



From a RIA project to a product The CAPTAIN story

Evdokimos Konstantinidis

CAPTAIN H2020 Technical Coordinator

Lab of Medical Physics, Aristotle University of Thessaloniki, Greece

WITA srl, Trento, Italy

evdokimosk@gmail.com

Panos Bamidis

CAPTAIN H2020 Project Coordinator

Lab of Medical Physics,
Aristotle University of Thessaloniki, Greece



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

OUR VISION

CAPTAIN COACH vision is to improve the adoption of technology by people in need of care by reshaping the ways of interaction.

CAPTAIN COACH mission is to turn the homes of older adults into a gentle coach within an empowering space, providing intuitive interaction, guidance and help for independent living, whenever and wherever it is needed, leading to physical, cognitive, mental and social well-being.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN COACH SYSTEM

RADICALLY NEW USER INTERFACE



Projection



Speech



Tangible

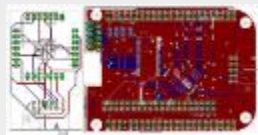


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN COACH SYSTEM COMPONENTS



Pico-projector



Raspberry Pi

Technical view



Embedded software components



Final system



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN COACH

OUR SOLUTION



**Radically new technology for
empowering and motivating
people in need of guidance and
care**



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN COACH

VALUE PROPOSITIONS FOR HELPING ELDERLY



AI Movement Analysis

Collection and assessment of data from movement and exercising inside the house



AI Emotion Analysis

Emotion analysis from face and voice



Speech Analysis

Speech analysis and speech generation to provide a multilingual, intuitive user interface



