



Unique eye tracking as biomarker for monitoring and diagnostics in dementia therapy

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My grandma 35 years ago... (suffering from Alzheimer's disease)



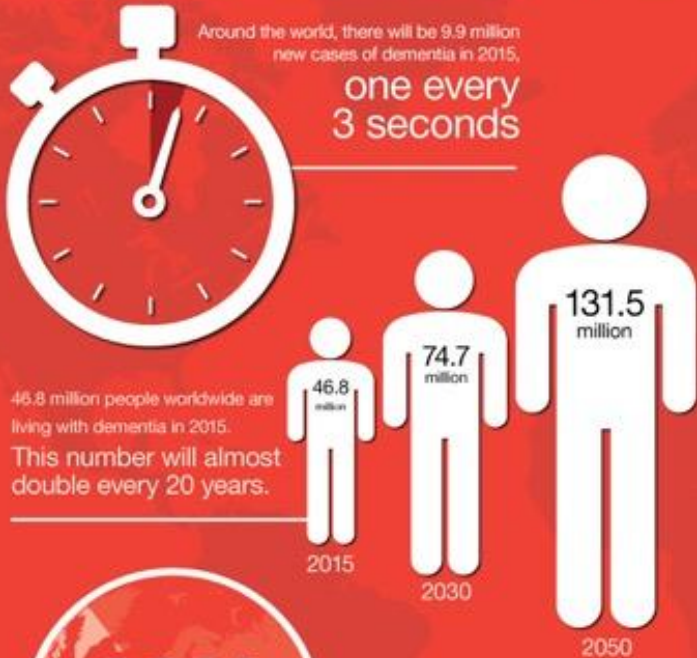


Dementia as a rapidly growing worldwide market

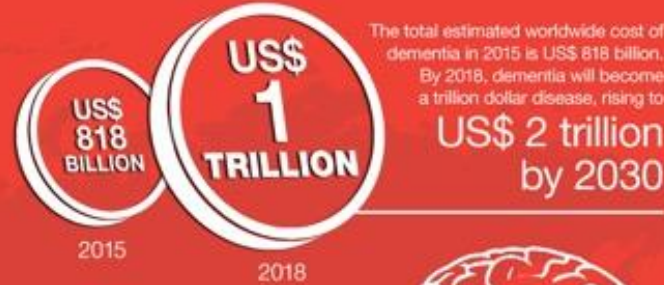


INFOGRAPHIC

The global impact of dementia



Much of the increase will take place in low and middle income countries (LMICs): in 2015, 58% of all people with dementia live in LMICs, rising to 63% in 2030 and 68% in 2050.



New markets

Several new market opportunities due to our unique eyetracking as biomarker and multimodal activation:

- People wanting to maintain their cognitive health
- Other neurogenerative diseases, e.g. Parkinsons
- Early detection of dementia

World Alzheimer Report 2015



The Challenge: Rapid global Growth of People with Dementia



Alzheimer

- Worldwide 46,8 Mio people (2015)
- By 2035 100 Mio people with dementia worldwide
- Cost to societies € 2 trillion

Research

- No results from drug research (Pfizer, Roche stopped)
- Combined behaviour-oriented approach (cognition, movement, nutrition...) shows results and recommended by WHO and The Lancet Commissions

Care

- Behaviour-oriented offers for mobile and stationary care under development
- Efficient tools for supply sought
- Currently only selective monitoring of the dementia status

Surrounding

- Family members & communities: support for care at home needed
- Slowing onset and progress of dementia for better quality of life and longer independence
- Prevention



Our Solution: Daily Training – supervised or independent



[digitAAL Life App explained](#)



Our Solution: Daily Training – supervised or independent



❏ Multimodal training model of MAS Alzheimerhilfe (Austria)

❏ Developed in cooperation with



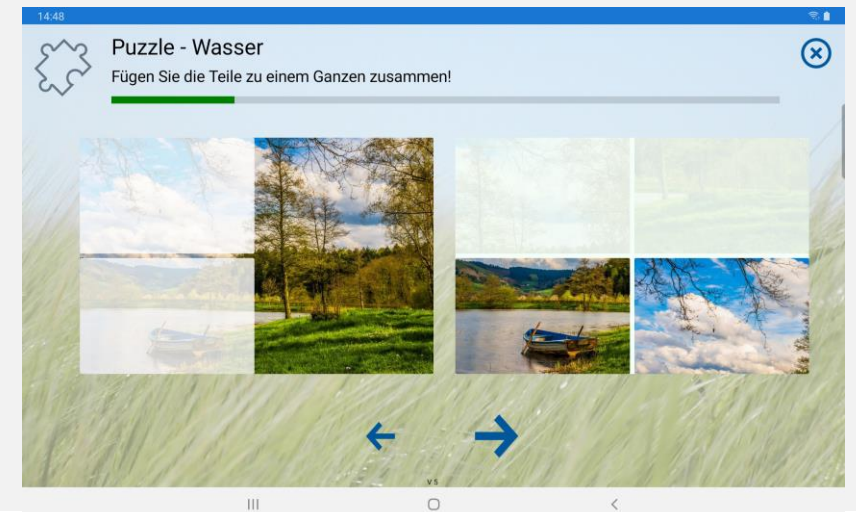
❏ Training units with a specific theme (e.g. water)

