

Community & Collaboration

TAO Project Deliverable 4.2

Exploratory Studies: Beginning Users 60 plus & Volunteers

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Contents

1	Introd	uction	11				
	1.1 Ove	Overview of the Deliverable					
	1.2 Cor	2 Connections to other Deliverables					
	1.3 Val	ue Added by the Project TAO	12				
2	Prelin	ninary Study Beginning Users 60plus	14				
	2.1 Onl	ine Communities and the Activation, Motivation and Integration of Persons Aged	60 and				
	Older: A	Literature Review	14				
	2.1.1	Introduction	14				
	2.1.2	Older Adults' Use and Non-Use of the Internet	14				
	2.1.3	Definitions of (Online) Communities	16				
	2.1.4	The Motivation to Participate in an Online Community and the Potential Ber	nefits of				
		Participation	19				
	2.1.5	Reasons for the Non-Use of Online Communities by Persons Aged 60 and Older	21				
	2.1.6	Integration, Activation and Retention of New Members	26				
	2.1.7	The Effects of Participating in an Online Community	30				
	2.1.8	Characteristics of Successful Online Communities	32				
	2.1.9	Conclusion	34				
	2.2 Hov	v Online Communities Can Make a Contribution to the Social Integration of Person	ns Aged				
	60 to 75	An Exploratory Study	36				
	2.2.1	Introduction	39				
	2.2.2	Method	41				
	2.2.3	Results	48				
	2.2.4	Conclusions	87				
	2.2.5	Recommendations	95				
	2.2.6	Final remarks	101				
3	Prelin	ninary Study on Volunteers	103				
	3.1 Vol	unteer Older Adults as Multipliers for Online Communities & Cooperation: A L	iterature				
	Review		103				
	3.1.1	Introduction	103				
	3.1.2	Definition of Terms	104				
	3.1.3	Social Importance of Voluntary Engagement	109				
	3.1.4	Significance of Voluntary Engagement for People in Their Third Age	111				
	3.1.5	Volunteering in Germany	111				

4

5

3.1.6	Volunteering in Switzerland	116			
3.1.7	Volunteering in The Netherlands	120			
3.1.8	A European Comparison of Volunteering				
3.1.9	Motivation and Self-Image of Volunteers	125			
3.1.10	Monetarization	131			
3.1.11	Volunteer Management	135			
3.1.12	Internet and Volunteer Engagement	141			
3.1.13	Findings and Research Questions	143			
3.2 Volu	nteers Study: An Empirical Exploration in the Context of TAO	146			
3.2.1	Introduction	146			
3.2.2	Focus Group during the Research Seminar in Bad Urach (February 2011)				
3.2.3	Focus Group and Interviews in the Context of "Freie Fahrt ins Internet" (Free Cru	ise on			
	the Internet)	152			
3.2.4	Individual Interviews and Focus Group of Volunteers (Instructors and Older	Adult			
	Authors) in the Context of Silberwissen	156			
3.2.5	Workshops in the Context of "Freie Fahrt ins Internet"	160			
3.2.6	Workshop of the TAO Community Partners in Bern, November 2011	162			
3.2.7	Open TAO Workshop in Ulm, 23 May 2012	165			
3.2.8	Comparison of Community Partners Concerning Voluntary Work	168			
3.2.9	Conclusions	174			
Conclu	isions and Recommendations	178			
Refere	nces	181			