User Modeling

Using AI to model and comprehend user's behavior through non-invasive monitoring



Environmental Monitoring

Sense and adapt to environmental conditions like weather, noise and temperature



AI Behaviour Prediction

Predict everyday life behaviour and activity recognition



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN COACH

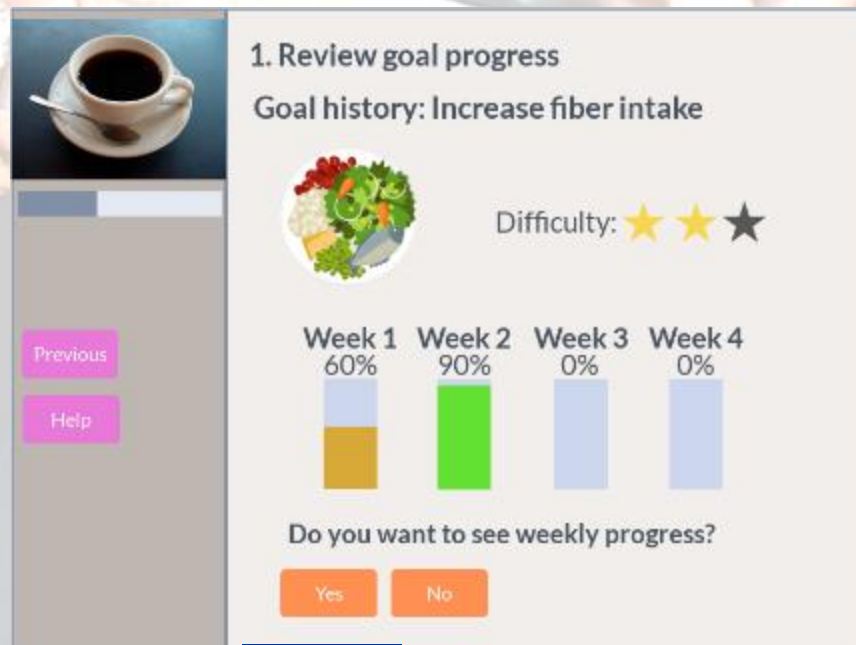
KEY CONCEPT

Set
GOALS

Coaching is
delivered

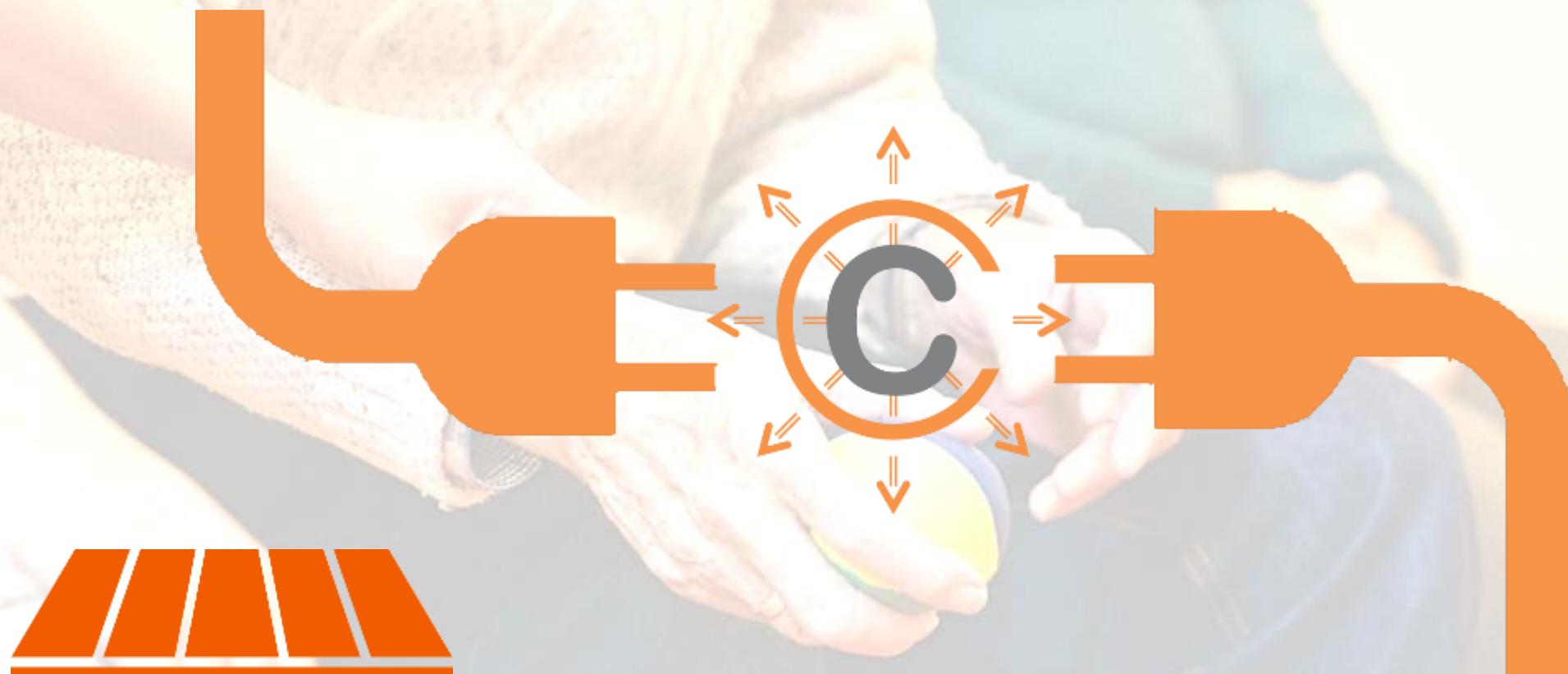
Get
feedback

Coaching plan
adaptation



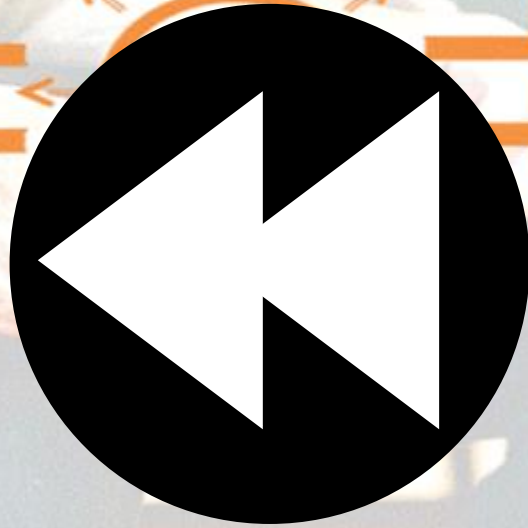
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN Smart Goal Plugin Marketplace

