



**XAMK**

**Active Life Lab**

# Novel concept for developing effective wellbeing services

Viljo Kuuluvainen, project manager

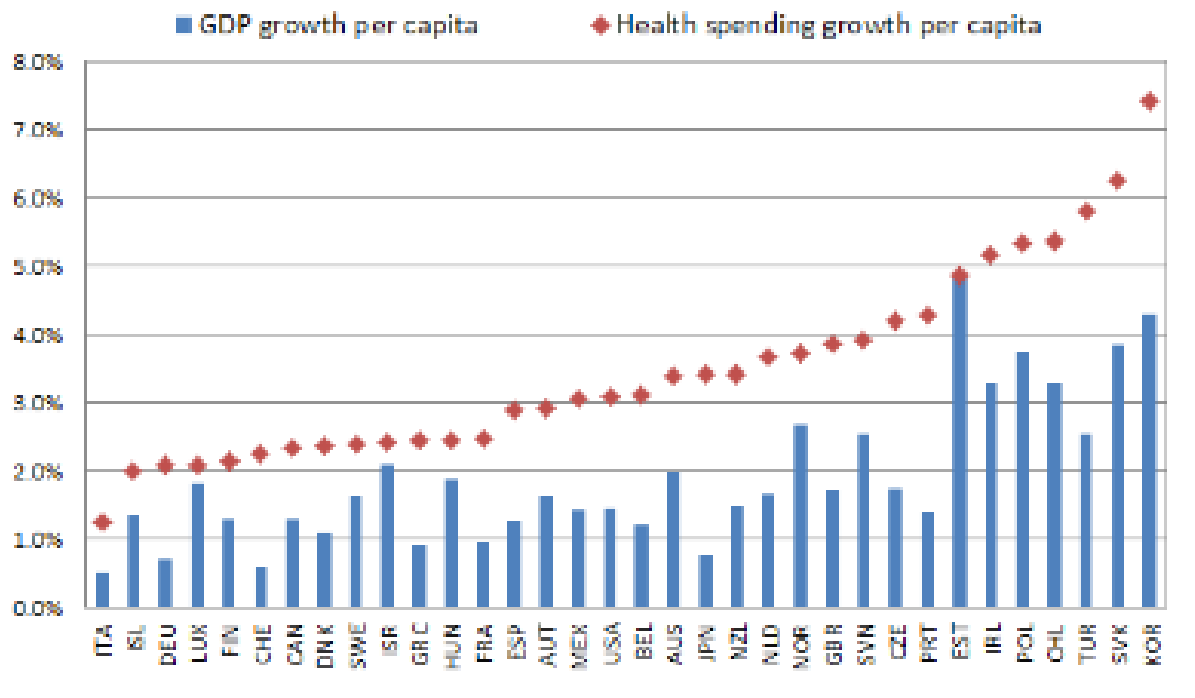
Vipuvoimaa  
EU:lta  
2014-2020





## Health spending has outpaced economic growth

Average growth rate of health spending and GDP per capita, 1990-2012





# Active Life Lab

# ACTIVE LIFE LAB

RDI-lab under South-Eastern Finland University of Applied Sciences (Xamk)



## SAIMAA STADIUMI

Opened in March 2018  
Total size 11.000m<sup>2</sup>  
Total cost 20.000.000 €  
Owned by Xamk & City of Mikkeli



## ACTIVE LIFE LAB

Located in Saimaa Stadiumi 2nd floor  
A 700 m<sup>2</sup> research facility including Smart Gym, Testing lab  
& VR-space/touch screen



# Active Life Lab timeline

2015

Saimaa Stadiumi  
plan published

2016-2018  
Construction of  
Saimaa Stadiumi &  
Active Life Lab

5/2017-5/2019  
Launching Active  
Life Lab (ERDF: 1,4  
m€)