Table of Figures

Figure 1 The four elements of user experience defined by Rubinoff (2004) 40
Figure 2 Three different types of online communities were included in the study 42
Figure 3 The button for registration on seniorweb.ch is easily overlooked
Figure 4 Finding a secure enough password was quite a challenge for the test participants
Figure 5 The last step of the registration process, confirming the e-mail address, was ignored by
many test participants 58
Figure 6 Test participants were trapped on this page, because they didn't see the link at the bottom.
Figure 7 As on seniorweb.ch, test participants did not see the message requiring them to confirm their
e-mail address
Figure 8 The grey box on the left was wrongly considered to be the main navigation
Figure 9 The seniorweb.ch community hides two levels below the homepage
Figure 10 Basic community features such as friendship requests and the search field for finding
friends were overlooked during the usability tests
Figure 11 Privacy settings were appreciated by test participants but hard to find and even harder to
understand
Figure 12 Getting started on Wikipedia involves a lot of reading and requires perseverance
Figure 13 Low quantity and quality as on the Diabetes forum of vitaclic.ch is a common problem of
topical online communities
Figure 14 Finding the place for adding personal data on seniorweb.ch is quite a challenge for new
users
Figure 15 Adding a picture to a blog contribution is a challenging mission on seniorweb.ch
Figure 16 Editing an article on Wikipedia requires a lot of research - for instance about relevance
criteria
Figure 17 A model of attracting and retaining (senior) community beginners
Figure 18 Actors involved in the process of developing an online community
Figure 19 Forms of voluntary engagement (Switzerland) 108
Figure 20 Social milieus by how complex/simple and how spontaneous/organized they are 110
Figure 21 Volunteer activities by age group (Germany, 1999-2009) 112
Figure 22 Areas of volunteer activities (Germany): Overall population and older adults ages 65 and
older
Figure 23 Engagement ratio by level of professional skills (2004, Germany) 115
Figure 24 Membership in clubs / formal volunteering (Switzerland 2006 and 2009) 116

Figure 25 Formal volunteering by age group and gender (Switzerland, 2007) 117
Figure 26 Informal volunteering by age group and gender (Switzerland, 2007) 117
Figure 27 Areas of informal volunteering (Switzerland, 2006 and 2009) 118
Figure 28 Motives for formal and informal volunteering (Switzerland)119
Figure 29 Time spent on volunteering (volunteers/overall population), by type of activity and gender
(Switzerland, 2007) 120
Figure 30 Amount of time spent weekly volunteering by income type (The Netherlands, 2009) 121
Figure 31 Percentage of the population and amount of time dedicated by volunteers in the
Netherlands (2001-2009) 122
Figure 32 Volunteering and informal help by age group (The Netherlands)
Figure 33 Percentage of volunteers compared to the overall population (country comparison, 2006)
Figure 34 Expectations of volunteer activities by age group (Germany, 1999-2004-2009) 126
Figure 35 Motives for volunteer activities (Germany, 2009) 127
Figure 36 Qualification needs in volunteer activities by age (Germany, 2009) 128
Figure 37 Percentage of honorary activities in Baden-Württemberg "compensated to a certain degree"
(1999/2004)
Figure 38 Percentage of honorary activities in Baden-Württemberg "compensated to a certain degree"
by field of engagement (1999/2004) 133
Figure 39 Areas of volunteer management in non-profit organizations
Figure 40 The engagement cycle of volunteers
Figure 41 Use of the Internet in volunteering by age group (Germany, 2004/2009)
Figure 42 From Familiar to New Volunteer Activities
Figure 43 Comparison of Community Partners Concerning Voluntary Work 169

Index of Tables

Table 1 A distinction of online communities according to their function	18
Table 2 User Groups and corresponding test sections	44
Table 3 Online communities included in this study according to type and function	45
Table 4 Overview of study participants	46
Table 5 Scenarios used in the first test session for intenders and hesitators	54
Table 6 Scenarios used in the second test session for intenders, hesitators and active users	75
Table 7 Overview of the Terms Used in Germany for Volunteer Activities 1	07

Executive Summary

This report presents the results of theoretical as well as empirical research on older adults' use and non-use of online communities and the roles, tasks and management of (older) volunteers in such communities. Efforts to activate, motivate and integrate older adults in the context of online communities will have to involve volunteers and can only be successful if this is done in an adequate fashion, a fact which underlines the link between the two issues treated in this report.

The first part of the report consists of the preliminary study on "Beginning users 60+", which starts out with a literature review on the motivation of older adults to participate (or not) in online communities, the benefit they may draw from it and how communities can integrate, activate and retain new older adult members. Also, the review considers what effects the participation of older adults can have on the online communities themselves. An exploratory usability study of different online communities, implemented with 18 participants aged 60 to 76, then identifies important technological and non-technological obstacles in using online communities. It also infers how online communities could become more attractive to potential users of that age group. The usability study showed that due to a lack of user guidance and insufficient explanations of functionalities, most participants encountered considerable barriers when testing the selected online communities.