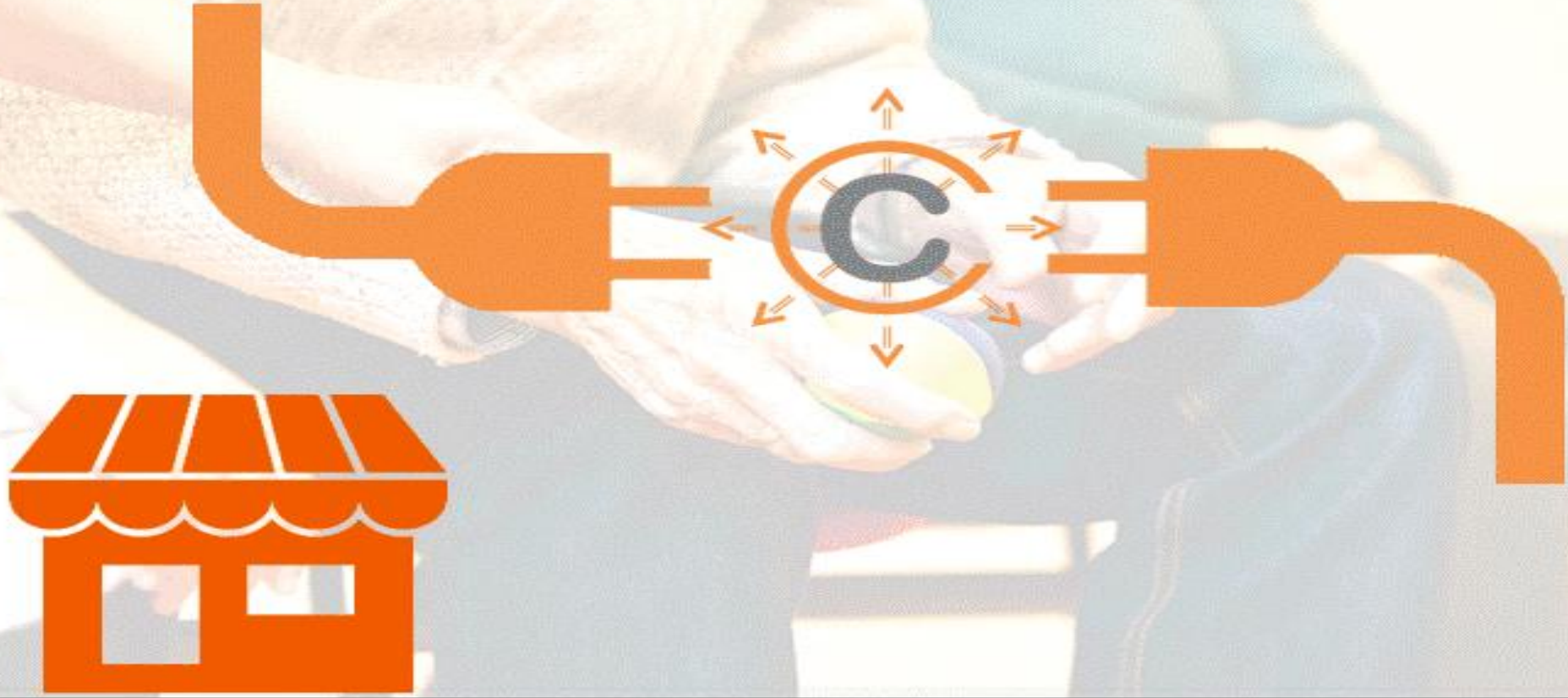


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CAPTAIN Smart Goal Plugin Marketplace



CAPTAIN Smart Goal Plugin Marketplace



CC

8B

CC

ME100

C9

8B





Our mission...