2019 >  
Establishing the lab,  
new projects/funding



# ACTIVE LIFE LAB

**RESEARCH**

**Effective  
wellbeing  
services  
for  
everyone**

**EDUCATION**

Dataperusteiset hyvinvointipalvelut (Masters degree) ja Wellbeing Management (Bachelors degree)

**HEALTH PROMOTION  
COLLABORATION**

**COMMERCIAL SERVICES**

# Vision

An established research partner offering practical solutions for measurement and development of preventive wellbeing service effectiveness

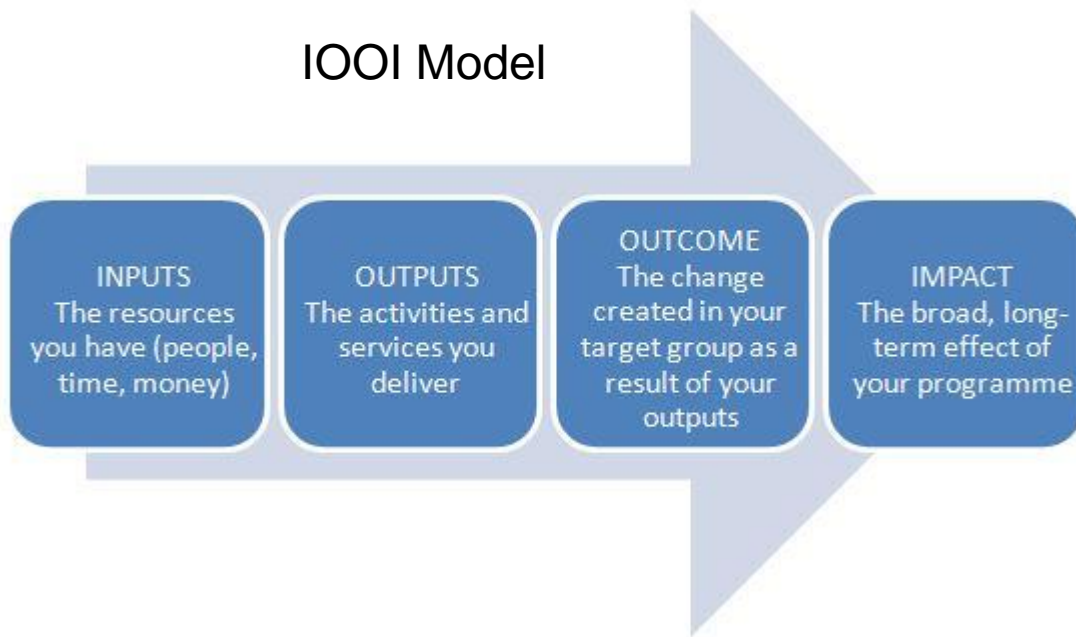
The logo for XAMK, consisting of the letters 'XAMK' in a bold, white, sans-serif font, set against a dark blue rectangular background with a slightly irregular, torn-edge effect on the right side.