❏ Sequence of exercises

❏ Movement and perception exercises to warm up

❏ Knowledge questions, calculations, cloze words and texts, puzzles, image pairs, trouble shooting images, audio puzzles and more

❏ Stimulate the different senses





AT HOME

Stay active - independently or with relatives



MOBILE

Supervised training with experts or trained volunteers



STATIONARY

Use in health and care centers for individuals and in group settings



Advantages of our Training App



- Individual or group sessions, at home and in health, care and social organizations
- Many different topics, each available in 4 levels of difficulty, new content every month
- Thoroughly tested in practice, professionally well-founded, clearly structured
- Can be used immediately without additional effort
- App raises interest and motivation to integrate multimodal training regularly into everyday life





Professionally well-founded methodology – thoroughly tested in practice



Tested in practice in numerous field studies by

[Austrian Red Cross](#)

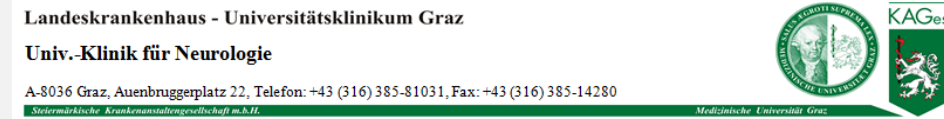
[LKH-Univ. Klinikum Graz.](#)

Scientific basis from several [research projects](#)

under the lead of JOANNEUM RESEARCH, especially the projects [multimodAAL](#) and [PLAYTIME](#).

Further development of eyetrackings with [MIRA](#) from research project [PLAYTIME](#)

[Numerous scientific publications](#) have been published





Serious Challenges need serious Solutions



- ❏ Since 2011 Active & Assisted Living @ **JOANNEUM RESEARCH – DIGITAL**
- ❏ Since 2011 mobile dementia (M.A.S.) trainings @ **Sozialverein Deutschlandsberg**
- ❏ Successful cooperation since 2015
- ❏ Digital, tablet-based solution for multimodal training as result of joint **research projects**
- ❏ Convincing field tests and pilot projects
- ❏ Research (JR-DIGITAL): ICT based indicators for dementia investigated for the first time worldwide
- ❏ **digitAAL Life** is a **spin-off** of JOANNEUM RESEARCH and the Sozialverein Deutschlandsberg (founded in 02/2020)





Multidisciplinary Team



Maria Fellner, MBA

Co-Founder and CEO



Dr. Heinz Mayer

Co-Founder, Director of [institute DIGITAL at JOANNEUM RESEARCH](#)



Josef Steiner

Co-Founder, Former Chairman of Sozialverein Deutschlandsberg



Robert Hartmann

Business Development



Elke Zweytik

Dementia & Care



Thomas Fruhmann

Software & IT



Raphael Marton

Medical Device Regulatory Affairs



DI Dr. Lucas Paletta

Scientific head of research team at [JOANNEUM RESEARCH DIGITAL](#) & scientific lead of EU project PLAYTIME



Dr. in Sandra Schüssler

1st Deputy Head of [Institute of Nursing Science at MedicAL University Graz](#), Austria



Silvia Russegger, MSc

Head of platform development at [JOANNEUM RESEARCH DIGITAL](#) 20+ years in managing positions in product management

Prof. Dr. Reinhold Schmidt

Head of [Department of Neurology, Medical University Graz](#), Austria

Petra Schmidt

[Austrian Red Cross](#)

Dr. Stefanie Auer

Head of [Center for Dementia Studies at Danube University Krems](#), Austria
Scientific head of [MAS Alzheimerhilfe Austria](#)

Dr. Liselore Snaphaan

[Mental Health Care Center Eindhoven](#), NL

Prof. Dr. Inge Bongers

[Tilburg University](#), NL





Product Development Stages



USP: *only* certified medical device for therapy *and* diagnostics with a scientific basis by clinical studies