In the report's second part, an exploratory study on "Volunteer Older Adults as Multipliers for Online Communities and Collaboration" examines the issues of what motivates older adults to volunteer, how they can be accompanied during their volunteer work, which roles they can play in online communities and whether volunteering contributes to general well-being in old age. These issues were firstly examined through a literature review concentrating on Germany, the Netherlands and Switzerland. A second section presents the results of empirical research focusing on the tasks, roles and the management of volunteers in the TAO community partners.

The following key conclusions and recommendations can be drawn from the research described above:

The number of older adult users is rising, but a generational gap remains. Compared to other age groups in society, the number of active older adult users and contributors to online communities remains low. In light of the fact that the use of online social media is becoming an ever more important way of social participation, the importance of bridging the generational divide in this area remains undiminished.

The value of online communities is largely created by voluntary contributions of its members. Therefore, crucial community activities, such as the contribution and sharing of user-generated content, must be as easy as possible. Good usability is at the heart of successful online communities. Online communities must come up with creative ways to reward their active contributors. The simplest way of positively reinforcing active contributions is by being responsive and providing adequate feedback. Online communities planning to engage volunteers in outreach activities need to establish an adequate management structure, which is dependent on a certain degree of professionalization.

The target group of older adults is characterized by diversity. Therefore, older adults should be addressed not as members of an age group but as individuals with specific needs, interests, desires and values. This means that organizations relying on older adult volunteers need to accommodate differential motives and needs. A logical consequence is to allow for a broad array of possible voluntary contributions with a high degree of self-selection. Online communities must appeal to their users' important personal cognitions (especially beliefs) and desires. Online communities wishing to engage older adults must allow for the establishment of trustful relationships. This can be enhanced by providing opportunities for offline meetings.

Many older adults have a greater need for user guidance when joining an online community.

Online communities striving for a higher share of older adults among their members should rigorously test their community platforms in order to identify functions that are not self-explanatory. Ideally, older adults should be involved in the design of online communities using techniques of user-centred design and co-creation.

Online communities need to activate, guide and reward the older adults in order to attract and attain them. The provision of good quality content and clear communication about the benefits of participating in the community facilitates the activation. Online communities also need to guide new users through the registration and other initial processes, to help them achieve a satisfactory first user experience. In addition, as it is crucial for new users to be rewarded for their first efforts, online communities should ensure that they send an encouraging feedback as soon as possible.

Activation and integration of older adults can be seen as a process of social persuasion. The goal of this process is to create "cognitive dissonance" between non-participation in an online community and important personal attitudes and cognitions. Participation in an online community must become a personally relevant activity fitting in well with other important attitudes and beliefs. Online communities should demonstrate to older adult users how participation is relevant and safe for them.

The long-term effects on older adults of participation in online communities are unclear. Randomized controlled intervention studies have not been able to prove that Internet use has positive effects on cognitive functioning, autonomy, well-being and the social network of older adults. These results, however, call for further research and cannot be called definitive.

1 Introduction

How do and how could older adults relate to online communities? What effects would the integration have on older adults themselves and on the concerned communities?

The present deliverable (D 4.2) describes research aimed at answering these and other key questions of the project TAO, considering them from different angles. It focuses on the findings of two complementary exploratory studies within the TAO-project about older persons (60+) and online communities. The exploratory study "Beginning users 60plus heads off with a literature review about older adults and the use of online communities and illustrates how older persons can be activated for the participation in such communities. This is followed by a usability study, which identifies technological and non-technological obstacles for older persons in using online communities. The second part of this report consists of a literature study on voluntary work characterizing older adult volunteering in general, and, more specifically, in online communities.

What is the connection between the topic of online communities and that of voluntarism?

At the heart of most communities we find a group of deeply committed persons who invest time and energy without being on anybody's payroll. While it may be easier to observe this phenomenon in offline communities it is just as present in online communities. Most online communities could not exist without the work being carried out by volunteers. This is why it is important to connect the topic of older adults and online communities with the topic of voluntarism. Efforts to activate, motivate and integrate older adults in the context of online communities will have to involve volunteers and can only be successful if they address volunteers in an adequate fashion. This knowledge is especially relevant and useful within the context of TAO, since older adult volunteers are the main driving force behind many TAO activities to bring older adults and online communities closer together.

1.1 Overview of the Deliverable

The project TAO focuses on making online communities more attractive to older adults, and on encouraging this older target group to actively engage in such communities. Therefore, TAO aims to facilitate the introduction of older adults to online communities, and to help them with their first steps as active users. This process of rapprochement between older adults and online communities has been studied on various complementing levels: first through a study of the scientific literature on older persons and online communities; second, through a usability study on their motivations and hindrances; and third, through a literature study on older adults and volunteer work, also in the realm of online communities.

The exploratory study "Beginning users 60plus" clarifies the definition of online communities, suggests motivations of older persons to participate in online communities as well as reasons not to participate,

demonstrates how new members can be integrated and kept in an online community and lists the possible effects of participation in such communities for older adults.

After presenting the state of the art concerning these topics, the empirical part of the study illustrates how online communities could be more attractive for potential users of that age group. A usability study involving various online communities (Facebook.com, Seniorweb.ch, de.wikipedia.org) was conducted to identify the possible (technological and non-technological) hindrances for older adults to join online communities. The results are placed in a larger context and practice-oriented recommendations are made.

The third part of this deliverable focuses on the findings of a literature review on older adult volunteers and their possible role in the realm of online communities. This review aims to clarify what motivates older adults to volunteer, how they can be accompanied during their volunteer work, which roles they play in online communities and whether volunteering contributes to older adults' general well-being. Since many of the TAO activities adults, are organized and carried out by volunteers, the best practices from this literature review were highly useful for the conception and implementation of the TAO activities.

In conclusion, this deliverable aims to provide insights into various aspects of the central theme of older adults and online communities: how older persons can be activated to use online communities and to contribute to them, what their motivations and hindrances are in that respect, and under what circumstances older adults may want to volunteer and assist their peers with their first steps in the use of online communities.

1.2 Connections to other Deliverables

Deliverable 4.2 provides important material for the TAO handbook (deliverables 4.3 a and 4.3 b). The preliminary studies on beginning users 60 plus and on volunteers in the context of online communities informed the strategies chosen in the exploration and multiplication phase of the subproject 4 (action research; deliverable 4.1). Important material was also provided for the design of the TAO survey (deliverable 5.1). Moreover, deliverable 4.2 is an important backdrop against which the impact analysis can be carried out (subproject 5).

1.3 Value Added by the Project TAO

All of the research activities described in this deliverable took place within the frame of TAO and were financed from the project budget.

Desktop research was carried out to arrive at the two literature reviews on 1) online communities and the activation, motivation and integration of persons aged 60plus and 2) older adult volunteers as multiplicators for online communities and collaboration. On both of these topics empirical research was carried out as well: BUAS collaborated with Zeix on an exploratory study examining how online

communities can contribute to the social integration of persons 60plus. ZAWiW conducted the literature study. BUAS and ZAWiW jointly implemented the empirical studies. The main value added by the project TAO lies in highlighting the particular importance of voluntary work in the context of activation, motivation and integration of older adults in the context of online communities and in demonstrating in concrete detail the opportunities and pitfalls of online communities when used by older adults.

2 Preliminary Study Beginning Users 60plus

2.1 Online Communities and the Activation, Motivation and Integration of Persons Aged 60 and Older: A Literature Review

2.1.1 Introduction

The TAO project aims at facilitating and promoting access of older persons and persons in early retirement to online social communities and online collaboration projects. The project's foremost objective is to bring about a win-win-win-situation: Older persons are expected to profit in terms of social and human capital (health and well-being, but also skills and know-ledge), improved possibilities for online activities, and a larger array of online content which is targeted at their needs. Existing online communities are expected to profit in terms of in-creased participation as well as in terms of a qualitative improvement of their products and/or their social interactions. And finally, society as a whole is to profit from improved social and human capital among older persons, from improved inter-generational relations as well as from the expected boost in "open" production and the creation of new opportunities for older persons to put their knowledge and rich life experience to use.

The aim of this paper is to give an overview of the relevant literature on the use and non-use of online communities by persons aged 60 and above and to learn about effective strategies of activation, motivation, and integration of older persons in this context. Starting with a brief overview of older adults' current usage of the internet and online communities (chapter 2.1.2) we will secondly discuss the term community and definitions of online communities in order to arrive at a differential perspective of online communities according to their function (chapter 2.1.3). This will be followed by a discussion of motivational aspects of participation in online communities and potential benefits of such participation (chapter 2.1.4). Chapter 2.1.5 deals with the reasons for non-use of online communities by older persons. Chapter 2.1.6 discusses strategies of member integration, activation and retention. Chapter 2.1.7 reports findings on the effects on older persons of using online communities should take into account if they want to be successful – especially in reaching out to older persons. Conclusions based on the reported findings are drawn in chapter 2.1.9.

2.1.2 Older Adults' Use and Non-Use of the Internet

The most basic precondition for an active participation in online communities is the use of the internet. However, Lenhart et al. (2003) found that in 2002 42% of Americans aged 18 and older did not use the internet. The percentage of persons aged 65 and older who were online was 18%. Lenhart et al. (2003) divide non-users of the internet into three subgroups which they label 1) net evaders (8%), 2) net dropouts (10%) and 3) truly disconnected (24%). Net evaders live in a household where another person has internet access. They benefit from the internet by using the services of those other persons. Net dropouts used the internet at an earlier point in time. Frequently, they have stopped doing so due to technical problems. Only the truly disconnected have never had direct nor indirect experiences with the internet. However, the perception that persons are either online or offline is too simple. The authors prefer the use of the term "spectrum of internet access". This expression underlines the fact that also among onliners there are persons who use the internet only intermittently (16-28%).

As reported in the Pew Research Center's Generations report (Zickuhr, 2010), in 2010 79% of all American adults were online. The percentages of persons online were 76% for ages 56-65, 58% for ages 65-73, and 30% for ages 74 and older. Older generations in the United States have continued to make notable gains in the use of internet activities. Their participation in online communication and entertainment activities has shown one of the fastest growth rates in recent years. This is especially true for the use of social network sites where the rate of active users aged 74 and older has risen from 4% to 16% since 2008. While 61% of Americans aged 18 and older use social network sites the respective percentages for older adults are 43% for ages 56-64, 34% for ages 65-73 and 16% for ages 74 and older.

In Germany, in 2010 72% of Germans aged 14 and older were online (Initiative D21, 2010). However, the share of onliners drops markedly for the ages 60-69 (54%) and 70 and older (23%). There is also a striking difference to be seen between men and women: While 80% of men in the ages 50-59 are online this is true for only 65% of women. In addition, the rates of internet usage among persons aged 50 and older is clearly lower in the Eastern part of Germany. As Busemann & Gscheidle (2010) show, only 4% of internet users older than 60 use an online community once a week and only 6% have ever had contact with an online community. And of that same group only 12% indicate an interest in actively authoring content and sharing it on the internet compared to a share of 22% of all internet users in Germany.

In Switzerland, in 2010 84% of the population aged 14 and older had used the internet at least once during the past six months (Bundesamt für Statistik BFS, 2010). 77% indicated that they use the internet several times per week. Age differences in usage are striking: While the frequency of using the internet is still at 79% in the ages 50-59, it drops to 58% in the ages 60-69 and to 26% in the ages 70 and older. In addition, regular use of the internet is more common among men (84%) than among women (71%).

In the Netherlands, in 2010 91% of households had internet access at home (European Commission, 2010). 88% of individuals aged 16-74 accessed the internet at least once a week. There are no official numbers for European citizens aged 75 and older.

15

2.1.3 Definitions of (Online) Communities

Omoto & Snyder (2002) define a community as a psychological entity or conceptualization, rather than a geographically bounded area. An important feature of such a psychological community is the existence of a sense of community, which can be described as a feeling of belonging, connection, confidence and esteem that is attached to a psychologically identifiable community or grouping.

Although the academic debate about what defines a 'sense of community' is ongoing, it is advantageous to consider communities in such a psychological sense. This conceptualization comprises the aspects of membership (sense of belonging), influence (refers to mutual influence among members), integration and need fulfilment (the community fulfils members' needs, including need for status, success and protection) and shared emotional connection (value of shared experiences). The sense of community contributes to individual and collective action: members tend to feel obligated to work on behalf of the community, and to be good team players. Moreover, a sense of community increases people's readiness to engage in volunteer activity (Omoto & Snyder, 2002).

McMillan & Chavis' (1986) model of Sense of Community has sparked a large amount of research and is empirically well validated. Recently, Peterson, Speer & McMillan (2008) delivered evidence through confirmatory factor analysis for the four dimensions of the model, which include needs fulfilment (the community meets members needs), group membership (best characterized as a feeling of belonging), influence (the sense, on the one hand, that one can make a difference and, on the other hand, that the community is important to its members), and emotional connection (a feeling of attachment, which is based on members' shared history and experience).

In a reappraisal of McMillan & Chavis' (1986) model, McMillan (1996, p. 315) mentions the following four elements as characteristic of a sense of community. 1) a spirit of belonging together, 2) a feeling that there is an authority structure that can be trusted, 3) an awareness that trade, and mutual benefit come from being together, and 4) a spirit that comes from shared experiences that are preserved as art. Art, in this sense, symbolizes a collective heritage (e.g. in song and dance). The spirit of belonging together is dominated by a feeling of friendship between members of the community. This creates a setting which allows community members to express unique aspects of their personality (McMillan, 1996, p. 315). Members of a community can be themselves and can see themselves mirrored in the eyes and responses of others (p. 316). McMillan (1996, p. 316) believes that "the first task of a community is to make it safe to tell "The Truth"". This is dependent on a number of preconditions, namely community empathy, understanding, and caring. In a community that is built on trust there exists a certain order (McMillan, 1996, p. 319). It is a community that has norms, rules, or laws. This order allows members to predict, plan, and commit. In fact, a sense of personal mastery (McMillan, 1996, p. 319) is only possible if one knows a community's norms and laws. McMillan (1996, p. 321) makes it clear that communities establish a "social economy", which is based on shared intimacy. The unit of exchange in this economy is self-disclosure. The value of a trade can be

16

measured according to the personal risk involved in self-disclosure. McMillan (1996) is convinced that this risk is only taken on if community members feel safe from shame.

There is no commonly agreed on definition of online community. Nevertheless, it seems helpful to mention some of the commonalities of online communities as well as some of the criteria that have been used to distinguish different types of online communities. We can start out by using the broad definition provided by Preece (2001) who defines online community as "any virtual social space where people come together to get and give information or support, to learn, or to find company. The community can be local, national, international, small or large" (p. 3). To Döring (2001, quoted from Schaffert & Wieden-Bischof, 2009, p. 11) an online community is an alliance of people with common interests who exchange information and build contacts on a regular basis and with a certain reliability [my translation].

Schaffert & Wieden-Bischof (2009) propose that an online community consists of persons with common interests who use the internet and other communication technologies for regular exchange and/or to jointly develop content. They thereby develop strong mutual attachments and experience themselves as belonging together (p. 12) [authors' translation]. Online communities are virtual communities because they use the computer as medium to carry out the activities that define their community.

From Preece's (2001) definition we can derive that what all online communities have in common is the provision of a virtual social space where people come together. What is also common to today's online communities is the possibility to engage in multiperson social communication. What takes place in an online community is normally a many-to-many communication. Thus, today's online communities provide users with the facilities to produce "significant social activity" (Butler, 2001, p. 346). The central mechanism of a web 2.0 application is that the activity of users leads to an organic growth of information. One could call this the collective intelligence of the network. Persons with information needs can pose fully phrased questions to a community. This clearly differs from the search process applied to a search machine where frequently the format of the required information must be defined beforehand (Godfrey & Johnson, 2008, p. 638).

Let us now turn to the question of distinctive features of different online communities. One criterion by which online communities can be distinguished – at least to a certain extent – is their function. Accordingly, one could ask for the main purpose that an online community is supposed to fulfill. In this respect, Preece's (2001) definition offers the following elements: 1) exchanging information and/or support, 2) learning, 3) social interaction (finding company).

Exchange of information and/or support usually takes place inside the boundaries of specific topics in which the members of a community share a common interest (e.g. health). Hagel & Armstrong (1997) used the term "community of interest" for communities with that kind of main purpose. While learning is certainly an aspect of communities of interest it need not be their main focus. Knowledge communities (Bürbaumer & Mellacher, 2009), on the other hand, can be defined as just that, namely

communities who engage in communication in order to acquire and provide knowledge – usually about a specific topic. Communities of practice (Wenger et al., 2002) can be localized at the borderline of online communities of interest and online communities of knowledge. Their main purpose is, on the one hand, to provide information and support among a like-minded group of persons (often professionals) and, on the other, to facilitate mutual learning. The term practice indicates that members of the community engage in a common – usually rather complex and frequently professional – activity.

What draws members to online communities of the mainly socially interactive kind is the possibility to get into and stay in contact with persons they know and like and to meet new persons who appeal to them. Often members are offered the chance to follow up and comment on each others' activities. Hagel & Armstrong (1997) would call these communities "communities of relationship". Some communities of relationship are limited to specific societal groups. For instance, there are online communities aimed specifically at older persons. This relationship-oriented type of online community is sometimes also referred to as an online social network. Online social networks are online communities that emphasize affiliations of its members (geographical, shared background, common social interests) more strongly than their topical interests. Online social networks can also be characterized in terms of their form of information exchange. It is "ad hoc, informal, personal, often anecdotal, largely unregulated and potentially unreliable" (Godfrey & Johnson, 2008, p. 638). Nevertheless, Godfrey & Johnson (2008) believe that online social networks have the "potential for empowering individuals and citizens and developing and strengthening communities..." (p. 638).

Type of online communit v	Main function	Predominant form of com- munication	Content	Examples
Communiti es of interest	Exchange of information and support concerning a specific topic or a cause	Informal; personal	Advice, reports mostly based on personal experience; potentially unreliable	progressiveexchange.org haustiercommunity.de
Communiti es of practice	Exchange of information and support, mutual learning concerning a profession or a practice	Formal; expert discussion	How-to-information; instructions, guidelines; best practices	myplan.com/careers/chiropractors/ community-29-1011.00.html

Table 1 A distinction of online communities according to their function

Knowledge communiti es	Collection and retrieval of information ; knowledge manageme nt	Formal; expert; impersonal	Structured, reliable, factual information	community-of-knowledge.de
Communiti es of relationshi p	Staying in touch; making new social contacts	Informal; personal; conversational, "chatty"	Personal information; conversations; potentially unreliable	facebook.com
Business communiti es	Creation of value for businesses and customers	Professional; client-customer communication	Information about products, business partners and customers	smallbusinessonlinecommunity.ban kofamerica.com/index.jspa

2.1.4 The Motivation to Participate in an Online Community and the Potential Benefits of Participation

Kollock (1999) sees most interventions in online communities as being driven by either egotistic or altruistic motives. Motivation can be defined as "[a] driving force or forces responsible for the initiation, persistence, direction, and vigour of goal-directed behaviour. It includes the biological drives such as hunger, thirst, sex, and self-preservation, and also social forms of motivation such as need for achievement and need for affiliation" ("motivation", 2009). In the context of online communities, it seems plausible that one of the driving forces for active participation would be a need for affiliation, i.e. "[a] social form of motivation involving a need to seek out and enjoy close and cooperative relationships with other people, and to adhere and remain loyal to a friend" ("need for affiliation", 2009).

According to Bishop (2007), what makes online communities attractive is that they offer their members a space to engage with others in participatory behaviours that are in line with important desires, plans, goals, values and beliefs. Bishop (2007) postulates that members of online communities carry out actions based on their desires. He divides these desires into five main categories, namely social, existential and creative desires as well as a desire for order and for vengeance. Bishop believes that desires lead to plans, which need to be consonant with existing plans as well as a person's goals, values, and beliefs. He believes this approach to be advantageous of approaches based on hierarchical needs models such as Maslow's (1943, quoted by Bishop, 2007, p. 1882) and of approaches that believe community members to be mainly goal-driven. In the context of online communities hierarchical needs theory is based on the assumption that community-members will only engage in participatory behaviour if their more basic needs (e.g. for security) are met. Accordingly, higher order needs such as a need for achievement or affiliation will only become relevant for behaviour when more basic needs such as the need for physical security are being

fulfilled. A needs-based approach would explain the attractiveness of online communities with the opportunity of satisfying needs for affiliation, achievement or social recognition. Thus, the driving force for active participation in an online community would be the satisfaction of higher-level social needs. However, Bishop (2007) criticizes hierarchical needs theory because of its failure to account for the non-participation of "lurkers" even though their more basic needs have been met. Theories of goal-orientation, on the other hand, fail to explain why certain members of online communities do not engage in participatory behaviour even though they have the desire to do so. In Bishop's multi-level ecological cognition framework a person is motivated to participate in an online community if this is in line with his or her desires (e.g. social, creative; level 1), cognitions (e.g. plans, goals, values, beliefs; level 2) and if the person possesses the abilities and means to interact with the environment (level 3). Compared to hierarchical needs models, cognitive elements play a much more important role in the ecological cognition framework.

