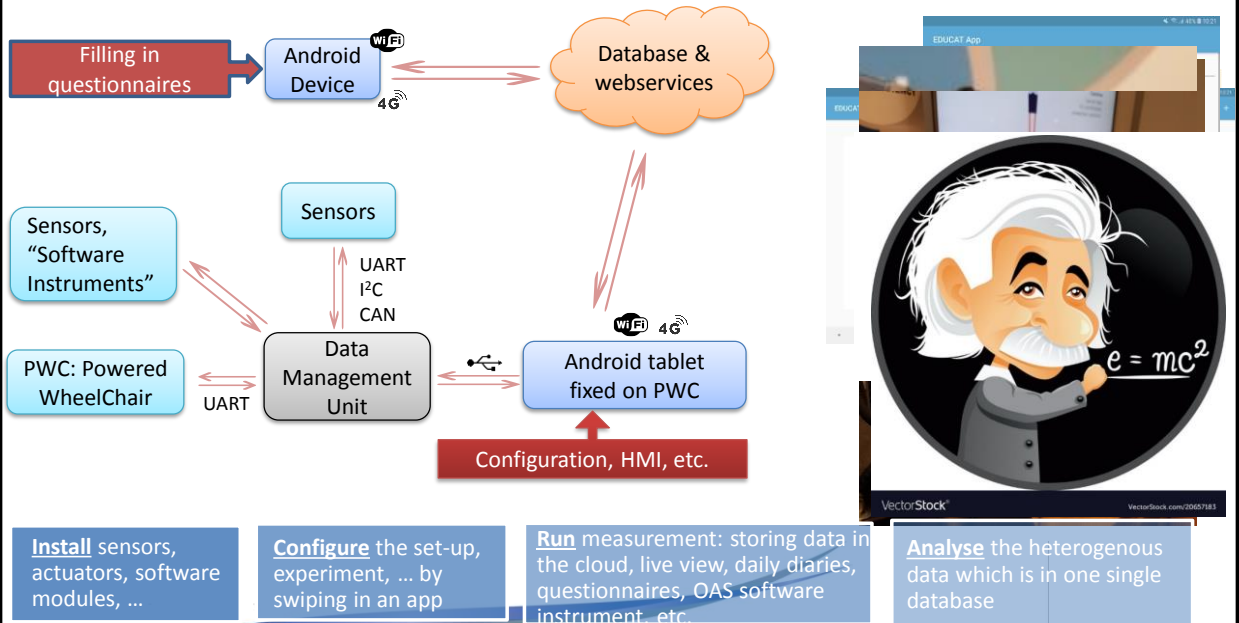


We need an open, modular and adaptive framework !
We need one single database combining all the heterogenous data !



3

Solution: "One workflow does it all ..."



4

Opportunity – Market

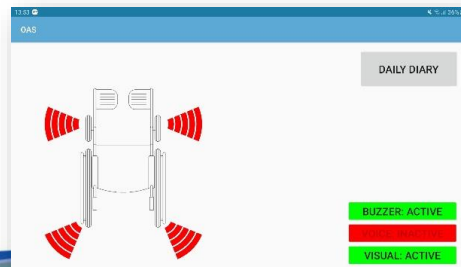
Company R&D: developers that want to test the effectiveness of new medical devices in clinical trials

Universities: Studies that want to collect data from heterogenous sources (user data, experiment set-ups, measured data, questionnaires, etc.)

EDUCAT is a customer: the Obstacle Alerting System (OAS) is an application example as «software instrument »

The **NOMADe** project is a customer

NO IP rights: open technology



Interreg 
2 Seas Mers Zeeën
EDUCAT
Europe's Regional Development Fund

5

State of the art – What is existing?

Our light weight framework uses **state of the art technologies** (HTTP Digest Access Authentication, TLS encryption, graphic configuration on «off-the-shelf» Android devices, etc.)

Android devices are also used for questionnaires, called **directly from the database** (no hard coding); questionnaire design is very straightforward from a web interface

WHAT IS EXISTING?

Some universities are active for Powered WheelChair measurements; **Un. of Berkeley** is designing a platform called **Mezuri**, but ...

None of them has the complete chain: own data-acquisition and sensors, open and configurable, Android based HMI and questionnaires, cloud database

Interreg 
2 Seas Mers Zeeën
EDUCAT
Europe's Regional Development Fund

6

Status

- *Status*
 - First tests on the REVA fair (Gent, April 2019)
 - First tests in hospital environment: Fall 2019 (Chailey, Sussex, UK)
 - Obstacle Alerting System as «software instrument» ready Summer 2020

7



@EDUCAT_Interreg

Contact details

First name: Philippe
Last name: Saey
Company: KU Leuven (Technology Campus Gent)
Email address: philippe.saey@kuleuven.be

www.educat2seas.eu

8