**XAMK**

Active Life Lab

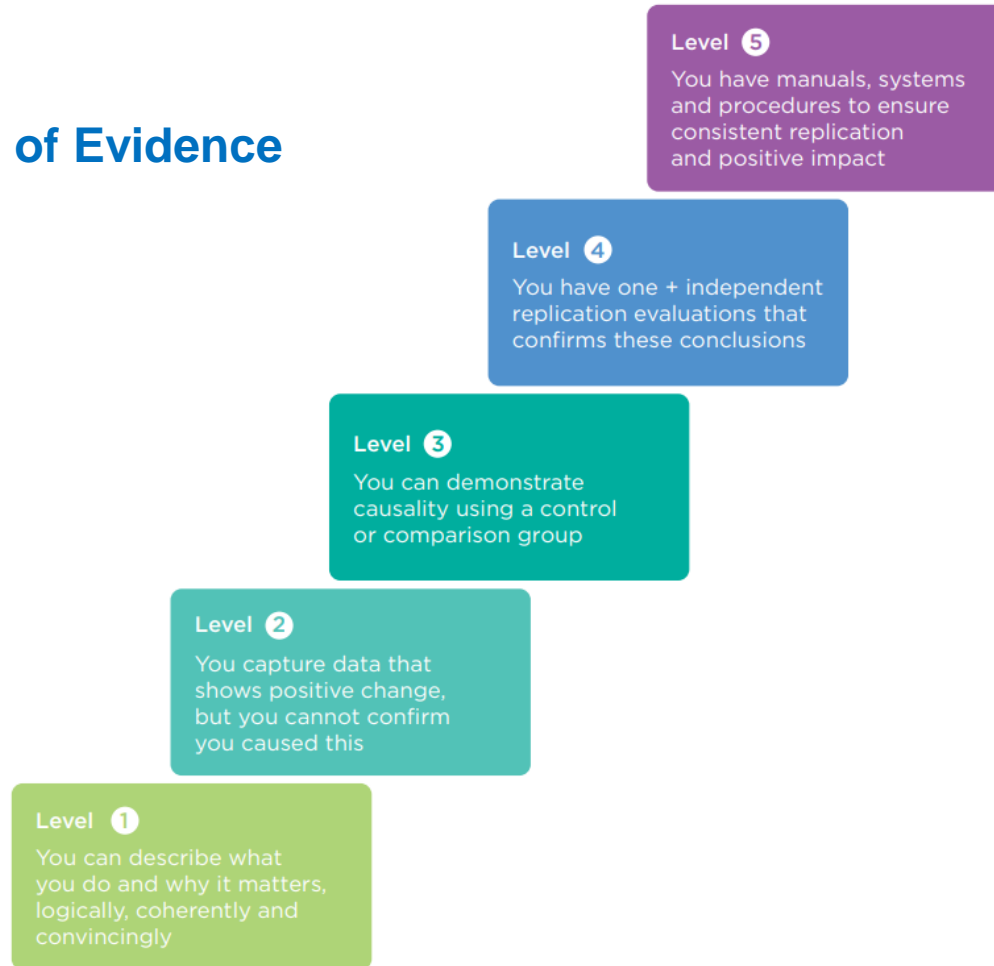
# What is effectiveness?

*"The ability to produce the intended (lasting) results"*





# Standards of Evidence



# Why should effectiveness be measured and developed?

- **Service provider**
  - Unique value proposition/selling point
  - Better quality of service & streamlined processes
- **An individual**
  - Measured results > better wellbeing
  - Value for money
- **Society**
  - Increased wellbeing
  - Savings in health costs > only sustainable option in long term

# Active Life Lab Effectiveness Concept

## Basic research

is used to develop and validate the methods used for data collection.

## Data collection

Health and behaviour data is collected in actual measurements in Active Life Lab, and/or with a mobile application and stored in Active Life Lab databank.

## Partner collaboration

Active Life Lab has partnerships with public and private social and health care services, occupational healthcare, corporate wellness, insurance companies, wellness companies, startups and other research laboratories. Partners use Active Life Lab facilities, methods and/or expertise for health promotion of their clients, testing the effectiveness of their services, and for developing new services and products.

## Effectiveness of health promotion services and products

Data collection during health promotion in Active Life Lab enables analysing effectiveness and developing new services based on the effectiveness data.