	Therapy I	Therapy II	Diagnostics	Therapy III
Medical Device Certification	none	Therapy of dementia	Diagnostics of dementia	<i>Personalised</i> therapy of dementia
USP	Thematic, structured, stadium-specific training units in 4 levels	Unique certified training tool Progress monitoring, remote care cockpit and target group specific dashboards	Diagnostics <i>and</i> therapy Eyetracking as a biomarker Decision support	Therapy with diagnostics and progress monitoring -> personalised therapy
Licence types	Home Professional Lite	Home Professional Lite Professional Premium	Home Professional Lite Professional Premium Decision Support	Home Home Premium Professional Lite Professional Premium+ Decision Support+

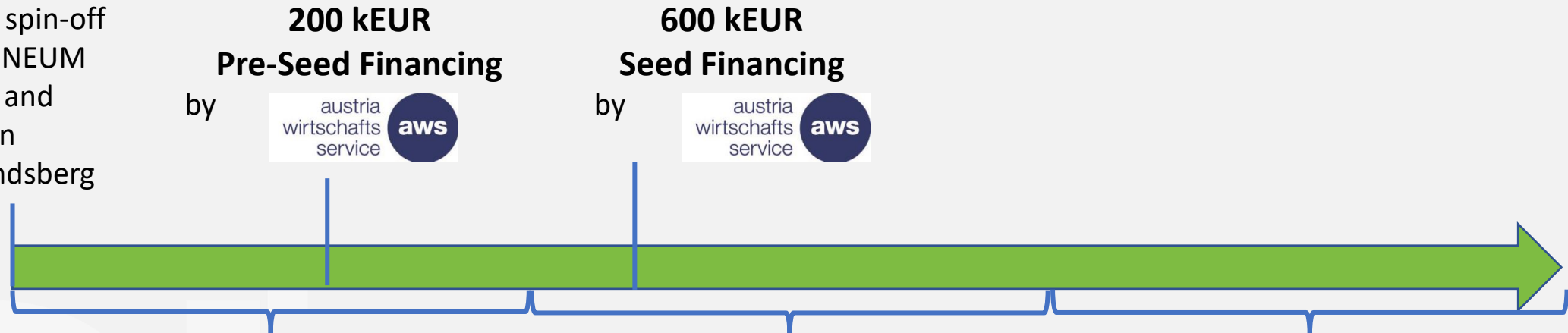


Roadmap for Scaling-Up and Growth



February 2020

Foundation of company as spin-off from JOANNEUM RESEARCH and Sozialverein Deutschlandsberg



until Q1/2021

- First product version in German finalized (without certification as a medical product)
- First licences sold
- Dutch content

until 2023

- Development of decision support and remote care features
- Reference study on efficacy and clinical study
- Certification as a medical device for therapy and diagnostics (CE & FDA)
- Markets: Europe, US

> 2024

- Internationalisation of product and sales
- Extension of product and service portfolio
- Reaching profitability
- 2024: 29,000 licenses installation basis



Licenses

Research projects

Trainings

B2B2C-Model:

■ B2B:

- Inpatient facilities
- Inpatient long-term care (retirement and nursing homes)
- Day centers
- Assisted and sheltered living
- 24 care
- Mobile care, ...

■ B2C:

- Persons with mild to moderate dementia
- Persons with mild cognitive impairment
- Elderly persons who want to remain active or make provisions for etc.



