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ABRIVIATIONS

RELEASE NUMBER	RELEASE DESCRIPTION / CHANGES MADE
PwD	Person with Dementia
ADI	According to Alzheimer's Disease International
SAM	Serviceable Available Market
TAM	Total Available Market
SOM	Serviceable Obtainable Market

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AAL PROJECT SUCCESS

In the European research project SUCCESS (SUccessful Caregiver Communication and Everyday Situation Support in dementia care), an innovative mobile training application is being developed. It aims at supporting caregivers of people with dementia (PwD). The users of the application are introduced to evidence-based communication and intervention strategies by reading articles, engaging in conversations with an avatar, and listening to lectures presented by an avatar. This format of learning and the multimodal user interface of the app supports different usage situations and contexts. All implemented features are believed to increase the quality of communication and interaction of care persons with PwD and minimize burden of care. This is done by fostering a deeper understanding for PwD (e.g. understanding why PwD can become aggressive) and supporting the caregiver with useful situation-related suggestions. A remarkable feature of the app is that it is not only focusing on the relationship between the caregiver and the PwD and the behaviour of the PwD, but on the caregiver, too. This is done by highlighting the importance of self-care among caregivers and implementing a meditation and diary feature. SUCCESS supports the PwD to maintain a purposeful life by suggesting meaningful activities that can be adapted to various stages of dementia. Additionally, the app provides a quick help feature and the possibility to personalize the content by using tags. Therefore, SUCCESS is an application that caters to every stage of dementia and supports caregivers in various situations by providing information, a possibility to apply and train the gained knowledge, and tools for self-care.

The research presented is conducted within the SUCCESS project (AAL-2016-089), partially funded by the European Active and Assisted Living Programme and the National Funding Agencies from Austria, Cyprus, Norway and Romania.

EXECUTIVE SUMMARY

Dementia is a highly debilitating disorder that seriously damage a sufferer's quality of life. As this disorder gets progressively worse over time, the process can be highly distressing to the sufferers and their loved ones. Due to this end, several apps have been created in order to assist both persons with dementia and their families, however, none of them can provide users with a training process with respect to the interaction with persons with dementia. On the contrary, SUCCESS aims to fulfill this need, becoming a valuable product in this context. Based upon this goal, in the current document, the estimated market size for each Business Plan is specified, and at the same time, the estimation of the market size for each potential business model demonstrates the great variety of the addressable market.

1.1 SCOPE OF THIS DOCUMENT

This deliverable summarizes the analysis of SUCCESS' competitors and focuses on estimating the market size. A comprehensive analysis of the existing competition is also an important part of this document. It is important to know the competition and to collect important facts and figures about them, because only then is it possible to make strategic decisions and develop a unique selling proposition.

The market size indicates the maximum total number of sales or customers that the product can reach. In particular, the estimation of the market size is important for the preparation of the business plan as well as essential and indispensable for the estimation of sales and turnover. A part of this deliverable also deals with the definition of the target group of the SUCCESS-App. This knowledge in turn enables precise planning of objectives and the associated future marketing activities. In addition, the competition of SUCCESS on the market is also considered.

The general goal of this document is to outline a market situation in the context of the SUCCESS app.

1.2 RELATION TO THE WORKPLAN

In the description of work (DoW) the exploitation activity is carried out within the WP6 – Dissemination and Exploitation. Hence, this report stands in relation to a few other tasks and deliverables in the project:

DELIVERABLE (D) / TASK (T)	DESCRIPTION
D6.3 Dissemination plan and report	The deliverable "Dissemination plan and report" describes the dissemination tools, channels, methods and communication activities to maximize the exploitation.
T6.2 Scientific and public dissemination	The task "Scientific and public dissemination" is the corresponding task to D6.3.
T6.4 Exploitation planning and business modelling	The task "Exploitation planning and business modelling" covers the planning of the exploitation and commercialization of the project results.
D6.4 Intermediate Business Plan and Business Model	The deliverable "Intermediate Business Plan and Business Model" describes the overall business plan and model draft.
D6.5 Exploitation and Standardization	The deliverable focusses on the path to make SUCCESS an actual success by planning its way to make it a product on the market.
D6.6 Final Business Plan / Business Model	The deliverable "Final Business Plan / Business Model" covers the final version of the business plan and model.

Table 1 Relation to other deliverables

2 MARKET ANALYSIS FOR TRAINING SOFTWARE

2.1 POTENTIAL CUSTOMERS

In 2015 there were 46.8 million PwD and it is estimated that this number will almost double in the next 20 years. There were 9.9 million new cases of dementia in that year. More precisely, every three seconds an additional person is diagnosed with dementia. (According to Alzheimer's Disease International (ADI)). ADI notes that "if global dementia care were a country, it would be the 18th largest economy in the world, exceeding the market values of companies such as Apple and Google"¹.

It is estimated that 10.5 million people in Europe and 9.4 million people in the Americas are currently living with dementia. This creates an estimated cost to society in the amount of \$818 billion dollars (ibid). To delay institutionalization, Europe's policy approach includes encouraging home and community-based services². As a result, the importance of informal caregiving is increasing also for PwD. SUCCESS contributes to improve the communication and interaction between the caregivers and PwD and support the emotional and psychological stability of caregivers. Thus, the quality of the care, effectiveness and efficiency are increased contributing to reduce care costs.

Due to the major increase in the number of PwD in the near future, it is expected that the cost of care for dementia will be increased by 85% in 2030, possibly making it the most expensive disease of our society³. There has been a tendency for PwD to stay at home as long as possible, rather than moving into a care facility. Approximately 60% of people suffering from dementia live at home⁴. Thus, most of the care work is done by relatives, friends, and others who can be considered as informal caregivers. **A high potential market is growing in the development of technologies for supporting informal caregivers in their highly important vocation.** Informal caregivers have usually had no special training prior to start caring for their loved one. Consequently, technology has an important role to play in supporting the caregiver through providing training and learning support in situ. The potential of such a market is huge, because in many countries families are reluctant or financially incapable of paying for their relatives or friends for receiving professional dementia care. Dementia is undoubtedly a global issue and SUCCESS is addressing this growing high potential market in Europe by providing a mobile application that will be used by caregivers to guide throughout their journey of caring for their loved one.

The target group for SUCCESS will be

- i) Formal caregivers of PwD both in public and private care organizations
- ii) Private individuals/and informal caregivers who care for a friend or relative at home
- iii) Private or public organizations that contribute to finance or enabling AAL products and services (public sector service organizers, social security systems, insurance companies)

¹ World Alzheimer Report, 2015

² Colombo et al., 2011; Gibson et al., 2003, Bremer et al., 2015)

³ World Alzheimer Report, 2010

⁴ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4994155/> (Access to timely formal dementia care in Europe: protocol of the Actifcare (ACcess to Timely Formal Care) study, 2016)

2.2 MARKET SIZE

This chapter will describe the market size of SUCCESS that can be achieved with the various business models developed in the project. The market size is determined and defined using the TAM, SAM, SOM concept.

The market size quantifies the financial potential of a product. Thus, the turnover that can be made with the respective product increases together with the market size that is addressed.

2.2.1 MARKET ANALYSES BY THE USE OF THE TAM, SAM, SOM CONCEPT

TAM, SAM, SOM are forming the different subsets of a market⁵.

- **TAM - Total Available Market**

TAM forms the total market including all people who can be addressed with this product. It describes the revenues that would theoretically be possible if the company had an all-embracing monopoly with its product. The figure is calculated without taking into account any factors that might reduce the size of the market. This concerns both factors that depend directly on the company and economic factors that influence this market size.

- **SAM - Serviceable Available Market**

SAM describes the market size that can be addressed by the business model in question. This means that this market size already includes some factors that cause a reduction in market size. The first decisive factors for reducing the market size are, for example, the needs of a target group that are not addressed by the product or marketing methods.

- **SOM/ Target Market -Serviceable Obtainable Market**

SOM forms the target market which can be realistically served with the product. SOM should give a very precise picture of the market size that can actually be reached with the product. On the basis of this market size, it should also be possible to derive the possible size of the turnover.

⁵ <http://www.zephram.de/blog/ideenbewertung/marktabschaetzung-tam-sam-som/> (Information on TAM, SAM, SOM concept)

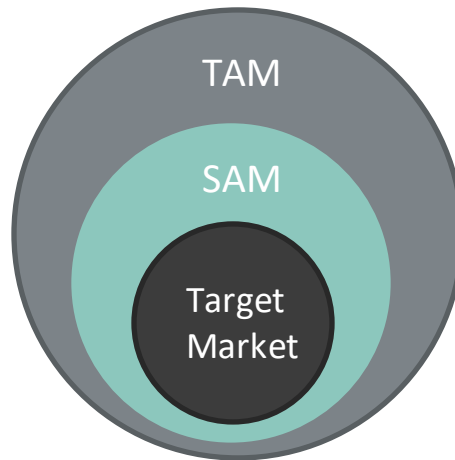


Figure 1: TAM, SAM, SOM concept

2.2.2 MARKET ANALYSES FOR SUCCESS

Worldwide there are 46,8 mio people suffering from dementia. In Europe the number is 10.5mio for PwD, where 6.3mio of those are living at home and therefore need support from relatives or their equivalent.

The prevalence of dementia is higher in women than in men. The probability that a woman in the ages from 60 to 64 suffer from dementia is 0.7% higher than the probability that men suffer from it in the same age. It has to be considered, though, that life expectancy is higher in females than it is in men.^{6 7}

Persons with dementia	Number in mio
Worldwide	46,8
Europe	10,5 – from which 6,3 are living at home

Table 2 Target market

⁶ <https://www.alzheimer-europe.org/> (Prevalence of dementia in Europe, 2013)

⁷ https://academic.oup.com/eurpub/article/27/suppl_1/90/3045950 (Informal care in Europe: findings from the European Social Survey (2014) special module on the social determinants of health, 2017)

Business Model A:⁸

The Business Model A focuses on people who care for their relatives. These people are also called informal caregiver. The total size of the market in the EU is 180.9 mio. people who care for relatives. Of primary interest to SUCCESS are informal caregiver who are already caring for relatives suffering from dementia. This group forms the SAM group with 8.6 million people in the EU (see table below).

For Business Model A, the customers are informal caregivers. We will try to reach them directly via our Website, the consortium, and marketplaces, and indirectly via caregiver organizations and local peer groups of caregivers. With the available marketing channels, we can reach 43.000 of the 8,6 million people. As this is private care at home these people are often difficult to reach.

BM A	Description	Number
TAM	Caring relatives in EU	180,9mio
SAM	Caring relatives for Dementia in EU	8,6mio
SOM	Estimated number of people we will reach	43.000

Table 3 TAM, SAM, SOM Business Model A

Business Model B:^{9 10}

The Business Model B focuses on care staff in the EU. The care staff is also called formal caregiver. Formal care for older people usually refers to paid care services provided by a healthcare institution or individual for a person in need. Thus, with Business Model B we will have interest organization, health care professionals and caregiver organizations as our customers. The total market size of care staff in the EU is 7,12 mio people. If we refer to the exact target group of SUCCEES and those who are directly involved with dementia patients, we have a market size of 2.8 mio formal caregiver. With the available marketing channels, we expect to reach 280.000 of the 7,12 million people. As this business model is focusing on care organizations and formal caregiver, it can be assumed that they are much easier to reach than those who provide private care to their relatives (informal caregiver).

BM B	Description	Number
TAM	Care staff in EU	7,12mio

⁸http://portal.research.lu.se/portal/files/11626472/Connie_Lethin_webb_papers_3.pdf (Informal caregivers of older persons with dementia in eight European countries, 2016, S. 17)

⁹https://www.bmgf.gv.at/cms/home/attachments/4/8/3/CH1066/CMS1382089784387/das_oesterreichische_gesundheitswesen_im_internationalen_vergleich.pdf (Das österreichische Gesundheitswesen im internationalen Vergleich, 2015, S. 51)

¹⁰<http://actifcare.eu/?p=5132> (The use of formal and informal care in early onset dementia: results from the NeedYD Study, kein Datum)

SAM	Care staff for Dementia in EU	2,8mio
SOM	Estimated number of people we will reach	280.000

Table 4 TAM, SAM, SOM Business Model B

Business Model B2:

By expanding the target group of formal caregivers through informal caregiver, we can increase the estimated number of people we want to reach by 86.000 people. The informal caregiver group has great potential with an estimated number of 8.6 million, unfortunately this group is very difficult to be reached in the market. However, with the health organizations as multipliers we predict to reach more people of this group then with direct marketing.

BM B	Description	Number
TAM	Care staff in EU	7,12mio
SAM	Care staff for Dementia in EU	2,8mio
SOM	Estimated number of people we will reach	280.000

BM A	Description	Number
TAM	Caring relatives in EU	180,9mio
SAM	Caring relatives for Dementia in EU	8,6mio
SOM	Estimated number of people we will reach	86.000

Table 5 TAM, SAM, SOM Business Model A+B

BM B2	Description	Number
TAM	Care staff in EU & Caring relatives in EU	188,02mio
SAM	Care staff for Dementia in EU & Caring relatives for Dementia in EU	11,4mio
SOM	Estimated number of people we will reach	366.000

Table 6 TAM, SAM, SOM Business Model B2

Business Model C:

For Business Model C, the customers are big companies, with a number of at least 250 employees. As a total target group, the employees of all big companies are included here, which corresponds to

45 million employees. We assume that 1.7 million caring relatives directly related to dementia work in large companies. Under the use of Business model C we are planning to reach 225.000 people of this target group.

BM C	Description	Number
TAM	Employees in big companies (>250 employees) in EU	45mio
SAM	Caring relatives of Dementia, working in big companies in EU ¹¹	1,7mio
SOM	Estimated number of people we will reach	225.000

Table 7 TAM, SAM, SOM Business Model C

Business Model D:

The Business Model D focuses on policy holders in the EU. This business model would require that SUCCECC is included in the portfolio of insurance companies, private or public. According to this model, the total target group corresponds to all policy holders in the EU, which corresponds to 500 million people in Europe. Assuming that every person in Europe is insured and that all caring relatives are insured, this corresponds to a serviceable available market of 8.3 million people. Based on this concept of the Business Model D the total number of people we will reach is 415,000.

BM D	Description	Number
TAM	Policy holders in the EU	500mio
SAM	Caring relatives that are insured in the EU	8,3mio
SOM	Estimated number of people we will reach	415.000

Table 8 TAM, SAM, SOM Business Model D

¹¹ 5% of employees are caring relatives in big companies. 75% of caring relatives are caring a person with dementia.

2.3 COMPETITOR ANALYSIS

The goal of this chapter is to provide research on possible competitive solutions that are comparable to the SUCCESS solution. For this purpose, a comprehensive research program was conducted. The results of this comprehensive research are listed and described in this chapter. With the shear, the focus was rather on existing solutions on the market.

By performing a competitor analysis can be interpreted that there are several apps, which are developed in order to support not only people with dementia, but also their caregivers and the professionals training caregivers. These apps are described in more detail in the following section (2.3.1)

2.3.1 APPS FOR PWD

There is a big offer of gaming apps for PwD that include body and mind training to decelerate or delay the process of dementia. “Clever Mind”¹², as an example, offers cognitive training tools like games and puzzles, combined with other helpful features for PwD, like food and nutrition tools and medical information.

Health apps, e.g. “MediSafe Meds & Pills Reminder”¹³ feature medication reminders to alert people with short term memory when it is time to take their medication and tracking of data like blood pressure, day planners and more.

Relaxation apps, e.g. “Soothing Sleeping Sounds”¹⁴ play soothing and relaxing sounds to calm down the PwD and/or facilitate them to fall asleep.

Supporting apps such as “It’s done!”¹⁵ help PwD to manage their daily living by providing a checklist for life’s everyday important tasks such as feeding pets, turning off the stove and locking doors.

There are also apps that allow to explore and restore objects from the past and share memories, which increases the confidence and well-being of PwD, e.g. “My House of Memories”¹⁶ or “Book of You”¹⁷.

¹² <http://myclevermind.com/the-app/> (Clever Mind)

¹³ <https://medisafe.com/> (MediSafe Meds & Pills Reminder)

¹⁴ <https://play.google.com/store/apps/details?id=com.zodinplex.lullaby3.sleep.sounds.baby.kids.soothing> (Soothing Sleeping Sounds)

¹⁵ <http://www.itsdoneapp.com/> (It’s done!)

¹⁶ <https://play.google.com/store/apps/details?id=com.nml.myhouseofmemories> (My House of Memories)

¹⁷ <http://dementiacitizens.org/project/book-of-you/> (Book of You)

- **MindMate:** ¹⁸

“Think about what you might need in a single app and MindMate has it all.

There is a ‘My Life’ section where people can access all the personal information they need in the apps "Getting to know me" section. This is especially helpful, when a person with dementia has to leave their home and go into hospital or care home.

There is a tools section where you can use the “My Story” timeline tool, and helpful, customisable reminders to shower, eat, brush teeth, take medication and more. The app even has physical exercises and nutrition advice for a healthier lifestyle to stay mentally as well as physically fit, games, music and a lot more besides.

Recommended by [Thomas Whitelaw](#), this is definitely one to check out.

MindMate is available for iPhone & iPad.”

Apple, Android and Web-based

Costs: for free

Company: Founders – Patrick Renner, Rogelio Arellano and Susanne Mitschke

- **Clever Mind** ¹⁹

Specifically designed for people living with Alzheimer’s and other forms of dementia, CleverMind includes cognitive training tools like games and puzzles, as well as food and nutrition tools and medical information.

The app also serves as an easy-to-use access to the internet and social networking. You can connect to a simplified version of Facebook through the app and set up customised big pre-set buttons to people’s favourite websites.

CleverMind is currently only available for iPad.

Costs: for free

Company: Founder – Scott Jung

- **My House of Memories** ²⁰

„My House of Memories is a free app that allows you to explore objects from the past and share memories together. It can be used by anyone, but has been designed for, and with, people living with dementia and their carers.

¹⁸ <https://www.mindmate-app.com/> (Mindmate, 2018)

¹⁹ <https://www.medgadget.com/2013/08/clevermind-app-for-alzheimers.html> (Clevermind for iPad Helps Alzheimer's Patients Exercise Their Minds, 2013)

²⁰ <https://houseofmemories.co.uk/things-to-do/my-house-of-memories-app/> (National Museums Liverpool, 2017)

Designed by National Museums Liverpool, My House of Memories lets you browse through objects from across the decades, brought to life with multimedia. You can reminisce together about a range of everyday objects, from school life to sport.

One of the great features of this app is that someone living with dementia can use it to create their own memory tree where they can save their favourite objects, photos, video and look at them whenever they wish. This memory tree can then be shared with only the people you'd like to share it with."

For Android and Apple devices

Costs: for free

Company: National Museums Liverpool

- **Book of You**

"Book of You is a fantastic interactive book that uses the benefits of reminiscence therapy to create a personal life story of someone living with dementia, by capturing the precious moments that make up their lives and who they are.

Using words, pictures, music and film you create a digital book that shows who a person was and who they are now. It makes sharing life's moments simple, making storytelling easy, fun and beneficial.

It's a great app to use together. If you care for someone with dementia, creating a Book of You gives you the opportunity to do a shared activity that is beneficial for the person you care for and also lets you spend quality time together."

- **MediSafe Meds & Pills Reminder:** ²¹

People with dementia will typically have problems with short term memory and may forget to take their regular medication. This app will alert them when it's time to take their various types of medication, and also when it's time to reorder a prescription.

Available for free on Android and iOS

Costs: for free

Company: Medisafe

- **It's done!** ²²

It's Done is essentially an app that provides a checklist for life's everyday critical tasks such as locking doors, feeding pets, taking medication, and turning off the stove. According to the developer, A.J.

²¹ <https://medisafe.com/?lang=de> (Medisafe, 2018)

²² <http://www.itsdoneapp.com/privacy.php> (AJ Lester & Associates, Inc., 2018)

Lester & Associates, Inc., the It's Done app is "...ideal for those suffer with short-term memory loss due to brain injury, dementia, or other related medical conditions".

Costs: Apple 2.99\$²³
 Android 2.99\$(Amazon)²⁴

Company: A.J. Lester & Associates, Inc.

2.3.1.1 WEB-BASED APPS

- **Alzheimer's Society – Talking Point**²⁵

Alzheimer's Society Talking Point is an online Community for people who are affected by dementia. Talking Point is helpful if you need advice, read other people's stories, talk about your concerns or share information. You get support and can give support for people which are in the same situation as you are. Talking Point is divided in several sections e.g. "I have dementia", "I have a partner with dementia" or "I care for a person with dementia".

Costs: for free

Company: Alzheimer's Society.

2.3.2 APPS FOR CARERS

There are not only apps for the PwD themselves on the market, but also for their caregivers.

Apps like the above mentioned "My House of Memories" allow carers an insight into the PwD's past and therefore understand them better.

There are also apps that give tips how to handle challenging or everyday situations, like "Alzheimer's Daily Companion"²⁶ and "Dementia Emergency"²⁷.

Forums, like "Talking point"²⁸ provide emotional support to exchange information and feelings between carers.

²³ <https://itunes.apple.com/us/app/its-done/id439338524?mt=8> (Apple Inc, 2018)

²⁴ <https://www.amazon.com/gp/product/B00EV1R2CS> (Amazon.com, Inc., 2018)

²⁵ <https://www.alzheimers.org.uk/get-support/talking-point-our-online-community/what-talking-point> (Alzheimer's Society, 2018)

²⁶ <http://www.homeinstead.ie/alzheimers-dementia-care/dementia-app>

²⁷ <https://play.google.com/store/apps/details?id=com.AppInstitute.danhodge>

²⁸ <https://play.google.com/store/apps/details?id=com.tapataalk.forumalzheimersorguk&hl=de>

Information apps, like “Lewy Body Dementia Information”²⁹, allow to gain knowledge about the different types of dementia, such as vascular dementia, lewy body dementia and more.

You can even step into the world of dementia by seeing it of a PwD’s perspective with the app “EDIE”³⁰ and “A Walk through Dementia”³¹ that allows a virtual reality sight of things.

For clinicians the “BPSD Guide – Dementia”³² provides scientific knowledge and guidance in their role of assisting people that serve as carers for PwD.

Here are a few examples:

- **My House of Memories**³³

My House of Memories allows PwD to explore objects from the past and share these. It is made for PwD and their carers and families but can be used by anyone. The Application contains pictures of objects from across the decades which contain sound, music and description e.g. a Singer sewing machine and a 10 schilling note.

PwD can also upload their own pictures and share with family, friends or other users. The memories are divided into school, work, leisure and maritime.