T1

T2

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**SURVEY & TARGETING**

ACTIVE LIFE LAB

Effectiveness  
measurements

ANYWHERE

Wellmie questionnaires

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**INTERVENTION**

Lifestyle counseling &  
training at Smart Gym

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**EFFECTIVENESS & RETARGETING**

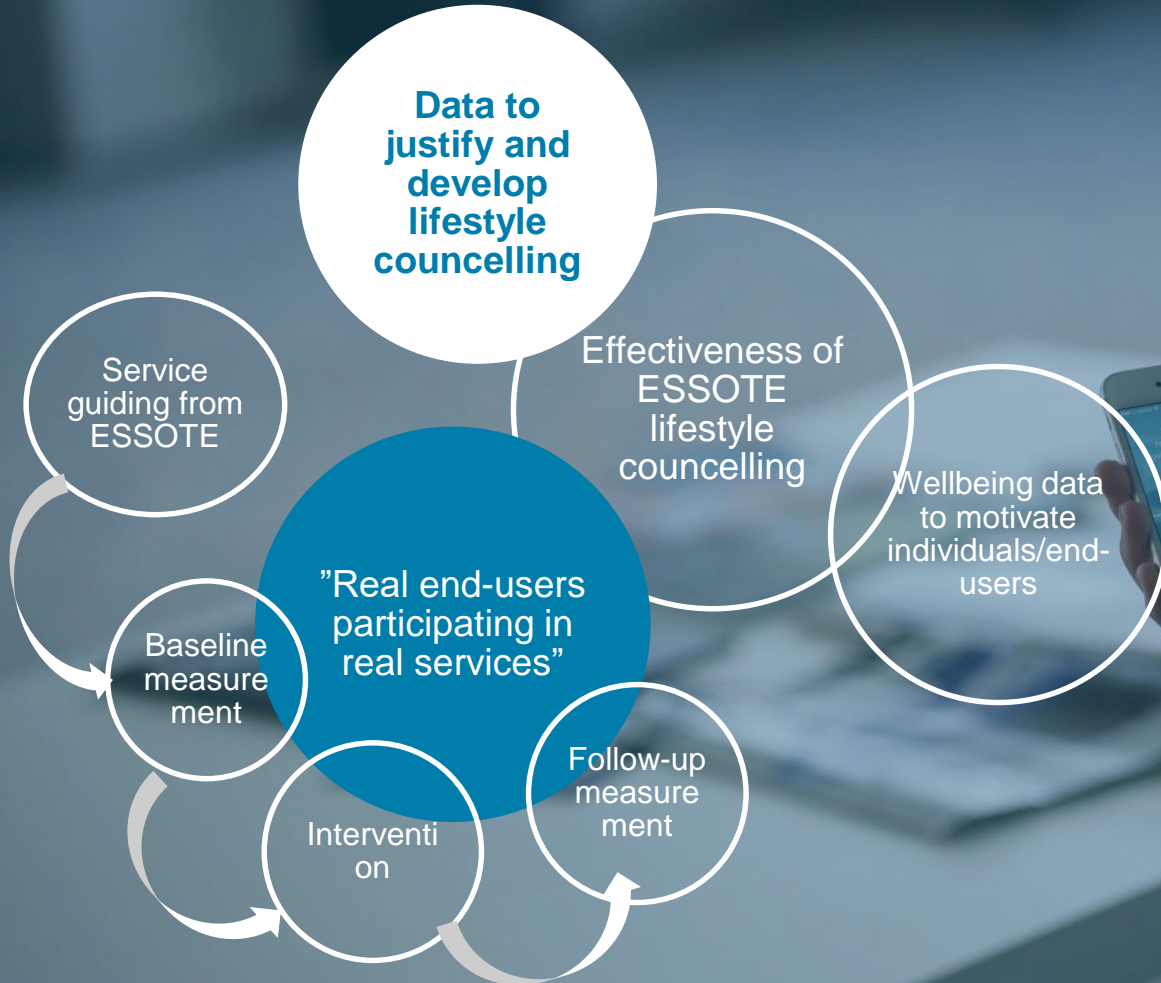
ACTIVE LIFE LAB

Effectiveness  
measurements

ANYWHERE

Wellmie questionnaires

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1) **Individuals** are motivated and engaged when they get information about their progress measured by latest wellbeing tech

2) **Wellbeing service provider** gets information about the effectiveness of lifestyle counseling to develop and justify its services