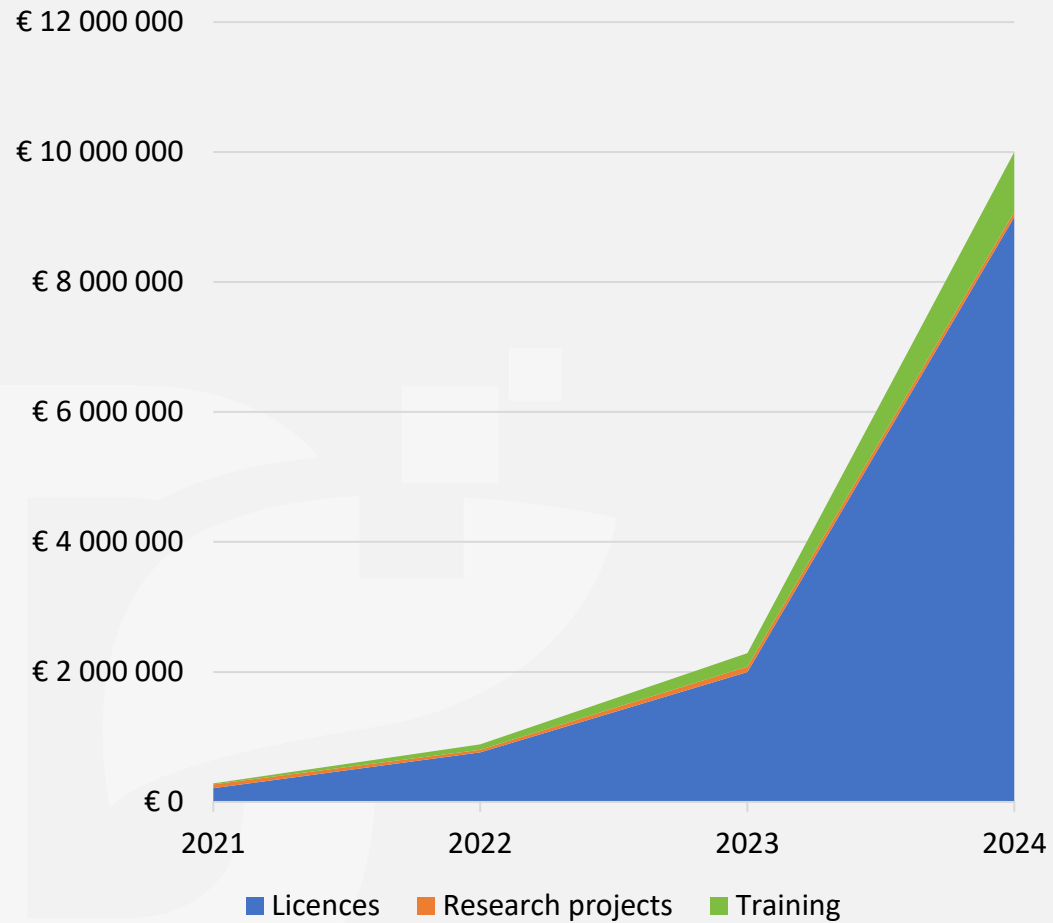
Revenue planning using the example of a typical larger 24-hour care provider in Austria



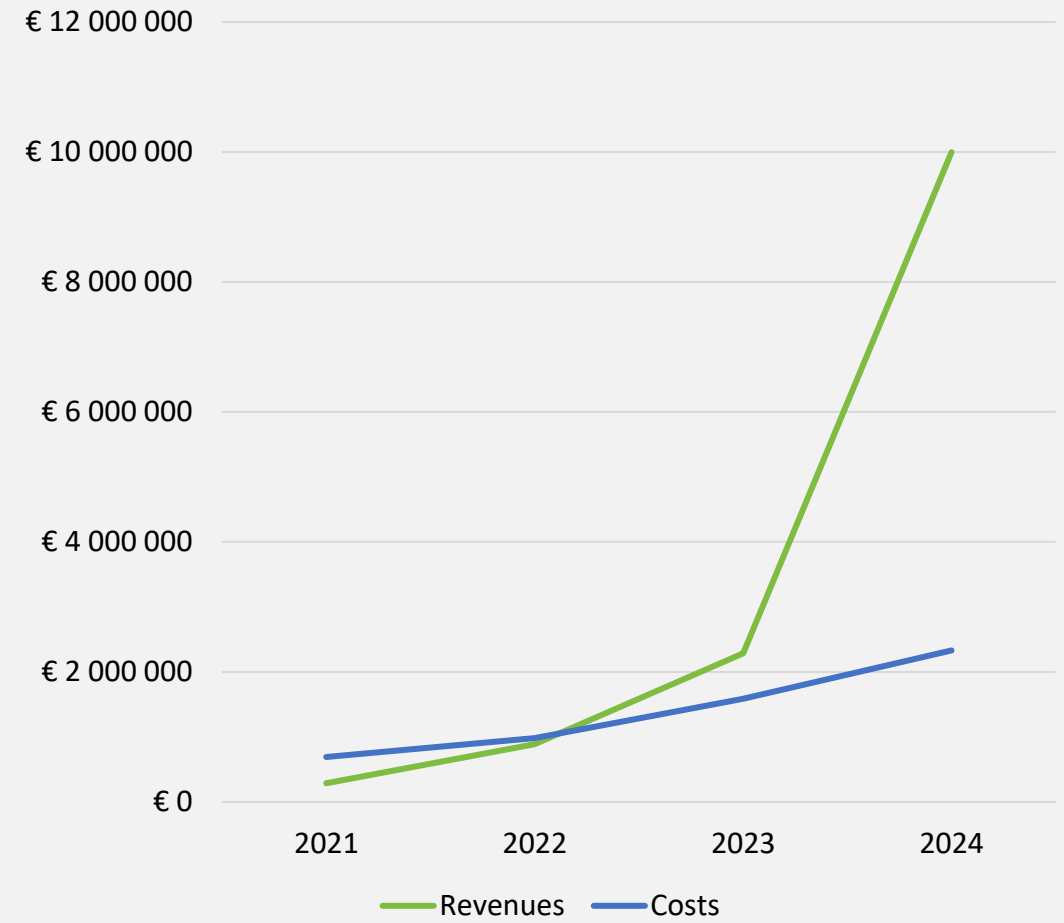
- Approx. 45,000 people in 24h care in Austria.
- One provider has about 400 clients
- Price of an annual license: EUR 450 (incl. discount)
- Turnover per year: EUR 180,000
- Market share of the 24h care market: 0.88%
- Target market share: 5% = EUR 1.023 million turnover in Austria alone



