

#### **Document History**

Revision	Date	Author	Organisation	Description
Creation 0.1	18.03.2014	Péter Molnár	Kecelcom	Initial research report unformatted content
Revision and for- matting	19.03.2014	Attila Birócsák	Kecelcom	

#### **Statement of Originality**

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

# **Table of content**

1	Research evaluation	2
2	Possible motifs of interest expressed by potential customers	5
3	Preliminary preconceptions that influence customer's decision	7
4	TARGET GROUP DESCRIPTION, FIRST APPROACH - HUNGARY	10
5	TARGET GROUP DESCRIPTION, FIRST APPROACH – SWITZERLAND	11

## **List of Figures**

## **List of Tables**

Table 2: Rate the following factors in terms of their importance when you think about whether or not to purchase an assistive device or technology! Strongly disagree (1) or strongly agree (5) with the statement about factors in purchasing, pct of respondents, mean; Switzerland (N=44), Hungary (N=85)

### 1 Research evaluation

#### Interest in HELASCOL platform

When interpreting the collected data, one must be aware of the fact that during data collection the respondents *could not gain direct experiences* about the product to be launched as they could not see, touch or watch it work. As a result, their imagination was highly necessary to assess interest in and form an opinion about the product.

The questionnaire itself supported them in shaping their opinions and making real decisions. The series of questions began with more general and indirect issues, while the more concrete ones on self-provision or social nexus and interest in developed medication and hi-tech devices came later. As a result, by the time they got questions about the product, they had not difficulty finding out what that was. Obviously, some had already realized that the questions were centered on some sort of info-communications service.

Before the last phase of data collection started, the following product description related to the HELASCOL project was read out to the interviewees:

"Developers are currently working on a digital device aimed specifically for ageing users that technically would be similar to a mobile phone or the teletext of the television, and includes features that we have already been talking about. Let me just name a few again: videochat with friends or relatives; provides booking opportunities; remind the user of the timing of medicines' intake; contains quiz games; helps maintaining and improving the user's mental and physical fitness; enables its' user to keep in touch 24/7; it can autonomously make emergency calls when needed and on top of that, the device runs these features in an electricity saving way that is environment friendly. Let me ask you whether in case this device gets into the shops, would you consider purchasing it?"

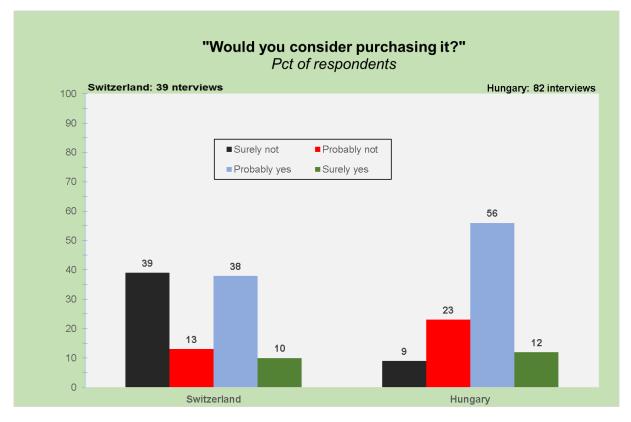
During the interviews, we asked the question whether they would buy the product based on their knowledge gained so far. However, because of the aforementioned factors (e.g. lack of direct experiences), the answers are to be interpreted more as expressing their interest in the product – in other words, whether they would be open to receiving further information on it, to what extent they could be convinced – than decisions of potential customers.

Even by taking into consideration the reservations about the methodology employed during data collection, we can state that the elderly citizens of the two countries - based on the information available to them – show different interest in the product/service developed in the framework of the HELASCOL project.

In both countries, only few were fully convinced by the product/concept. About 10% of the respondents said they would surely purchase that if given the opportunity. Surveys focusing on customers/consumer's decision-making mechanisms usually stress the fundamental role of personal experiences, and so the number of those promising a positive decision could not be much higher. Knowing that, an answer indicating one would *probably* buy the HELASCOL

device can be considered more valuable than in other cases: 56% of the Hungarian respondents and only 38% of the Swiss ones said so. That the Swiss might be slightly more reserved can be detected by the fact that the proportion of negative responses was higher there: 38% of the Swiss interviewees said they would not purchase the product described during the conversation, while the corresponding figure was 9% in Hungary.

All in all, we can state that considering the lack of relevant information (e.g. the price), the majority of the 60+ Hungarian interviewees probably would be principally open to buying the product (68% said so), while the Swiss ones might be much more divided (52% responded negatively).



As indicated by the findings of the survey, the extent of the Swiss and Hungarian elderlies' interest in the HELASCOL platform can be different:

- two-thirds of the Hungarian respondents mentioned that they might use the platform's services, while
- half of the Swiss ones were found open to and the other half rejecting the idea

Based on the information gained during the survey, for the majority of the respondents – the Hungarian ones in particular – the HELASCOL platform appeared as a product the services of which could be revealed especially when used in the company of others, during shared or community use.

The possible demands the platform's modules respond to were less important for the Swiss interviewees, while the rates indicating the Hungarian respondents' interest were higher for all relevant demands. In Hungary, the expectations that can be considered dominant were related to maintaining community contacts and the frequency and costs of that.

The social network of the Hungarian sub-sample can be better described with contact frequency and less with contact characteristics. It is of lesser importance whether the pensioners are in contact with relatives or acquaintances as it is more contact frequency what counts. Taking into consideration that elderly interviewees were involved in the survey, it is understandable that the number of contacted persons is more an explanatory aspect than the type of the relationship.

On average, the Swiss respondents mentioned ca. CHF 700 and the Hungarian ones ca. HUF 38,000 as fair price they would purchase the HELASCOL platform's services at, on the basis of the information gained during the interviews.

Among the Hungarian respondents those would be willing to pay a higher price who consider it especially important that with the help of a supportive device they could easily organize events or join others' social events, and those who would like to be reminded when to take medicine. Among the Hungarian interviewees, those would be ready to pay a higher price for the HELASCOL services who nurture their friendly contacts on a daily basis and meet their relatives or a weekly or at least a monthly basis.

If we only take contact frequency into consideration, the target group can be defined. Interest in the device is increased if one lives in marriage, partnership or together with other relatives. The target group can be characterised by either rare (monthly or even less frequent) or approximately weekly contacts. Slightly contradicting the survey's original hypothesis, those who are not in need of continuous therapy and treatment showed more intense interest in the product.

## 2 Possible motifs of interest expressed by potential customers

The results of the present survey – even considering the validity of the data collection method employed – indicate that the HELASCOL platform soon entering the final development phase might attract great interest even among a higher number of 60+ people. Primarily, the high proportion of those Hungarians showing potential interest can be regarded as a positive outcome, but no firm rejection could be detected with the – sometimes less unfavorable – results measured in Switzerland either.

When trying to reveal the motifs behind the slightly more rejecting Swiss attitude, we can mention that the demands for the offered services were a bit lower. That could be explained by the difference in the attributed importance of features but also that the Swiss respondents in many cases already had sufficient solutions to the existing demands.

To complete a slightly more detailed analysis, it is only the element number of the Hungary database that provides an opportunity. As a result, the demand groups dividable by the different motivation in interest could be formed on the basis of the demands and expectations of the potential Hungarian customers. Generally speaking, the extent of interest in any service is primarily formulated by the way the offered features meet the target group's demands. Certainly, members of a target group might live under highly different circumstances, and so they can have various individual expectations. Still, in many cases similar starting points can be detected in their decision-making logic when studying their expectations.

During the course of the present survey, the population members could express their opinions on various potential expectations. To reveal similarities in the mind-sets deductible from the average scores we again employed a multidimensional analytical method (factor analysis). Certainly, the present survey cannot estimate the scope of dominant approach forms. However, knowing the different dominant customer's expectation schemes can efficiently help the marketing communication messages become more targeted.

Among the observed target groups there might be smaller or larger overlaps, but our findings indicate that the demands of the potential customers can be approached from three different directions:

**A. expectation group**: Slightly more than one quarter of the Hungarian respondents expect a device assisting the elderly to offer practical solutions that are home-based, economical and resulting in easier every days and a more comfortable lifestyle.

**B. expectation group:** as far as the Hungarian respondents are concerned, a similar proportion of them would find attractive the potentials of digital communication. The majority of this group interpreted the potentials of the HELASCOL platform similarly to that of the mobile phone, and the videophone feature especially attracted their interest. They primarily opted for solutions that support contact maintenance and social networking at lower costs.

**C. expectation group:** although it only applies to a small fraction (ca. one-tenth) of the sample group, but that fraction of the 60/60+ Hungarian citizens showed real interest in gaming or recreational features of the described device.

Judgment factors of device's features pct of respondents				
	<ul> <li>Videophone, one fourth of respondent</li> <li>We could see each other on a screen besides 'just' talking to each other</li> <li>I could make this call for free or cheaper than usual</li> <li>I could see some of the most recent photos of my relatives on its screen</li> <li>I could organize or just join to different social community events</li> <li>I could reach my relatives and friends easily</li> </ul>			
	Games, <i>tenth of respondents</i> • I could write, share some of my biographical stories with other people • I could get new electronic quiz games right away anytime I want • I could be able to choose different difficulty levels of the quiz games • I could be able to play live with others that are not presentphysically • I could be able to train my brain and maintain my memory with quiz games			
	Practical, <i>quater of respondents</i> • Emergency situations could be detected and emergency calls could be initiated automatically, in some health-related danger • I could remotely control some other electronic household devices • Could the device itself, as well as the other devices I can control with it remotely, be controllable even with my uttered word or two. • I could keep my energy costs on the necessary minimum			

## 3 Preliminary preconceptions that influence customer's decision

The data collected about the platform's modules indicate that these separately and as a whole met less the Swiss elderlies' demands and expectations than that of the Hungarian 60+ respondents. The results seem clear also in the respect that interest in the HELASCOL platform was found more intense with the Hungarian group, probably because of the type and attributed importance of the services.

When the respondents were asked to mention information bits on the basis of which they would feel that the platform actually assists them and it would be worth purchasing, the tendencies formulated by the responses again prove that – at least knowing the information in the questionnaire – the Swiss elderlies felt less attracted to the platform's services.

For the Swiss respondents, only the statement "the device could improve their daily activities" seemed more or less acceptable (3,7). With the Hungarian ones, the statement "it would make me feel more secure" (4,1) was accepted in general, alongside the options "the device is suggested by a physician or other professionals" (3,9) and "the device is suggested by my family or by my caregiver" (3,8) that could increase the chance of a positive customer's decision.

Table 1: To what extent are you influenced by the below statements in relation with the use of the platform? You strongly disagree (1) or strongly agree (5) with the statement about these features, mean; Switzerland (N=44), Hungary (N=85)

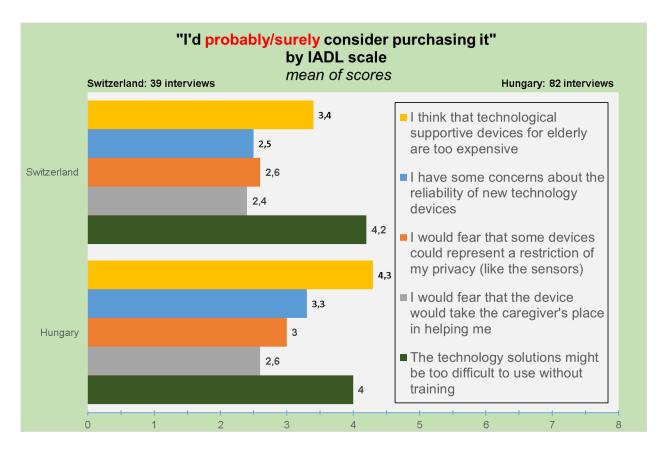
	Switzerland	Hungary
the device could really improve my daily activities	3,7	3,7
the device could help the caregiver's work	3,2	2,9
the device could implement my efficacy in managing the envi- ronment	3,2	3,6
the use of the device is suggested by a physician or other pro- fessionals	3,4	3,9
the use of the device is suggested by my family or by my care- giver	3,3	3,8
I will feel more secure in my home when I am alone	3,4	4,1

Earlier we wanted to know what primary product features could be best applicable to raise potential customers' interest in the HELASCOL platform. The next step was just the opposite, namely what ideas related to the device could be considered counter-arguments to purchase. We again came up with statements, information bits that could negatively influence the chance of interest or the willingness to purchase the product. The respondents had to express their views (whether they agreed or not) on a scale similar to school grades.

The average values of the responses indicate that the vast majority of the Swiss interviewees could especially identify with one counter-argument, while two were found dominant with the Hungarian group. The majority of both groups found it likely that the service now known (imagined) would require operational skills that were difficult to acquire (4,2).

Views that indicate that special knowledge and skills are necessary to operate the HELASCOL platform properly and to acquire these one should follow a training constitute a strong negative preconception that might affect future potential customers' decisions. Already in the introductory communication related to the product stressing the positive information bits can be of special importance.

Furthermore, another negative attitude might influence the Hungarian respondents' interest even more than that. With the Hungarian group, the statement on the very expensive technological devices assisting the elderly was seen as the most dominant. On the Hungarian market (though its seems more open to the product) one must take into consideration that many of the potential customers do not feel involved by the product when hearing about it as already on the basis of a few product characteristics they will think the price would be too high for them.



The negative expectations for the simple use and high price of the technology assisting the elderly are especially important in the light of the (subjective) aspects and priorities of customer's decision-making. For the Swiss respondents, simple use was mentioned as a key factor (4,7), and that proved dominant also in Hungary (4,7).

The Hungarian respondents mentioned the price of the product as the most important factor to consider, together with the durability of technical devices necessary to operate the service (4,8). Another important factor was whether social allowance and state subsidy could be expected when purchasing the product.

Table 2: Rate the following factors in terms of their importance when you think about whether or not to purchase an assistive device or technology! Strongly disagree (1) or strongly agree (5) with the statement about factors in purchasing, pct of respondents, mean; Switzerland (N=44), Hungary (N=85)

Tactors in purchasing, pet of respondents, mean, switzenand (N-44), hungary (N-65)				
	Switzerland	Hungary		
State of your health	4,1	4,1		
Ease of use of the device	4,7	4,7		
Device's cost	4	4,8		
Level of comfort with technology	3,9	4,4		
Whether insurance scheme will pay for part or all of The	4,1	4,7		
cost		,		
Aesthetic appearance of the device	2,8	3		
Durability of the device	4,3	4,8		
Easiness of buy/availability	3,6	4,4		
Recommendation from your physician	3,4	4,1		
How adequate and how much support you receive from caregivers	3,6	3,6		

# 4 TARGET GROUP DESCRIPTION, FIRST APPROACH - HUNGARY

- males and females alike
- characteristically, ones with secondary or higher education
- mainly around 60-70 years of age
- do not live alone (but with a spouse or family member, characteristically)
- rarely are at home alone

#### I suggest to change these two points with "live independently, with or without spouses".

#### See D3.3 Multi-modal UI Specified\_08 page 17

The results of the Ethnography Enquiry results and analysis (5.1) were significantly different for the Swiss and the Hungarian target group. The key difference in the two groups was their independece, and self-reliance. The Swiss group lives in assisted care homes, the Hungarian seniors lived independently, with or without spouses.

- know and use at least on average everyday digital devices
- can use their mobile phones/smartphones at a level above the average
- are in an average or better state of health
- household chores take ca. 25% of their time
- Motivation behind their interest 1: information related to services supporting a more comfortable life, responding to practical, everyday problems
- Motivation behind their interest 2: information related to digital communications, interactive services, at a favourable price
- Motivation behind their interest 3: services supporting leisure time and recreational activities, information related to games and services increasing intellectual capacity
- Key concepts of their interest: skill development, increasing personal security, professional recommendations, suggestions by friends, acquaintances and family members
- Main reservations about the product: difficult to learn operation, probably expensive if provides good services
- Priority aspect of the customer's decision: product price, durability, easy operation, whether price subsidy is available

## 5 TARGET GROUP DESCRIPTION, FIRST APPROACH – SWITZERLAND

- rather males
- rather ones with higher education
- mainly 60-70 years of age
- do not live alone (characteristically with a partner or family member)

I suggest to change with "live in assisted care homes".

#### See D3.3 Multi-modal UI Specified\_08 page 17

The results of the Ethnography Enquiry results and analysis (5.1) were significantly different for the Swiss and the Hungarian target group. The key difference in the two groups was their independece, and self-reliance. The Swiss group lives in assisted care homes, the Hungarian seniors lived independently, with or without spouses.

- can use everyday digital devices at a level above the average
- can use the services of the mobile phone/smartphone at least at an average level
- above-average self-care skills (IADL index)
- household chores take ca. 10% of their time
- watch much TV, Internet, phone
- Key concepts of their interest: skill development
- Main reservations about the product: difficult to learn operation
- Priority aspect of the customer's decision: easy operation