**Effectiveness concept**

3) **Research partner** gets effectiveness data from real end-users in real circumstances

4) **Partners** have access to real end-users to test their services

# ACTIVE LIFE LAB EFFECTIVENESS CONCEPT CONTENT

## MEASUREMENTS

- Stress & recovery (HRV)
- Arterial stiffness
- Body composition
- Cognition
- Aerobic capacity
- Grip strength & Leg press

## WELLMIE QUESTIONNAIRE

- Health
- Mental wellbeing
- Physical activity
- Sleep and recovery
- Diet
- Motivation

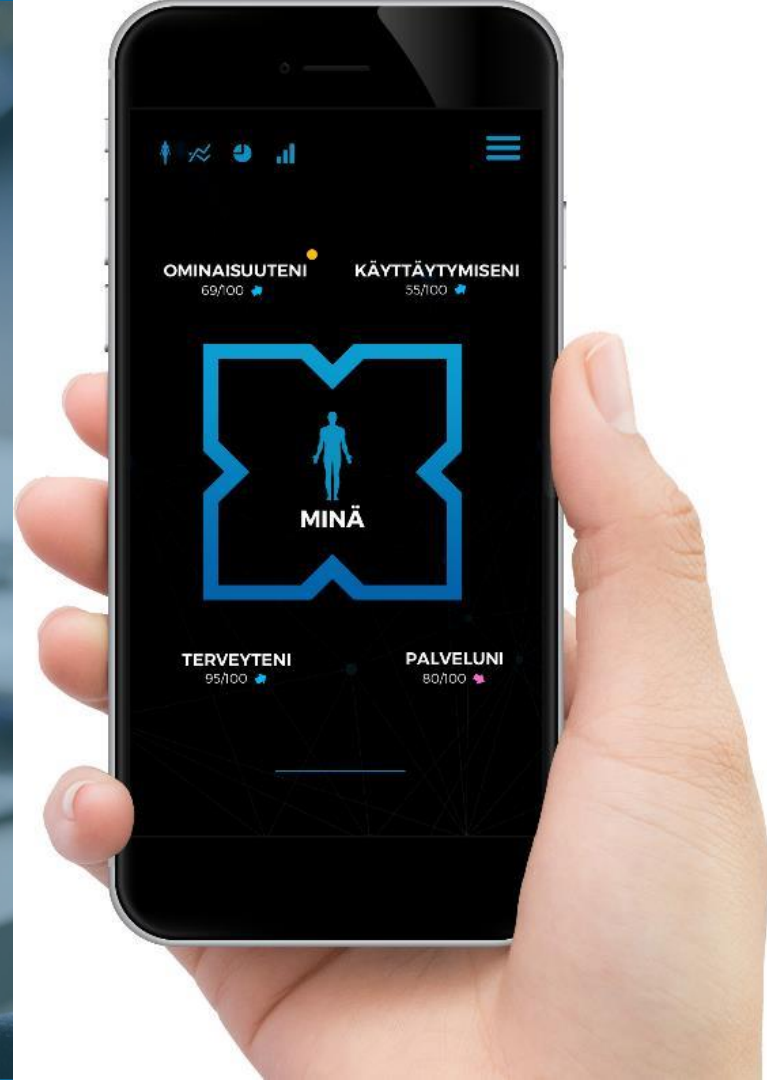
# Effectiveness measurements for occupational wellbeing projects





# Wellmie (Hyviö) app to scale-up effectiveness concept

- Digital platform (mobile app) for developing effectiveness of wellbeing services
- Idea
  - To gather wellbeing data from individuals with questionnaires at different time points
  - Link this data to the wellbeing service usage of the individuals
  - Analyse and evaluate service effectiveness based on the data



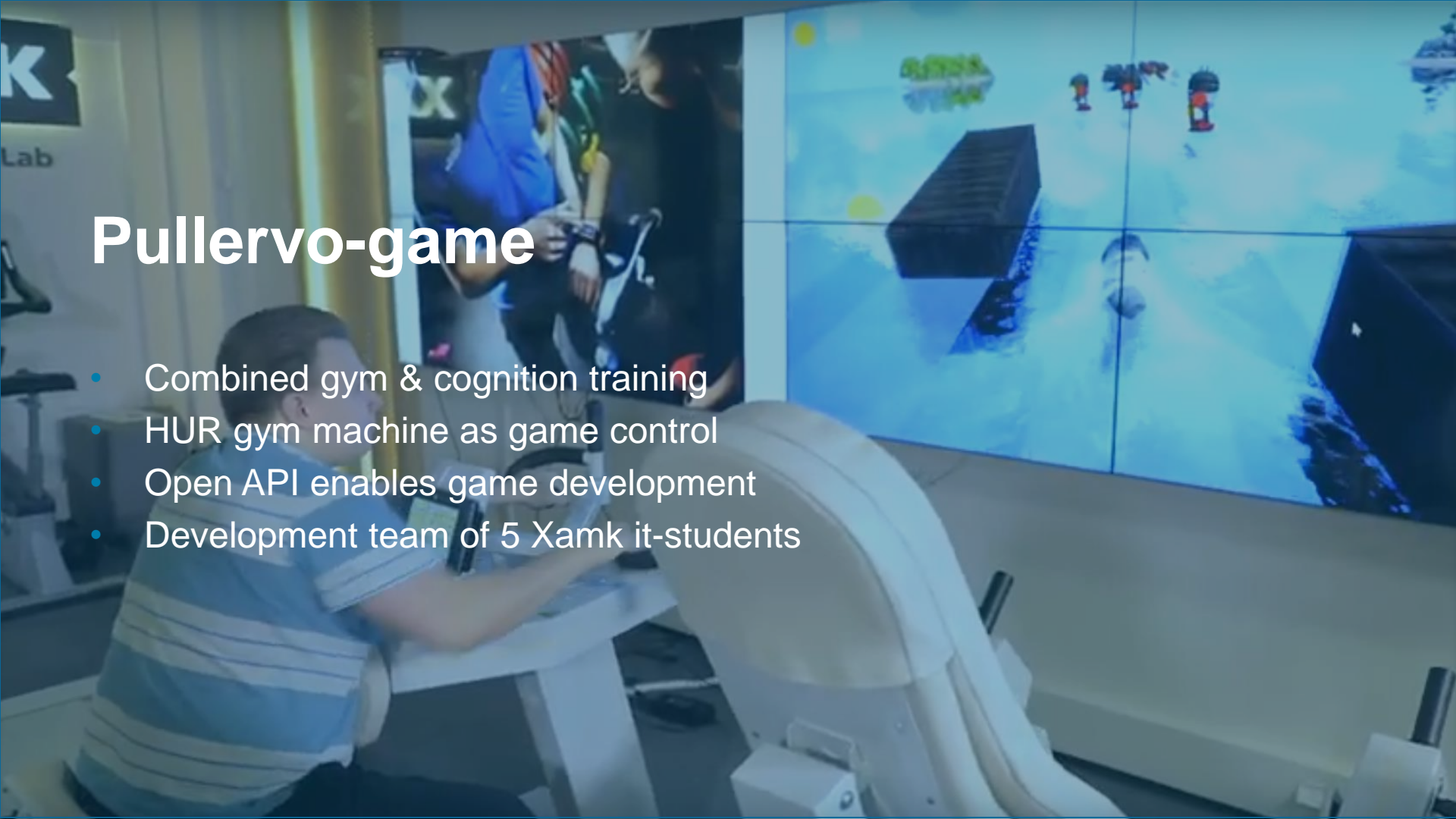
# Active Life Lab figures as yet

- Over **350** effectiveness measurements carried out
- Over **2000** individual training sessions in Smart Gym
- Around **200** individuals training weekly in Smart Gym
- Over **5000** visitors in Active Life Lab
- **10** new services developed
- Students involved in development activities with over **500** credits
- Home of **2** new Xamk degree programmes

# Cases

# Pullervo-game

- Combined gym & cognition training
- HUR gym machine as game control
- Open API enables game development
- Development team of 5 Xamk it-students

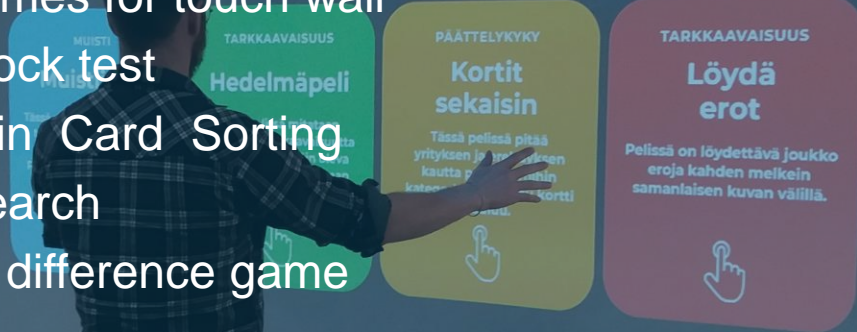


# Nutcracker - Games for Brains

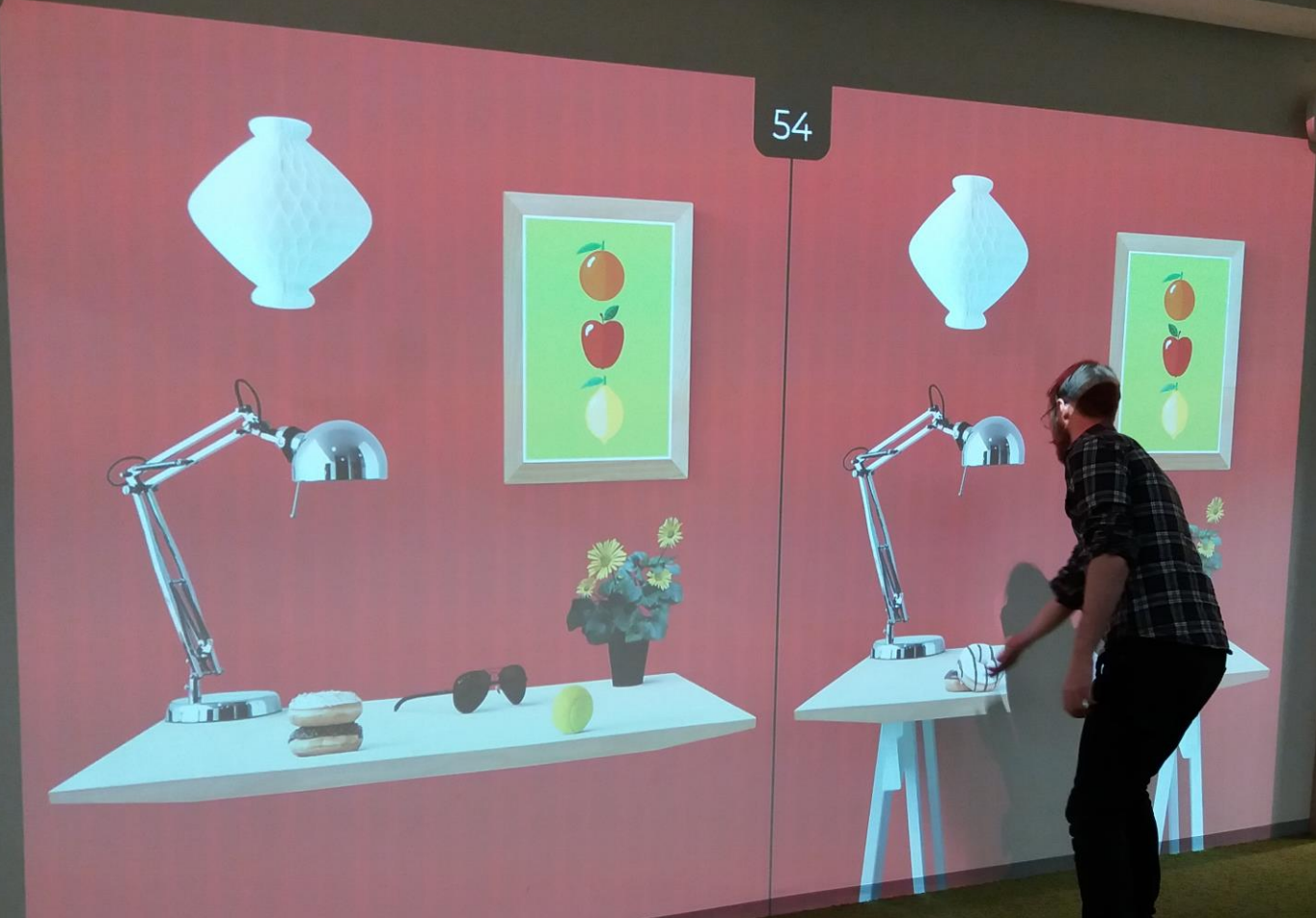
- In cooperation with OiOi Smart Space
- Cognition games for touch wall
  - Corsi block test
  - Wisconsin Card Sorting
  - Visual search
  - Spot the difference game



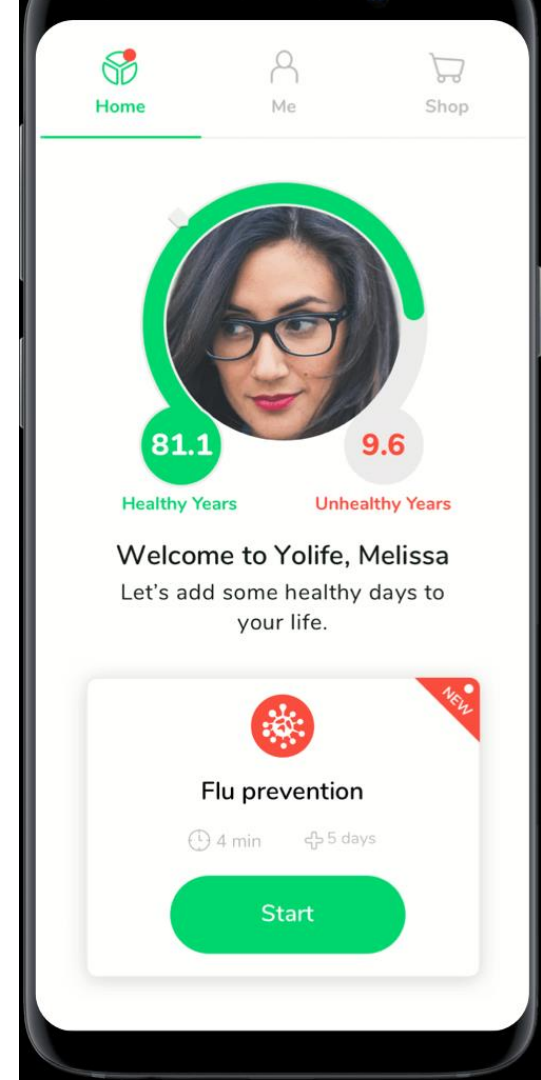
**NUTCRACKER**  
GAMES FOR BRAINS



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# User experience study for Yolife-app



# ACTIVE LIFE LAB -TEAM



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# Wellbeing service is effective when...

- There is an explicit goal to be achieved
- Target group is clearly defined and reached
- The service is designed and tailored to the needs of the individual
- The results and the effectiveness of the service are measured and proven