...is to turn the future homes of older adults into a gentle coach

VYOND



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830



The consortium

Coordinated by



UNIVERSITY OF TRENTO



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

Our deliverables were:

develop radically new ICT based concepts and approaches for empowering and motivating people in need of guidance and care

users should be involved and drive the innovation at all stages of design and development, including user acceptability, satisfaction and impact in realistic settings



Launch of a new company based on CAPTAIN



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

The motivation



Include a deliverable or milestone for launching a new company. At the end of the project, you will have to deliver ;-)

MS7	Definition of business model and business take-up	WP9	4 - INI-Innovation	39	Launch of a new company based on CAPTAIN
-----	---	-----	--------------------	----	--



At some point, partners started losing their real interest



The new company vision was communicated to all partners through a workshop from the Exploitation WP partner.

The vision of a new company where partners would keep their IPRs was enough to motivate them to work more effectively.

The technological partners were more motivated compared to the pilot partners.

Different skills are required for the dissemination and exploitation tasks, although most of the times are under the same WP with one WP leader.



LICENSE



**Licensing of
Intellectual
Property
Rights (IPR):
Business
Perspective**



The support of the Technology Transfer Office

- We had 3-4 meetings with AUTH's TTO, Legal Support and the Vice Rector for Research and Lifelong Learning (Stratos Stylianidis)
- The TTO and the Legal Support of AUTH went through the Grant Agreement and the Consortium Agreement to make sure everything is fine.
 - The project was ongoing when the company was established, and some conditions should be met
 - They understood our needs for some conditions and they accepted some amendments in the agreement between RC AUTH and the spin-off





COVID-19

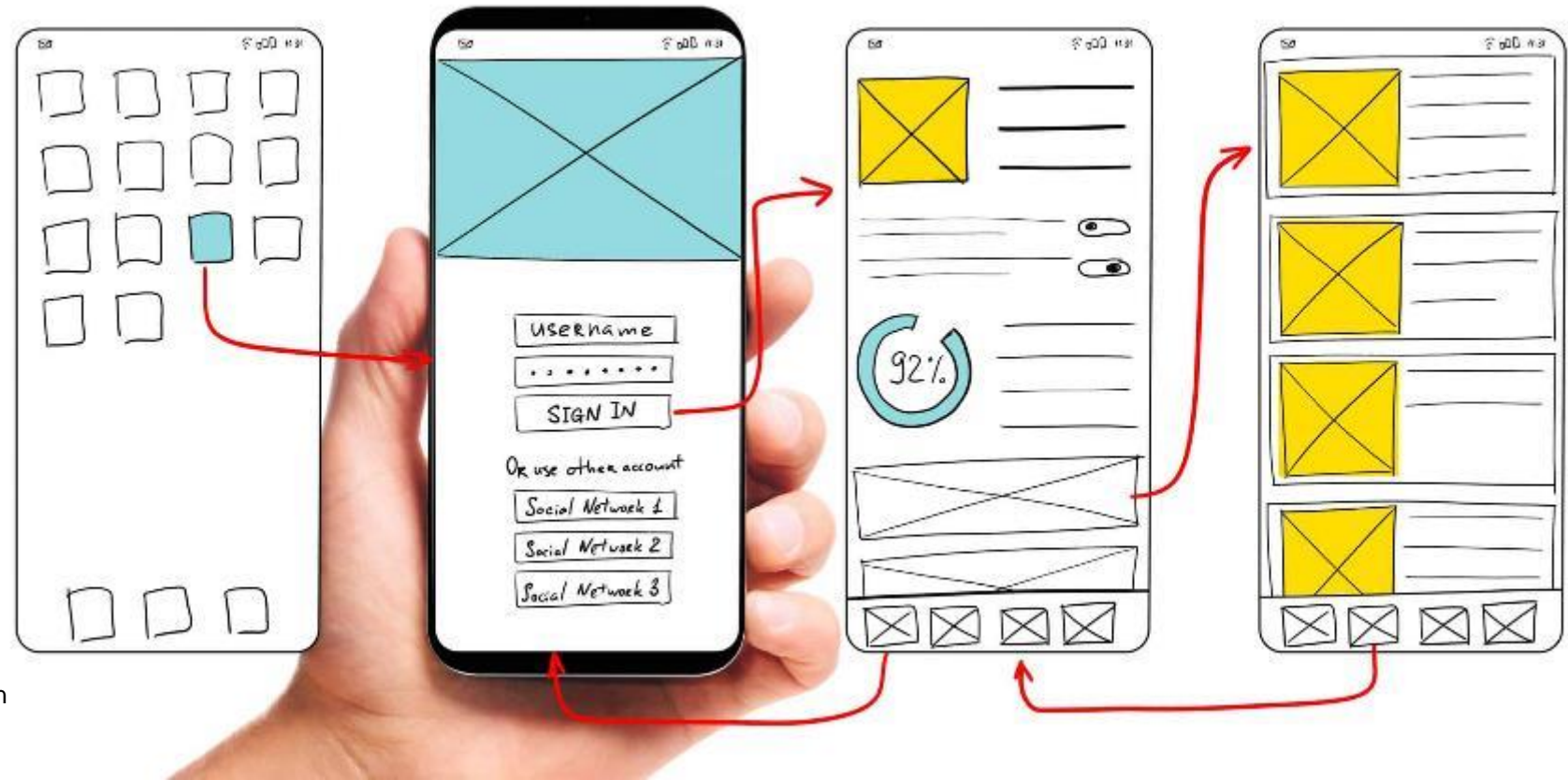
Problem turned into opportunity?

Improved UX for:

- Deployment
- 1st time installation
- Usage
- Simplified manuals



**A project closer
to a product**



The drawback



Uncertainty for pilots


Evaluation protocol needs to be substantially amended (space for innovation though)



Scientific publications without results???



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

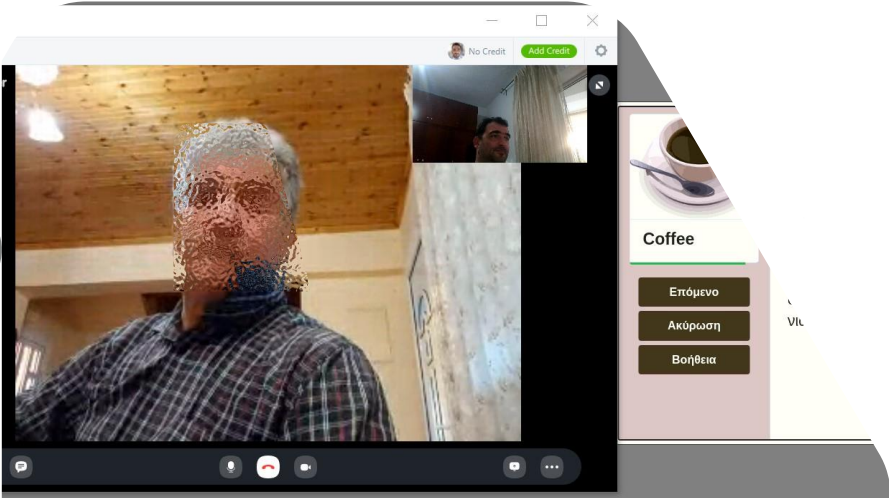


“It is fun to have the
projections in your home,
especially if you learn
something!”



“It is nice that when it detects you it starts automatically. Then, out of curiosity, you might read the text”

Virtual support and assessment



PRIZE



FOR A STRONG DIGITAL EUROPE

WINNERS 2020



[Home](#) / [EIT Digital Venture Program](#) / [Winners 2020](#)

EIT Digital Venture Program

[Overview](#)

[Partners](#)

[Winners 2020](#)

[Winners 2019](#)

[Winners 2018](#)

WINNERS 2020

REGION 2

Captain Coach

CAPTAIN COACH is a "transparent" technology designed as a ubiquitous assistant for elderly compensating their phy



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830

CURRENT STATUS



CAPTAIN H2020
project



EIT Digital
Accelerator



CAPTAIN COACH
establishment



CAPTAIN COACH
prototype ready



Operations
started



2017-2021

June - September
2020

September 2020

December 2020

2021



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830



Evdokimos Konstantinidis
CAPTAIN H2020 Technical Coordinator
Aristotle University of Thessaloniki, Greece
WITA srl, Trento, Italy
evdokimosk@gmail.com



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 769830