Revenues by category



Revenues and Costs





Use of funds:

- Development of new features
- Efficacy reference study and clinical trial
- Medical device certification for therapy and diagnostics
- Personnel for development and sales

525 kEUR
open

600 kEUR
seed financing

by



**1,125 Mio. EUR target
of financing round**



Free test version & contact

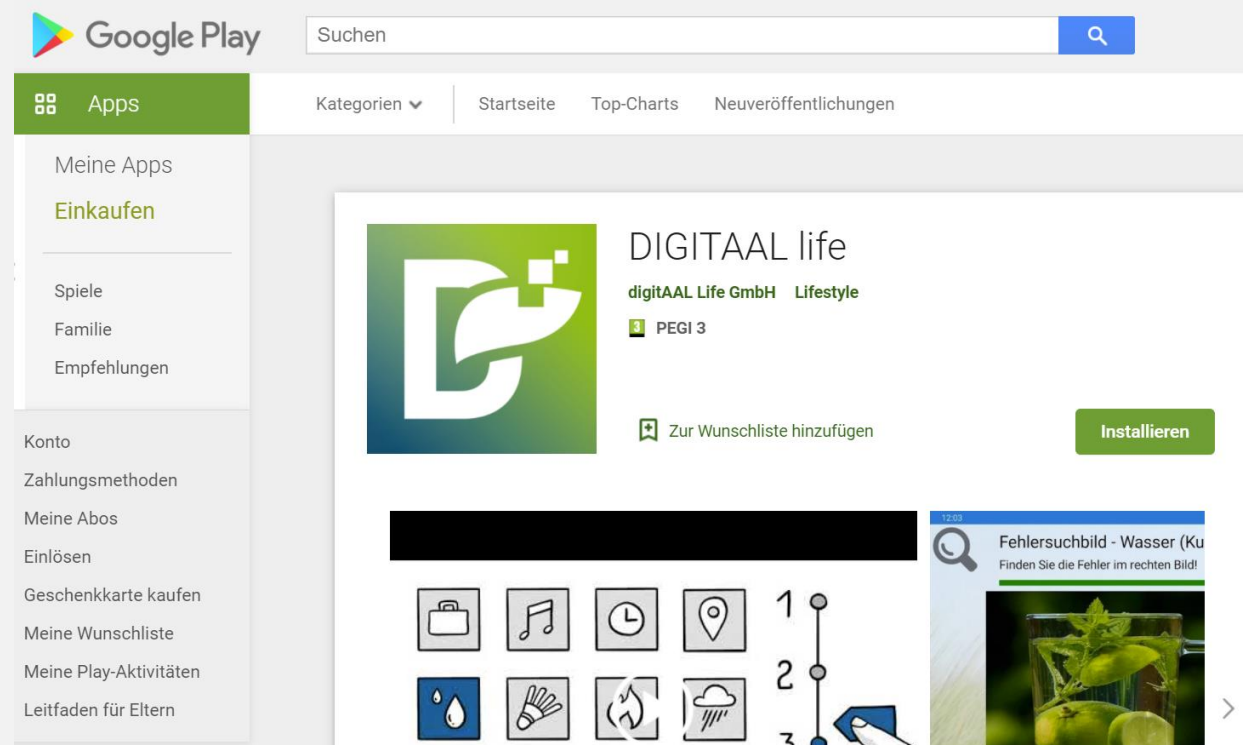
www.DIGITAAL.life/test


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 Bundesministerium Digitalisierung und Wirtschaftsstandort

 Bundesministerium Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie