

# GtG deliverable

## D2.2 Co-creation results II

This document D2.2 follows on from document D2.1 (Co-creation results I) in which we describe the GtG concept and product being explored with elderly in Workshop 1 in sprint 1. Deliverable D2.2 reports on pilot 1 and Workshop 2 (sprint 2), and concludes with the overall, combined results and conclusions of wordpackage 2 towards the construction of a final value proposition canvas. As such it provides valuable input for D1.2, the Business strategy of GtG.

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# 1 Summary

Project Gift to Gift (GtG) aims to co-create a novel collaborative economy initiative, which both assists and activates the elderly population. We aim to build a senior-to-senior platform that can match a task force of 'GtG Helpers' with other less resourceful 'GtG Users' in need of help, tasks and activities, in and around their homes. To make the platform economically sustainable, we build our business model on a novel business concept, a gift card relaying model. With this model, we leverage the growing market for gift cards as a means to generate the revenue needed to run the associated services. At the same time, the helping citizen gets a token of appreciation in return, and so the concept uniquely combines intrinsic and extrinsic rewards.

The GtG project will develop this novel senior-to-senior civic citizenship-based service through the assessment of user and market needs, co-creation of the Helper-User interface in workshops and small pilots (WP2), and ICT research and prototyping (WP3). This report follows on from Deliverable D2.1 (Co-creation results I) that describes the first sprint in which the GtG concept and product are explored with elderly in Workshop 1. Deliverable D2.2 reports on pilot 1 and Workshop 2 (sprint 2), and concludes with the overall, combined results and conclusions of WP2 towards the construction of a final value proposition canvas. As such it provides valuable input for D1.2, the Business strategy of GtG.

In pilot 1 we tested several GtG prototypes end-to-end. An interesting finding here was that by actually experiencing the GtG 'gift' (of visiting a museum together), the User became seriously enthusiastic about the GtG service. In Workshop 2 the Helper app prototype developed by siosLIFE in WP3 was tested, resulting in a number of useful recommendations and insights. In general the app developers (and GtG business strategy) will need to allow for users that may be wonderful Helpers, but that are not too skilled using today's technology.

Overlooking the WP2 results obtained during the project in the three regions, we pasted together the value proposition map for the GtG service.

Is there a need/ demand for GtG? We conclude that the GtG concept is not the easiest to grasp at first. Having said that, we found enthusiasm with potential Helpers (to help) and potential Givers (to buy and pay for a gift card). Clearly many older people like to help (each other) where they can. We realised that Users and Helpers are actually very alike in terms of needing recognition and companionship. The only difference being that the one, Helper, is still able to carry out a specific task that the other, User, can no longer do. In this sense a Helper can be a User and vice versa.

Although we collected a list of possible jobs to be done in and around the house, in terms of demand we confirmed that indeed (single) older people typically do NOT like to admit they are in need of help. They do not like to ask for or receive help. This is exactly why the innovative GtG model is so interesting: it is not the User that decides and buys, but the Giver that seeks (needs to find) a gift. Thus, as the need for help is there, we see no reason why this new initiative of elderly helping elderly (with small tasks) would not be able to earn its own special niche in the market. To do so successfully, however, it will have to have a very attractive value proposition.

What does the GtG product look like? Apart from some regional nuances, we identified an interest in tasks to be carried out in roughly three main areas, each with three sub categories: 1. Handyman tasks (Tools, Hands, Green hands), 2. Visits/ entertainment at home (Storytelling, Memories, Hobbies and games) and 3. Companionship out of home (Culture, Nature, Activities). Interestingly, next to practical jobs (that can no longer be done by User) the more social tasks (or 'experiences' that concern Quality of Life) appeared to be of interest, discerning GtG from existing (competing, commercial, volunteering) services.

We gathered a wealth of (detailed) information on the potential design of the GtG service and platform. The project concentrated on the GtG User-Helper interface and we looked into the ICT literacy of both these GtG user groups. As ICT skills can be limited, we concluded that GtG Users should not have (to have) any interaction with modern technology, and that the GtG platform should be very user friendly towards the GtG Helpers when e.g. registering and assigning tasks.

In this scenario it is the GtG Giver that buys and activates the GtG gift card (online) and communicates with the Helper about the task at hand. Having said that, the customer profiles and personas created in WP2 tell us that GtG must be 'targeted' towards the User. It is important that the Users are not patronized or talked down to as people who need help to improve a 'lesser' Quality of Life. In this line the GtG service should be framed as something that makes everybody happy, and is not about being vulnerable, lonely or anything negative.

The value proposition of the GtG service should not be about making money, but all about a token of appreciation. This matches with the observation that the helping elderly are not in it for the money, as they typically indicated not to need anything in return for their help. GtG is a social business innovation, not an economic one.

We are undecided on the exact valuing of the tasks, as we realised there are many variables that potentially define a task (time needed, difficulty or effort involved, equipment needed, money spent). We are discussing the introduction of GtG tokens or coins, so Helpers can save what they earn and e.g. redeem the tokens at local shops supporting the local economy.

Feedback received confirmed that the service will need to pay close attention to issues of trust, privacy and security. GtG Helpers should be somehow screened for trustworthiness before they enter people's homes. In addition we envisage an important role for stakeholders, be it to successfully reach and recruit seniors, both Users and Helpers, or attract buyers, the GtG Givers.

While we were able to gather quite some answers in the two innovation sprints meeting the project goal to validate and further co-create the value proposition of the GtG platform, many scenarios remain possible. Considering the passion of the partners, our next steps will continue this process in terms of improving quality of life for end-users as well as designing a system, that will be both safe and trustworthy, building adequate numbers of participants from both -or should we say three?- sides of the market.

## 2 Introduction

This report provides an update and follows on from Deliverable D2.1 Co-creation results I , describing Workshop 1 in which we explored via co-creation activities with elderly the GtG concept and product.

This document, D2.2 Co-Creation Results II:

- 1) reports the results of WP2 Pilot 1: Running an end-to-end scenario with GtG pretotype
- 2) reports the results of WP2 workshop 2: Testing of ICT prototype or GtG Helper app prototype
- 3) reports on the collective WP2 Co-creation results and conclusions regarding the GtG concept and product, including combined customer profiles and value proposition maps.

Deliverable 2.1 and D2.2 together provide valuable input for D1.2 Business strategy.

In short GtG concerns a social business innovation, which aims to both assist and activate the elderly population as well as increase elderly participation in the booming collaborative economy. We want to mimic the situations where a friend or neighbour does you a favour. However, to extend beyond friends and neighbours, we will be giving elderly without a local support network the chance to receive help from other senior citizens. We will build a senior-to-senior platform that can enable a task force of Helpers to assist other less resourceful with help in and around their homes.

To make the platform economically sustainable, we build our business model on a novel business concept, a gift card relaying model. We use the concept of passing on a baton in a relay race. We call the model Gift to Gift (GtG). With this model, we leverage the growing market for gift cards as a means to generate the revenue needed to run the associated services. At the same time, the helping citizen gets a token of appreciation in return, and the concept uniquely combines intrinsic and extrinsic rewards.

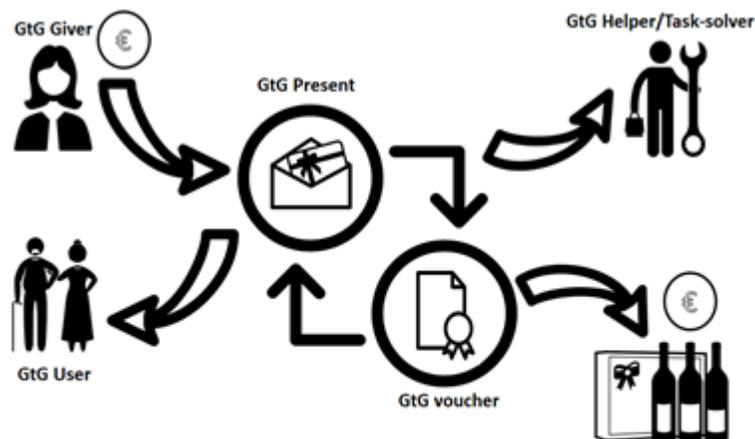
The co-creation activities existing of two iterations (or sprints) took place with user-groups in Denmark, The Netherlands and Portugal.

The overall goal of GtG is to establish a sound base for a subsequent development, product and market maturation process.

## 3 Methodology

### 3.1 Innovation sprints: design, testing and learning

As described in more detail in D2.1 the methodology adopted in GtG follows an end-user centred perspective with an “users-first” design-thinking philosophy. The design of the GtG product is based on insights gathered through a process of co-design with its stakeholders. We aim to investigate, build and test for both known and ambiguous aspects of our ultimate goal; *connecting elderly through a gift card-supported exchange of tasks and gifts*. During the project we perform agile, iterative prototype-development in two co-creation iterations or sprints. This approach will help us to consider all aspects of our ecosystem (see Fig 1.2 below), typically difficult with designing systemic solutions for societal challenges.



**Figure 1.2. The GtG model. Giver buys a Present and gives it to User. User activates the Present and receives help from Helper. Helper received a GtG voucher, which at any time can be redeemed and exchanged to a traditional gift card.**

The first sprint concerned Workshop 1 (see D2.1 on co-creation activities revealing needs and GtG tasks) and pilot 1 (an actual end-to-end simulation of a Helper performing an identified task for a User, reported here). The second sprint (workshop 2, reported here) was performed using an ICT based prototype of core elements of what could be a minimal viable product.

While the first sprint was prepared in Vig (DK, 14-15 February 2019) and concluded in Almere, the second sprint was prepared in Almere (NL, 8-9 April 2019) and concluded in Braga (PT, 17-19 July 2019). This seminar also included the discussion of the overall WP2 conclusions and lessons learned on the GtG concept and product as input for D1.2 Business strategy - as reported here.

### 3.2 Pilot 1 - run end-to-end Helper-User scenario

The objective of Pilot 1, following on from workshop 1, was to run an end-to-end scenario with prototype according to plan. Having identified User needs and Helper tasks in co-creation

workshop 1, the aim is to bring an actual User together with an actual Helper to carry out an actual desired task.

In short, these pilots are a reality check: can these tasks be carried out in real? What have we missed in planning for them? Which factors, emotional or practical, have we not foreseen? How do people respond to the actual tasks and practicalities around them? And how is the reaction to the reward of an actual GtG gift card?

### 3.3 Workshop 2 - test ICT prototype

Co-creation workshop 2 was held to further test the concept of GtG. Though we originally planned to develop in WP3 an app supporting the GtG User-Helper interface, it turned out (based on the filled out ICT habits questionnaire, see Chapter 6) that especially potential 'GtG Users' had very limited technical skills and experience and would most probably not get involved in any User-Helper online interaction. After several design-sessions and discussion, we conceptualized a way for the GtG concept to work without (necessarily) burdening the GtG User with digital interfaces - and it was agreed that siosLIFE would thus build a app prototype for Helpers only, allowing them to register as Helper for the GtG service, to choose and reserve tasks and set up an appointment with the User (or Giver).

Questions we seek to answer in Workshop 2 are related to form and function, amongst others:

- How does the interaction with tech unfold for seniors/ GtG Helpers?
- Does the incentive/motivation make a difference in their perseverance when seeking to negotiate an understanding of the technology?
- Can we make our Helpers use an app to register on the platform?
- How about looking for tasks?
- Will our Helpers be able to reserve and report back on tasks?
- What are the needs in relation to simplicity and/or functionality in an app?

The Helper app test sessions took place in the three communities involved in the GtG project - Vig, Denmark; Almere, Netherlands; and Braga, Portugal as reported below.

# 4 Approach

For practical reasons the second sprint of the GtG project, 'Workshop 2', existed of individuals testing the ICT prototype rather than traditional group work. The elements of reiteration and co-creation remain as we have been very sensitive to the ideas that our respondents have offered us as a result of their experience with the prototype.

## 4.1 General test design workshop 2

### Objectives

In this test round we wanted to test the practical interaction between user (potential GtG Helpers?) and technology as a result of the sensemaking taking place in the individual respondent as he/she interacted with the Helper app prototype and its content.

Recording reactions to the technology on an individual level, reflecting the real life use of the Helper app, was the primary objective. To achieve this we have applied one-on-one tests using a semi-structured interview guide of questions relating to the flow and events unfolding during the prototype testing.

On a secondary level it was important to us to also capture input and reactions relevant to the GtG concept itself. For this purpose we have explored attitudes and reactions as the testing took place. Questions exploring this dimension were not fixed but rather a series of intuitively crafted questions established on an ad hoc basis. Thus, the results relating to this level are mainly qualitative as no two respondents went through an identical series of questions.

### Test design and practicalities

Three people in the room:

- the respondent, testing the app
- one test conductor, asking questions and prompting the respondent to think out loud
- one observer, taking notes

(on some occasions the interview was done by one person taking notes at the same time)

The prototype typically ran on the smartphone (Android only!) of the test conductor who would make sure to keep the phone alive and the test screens on track.

To capture the reactions of our respondents we developed an outline/ script with a storyline (setting the context for the interaction between respondent and app) and questions to be asked. This was combined with a note-document containing all screens with adjacent comments-fields, allowing the observer to insert notes relative to the relevant

			<p>S: Denne skærm er op-doverskriften er for lang og kan måske (GtG) i den nærmeste fremtid?</p> <p>S: "Der er 5 muligheder" - der er jo så 2 her...</p> <p>S: Gå på opgaven "Gennem 'Lid i naturen', 'Tilbage' - det har jeg ikke sagt jeg ville...</p> <p>F: nej den er ikke udfoldet endnu - kan ikke læse selv</p> <p>S: Så siger vi 'for alle opgaver'?</p>
<p>T0.1 Åben lække</p> 	<p>S: Nej, det skal jeg ikke gøre de andre opgaver, 'Lid i naturen'.</p> <p>S: sætter ud i naturen</p>	T0.2	

<p>T1.1 Udfaldet læk</p> 	<p>S: det her er jo så en opgave vi har lagt ind som forslag. Hvad kan du finde ud af om det?</p> <p>S: jamen så må jeg jo se hvad det CR for en opgave.</p> <p>F: prøver at trykke på de forskellige overskrifter som 'opgaver', 'placering' finder en side ud af at se side.</p>	T1.2	<p>S: Nåh! "Jeg vil gerne ud at gå..."</p> <p>S: Så er opgavebeskrivelsen og kommer til at trykke på RING - og bliver forvirret - vil ikke ringe, for han interesserer og ikke for at gå i naturen</p> <p>S: Ring - nej det skal jeg ikke - for opgaven betyder mig ikke</p> <p>Jeg vil måske gøre det, hvis jeg havde vedkommende, men en helt tilfældig - det giver ikke noget.</p> <p>S: Det der ville tænke mig ville være at undersøge i materialet. Jeg ville måske tage en sag sammen med ud i naturen, men ikke en træmad</p> <p>F: men hvis vi nu foreslår os at det var en opgave, du gerne ville prøve</p> <p>S: Skal jeg prøve at ringe til hende?</p>
T2 Call Anna	S: Hun er da en pæn dame.	T3.1 Will you choose this task?	<p>beslut dig angående opgaven vil jeg sige at du har snakket med Anna, som er responsive. Lad os arbejde i løbet af en uge</p> <ul style="list-style-type: none"> <li>• Hvad gør du så?</li> </ul> <p>S: Jeg ville ringe til hende og aftale noget.</p> <p>S: -hvis jeg har lavet en aftale med Anna, så gør jeg det og så kører vi på cafe.</p>

screen in the prototype (see image of Danish note-document herewith). The document was made available in Danish, Dutch and Portuguese (see chapter 5).

From this point on, methods and additional tools may have varied somewhat from site to site. Any additional local information is added by the individual partner below.

## 4.2 Danish approach

In the Danish tests we have taken time to discuss and explore with our respondents, what would be better solutions or missing functionalities. Reiteration is especially prominent in the way that our learning in one test has impacted the flow and focus of the next test. This has obvious consequences for the quantifiability as no two tests were alike, but it gave us the possibility of qualitatively probing areas that we learned were problematic along the way.

Respondents were not chosen for their positive inclination towards GtG, or 'Helper potential', but rather for their varied personalities and ability to give us a broad spectrum of reactions to the app. All respondents had, in some form or other, been introduced to GtG before. For more on respondents see Fig 2 in 5.1.2.1. Numbers.

Tests had a duration of 20 to 48 minutes depending very much on how talkative the respondents were.

Tests were structured by a combination of the flow of the app and the questions designed to elicit at the very least the most basic reactions to the various screens and functionalities of the prototype. It was the intention that this should only be a rough guide and that we would pursue interesting lines of inquiry whenever they presented themselves.

From this point of departure, our tests were very dialogical, probing into frowns and silences, attempting to shed light on the underlying feelings and reasoning. And, obviously, looking for all the places where using the app was difficult.

## 4.3 Portuguese approach

siosLIFE has an extensive background doing usability tests, so we have a structured process and we have been building a knowledge base about this target along the time.

This knowledge has guided us in the development of the prototype, giving us a little bit more confidence about some mistakes that could be made, and we avoid them.

To this particular case we had 3 stages:

### **1 - Preparation**

16 tasks were identified as potential/interesting to get answers, covering the main flow of the prototype application. With that we created a script to be used in the field with participants.

In addition to outlining all the tasks to be performed by the participants, the script provides the interviewer with a set of important notes to guide the session correctly, without any kind of bias. One of the most important things in this kind of test is to be impartial asking the questions, to not drive the user to any kind of expected answers.

## GTG App Prototype & Usability Test Script

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### 3rd TASK - SETUP AN ACCOUNT (screen "Welcome" | screen "Personal settings")

Give the participant the smartphone with "Welcome!"

#### Task:

I will ask you to analyse this screen and tell us what do you think you need to do in order to star using the app.

Expected actions	Finished actions	Number of Interventions	Obs.
3.1. Press "Setup account" button			
3.2. Fulfill the form			

### 4th TASK - Choose services

Make sure to "Enable Services"

## 2 - Tests run

In Braga we conducted two sessions of usability tests, each one with 3 participants. The sessions took a maximum of 20 min per user. The participants of the first sessions were somewhat older (average age 70 years) compared to the second session (average age 66 years). See also tables below.

User type	Average Age	Male/Female
Test 1	70	1M, 2F
Test 2	66	2M, 1F

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1			Gender		Age	Background		Literate	Technological Knowledge			DemENTIA	Other Health Problems?	Other Characteristics? Observations
2			Female	Male		Rural	City		Computer	Tablet	Smartphone			
3		P1	X		75		X	X	X		X	0		
4		P2	X		71		X	X				0		
5		P3		X	64		X	X	X		X	0		
6		P4	X		69	X		X			X	0		
7		P5		X	64		X	X	X			0		
8		P6		X	65		X	X		X		0		
9	TOTAL	10	3	3	68,00	1	5	6	3	1	3	6		
11	TOTAL %		30,00%	30,00%	-	10,00%	50,00%	60,00%	30,00%	0,1	30,00%	0,6	0,00%	problemas motores
12													0,00%	problemas auditivos

### 3 - Debriefing

After the conclusion of the tests sessions, we used a tool that we have been using for a long time with developed by our team, which allows us to get some indicators.

The results were discussed within the GtG team and registered as “recommendations” for future improvements of the prototype.

## 4.4 Dutch approach

In Almere we conducted 6 user tests, of which 3 were pre-tests with people outside of the 60+ target group. Due to vacation and illness, it was impossible to engage more participants (from the previous co-creation session as we had originally planned). All testers had a higher than average knowledge of day-to-day modern technology.

Group characteristics:

User type	Average Age	Male/Female	OS user
Pre-test	39	2M, 1F	1 iOS, 2 Android
Test	65	2M, 1F	2 iOS, 1 Android

The script used (in Dutch) is shown below. The associated screenshots have been (only) included in Fig 3 in section 5.3.3 together with the comments per shot.

Apart from noting body language closely and responding/explaining when participants had questions about data input or irregularities in the process, we focussed on what they thought was ‘missing’.

Although the Gift-to-Gift prototype was only available for Android phones, there were no specific problems that iPhone users encountered more than Android users. People who were used to Apple's iOS needed approximately the same time to complete a full cycle of all the screens and options as testers who owned an Android phone (22 minutes on average). This suggests that technological literacy transcends operating systems.

### **Script GtG 'HELPER APP' test (in Dutch):**

Testpersoon: Naam: \_\_\_\_\_ Leeftijd: \_\_\_\_\_

*Introductie van GtG project (in eigen woorden, voorbeeld): Gift to Gift project, waarin ouderen elkaar onderling helpen met klussen en activiteiten. Gift-to-Gift wordt als een cadeaukaart verkocht/ gekocht en cadeau gegeven aan een oudere die hulp, een klus kan gebruiken (Ana in dit voorbeeld). De klus wordt uitgevoerd door een Helper, een oudere die zich heeft aangeboden om te helpen.*

*Wat we vandaag gaan testen is de eerste versie van de app, bedoeld om de Helpers van Gift to Gift te ondersteunen bij het aannemen van klussen en het communiceren met de gebruikers. Het is een beetje zoals wanneer een architect een klein model van een huis in karton maakt - om dimensies te kunnen zien, etc. Dit betekent dat de app nog lang niet is voltooid, maar wij willen graag weten hoe u ervaart wat tot nu toe is gedaan. Het helpt ons om ons te concentreren op de onderdelen die anders moeten zijn.*

*Wij vragen u om wat u denkt, voelt en vindt steeds hardop met ons te delen. We testen de app, en niet u!*

*Een van ons zal observeren en notities maken, de ander zal de app met u doorlopen.*

*Als u klaar bent om te beginnen..? Fijn dat u zich als Helper wilt opgeven voor Gift to Gift. Laten we aan de slag gaan.*

*(Onthoud vóór test: heb een 'giftkaart' met QR-code bij de hand; schakel de schermbeveiliging uit wanneer je app-tests uitvoert)*

## **5 Results and lessons learned per location**

### **5.1 Danish results**

#### **5.1.1 On pilots**

In Denmark, 3 pilots have been held. In the following we describe the tasks and report from our debriefings of Helpers and Users respectively.

The tasks were:

- 1) Make up beds for guests
- 2) Escort a senior to an art museum
- 3) Clean out and arrange a cupboard of clothes

### **A practical chore in the household: Making up beds for guests**

→ Our User, Otto, needed help to make up beds for guests. He had 6 guests coming to stay and as he is single and no longer very mobile, he would like help making the beds and laying out towels. The guests were predominantly women, and quite possibly he also felt conscious that he is not the type of person who notices if the bedding matches or if things are laid out nicely. In short, he felt he could do with some help.

→ Our Helper, Sarah, was curious to see how our GtG model would play out and quite ready to help. We did not discuss the value of the task beforehand, and Sarah was eager to help regardless of the reward.

She called Otto up and arranged day and time. Actually, it was only by chance that we found out the date of the pilot as there was none of the test-participants who felt they needed to keep us in the loop.

→ Before the event Sarah reported that she thought that 6 beds were quite a handful, and that she worried about a shoulder, that periodically causes her pain. She was offered to opt out, but did not wish to do so. In the end, a few guests had cancelled, and there was only the need to make up two beds. Now Sarah thought this was a very small task, but as she was already in the house, not performing the task was not an option.

→ Sarah had asked Otto to have the linen ready beforehand, and he had accepted. However, when she got there, they needed to go to the basement to get the linen out of storage. Sarah experienced quite a lot of impatience as Otto was slow and had his own quirky ways of doing things (like driving in the car, around the house, to the basement entrance, to get the linen, and then driving back to the front again). Sarah found that she needed to lower her pace to match Otto's in order to not get irritated. Once she did that, the irritation dissipated. She even sat down for a cup of coffee and a talk at the end, which turned out to be pleasant.

→ After the pilot, Sarah thought that being rewarded 250 GtG (the equivalent of 250 Dkk/33€) was way too much.

### **Companionship - a trip to a museum**

→ Our User, Catherine, felt she needed a bit of cultural input. As she no longer drives, getting to museums can be difficult and she rarely does. She lives with her husband who, we think, is in early stages of dementia. This means that she is also not getting very much intellectual input from him. The couple have planned ahead and live in a senior house share complex, but since most residents moved in at the same time, most are now well into their 80's and the opportunity to drive each other is dwindling.



☼ In this pilot we had a cancellation from our intended Helper and were unable to substitute. We decided that Merete, project developer, would play the Helper part so that we could carry out the pilot. In addition, this gave insights into the Helper role that have proven helpful later in our work.

☼ Before the pilot our Helper registered feelings of 'will the User be satisfied with me as a Helper?' and 'will we be comfortable in each other's company?'.

☼ Merete picked Catherine up and drove to the intended museum. Even though they had both of them

checked the museum website, they had both failed to see that the museum was actually closed. As a solution, they opted for another local museum, and drove there.

■ Issue: who is responsible to check that the destination is accessible in relation to date or physical accessibility? Does there need to be a plan B already in place? This type of task may involve unforeseen events!

→ At the museum, Catherine insisted on paying both ticket and coffee for Merete. This possibly an effect of Merete not receiving a gift card in return for her services? In any case, the User was very aware of there being a 'balance' around expenditure between them.

■ Issue: this type of task need clear outlines of what is covered by the GtG points, and what is not. Also, museum prices differ. How do we set price to match?

→ User benefitted from Helpers insights into art and their ability to share the experience.

■ Issue: the Match of User-Helper becomes important. Might it make sense to add a section on 'preferred Helper type' to the task description?

→ User reported willingness to subscribe to a system that gives the opportunity to enjoy this kind of service.

### **Another household task - Clearing out and organizing a wardrobe cupboard**

→ In this pilot our User, Heather, lives in a retirement home. Mentally sharp, Heather is no longer able to walk and sits in a wheelchair all day. The use of her arms is also somewhat restricted. This means that she cannot put away her own laundry when it is returned to her home, or indeed tidy up her room. When the laundry is returned, the staff puts it in the wardrobe closet randomly without thoughts to organisation, or indeed accessibility. Heather can open the wardrobe, but she can only reach the lowest shelves, and only with difficulty.

There is a lot of clothes in Heathers wardrobe as her daughter owns a clothes shop and frequently brings her new clothes. Also, clothes for all seasons is mixed, and there is no sorting of 'types'. Heather enjoys looking smart but she is dependent on the staff to get out the clothes in the morning, and help her dress. The staff, in turn, is short on time, and Heather finds herself

sitting in an old, stained t-shirt and mismatching skirt because she is unable to identify the clothes she'd like to wear.

→ Again, our Helper was Sarah. She arranged a time to come to the retirement home with the staff as Heather may not always know the schedule of the staff. Sarah was to come at 11 as Heather would be ready then, but it turned out the staff was behind schedule and Heather was not dressed till 11.30.

→ Sarah, who has a past in retail, easily organized the task, helping Heather to decide on some item to be discarded and others to go into storage as they did not fit the season. The remaining clothes was sorted, folded neatly and placed by category into the cupboard.

Sarah was mindful (having learned the lesson in the first pilot) to pace herself after Heather and not force the speed at which they were going.

→ The two women quickly realised they had quite a few things in common and they did not find conversation difficult.

→ As the task was nearing the end, Heather would like Sarah to also sort another wardrobe, but this felt like too much of a strain to Sarah. She could also sense that Heather was a bit fatigued, so they left the second closet well alone.

→ Heather asked if she could get Sarah's telephone number and maybe could pay her to come again and continue organising things. Sarah replied that she didn't think this was allowed within the project. In reality, Sarah felt that she was not able to gauge what giving Heather her number might lead to, and she was worried about being exploited or having to turn down too much.

■Issue: Turning down tasks once 'inside' with a User might be difficult. On the other hand, once there is an app where the User can create tasks, perhaps we can make it possible to 'flag' specific Helpers, to give them first pick. Then they will have the option to turn down the task if they feel a particular User is troublesome or 'too much'.

→ In the debrief, Heather asked whether Sarah was allowed to come again, and she was genuinely sad she couldn't get her number.

Heather reported that in the retirement home they once had an arrangement where they had been allotted vouchers for 30 minutes of help a week (this was a national initiative a few years back but it has been cut back in most municipalities). These vouchers could be used independently or pooled to for instance 2 hours/month. The vouchers could be used for all sorts of tasks such as cleaning (proper) or having one's feet done. Since this arrangement was discontinued, no substitute has been found. Heather would gladly pay to get something along these lines. (This corresponds to our information from the retirement home director who report, that the residents or their relatives are already paying for a few tasks being carried out, such as weeding the small patio that each room has, or rearranging furniture. The staff sees GtG as an obvious successor to the old arrangement and are sure people will gladly pay).

→ Heather was under the impression that Sarah only had 1,5 hours to do the task. This impression was likely created by Sarah, working to avoid also sorting closet no. 2.

■Issue: The need for aligning expectations and setting out clear boundaries for the task is apparent. How to do this in app and over telephone becomes important as not all people are clear spoken and to the point. In the context of this pilot, the need to go through caretaking personnel in setting the task and making the appointment does obscure things.

→ Heather enjoyed the visit immensely and said she “felt privileged”. However, she did not think that her children would buy a gift card to GtG if the opportunity arose. She herself would also not buy a gift card. But she would still like to get Sarah's number and arrange for more tidying up, and pay for it.

■Issue: The gift-card idea seem strange and unusual to the senior segment. It is an obstacle in itself that they need to think along new lines, or in new terms. Heather would happily pay, if the concept was that of a voucher system similar to what she has been used to in the past.

→ When asked which other things she finds impossible to do herself and would like help with, Heather replied that she would really love sometimes 1) to wear an ironed shirt, 2) to have her copper trinkets shined, 3) to have her bookshelf properly dusted and 4) to have that second cupboard sorted. She doesn't want to ask her children to help when they come, because then it should be about “quality time”.

→ In this task, Sarah felt that the User was draining her energy a bit. In a good way, because Sarah felt that she was really making a difference to Heather, but still.

Sarah walked away from the task carrying her head high and feeling really proud of herself, she said.

■Issue: the possibility of ‘debriefs’ built into the administration of GtG becomes a concern. Some tasks will be more exhausting, worrying or in other ways emotionally destabilising, and the Helpers may need the opportunity to treat these experiences.

→ Sarah really felt she deserved the gift card of 250 GtG this time round.

#### **3.3.1.4 Conclusion on Danish pilots**

We found that all involved parties profited from the pilots. There was positive feedback on the quality of the companionship and on profiting emotionally from helping someone.

As flagged above (■), there are issues that point to a need of development of special functionalities in app; a variation in the detail in task description depending on the type of task; of extra competencies in administration to also take care of the Helper corps, of a branding of the Gift card solution, and more.

#### **Gift-card-issues**

Regarding the gift card solution, we have debated the need for a branding campaign that elicits storytelling in news media and relevant senior channels in order to help the potential Users and Helpers become accustomed to the thought of exchanging gifts instead of just hiring someone to do a job (as exemplified in the debrief of Heather in 3.3.1.3). This will be discussed further in the section Gift Cards and Storytelling, in 5.1.3.

#### **Relationship**

The issue of ‘how to manage the relationship between Helper and User’ caused trouble in the third pilot, 3.3.1.3, but in fact, this may be more of a problem presently, in the development phase, because neither Helper nor User can manage this relation through a neutral system (the app).

Once the GtG system is up and running, this is something that may prove less of a problem: User can ‘hire’ the same Helper through the GtG platform several times which will allow the Helper to better gauge what kind of person the User is, and whether they would want to continue

the relation outside the GtG circuit. Obviously, this is something we will be observing as we push forward.

### Value

Putting a value on the gift cards will be a challenge. As exemplified by the second pilot (3.3.1.2), putting a value on a visit to a museum that involves expenses is not necessarily straightforward. And interestingly, Sarah in the first pilot (3.3.1.1) felt that she had not deserved the 250 GtG/Dkk, but in her second pilot (3.3.1.3) had no doubt that she had earned every GtG.

## 5.1.2 On workshop 2

### 5.1.2.1 Numbers

We have tested the app on 6 persons within the 60+ age group.  
2 female, 4 male respondents with an average age of 69.

Test no.	Respondent	Sex	Age	Comfortable using apps*	GtG Helper potential**
T1	R1, Sonja	F	72	1	15% (somewhat introvert + busy w. own garden etc.)
T2	R2, Steen	M	65	3	5% (too busy w. own farm even though retired)
T3	R3, Lars	M	69	2	70% (busy as a volunteer already but keen on the idea)
T4	R4, Frede	M	72	2	30% (busy, engaged in 7 volunteer associations)
T5	R5, Jan	M	68	3	30% (too busy ( not yet retired), but would like to exchange services and thereby have his hedge trimmed)
T6	R6, Susanne	F	70	1	99% (has already helped us in 2 pilots and would like to do more)
<b>Average</b>			<b>69</b>		

Fig 2. \* our estimate, 0=no app literacy, 1=a little app literacy, 2=quite skilled, 3=no problems w. ICT. \*\* Estimated likelihood of respondents signing up as a Helper in GtG in real life based on our knowledge of the individual respondents.

Instead of asking our respondents about their app-literacy, in the above Table we have estimated their skills based on the tests. As seen, there are 2 respondents with a limited app literacy, 2 in between, and 2 with high app-literacy. None of our respondents are completely without app literacy.

### 5.1.2.2 The ICT prototype

Zooming in on whether ICT in the form of an app is suited to the kind of functionality we need to operate the GtG model.

### 5.1.2.3 Technical issues

Technical issues in this context are issues that make interaction between user and app difficult, troublesome or impossible. Some issues derive from the design of the prototype app whilst others are caused by a combination of app and lack of technical ability in the senior attempting to operate the app. In developing the app, we must know what causes confusion or a breakdown, and it becomes relevant to distinguish. However, only in one issue (marked **TI**, Technical Inability) was the TI solely to blame.

Categorizing the issues in testing

#1 complete **breakdown**

#2 functions causing **irritation** or

#3 **confusion**

In the Danish tests we have logged the following incidents:

Type	Description of issue	Issue #
#1 Break-down	Screen 11. Possibility of scrolling not shown. 2 respondents need assistance to go further, and 2 more are confused about the nature of the assignment as they cannot access information (found by scrolling).	1
	Assistance required to use QR code. TI	2
	Some Helper types are apt to not give a thought to the fact that a task need to be registered as 'finished' in the app, and thereby the system. 2 Helpers showed this.	3
	Trying to use the menu caused loss of data and break down (user needed to start the registration process over). This led to confusion and a need for intervention from test conductor.	4
#2 Irritation	Screens 1-2: Illogical country code for telephone number - first testers wondering why they needed to select +45 as app was already in Danish. This appeared to be a little irritating and not a good start to the test. However, in combination with the fact that screen 4.2 did not remember the number entered in	5

	screen 2, the 'telephone number issue' caused more irritation. We deemed this an unnecessarily negative start to the test and pulled screens 1-2 from following tests.	
	Screens 5, 6 and 7 (relative to those of the note document used in the test) sent several respondents into a loop as the buttons on screen 6 lead respondents back to choices they have already filled in, in screens 5 and 7.	6
	Phone number and address not 'saved' from previous screens	7
	The talk about GtG points - focus on the valuation of the tasks	8
	Screen 4: asking for too much detail about people (address, birthday etc.) does make some people wary and suspicious	9
	Extra screen issue - (this screen is not in the list, but appears right after a task has been reported 'done' by scanning a qr code). The screen says "You've made somebody happy!" - this caused irritation in 33% of our respondents. Possibly, this is a cultural thing; too much praise can be a bad thing.	10
#3 Confusion	Scroll/no scroll. When unaware that scrolling is a necessity, respondents tried to press the headings in screen 11 and 13 to access more information about a task. When this didn't work, they didn't know how to proceed.	11
	Screen 15: 50% need prompting to press the image next to the task heading, in order to access the task itself. Finding your way back to a reserved task is a problem.	12
	Screen 20: language makes for mixed messages ("Find other tasks" vs. "close" on button)	13
	Screen 9: missing scroll indication in order to see button for more tasks.	14

Looking at these issues, it becomes apparent that quite a few cases of breakdown, irritation or confusion result from the early development stage of the app. There are many functionalities that misfire or are not yet added. That this causes confusion is to be expected.

## **Addressing the not-so-straight-forward issues briefly:**

**#1:** The decision of scroll/no scroll, as this causes a lot of confusion. Not only in screen 11, but across screens as headlines (address, name in task descriptions) are frequently tapped in the attempt to access more information, and then, as the respondent learnt that scrolling was a possibility, he/she would try to scroll all screens, just to be sure they hadn't missed anything.

**#2:** Can we rely on QR-codes? Is there an alternative? One Helper remarked he'd think it was easier to call in to a telephone number and press the digits of a code than figure out the QR-scan system. And some Helpers will not have smartphones. Do we supply alternative options?

**#3:** We need to drill into Helpers how to use the app. Manual? Walkthrough video online? Reminder coded into the app and sent to the Helper, possibly as an sms (a lot easier if the date agreed upon is somehow logged through the app, as part of the "reserve this task" procedure).

**#5:** Make intro very country specific.

**#6:** One Helper remarked that as she gets older, when things repeat or are difficult to understand it makes her think that she's done something wrong, and thus doubt herself with the app. This could make potential Helpers give up the registration process.

**#8 + #10:** Again, this may be country/culture specific. As with #5, we must pay attention to cultural norms in the translation of the app, and possibly even leave out some sections ("Congratulations", or "You have earned XXX GtG points") in some cultures.

**#9:** Can we limit the amount or detail of the information we're asking? Knowing a year of birth is enough - we don't need the date (which, in a Danish context, is tied into our social security number and something that is strictly personal). Also - if people have already been to our web-site to download the app - why didn't they just give their information there? Several of our respondents commented that they needed to know more about GtG to register and give all this information. We had given a short intro, which they thought was enough. We shall have to give this info on the website - so why not solve more there?

**#11:** The scroll/no scroll causes confusion. Respondents struggle to find the information they need.

In screen 11.1, respondents were confused about the task. Once they found out that they needed to scroll they found the task-intro-text, and were clearly happy to find the information they had been seeking (50% exclaimed something along the lines of "Ah! This is the info I need", once they scrolled down to 11.2).

**#12:** This is an issue that requires more thought. How do we make it as simple as possible to navigate back and forth, to know how to access tasks and so on?

#### 5.1.2.4 How to bridge some of the gaps between potential Helpers and the ICT interface

##### **Manuals and other help-systems**

Interestingly, our very best Helper throughout the project, who has helped us conduct 2 pilots, has a low app-ability. This resulted in insecurities and confusement during the test and could, in a real-life-situation, have led to her not becoming a Helper.

When asked, she called for some sort of short manual describing both project and steps to go through in the app. She would also like to “call someone” who could help her out (hotline function). Are these systems that we need to put in place, or must we accept the loss of some percentage of potential Helpers because of ICT illiteracy?

##### **Gift card and GtG points issues**

Several respondents display dismay at the focus on the points being earned.

We are learning that while there may be something to be earned, flaunting this is NOT the way to make people feel at ease with this. Not in Denmark, in any case.

On the other hand, it is clear that as we now have a tangible product, talking about the tasks and about helping becomes more real. Several of our respondents profess they would honestly consider signing up and helping. In fact, we were stricken by how respondents whom we’ve talked to before - where they expressed reluctance at the thought of money changing hands - are now a lot easier with the thought. What has changed? Is it the presence of the prototype app? Or is it because hearing about the concept for the second or third time is making them more accustomed to the idea? More about this in Gift Cards and Storytelling in section 5.1.3.

#### 5.1.3. On lessons learned across workshops and tests

##### **ICT & Language**

There’s a point to be made regarding the language we use when interacting with the seniors around ICT. Particularly in Denmark, we experienced that the seniors filling in our questionnaire left quite a few questions unanswered - a total of 32 incidents, to be precise. There was a tendency that some respondents answered pretty much all questions, while others had quite a few blanks. This stems partly from our questions being inadequate, so that some categories were ‘Not applicable’ while we had not provided anywhere to indicate this. However, there seems to be some confusion around the terminology used. For instance, 2 Danish respondents have indicated that they have a ‘keypad’ on their phone (= this should not be a smartphone) but at the same time, they indicate that they own iPhones. It is, in other words, it is difficult to know whether the language associated with ICT is understood by the seniors. This is a lesson for the development of information material in relation to both app and website: Keep it simple. And at the same time, be sure not to ‘talk down’ to the target groups.

## Assumptions

In D2.1 we stated a number of assumptions that have guided our planning and execution of the project (quote from D2.1):

1. *Givers will want to buy our product, and there will be Givers with relatives in Odsherred.*
2. *A location in a rural setting, geographically confined, will enable us to better measure impact.*
3. *An active community where people help each other will hold many candidates for our Helper corps.*
4. *Volunteers will like the GtG mechanism and appreciate something in return.*
5. *In the countryside, people know each other, and we will be able to identify those who need help.*
6. *A positive stakeholder environment in the local community will make our investigations easier.*

*Led by these and more assumptions, we located our project in a rural setting. We chose an area with very engaged citizens, who were excited by the prospect of the project and wanted us to place the project in their village. The assumptions influenced the way we crafted workshops, our framing and outreach, and the location had bearing on what type of informants we had access to...*"

**Re 1; Givers will want to buy our product, and there will be Givers with relatives in Odsherred.** Reaching the Givers for our elderly recipients in Odsherred has proven more difficult than imagined. But we have learned that at least some of the elderly themselves would like to “give” themselves a giftcard when needed. (Catherine and Katty).

In any case, we need to communicate about the GtG concept differently, and through different channels than merely the local word of mouth. More on this in the section on Gift Cards and Storytelling below.

**Re 2: A location in a rural setting, geographically confined, will enable us to better measure impact.**

On a small scale the confined area has helped us overlook the population, other projects for seniors taking place in the municipality, the various volunteer organisations that are already filling people's time and so on. This has been an advantage as the total image was less complex than what would be the case in a large city. Whether there are more advantages to the measurability in relation to impact is yet to be seen.

**Re 3; An active community where people help each other will hold many candidates for our Helper corps.**

This assumption held 2 surprises for us: First up, these very active people in the community are so busy that they do not have time for signing up as Helpers in GtG.

Secondly, we have learned that people who already help the people they know find it difficult to imagine that there are seniors outside their circles who are **not** getting help. This had the effect that the ‘Helpers’ initially didn’t understand the advantage of a gift card or a Helper corps, or indeed the need. (In D2.1 we have written extensively about the identified need).

#### **Re 4; Volunteers will like the GtG mechanism and appreciate something in return.**

At first the local volunteers (people with plenty of time and resources) did not really see the need of GtG and thus didn't see how the mechanism could work.

In D2.1 we recorded the objections to GtG. We have found that especially amongst volunteers there seem to be a code: 'volunteering is about doing something for others purely motivated by altruism'. We have kept probing this issue with our respondents in interviews, talks and tests, and it seems that it may indeed be possible to circumvent this 'no pay'-code, that serves as a barrier to even more people getting help and companionship. More about this in the section on Gift Cards and Storytelling below.

#### **Re 5; In the countryside, people know each other, and we will be able to identify those who need help.**

This assumption is linked to no. 3. What we have seen is that people help people they know already - and are very unaware of the other people around them who might need help. Once we dig deeper, they realise that they don't know the ones who **really** need help - the ones who lack friends and connections. The conclusion is that this assumption does not hold. Lonely people are not necessarily known to their neighbours - countryside or cityscape.

#### **Re 6; A positive stakeholder environment in the local community will make our investigations easier.**

This assumption has proven true. We have been met by people who wanted to help, both in the vicarages, the senior associations, and other associations. Keeping an office locally has aided our approach as it made us semi-local, and the fact that the office was in a local innovation- and upstart house also helped as our connections there have led to more local connections.

### **Gift Cards and Storytelling**

*"GtG sounds good. But I have to get used to the thought of it"* (Inger, local volunteer).

*"I think it's what we're already doing with friends and family - you get a dinner for lending a hand. But when you don't know each other, you're not going to offer dinner. In those cases the gift card is better, it lessens the obligation or debt of gratitude. At a later point the relation may turn into something that includes dinner, (Frede, local volunteer).*

These statements are a few of the reasons why we think storytelling and time will both aid us in making GtG a commonplace concept.

Frede (above) didn't understand the need for GtG when we first spoke to him in February. When he participated in workshop 1 (a few weeks later), he still was not at all convinced. But when we interviewed him for workshop 2 - app in hand - he started seeing things differently. Whether this was the repeated exposure, the app, or a combination, is hard to tell. Inger, above, says it clearly: she needs to adjust to the thought of helping within such a system.

Generally, other testers in workshop 2, who were encountering the app but had also heard of GtG before, were much more positive towards becoming a Helper in the project than when we have been speaking to people before.

The case of Hannah who enjoyed the visit and help of Susan immensely (DK pilot 3), and would like to pay Susan directly to do more clearing up of her wardrobe, also shows this point clearly: she doesn't want to buy a gift card and she doesn't think her children would buy one if the opportunity arose - but she would like the service and is ready to pay for it!

Are Heathers reservations purely a result of the thought being novel and her not having used "gift cards" to get tasks done before? Research on habits and attitudes tell us that when things are new and untested, scepticism is high and people are prone to frown and wait for others to test, before dipping in themselves. Furthermore, history tells us that something that seems radical when first introduced can become commonplace just a little down the line. Uber and Airbnb are good, recent examples of this.

In the next phase, storytelling becomes an important tool in the accustomization-process. Drawing on the insights just recorded, we shall be focusing on reporting from pilots and events in the local media, and in our own newsletter, telling the stories about how GtG has made a difference - for Helper and User alike. The very basic reasoning is that if people become familiar with the name and hear success-stories, they will have fewer reservations about this new way of doing things.

### **Local engagement**

In Vig we have planned a campaign to run in the local supermarket, donating gift cards to Helpers. This too will help visibility and talk of the project to ensue, and will be part of the accustomization process. To run such a campaign, however, we found that we need to start further up the supermarket chain in order to get the backing that will ensure that the campaign becomes a priority to the individual storekeeper. (We have had initial talks with the local storekeeper. They're interested in starting a collaboration, but seem to always to busy to make it a priority. Their view on the advantages of the gift cards are primarily focused on boosting local economy and the CSR that is in it for the store).

### **New channels**

Telling the story through other channels is another way to reach the local community. We would like to feed stories and tasks through the associations where people are already active. Where this is concerned we shall create new partnerships with local and national organisations - players who are already running programmes with an angle on seniors. Relevant organisations are:

- a. Danish association for gymnastics (DGI), running a project to activate more seniors.
- b. The local evening school (ODA), special focus on senior groups
- c. Boligforeningen DAB, a housing agent wanting to help their senior tenants.
- d. Dane Age/Ældresagen (reported on in D2.1 chapter 5.1.6)

In all of the above, we have contacts we can activate. Presently we are pursuing a partnership with DGI, association for sport clubs in DK with 250.000 senior members country wide. They see the potential advantages of GtG as they are attempting to expand the number of members in

Danish sports associations and are presently focusing on seniors. A cooperation with DGI is a possibility in the next part of the project and would be a win-win situation.

## 5.2 Portuguese results

### 5.2.1 On pilots

In Portugal, the main focus was always the ICT part of the concept, so that in our interactions with participants, on Pilots and workshops were focused on understanding how the technology could be a help or a constraint in the flow of “user requesting a service” or “helper providing a service”. In workshop 1 we found a lot of interest in the concept and we also found people already requesting/providing this kind of services we are addressing. The participants were very active and they knew very well their community which is a benefit to confidence when providing services.

At the first stage we identified a match between Users/Helpers to the following services

- Gardening
- Teaching music
- Help with technology

Although matches were identified, it was not possible to go along with the participants after that. We only had the possibility to follow one of them that happened in the place where the participants usually meet, which was music teaching. But it didn't happen in the way we wanted, because the organization started to provide Music lessons to everyone, which was not the experience we wanted.

### 5.2.2 On workshop 2

	Gender		Age	Background		Literate	Technological knowledge		
	Female	Male		Rural	City		Computer	Tablet	Smartphone
<b>P1</b>	X		75		X	X	X		X
<b>P2</b>	X		71		X	X			X
<b>P3</b>		X	64		X	X	X		X
<b>P4</b>	X		69	X		X			X
<b>P5</b>		X	64		X	X	X		
<b>p6</b>		X	65		X	X		X	
<b>10</b>	3	3	avg 68	1	5	6	3	1	4

Following the Script, we prepared 16 questions, covering the entire app flow, registering the success rate of each task and the number of interactions of the interviewer to get more accurate conclusions. Here are the results:

#	TASK	Success Rate	Interventions
1	<b>First Screen - Comments</b> <i>What are your thoughts about this screen?</i>	100,00%	0,00
2	<b>Create Account</b> <i>I will now ask you, please, to create an account using the details in this paper.</i>	66,67%	1,33
3	<b>"Welcome" Screen - Press "Setup Account"</b> <i>I will now ask you, please, to analyze this screen and tell us what you think you should do to start using this app.</i> <b>"Settings" Screen - Fill Form</b> <i>I will now ask you, please, to fill this form using the details in this paper and complete your registration.</i>	66,67%	1,33
4	<b>"Choose service" - Choose tasks and proceed</b> 2.1. <i>What do you think you should do now?</i> 2.2. <i>What are the user thoughts about the tasks you see here? Do you feel you need to know more about these tasks before selecting them?</i> 2.3. <i>How do you proceed?</i>	100,00%	1,00
5	<b>Configure Helper Profile ("Helper settings" screen)</b> <i>Please, configure your helper profile.</i>	66,67%	1,67
6	<b>COMMENT SCREEN "You're now a GTG Helper" and start</b> <i>What are your thoughts about this screen?</i> <i>What do you think you should do?</i>	100,00%	0,67
7	<b>Homepage Comments</b> <i>Can you tell us, what are your thoughts about what you see in this screen?</i>	100,00%	0,00
8	<b>View all Tasks available</b> <i>I will ask you to find a way to visualize all the tasks available.</i>	33,33%	2,33
9	<b>Select a Task</b> <i>I will ask you to find a way to select "Limpeza do Jardim" from the available tasks list .</i>	100,00%	1,33
10	<b>Analyze and Accept a Task</b> 10.1. <i>Please, comment the information you see on screen.</i> 10.2. <i>To accept the task, how should you proceed?</i>	100,00%	0,67
11	<b>Analyse "call" screen</b> <i>I will now ask you, please, to describe what you see on this screen.</i>	66,67%	1,33
12	<b>Accept Task</b> <i>What do you have to do to accept the task?</i>	100,00%	0,33
13	<b>Register the Task as Done</b> <i>How do you have to proceed in order to register the task as completed in the app?</i>	66,67%	1,50
14	<b>QR Code Scan</b> <i>How do you have to proceed now?</i>	100,00%	1,67
15	<b>Analyse the completed Service</b> 15.1. <i>I will now ask you, please, to describe what you see on this screen.</i> 15.2. <i>How do you have to proceed in order go back to the services list?</i>	100,00%	2,00
16	<b>Identify "menu" button to access "personal settings"</b> <i>How do you have to proceed in order to add a new service?</i>	0,00%	2,67

Global results of the Prototype		
Percentage Success Rate	Average Facilitator Intervention	Average Usability
85,71%	0,86	3,14

From our standards, we consider the designed prototype as “Good”, considering the results of interaction/usability tests. However, the conclusions were limited to the participants characteristics (for example, all of them were tech-savvy).

4 Very good design	3,5 - 4
3 Good design	2,5, - 3,4
2 Medium design	1,5 - 2,4
1 Minor design	1 - 1,4

## Recomendations

Some recommendations after debriefing, that could be a solution to some observed problems:

#	Top recommendation
2	Phone number should not be filled with an example Use down/continuous press interaction on buttons instead of click
3	Avoid Scroll needs. Buttons at the bottom are difficult to find.
5	Some areas need to have an explanation of the feature
8	Avoid Scroll needs. Buttons at the bottom are difficult to find.
13	The button should be more self-explanatory (ex: “ <u>Mark service as completed</u> ”)
14	We should put a tutorial or some clear instructions here
General	Menu should be reviewed (Helper settings vs Personal settings vs Personal settings on the upper-right corner of the screen) After configuration of each helper settings, there is no need to go back to Helper settings confirmation

## 5.3 Dutch results

### 5.3.1 On pilots

We identified two 'matches', Helper-User combinations, during the workshop 1 co-creation sessions for follow up in an end-to-end pilot with Helper and User:

1. Task of performing garden work
2. Task of digitizing photos or slides

However, although all four end users had committed to participate, one pilot could not be executed due to timing issues during the holiday season (which is a much longer season when you are retired...). The second pilot was cancelled as, despite our efforts, both end users were no longer aware of the commitment or no longer interested.

### 5.3.2 AAL2business coaching workshop

We took advantage of the AAL2business support action and organised an AAL2business coaching workshop in April in Almere, The Netherlands with the Dutch partners. With the help of Arto Wallin from VTT we filled out the Business Model Canvas for Senior-Live (see Fig 4 below). This has been a very inspiring and instructive experience, providing numerous insights into the (wicked) value proposition of the GtG service. Arto wrote afterwards 'I think that the concept that you are developing is very interesting and has real potential to succeed.'

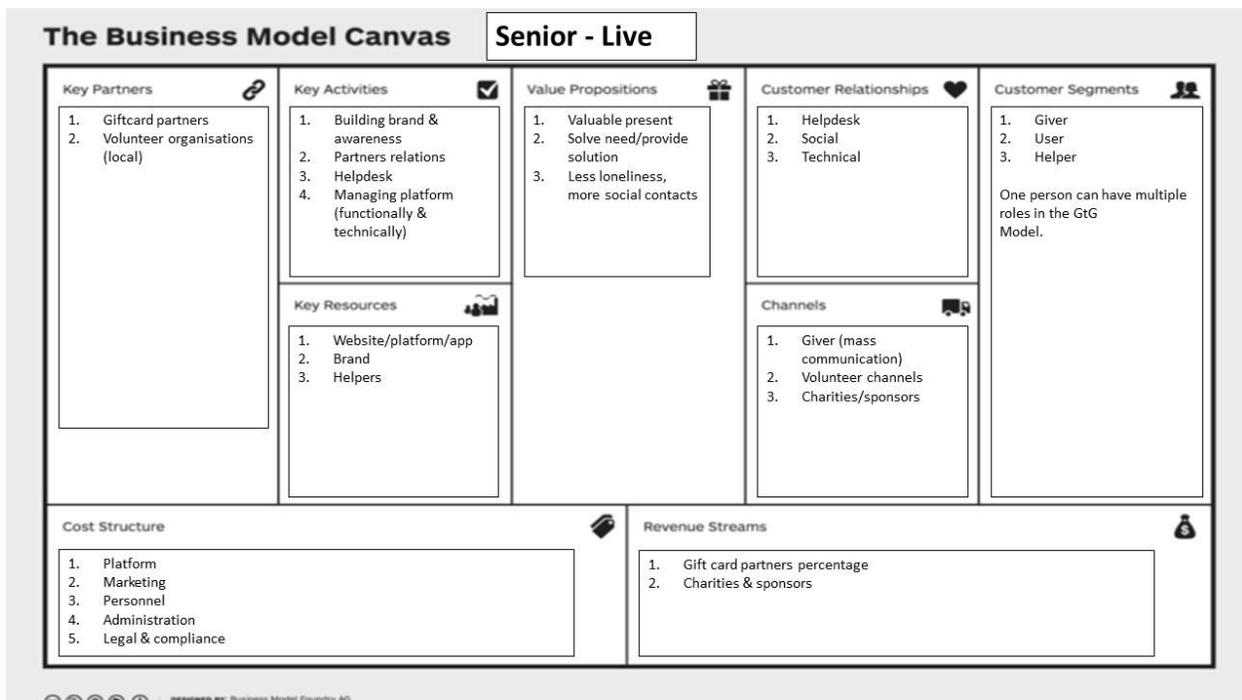


Fig 4. Filled out Business Model canvas for partner Senior-Live during AAL2Business workshop

Further feedback received:

- VISION: Clarify YOUR vision of the business. Are you going to establish new startup or does Senior Live want to become Dutch operator of the platform, or is there something else on the table? Who are personally committed?
- IPR AGREEMENT When you know what role you want to take. Negotiate about the licensing with Portuguese and Danish partners. You should agree with them about the right to operate platform (sooner the better).
- CONTINUE BUSINESS DEVELOPMENT
  - Continue working on the business model canvas. Preferably attach big canvas on your office wall and get back to canvas whenever you get new information.
  - Identify riskiest assumption and prioritize those (When you have your “management choices” on the canvas, continuously evaluate what are your leap-of-faith-assumptions i.e. biggest risks concerning building the potential business ?).
  - Organize regular meetings/workshops to brainstorm ways to test these assumptions. Design several tests and prioritize tests (your first goal is to find tests that are fast to implement + relatively cheap to implement)
  - Get out of the building. Start conducting business model tests to find out whether your assumptions are facts or wrong guesses. E.g.
    - Test the partner value proposition - Are they willing to work with you?
    - Test customer value propositions and channels
      - Can you attract Givers and Helpers through the preferred channels?
      - Are Users using the gift card if those are given to them?
    - There are many additional ideas to test. What else can you think off?

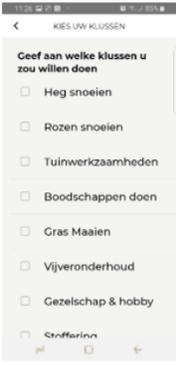
Lessons learned were shared with the partners and taken along in compilation of D1.2 business strategy.

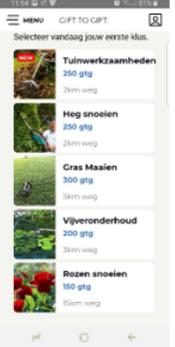
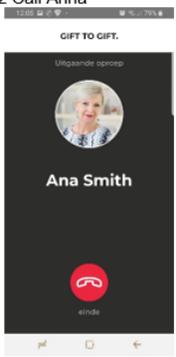
### 5.3.3 On workshop 2

Below we have included the aggregated results of the Dutch GtG Helper app tests per screenshot as part of the script that was followed (Fig 3, script in Dutch, in italics). Going chronically through the Helper app prototype we registered the following (most significant) observations (see comments and recommendations both per screenshot and under screenshots):

With the first two screens we actually ran into trouble as the pre-testers were annoyed that they give their telephone number here, and later in the app (screen 4.2 below) they need to enter it yet again. This annoys them unnecessarily. We decided to start testing from screen 3 onwards from then on.

<p>1 Opening screen</p> 	<p>3 Skipped.</p> <p>3 Showed (pre-testers)</p> <p>1 Remove . ---- .. Adds nothing. Too many fonts/ font sizes used. Remove . after GIFT TO GIFT</p> <p>2 No comments</p>	<p>2 Create account</p> 	<p>3 Skipped.</p> <p>3 Showed (pre-testers)</p> <p>2 Why input data that isn't stored in personal settings? See also 4.2.</p> <p>1 No comments</p>
<p>3</p> 	<p><u>Maak een account aan</u></p> <p><i>We stellen ons voor dat u de app van GtG hebt gedownload en geïnstalleerd op uw mobiele telefoon. Op het scherm kunt u zien hoe de eerste pagina van de app eruit ziet.</i></p> <ul style="list-style-type: none"> <li>• <i>Wat vind u ervan?</i></li> <li><i>Ik wil u nu vragen om een account aan te maken</i></li> <li>• <i>Wat gaat u doen?</i></li> </ul> <p>6 No indication that user needs to scroll down. Solution: put button higher on the screen.</p>	<p>4.1 Personal settings</p> 	<p><u>Persoonlijke informatie</u></p> <ul style="list-style-type: none"> <li>• <i>Wat doet u hier?</i></li> <li>• <i>Is er informatie waarvan u denkt dat deze ontbreekt? Waarover?</i></li> <li>• <i>Is er nog iets anders dat u opmerkt over deze pagina?</i></li> </ul> <p>1 There is no 'check' if the date (format) is valid.</p> <p>1 Filling out all the information on this screen takes a lot of time. Why should I need to provide my date of birth?</p> <p>4 No problems or questions.</p>

<p>4.2</p> 	<p>2 Validation of email address would be expected.</p> <p>2 'I have already inserted my phone number!' Rest of screen: no problems or questions.</p> <p>1 Show the full length example Email address (see Dutch version).</p> <p>1 No problems or questions.</p>	<p>4.3</p> 	<p>6 No problems or questions.</p>
<p>5.1 Select services</p> 	<p><u>Selectie van klussen</u></p> <p>Wanneer u voor het eerst klikt, kiest ons prototype een willekeurige klus voor u. Het is niet belangrijk dat het niet de klus is die u normaal zou kiezen wanneer de app klaar is.</p> <ul style="list-style-type: none"> <li>• Wat denk u dat u nu moet doen?</li> <li>• Hoe gaat u verder?</li> </ul> <p>6 No problems or questions.</p>	<p>5.2</p> 	<p>6 No problems or questions.</p>
<p>6 Helper settings</p> 	<p>6 Job categories have already been selected. Why do I need to enter these again?</p> <p>1 Solution to 1st remark: provide distance in the previous screen and leave screen 6 out of the process.</p> <p>1 This screen is unnecessary. Suggestion: move 'choose maximum travel distance' to previous screen. (2 comments for this screen)</p> <p>1 Range/distance is clear after explaining why this needs to be provided.</p>	<p>7 Range</p> 	<p><u>Stel de afstand in</u></p> <p>Hoe ver van huis bent u bereid te gaan om te helpen?</p> <p>Hoe zou u uzelf het liefst vervoeren?</p> <ul style="list-style-type: none"> <li>• Wat ga je nu doen?</li> </ul> <p>4 Home address has already been provided. Why do I need to enter this again?</p> <p>2 No comments.</p>
<p>8 Congratulations</p> 	<p>2 START NU is unclear. Change to: 'START NOW WITH THE SELECTION OF AVAILABLE JOBS'.</p> <p>4 Clear</p>	<p>9 Overview</p> 	<p>1 First input field could be left out. Available jobs that match preference have already been provided by the matching engine.</p> <p>1 Would be nice to see expected amount of time needed to perform the job.</p> <p>4 No comments.</p>

<p>10.1 Open tasks</p> 	<p><u>Zoek een klus (of activiteit)</u></p> <ul style="list-style-type: none"> <li>• Wat vindt u van de taken die u hier ziet?</li> </ul> <p>We hebben nu een aantal klussen als voorbeelden in de app opgenomen. Helaas kunt u niet vrijuit kiezen, maar er valt wel te kiezen ... Ook al zou je deze taak eigenlijk niet kiezen, ik zou je willen vragen om te doen alsof.</p> <p>6 No comments or questions.</p>	<p>10.2</p> 	<p>6 No comments or questions.</p>
<p>11.1 Detailed task</p> 	<p><u>Bestudeer de klus</u></p> <ul style="list-style-type: none"> <li>• Wat kunt u te weten komen over de klus?</li> <li>• Wat wil je nog meer weten over de klus?</li> <li>• Hoe kom je meer te weten?</li> <li>• Wat ga je nu doen?</li> </ul> <p>1 Good and clear summary and clear information about the job.</p> <p>5 No comments or questions.</p>	<p>11.2</p> 	<p>2 It makes more sense to have two buttons on this screen: Yes and NO. If NO, return to the previous screen and don't show this job again, if YES go to a new screen with a button: CALL ANNA.</p> <p>1 Good and clear summary and clear information about the job.</p> <p>3 No comments or questions.</p>
<p>12 Call Anna</p> 	<p>6 Needs a little explaining.</p>	<p>13.1 Will you choose this task?</p> 	<p><u>Beslis over de klus</u></p> <p>We nemen aan dat je met Ana hebt gesproken, de 'klus beheerder'. Stel dat je tot een overeenkomst bent gekomen.</p> <ul style="list-style-type: none"> <li>• Wat doe je nu?</li> </ul> <p>1 Provide an agenda app in order to have confirmation of agreed upon date/time.</p> <p>5 No comments or questions.</p>
<p>13.2</p> 	<p>2 I don't want to call Anna again. Enter agreed date &amp; time in a central agenda function as well as in the phone's agenda app.</p> <p>4 Why again the 'call Anna' button. I have just spoken to her and made my decision.</p>	<p>14 Confirmation task resolved</p> 	<p>6 Clear.</p>

<p>15 Overview reserved tasks</p>	<p><u>Voltooi de taak</u> We stellen ons voor dat je Anna hebt geholpen. In de app moet je nu registreren dat de taak voltooid is.</p> <ul style="list-style-type: none"> <li>• <u>Hoe gaat u verder?</u></li> </ul> <p>1 Change text to: 'Choose a job you have performed'</p> <p>5 No questions or comments.</p>	<p>16.1 Individual reserved task</p>	<p>1 Change text to: 'Job you have performed'.</p> <p>5 No questions or comments.</p>
<p>16.2</p>	<p>1 Is it possible to add a calendar app after accepting the job? Then a selected date/time could be captured and shared with the giver (and/or user).</p> <p>5 No questions or problems.</p>	<p>17 Scanning</p>	<p><u>Scan de code op de cadeaukaart</u> Anna geeft je een bewijs van de cadeaubon. Op de kaart staat een QR-code.</p> <ul style="list-style-type: none"> <li>• <u>Wat nu te doen?</u></li> </ul> <p>NL used a real gift card for scanning process. No problems with the scan functionality.</p> <p>1 Comment: why is the barcode needed? I have already notified the giver that the job is finished. If she sends me an acceptance notification, the GtG points should be booked into my account.</p> <p>1 After scan: open the camera function of the phone to take picture(s) of the new situation (post-job) as visual confirmation that the job is completed. After receiving scan result and picture(s), giver could then directly release GtG points into helper account. Provide notification (email, <u>whatsapp</u>, messenger etc.) to helper when his account balance is updated.</p> <p>4 No problems.</p>

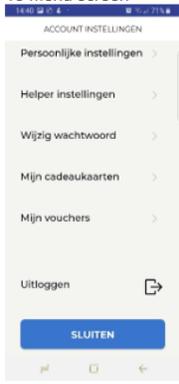
<p><i>BESPREEK DE TEST</i>  <i>Nu heb je de app eenmaal helemaal doorlopen</i></p> <ul style="list-style-type: none"> <li>• <i>wat zijn uw gedachten?</i></li> <li>• <i>Wat zou u willen verbeteren?</i></li> </ul>		<p>18 Menu screen</p> 	<p>6 Clear.</p>
<p>19 Decline task</p> 	<p><i>ALS TIJD HET TOELAAT!</i>  <i>Reset app naar derde scherm</i>  <i>Probeer terug te gaan en een taak te kiezen.</i>  <i>Deze keer kunnen jij en Anna het niet eens worden over een datum.</i></p> <ul style="list-style-type: none"> <li>• <i>Wat doe je?</i></li> </ul> <p>Clear.</p>	<p>20 Task declined</p> 	<p>Clear.</p>

Fig 3. Results ICT prototype testing: screenshots with script (italics) and test comments per shot

Screen 3: not one user understood the need to swipe up in order to proceed to the next step.

Screen 4.1: 1 user found it offensive that he needed to provide his date of birth.

Screen 4.2: 2 (pre-test) users didn't understand that there was no validation of the email address (syntax). These same people couldn't understand why they had to insert their phone number for the 2nd time.

Screen 6: all testers couldn't understand why they had to provide services selection again.  
Solution: move range/distance button to screen 5.2. Problem: very 'long' screen with much scrolling.

Screen 7: most users didn't understand why they had to re-enter their home address.

Screen 8: 'START NU' button should be explained in more detail. What is the user starting?

Screen 9: is it possible to provide a 'drop-down' range of choices, based upon the previously selected job categories

Screen 11.2: it makes more sense to have 2 buttons on this screen. If no, return to the previous screen and don't show this job again. If yes, go to a new screen with a button: 'Call (Anna)'.

Screen 12: needed clarification, but was not a major issue.

Screen 13.1: provide an agenda 'button' in order to confirm the agreed upon date/time.

Screen 13.2: no one understood why they should be interested in calling (Anna) again (i.e. 'I have just spoken to her and agreed (or disagreed) to help the user.

Screen 15 (and 16.1) Change text to: 'Job you HAVE performed'.

Screen 16.2: Is it possible to activate a calendar app after accepting the job? Then a selected date/time could be captured and shared with the Giver (and/or user).

Screen 17: Comment 1: why is the barcode needed? I have already notified the Giver that the job is finished. If she sends me an acceptance notification, the GtG points should be booked into my account. Comment 2: After scan: open the camera function of the phone to take picture(s) of the new situation (post-job) as visual confirmation that the job is completed. After receiving scan result and picture(s), Giver could then directly release GtG points into Helper account. Provide notification (email, whatsapp, messenger etc.) to Helper when his account balance is updated.

All in all the prototype was considered, apart from minor issues, a useful and workable tool to set up a Helper profile and gain further insights into the Helper-User/ Giver interface, as well as the overall GtG service and concept.

## 5.4 Combined conclusion and lessons learned Workshop 2

We managed to answer some questions that we posed ourselves towards the organisation of Workshop 2. We can conclude that the testing of the Helper app prototype by users (potential GtG Helpers?) in the three different regions resulted in overall quite similar comments. These comments and ideas for improvement were discussed further in the final meeting in Braga, and collected and reported in D3.1 ICT Platform recommendations to be taken along in further future technical developments.

We can draw the following overall conclusions:

### **App design:**

Many testers had problems (understanding) scrolling, so clearly relevant information (and action buttons) has to be visible on screen without the need to scroll first. We wish the app to be intuitive and function as good as possible, because otherwise (less ICT literate) people may get insecure, and may think it is because of them something is not working well. It turned out that the developers had developed the app with a big screen, whereas not all test phones had a big screen....

Testers were typically enthusiast about the primary, non complex colours used. Next to yellow and blue ('middle colours'), red and blue were used for 'interaction': red for 'no' or 'negative' interaction and green for 'yes' or 'positive' interaction.

We found out that if we wish to include some sort of screening process for the Helper, we cannot immediately regard them as Helpers after registration, saying 'You are now a Helper'.

In time it would be great to have a 'call in app' option. The picture of User (Ana) can be deleted, as it is not relevant, and we will not ask Users (or Givers) for one.

It would be great if once an agreement to perform a task is made, that the date can be/ is registered in an online agenda (app) of the Helper.

## **IT skills**

We left the GtG Users out of the app development. It now appears that not all GtG Helpers appear tech savvy either (scrolling, tapping on photos for job details, going back for reserved tasks) meaning that this needs to be taken into account by the developers (and/ or service desk).

Adding a 'quick start guide' for users would be a benefit.

## **Cultural differences:**

We had some discussion on how to approach the Helpers. It was felt by some testers childish and unnecessary to be congratulated upon (successful) registration. Or end a GtG task by saying 'You made someone happy today'.

Do we really need to provide information on 'GtG points' per task? Replace this with the anticipated time needed for a task? After all, Helpers should not expect to do it for the money. They should actually expect to get 'paid' less than what the job would cost if a professional could be hired to do it, as the GtG service really is about exchanging a token of appreciation for a job done.

# 6 ICT questionnaire results and conclusions

During co-creation workshop 1 we asked the participants in Portugal, The Netherlands and Denmark to fill out an ICT questionnaire to better understand their level of ICT savviness and skills.

PT prepared the questionnaire and processed the individual and combined results shown below. It was only when we asked persons that used no smartphone or computer at all, that we understood that some questions (answers) were not unambiguous, and open to more than one interpretation: e.g. 'I require help finding information online'. Both someone that is never using a computer, and someone that is very able to find information online will reply 'Never' to this question. In addition we found that people did not answer all questions, perhaps because none of the answers applied to them or because they simply did not understand the question. To deal with this flaw in the questionnaire, we finally decided to group all the 'questionable answers' (including 'no answers') under 'Never' (or 'Very hard'). We thus renamed the column 'Never' 'Never/ N.A.' (or 'Very hard/N.A. '), with N.A. standing for no answer or not applicable. We then focused and drew conclusions based on the overall results of the questionnaire, staying away from the confusing 'Never/N.A.' answers. Coupled with the small population of the survey we note several sources of insecurity to the below numbers. We are attentive to these shortcomings, treating the survey results as indicative rather than statistically significant. Even though we cannot draw rock solid conclusions, it is possible to get a sense of seniors and their ICT-readiness and ICT-literacy, and to identify and prepare for pitfalls as the project is developed further.

Figures 6 and 7 below show the individual country results and combined results, respectively. The numbers/ totals depict the total of questionnaires received, and excludes the number of

respondents that did not fill out the questionnaire. For The Netherlands 16 participants joined the co-creation sessions, of which 12 filled out the questionnaire. In Denmark 14 people joined, of which 13 filled out the questionnaire. In Portugal questionnaires were filled out by/ for all 11 participants. Those that did not fill one out were generally elderly elderly that had no smartphone or PC. Of the total of co-creation participants (41), 88% (36) filled out the questionnaire. In conclusion, among the 36 elderly respondents computer and (smart)phone usage was high (especially in Denmark and The Netherlands) with e.g. 31 persons (86%) making daily phone calls and 22 (61%) texting daily. This indicates an overall relatively good ICT literacy amongst the elderly that responded. See Fig 5 and Fig 6, 7. Having said that, we also concluded that not all elderly that filled out the questionnaire master the 'ICT lingo' when they say that their phone has a keypad while at the same time being an iPhone or Android...

Main usage of my PC/Smartphone

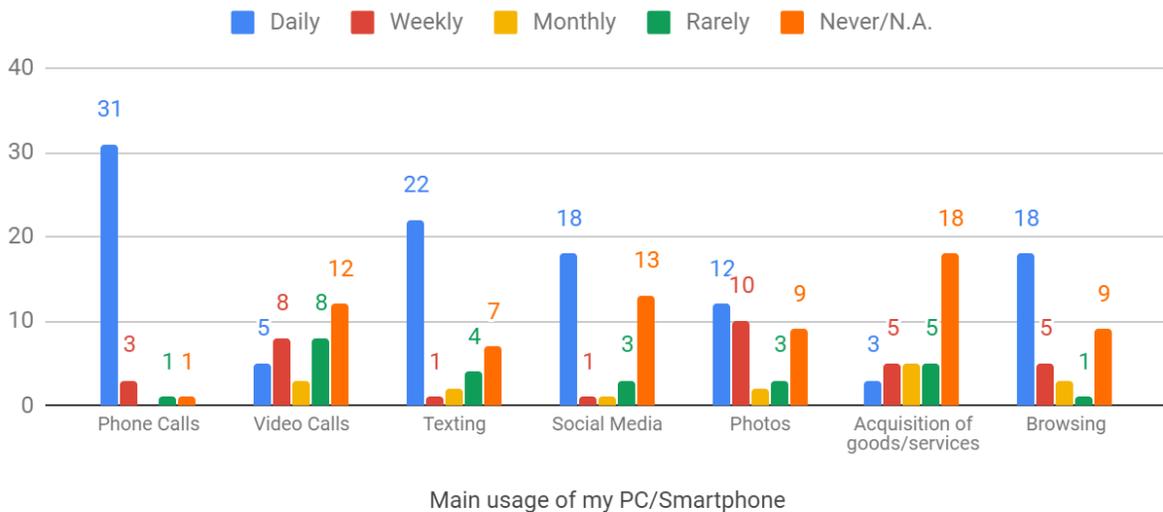


Fig 5. Main usage of computer and/ or smart phone, combined results for PT, NL, DK

ICT Habits																			
N.A. = not applicable, no answer																			
		NL	PT	DK	NL	PT	DK	NL	PT	DK	NL	PT	DK	NL	PT	DK			
		Daily			Weekly			Monthly			Rarely			Never/ N.A.			Total		
Computer usage	I use my computer	11	5	11		1	0			1	1		0		5	1	12	11	13
	I run into problems/require help to use the computer		2	2			1	1		2	9	2	3	2	7	5	12	11	13
E-mail		Daily			Weekly			Monthly			Rarely			Never/ N.A.					
	I send e-mail	9	3	7		2	5		1	0	2	1	0	1	4	1	12	11	13
		Very Easy			Easy			Attainable			Hard			Very Hard/N.A.					
Internet Browsing	I find information on the internet	6	5	8	4		3			0			1	2	6	1	12	11	13
	I require help to find information on-line		2				1				3	2	6	9	7	6	12	11	13
ICT Help		Daily			Weekly			Monthly			Rarely			Never/ N.A.					
	My family members/children/grandchildren help me with the use of ICT		2	0		1	0	3		2	7	4	8	2	4	3	12	11	13
Phone / Smart phone	I get professional help with the use of ICT		1	0	1		0			0	6	1	7	5	9	6	12	11	13
		Yes			No/N.A.														
Apps	My current phone has a keypad	10	1	2	2	10	11										12	11	13
		iPhone			Android			Windows			Other/N.A.								
Main usage of my PC/Smart phone	My phone is a(n)	6	3	5	4	3	5			0	2	5	3				12	11	13
		Daily			Weekly			Monthly			Rarely			Never/ N.A.					
	I use apps on my phone	10	4	8			0			0			1	2	7	4	12	11	13
Trust		Very Easy			Easy			Attainable			Hard			Very Hard/N.A.					
	I consider adding new apps on my phone	7	3	4	1	1	2		2	2	3	1	1	1	4	4	12	11	13
	Phone Calls	9	11	11	2		1			0	1		0	0		1	12	11	13
	Video Calls	3	2	0	1	2	5	3		0	2	3	3	3	4	5	12	11	13
	Texting	8	5	9			1		2	0	2	2	0	2	2	3	12	11	13
	Social Media	9	5	4			1			1		1	2	3	5	5	12	11	13
	Photos	8	3	1		4	6	1	1	0		2	1	3	1	5	12	11	13
	Acquisition of goods/services	2	1	0	3		2	3		2		1	4	4	9	5	12	11	13
Browsing	8	3	7		1	4	1	1	1	1		0	2	6	1	12	11	13	
Other																			
Trust		Very Easy			Easy			Attainable			Hard			Very Hard/N.A.					
	I find trusting someone selling/providing something on-line		1	0	1	2	3	4	1	8	5	3	0	2	4	2	12	11	13

Fig 6. Questionnaire results on individual ICT habits for NL, PT and DK

ICT Habits						
N.A. = not applicable, no answer						
		Daily	Weekly	Monthly	Rarely	Never/N.A.
Computer usage	I use my computer	27	1	1	1	6
	I run into problems/require help to use the computer	4	1	3	14	14
		Daily	Weekly	Monthly	Rarely	Never/N.A.
E-mail	I send e-mail	19	7	1	3	6
		Very Easy	Easy	Attainable	Hard	Very Hard/N.A.
	I consider sending e-mails	19	5	3	2	7
		Daily	Weekly	Monthly	Rarely	Never/N.A.
Internet Browsing	I find information on the internet	19	7	0	1	9
	I require help to find information on-line	2	1	0	11	22
		Daily	Weekly	Monthly	Rarely	Never/N.A.
ICT Help	My family members/children/grandchildren help me with the use of ICT	2	1	5	19	9
	I get professional help with the use of ICT	1	1	0	14	20
		Yes	No/N.A.			
Phone / Smart phone	My current phone has a keypad	13	23			
		iPhone	Android	Windows	Other/N.A.	
	My phone is a(n)	14	12	0	10	
		Daily	Weekly	Monthly	Rarely	Never/N.A.
Apps	I use apps on my phone	22	0	0	1	10
		Very Easy	Easy	Attainable	Hard	Very Hard/N.A.
	I consider adding new apps on my phone	14	4	4	5	9
		Daily	Weekly	Monthly	Rarely	Never/N.A.
Main usage of my PC/Smart phone	Phone Calls	31	3	0	1	1
	Video Calls	5	8	3	8	12
	Texting	22	1	2	4	7
	Social Media	18	1	1	3	13
	Photos	12	10	2	3	9
	Acquisition of goods/services	3	5	5	5	18
	Browsing	18	5	3	1	9
	Other	0	0	0	0	0
		Very Easy	Easy	Attainable	Hard	Very Hard/N.A.
Trust	I find trusting someone selling/providing something on-line	1	6	13	8	8

Fig 7. Combined questionnaire results on ICT habits NL, PT, DK

Relevant for GtG was the usage of (GtG) apps: 22 persons (61%) indicated to use apps, and 50% indicated to find adding new apps on their phone (very) easy, see Fig 8. This again indicates good ICT literacy, but not for all elderly. ICT help by family or professionals appeared not easily available and scarce, which implies that some kind of helpdesk in relation to using the GtG platform and service would probably be welcome.

The question about trust shows that less than 20% felt it easy to trust someone selling something online, see Fig 8. This implies that for GtG to be used it would probably be helpful to tap into channels that already have built up trust.

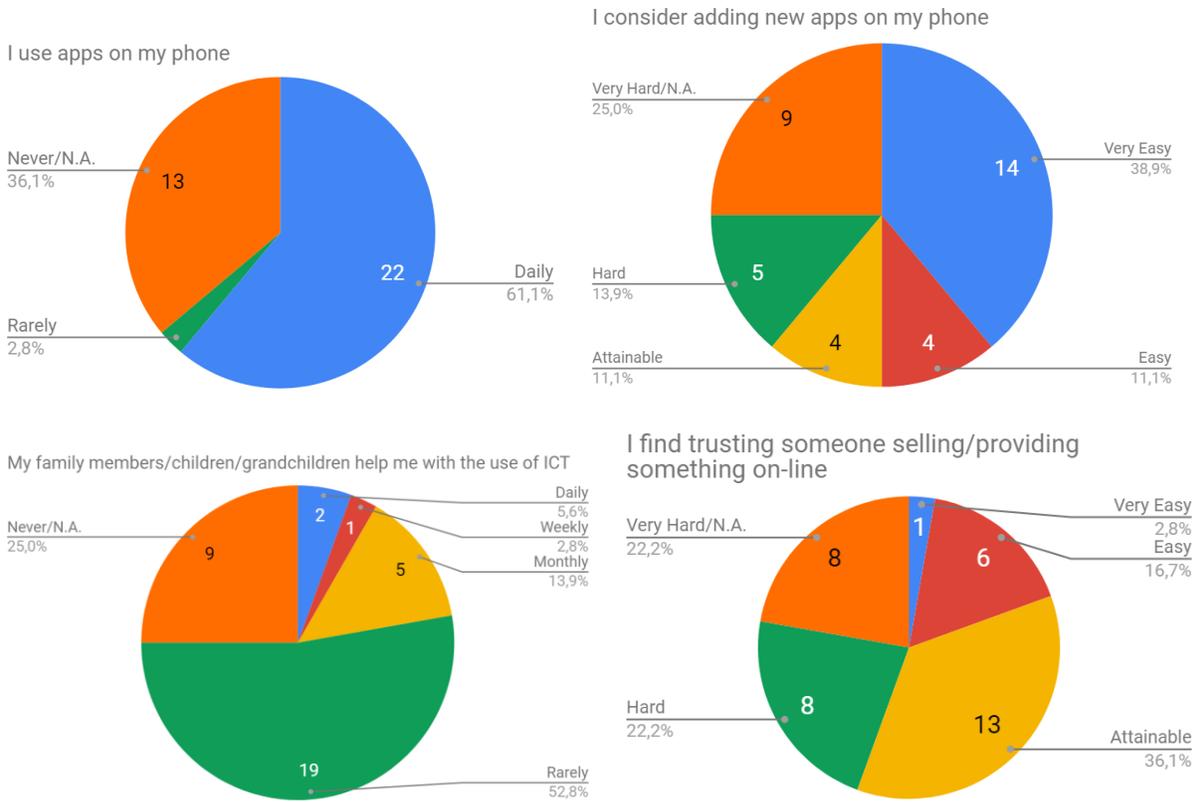


Fig 8. Pie Charts of the combined results for 4 selected questions on ICT habits

Based on these results we decided to not include the potential GtG User in any online interaction. Similarly, not every potential GtG Helper will be fully ICT ready, something to be taken along in the development of the GtG service and strategy.

## 7 Collective results and conclusions GtG

Based on and combining the (wealth of) regional results and conclusions obtained in Denmark, Portugal and The Netherlands, this chapter attempts to draw overall conclusions and lessons on the GtG model and concept in terms of

- Customer profiles (User, Helper, Giver)
- (Top) identified needs and tasks
- Value proposition map GtG service

The results concern those from:

- Workshop 1 (co-creation session around GtG concept, reported in D2.1),
- Pilot 1 (testing end-to-end GtG task with User and Helper (reported in D2.1 and D2.2)
- Workshop 2 (testing prototype of GtG app with 'Helpers', reported above in D2.2),
- Evolving discussions on the GtG concept

Based on this information and that of D1.1 (Market Research on Stakeholders) we shall be able to produce D1.2, Business Strategy, including a filled out business model canvas.

### 7.1 Assumptions and questions

In our original proposal we formulated a range of questions to be answered in the project. We here repeat these questions about the GtG User, GtG Helper and GtG Giver in the GtG model:

#### User

- What categories of help should we include in the service?
- What is the right balance between practical tasks (garden jobs, repair, transport, etc.) and social tasks (strolls, cook and share a meal, joint shopping etc.)?
- How can we empower the elderly to use the service?
- Would users accept gifts from their social environment (family, neighbours etc.) as a means to reward potential Helpers?
- How do we secure trust in the Helpers on our platform?
- 

#### Helper

- What is the typical persona that we can recruit with our intrinsic/ extrinsic reward system?
- What motivational effects do different types and sizes of gift cards create?
- For which type of tasks is the interest sufficient to establish a critical mass to successfully launch and finance the Gift-to-Gift platform?
- Would Helpers need a detailed understanding of the service required in order to sign up for a specific 'job' (i.e. time needed, distance to and from User, materials and equipment needed etc.)?
- What should requirements and sign-up process include?
- In case of an 'accident' while performing the task, who would be liable for any damages? Would this be covered by a liability insurance policy?

## Giver

- Are people who have possible Users in their social circle (family, neighbours etc.) and cannot help themselves (because of distance, time constraints, lack of knowledge/skills etc.) prepared to pay for a gift voucher?
- If yes, are they prepared to use the Gift-to-Gift platform to find and match with possible Helpers?
- How much would they be prepared to pay for a gift voucher to reward the Helper for his or her time and effort?
- Where would they look for a service that can assist them in finding Helpers who are qualified to perform the required task/ job?
- What information about the Helper would they need in order to be confident about the trustworthiness of the Helper(s)?

Without going into detail on all these assumptions, below we list the main co-creation conclusions. The co-creation activities have helped us to both determine that the GtG service idea is worthwhile pursuing further and to design it in line with end user's needs.

## 7.2 Conclusions on GtG customer profiles

### 7.2.1 Conclusions on GtG User

See also Fig 9 and Table 1 below for customer profile

Lessons learned on User persona:

- Typical User is living alone (or has a vulnerable partner at home) and is often an older elderly, no longer able to perform certain tasks or join certain activities. Older older adults often have a smaller local network than younger older adults.
- (Almost) nobody wants to be a User (importance of GtG Giver to reach User, right framing needed)
- However, in the actual experience (visiting a museum) in pilot 1 we had a very happy User (importance of experiencing GtG benefits)!
- Users are not typically used to using technology/ ICT (refrain from online interaction)
- Helpers can very well be Users and vice versa (they may well share similar gains and pains, see Table 1)
- Younger elderly (with partner) especially mentioned to have heavy tasks to be taken care of, which an (elderly) Helper can perhaps no longer perform?
- (Younger older adults often had a partner and were able to take care of their own tasks together/ themselves)

## 7.2.2 Conclusions on GtG Helper

See also Fig 9 and Table 1 below for customer profile

Lessons learned on Helper persona:

- Most respondents like to see themselves as 'Helpers'
- A Helper can be single or in a relation
- Helper typically does not wish to receive anything (tangible) in return (competition with volunteering, reason to not promote 'earning GtG points', look for partner as it is a challenge to recruit GtG Helpers)
- Helper can be very technology savvy, but can also be not used to using technology at all (need for helpdesk)

One thing our research seems to have failed, is testing whether a certain type of Helpers could be attracted through GtG points. We think our recruitment through existing volunteer networks (in Denmark and The Netherlands) might have skewed the response /respondents.

Segments	GtG User	GtG Helper
<b>Gain</b>	<ul style="list-style-type: none"> <li>• Quality of Life</li> <li>• Activity</li> <li>• Companionship</li> <li>• Recognition</li> </ul>	<ul style="list-style-type: none"> <li>• Quality of Life</li> <li>• Activity</li> <li>• Companionship</li> <li>• Recognition/ feeling of being useful</li> <li>• Keep using and sharing skills and expertise</li> <li>• Earn GtG points...</li> </ul>
<b>Pain</b>	<ul style="list-style-type: none"> <li>• Loneliness</li> <li>• Monotony/ boredom/ lack of stimulation</li> <li>• Feeling of being of no use to someone</li> <li>• Being unable to do what you want/ need</li> <li>• Not able to fulfill / feed intellectual interests</li> </ul>	<ul style="list-style-type: none"> <li>• Loneliness...</li> <li>• Monotony/ boredom/ lack of stimulation...</li> <li>• Feeling of being of no use to someone</li> </ul>

Table 1. General customer profiles (pains and gains) of GtG Users and GtG Helpers



- Givers were responding better on a campaign framing the service as a way to “make someone happy” as compared to another angle that was more focused on “help someone without lifting a finger”

## 7.3 Conclusions on identified GtG needs and tasks

We were able to collect a number of needs and tasks in the co-creation sessions in the three countries. Many practical tasks (that can no longer be done by User) were mentioned, with gardening as one of the top tasks. In addition, we identified that the importance of social interaction and company, for ‘experiences’ (that concern QoL) is very high. We expect that also practical tasks, when carried out, can provide interesting social support and connections. Tasks can be divided into tasks that can be done together with the User or should be done by the Helper only, e.g. running errands such as getting groceries, walking the dog.

Looking at the needs and tasks collected in the three countries, we identified three main categories, each with three sub categories (with possible overlap, see also D1.2 Business strategy) :

### 1. Handyman

- Tools
- Hands
- Green hands

### 2. Visits/ entertainment (at home)

- Storytelling
- Memories
- Hobbies and games

### 3. Companionship (out of home)

- Culture
- Nature
- Activities

While many of the tasks and needs were encountered in all three regions, some regional nuances were detected (for which the GtG platform would need to cater):

E.g. in the Netherlands many (commercial and care related) services for transport exist, while this was a really interesting need in (rural) DK and PT.

Needs related to religion, such as going to church together, were mentioned in DK and PT, but not in NL.

There were many needs mentioned in relation to IT support, however this may raise privacy/ security issues and needs to be investigated further.

## 7.4 Conclusions on GtG service and mechanism

### General feedback on concept

- It takes people a while to understand the concept, especially the gift card aspect. We believe that this is because of the novelty of the concept, getting something done with the help of a gift card.
- When the seniors get the GtG concept (with the help of the prototype) they do understand and like it
- User personas do not like the idea of being helped, so the gift card aspect (Giver role) is found very interesting/ attractive
- People recognize and confirm that it is hard to think of a present for an elderly person, and like the idea of a gift card

We have learned that GtG must be targeted towards the User - even when Giver buys the gift card - as the Users do not want to be patronized or talked down to as somebody who needs help to improve a 'lesser' Quality of Life.

We also wish to frame the GtG service as something that makes everybody happy, and is not about being vulnerable, lonely or anything negative.

### Feedback on Digital process

This has to be user friendly. During the project, we got the insight, that Users might be very limited in terms of Digital Readiness - thus forcing us to rethink the activation process, so the "digital" load on the user could be as low as possible. During the project, we "pivoted" the process, so only "Givers" and "Helpers" need to use web-pages (shop for gift cards) or apps (Helper task allocation/registration) for the mechanism to work.

The many 'blank' answers in our questionnaires (grouped with Never in 'Never/N.A.') suggest that the seniors - Users and Helpers alike - may also not be equipped to understand the technical lingo associated with ICT. This shines a light on the need to choose wording very carefully when addressing these user groups, while still not 'talking down' to them. On a psychological level there's a point to be made: when confronted with terminology that seem foreign and difficult to understand, the seniors may very well experience emotions of irritation or anxiousness. These emotions relate to sadness at growing old, irritation with own functionalities slowing down, or to a heightened awareness that they are no longer 'able to keep up'. In a questionnaire, this may cause them to skip questions. But in a situation where they are to sign up to the GtG platform, we do not want to push them away, and thus need to be very aware of not causing these emotions.

Considering that the Giver can live anywhere, i.e. not in the area where GtG is being implemented and building a Helper base, it appears that the GtG gift card is (at the start) best accessed and sold online, with the option to print out a pdf.

### **Feedback on Trust and security**

Screening of Helpers was discussed in detail in workshops as well as within the consortium, with many suggestions collected to gain trust

- Screen for skills (how?) as well as trustworthiness
- Some kind of intake, approval of a Helper e.g. after online registration
- Collect User/ Giver satisfaction and/ or feedback, references, recommendations (many examples of this exist, e.g. Uber, Booking.com)
- Create GtG identification...
- (Video) calling before User meeting Helper
- Present picture of Helpers
- A declaration of good behaviour was found too much to ask, because we also want to make it easy for Helpers to join.
- Agree on a code of conduct (to include in registration process?).

In the end the GtG service is a matchmaker, the agreement is between the User and Helper - and the Helpers are -compare Uber model- responsible for their own behaviour. Liability is not with the GtG organisation. GtG is not an employer (or bank). This needs further research though; we aim to involve a consultant to look into legal and tax issues related to gift card business model.

The specific channel(s) used can be very important to gain trust, e.g. City of Almere or ANBO in The Netherlands, DanAge (Ældresagen) in Denmark or Cruz Vermelha in Portugal. Quite possibly it is important to make sure that success-stories are reported in local news, because trust also comes from someone nearby having had a positive experience with the service.

### **Feedback on Valuing tasks**

We discussed the various ways to value the tasks / gift cards. No task is the same, how to deal with varying demands and wishes in a doable, flexible way?

Should we take into account the duration of the task, the difficulty of the task, the money spent?

What if a task itself costs money, e.g. an outdoor lunch, a car ride, a museum visit?

These are interesting questions and many examples and models to look into exist.

Shall we introduce our own coins, points, tokens: GtGs?

We agreed that we really wish the value proposition of the GtG service to not be about making money, but all about a token of appreciation. Meaning that it is a social undertaking, not an economic.

The GtG service takes away the need to give something back when someone has helped you.

### **Feedback on Partners and channels**

Association with trusted organisations/partners will help with the need for trust associated with the GtG concept. Also, existing organisations can help lower distribution costs and they have access to "markets" (Users, Helpers AND Givers). For the organisations, on the other hand, we

find that GtG can provide new means of activation/activating their members or a means of getting new ones.

Recruiting Helpers amongst people already volunteering for free has been found difficult; people already volunteering for free, feel that it is unnecessary or even wrong to get something (even though a small appreciation) for helping others. We have found, though, that there are potential Helpers that need this little push to get motivated (like the “Rema” gig-economy shopping solutions mentioned in D2.1).