Costs: for free

Company: National Museums Liverpool³⁴

- **Alzheimer’s Daily Companion**³⁵

„Alzheimer’s and other dementias family caregivers now have help at their fingertips. This app, a resource brought to you by Home Instead Senior Care®, helps build caregivers confidence to provide care by arming them with immediate tips and practical advice for all of the behaviors and situations they face on a daily basis. Caregivers can search on situations they are struggling with, and the app will return immediate and relevant answers. These tips are compiled by experts as well as family caregivers dealing with Alzheimer’s or other dementia illnesses.

The app includes over 500 searchable tips and practical solutions sourced from the Home Instead Senior Care network and the Alzheimer’s and other dementias caregiving community. The foundation of the content is a new book published by Home Instead Senior Care called “Confidence to

²⁹ <https://play.google.com/store/apps/details?id=lewy.body.dementia.causes.diseases.symptoms.prevention.medicine>

³⁰ <https://itunes.apple.com/de/app/edie/id1112026073?mt=8>

³¹ <http://awalkthroughdementia.org/>

³² <https://play.google.com/store/apps/details?id=au.edu.unsw.bpsdapp&hl=de>

³³ <https://houseofmemories.co.uk/things-to-do/my-house-of-memories-app/> (National Museums Liverpool, 2017)

³⁵ https://play.google.com/store/apps/details?id=com.homeinstead.alzheimersassistantandroid2&hl=en_US (Alzheimer's Daily Companion, 2018)

Care.” The app is a companion piece to the book in order to give caregivers, in need and on-the-go, immediate and easy to access advice for any situation.

Features Include:

- Free and immediate advice and tips for dealing with Alzheimer's and dementia behaviours and situations.
- 24-hour caregiving assistance available via toll free phone number or email submission.
- Access to free Alzheimer’s and other dementias caregiver resources and training materials.
- Caregivers sharing their own advice through a collection mechanism provided in the app.
- Ability to access all of the solutions and tips without Internet connectivity.
- Built-in rating system for caregivers to rate each tip so other caregivers benefit from their insight and evaluation of the advice.”

Android based App

Costs: for free

Company: Home Instead Senior Care

- **Family Locator GPS Tracker**

“People with dementia struggle with short term memory loss, and this can often mean that they forget where they are or where they should be. This app allows family members to track each other, provided they have the device with them and the GPS is activated.

Available for free on Android and iOS”

- **Dementia Emergency**³⁶

“This app, built by AppInstitute, is aimed at relatives, caregivers, and emergency service personnel working with people with dementia in emergency situations. It includes advice on how to approach and communicate someone with mid to late stage dementia who may be anxious or upset, as well as guidance on dealing with specific situations.

Available for free on Android and iOS”

Costs: for free

Company: Dignity In Dementia

- **A Walk through dementia**³⁷

³⁶ <https://www.ahpnw.nhs.uk/latest-news/84-free-dementia-emergency-app-launched-by-dignity-in-dementia> (Allied Health Professions Network, 2018)

³⁷ <https://play.google.com/store/apps/details?id=com.alzheimersresearchuk.walkthroughdementia> (Google, 2018)

“This innovative virtual reality app allows users to experience what life is like for a person with dementia. It uses a combination of 360 degree video sequences and computer generated environments to illustrate how even the most simple of tasks can be difficult for a person with dementia.

Available for free on Android”

Costs: for free

Company: Alzheimer's Research UK

- **BPSD Guide – Dementia**

“This App was developed to provide guidance for clinicians in their role of assisting residential aged care facility staff, community care staff and family members caring for persons living with dementia, who present with behavioural and psychological symptoms. This App provides summary information relevant to the most commonly presenting behavioural and psychological symptoms of dementia (BPSD):

- A description of the symptom and how it presents in dementia
- Potential causes and/or contributing factors
- Differential diagnosis
- Assessment tools
- Conclusions based on a review of available literature
- Precautions
- Suggested psychosocial, environmental, biological and pharmacological interventions with outcomes of the available evidence
- Brief clinical scenario”

- **Demenz**³⁸

For informal carer / relatives / friends of PwD

“This app was created as a support for relatives and caregivers of patients suffering from dementia. It contains information, inspiration and advice on how to increase the quality of life of both the patient and the caregiver.”

Android App

Costs: for free

Company: Swedish Care International -SCI

³⁸ <https://play.google.com/store/apps/details?id=io.appery.project93137> (Google, 2018)

- **EDIE**³⁹

“Step into the world of 65 year old EDIE who is living with dementia. Develop a greater understanding of dementia from the perspective of a person living with it through Alzheimer’s Australia Vic’s Educational Dementia Immersive Experience, EDIE.”

Android App (iOS?)

Costs: Not available in Austria

Company: Dementia Australia

2.3.2.1 WEB-BASED APPS

- **CureMyWay – Buddy&Soul**^{40 41}

Buddy and Soul is an online Platform, dedicated to wellness and personal development that merges research with the support of the community.

Costs: Free or Premium Membership (Monthly \$9.90, Biannual \$49.50, Yearly \$89.00)

Company: CureMyWay

- **Alzheimer’s Society – Talking Point**⁴²

“Talking Point is the Alzheimer’s Society online support and discussion forum.

A diagnosis of dementia can be shock and a worrying and upsetting time. Being able to talk and speak to other people who are experiencing the same feelings and worries as you are can be a huge benefit.

The Talking Point app from the Alzheimer’s Society provides instant access to their discussion forum so someone living with dementia or their carer can seek advice about anything, share information, learn from others experiences and join in the discussion.

The app is free and is beneficial for anyone who lives with dementia, or if you care for someone living with dementia.”

Costs: for free

Company: Alzheimer's Society.

³⁹<https://play.google.com/store/apps/details?id=au.com.alzheimersaustraliavic.mobileimmersiveexperience&hl=en> (Google, 2016)

⁴⁰ <https://www.buddynsoul.com/Home> (Buddy & Soul, 2018)

⁴¹ <http://www.curemyway.com/buddysoul/> (CureMyWay, 2015)

⁴²<https://www.alzheimers.org.uk/get-support/talking-point-our-online-community/what-talking-point> (Alzheimer's Society, 2018)

2.3.1 COMPETITOR STRENGTHS AND WEAKNESSES

In summary, many solutions that already exist on the market interact with the users in a playful way. In addition, there is currently no app on the market similar to SUCCESS, which offers scientifically superior content and also conveys the content in a very intuitive manner. The avatar function in connection with dementia-related training of relatives is also not yet offered on the market.

According to the research one common weakness of these solutions is that there exists no overall support solution. Many solutions are available on the market, each one has different functions, if you want a combination of several functions you need separate apps for them. So there is no app that combines several support solutions in one app.

Another weakness is that no actual training opportunity apart from the information that informal carers receive from the doctor of the person suffering from dementia is offered. Further on, there are very few online opportunities to obtain information or get a training in this sense.

Finally, a weakness of the already existing solutions according to the research is that many solutions are only web-based and not applicable and practical for the user on the smartphone or for those who have no internet.

2.3.2 CONCLUSION

The SUCCESS app offers help and support that can be used regardless of where you are and the time at which you want to use it. Due to the different content types that are provided in the SUCCESS app and its multimodal UI-approach the app is very flexible and can address various preferences to learn new subjects. The quick-help of the app can be used immediately even in critical situations. In contrast to all other solutions, this is a major advantage of SUCCESS. Further on the avatar-based role plays offer a unique way of training the interaction with a PwD in a verbal and non-verbal communication in a safe environment. Moreover, the availability of evidence-based content provides effective training.

On the basis of the above-mentioned advantages of SUCCESS, SUCCESS is a unique way to train people to appropriately interact with PwD – this is the first app doing so.

The detailed planning of the exploitation of the project's results is described in the deliverable D6.5 Exploitation and Standardization Plan.