Some members of online communities will actually experience the feeling of flow (Csikszentmihalyi, 1990, quoted from Bishop, 2007, p. 1889). Novak & Hoffmann (1998, quoted from Bishop, 2007, p. 1889) identified the following characteristics of flow: arousal, challenge, control, exploratory behaviour, focused attention, interactivity, involvement, optimum level stimulation, playfulness, positive effect, skill, telepresence, and time distortion. In a state of flow, an actor will simultaneously have reduced attention focus, lose track of time and become immersed in the environment (Bishop, 2007, p. 1889).

Active participation in an online community can also be viewed as learned behaviour. While this approach may not explain why a person accessed an online community in the first place, it can explain why persons continue to display participatory behaviour, the main reason being positive reinforcement. In many cases, participation in an online community will be reinforced positively by means of social rewards (Hoisl, Aigner & Miksch, 2007). An example of this would be an official and highly visible classification as active author, for instance on Wikipedia.

Online communities are characterized by social exchange. Theories of social exchange usually explain the behaviour of an individual in terms of costs and benefits (Butler, 2001). Accordingly, a person will participate actively when he or she assumes a high probability of a personal benefit. However, if the costs of such an active participation are considered too high, activity will be limited to the status of "lurker".

A study of Wikipedia administrators revealed that their central motive for participation was learning (Baytiyeh & Pfaffman, 2010). This was followed by the motivation to create a public artefact. Fun and enjoyment and the experience of flow as described by Nakamura & Csikszentmihalyi (2003, quoted from Baytiyeh & Pfaffman, 2010, p. 136) followed next. Flow can be experienced when a contributor has the necessary skills to carry out a non-trivial task. The social factor in Wikipedians' motivations should also not be neglected. Many Wikipedians report that they see their contributions as a commitment to the community. They cherish the fact that others share their interests and they like to

collaborate. Playing a dominant role in the community and personal benefit, on the other hand, seem to be less important motivating factors.

Oreg & Nov (2008) explored motivations to contribute to open source initiatives. They found that contributors to software development were more motivated by the chance of gaining a good reputation and by motives of self-development whereas content contributors showed mainly altruistic motives. Building up one's reputation is connected to achievement as a guiding principle in one's life. The enhancement of skills as a motivation showed a relationship to an emphasis on growth, autonomy and free thinking. A motivation to contribute to an open-source community is found in persons who strongly value the welfare of others.

Li (2011) finds evidence for the importance of perceived value of contributing to online com-munities and the likelihood of being rewarded for the willingness to contribute. Interestingly, cost of contribution had no predictive value for the willingness to contribute. Among four groups of variables social approval was found to have the strongest predictive value for the willingness to contribute.

While the reported findings offer insight into motivations for the engagement in online com-munities they do not focus particularly on older age groups. Older adults who have not used a computer during their professional life are most easily attracted to the internet through specific topics of interest. In order to mobilize these persons for online communities it has to be made clear how the use of the internet can enrich their relationship with these topics of interest (Eastman & Iyer, 2004, p. 220). Moreover, a survey of US citizens aged 65-85 showed that the most important reason to use the internet was the opportunity to stay in touch with friends and relatives (Eastman & Iyer, 2004, p. 217).

2.1.5 Reasons for the Non-Use of Online Communities by Persons Aged 60 and Older

2.1.5.1 Reasons for the non-use of the internet

A majority of non-users (56%) doubt that they will ever use the internet. In this group, older persons are overrepresented. Lenhart et al. (2003) believe misconceptions about the internet to be the main reason for the lack of desire to use it. More than one third of non-users are concerned about pornography, credit card fraud and other illegal activities on the internet. Older persons are especially preoccupied with fears of privacy breaches and security risks (Eastman & Iyer, 2004, p. 220). According to Lenhart et al. (2003), 27% of non-users find the internet to be too complicated and hard to understand (p. 4).

In the US, most non-users state a lack of interest as their main reason for not going online (31% of non-users). 12% say they do not have a computer and 10% consider going online too expensive (Zickuhr, 2010). Morris, Goodman & Brading (2007) describe a "grey digital divide" (p. 55). They see the main cause of non-use of computers and the internet in misconceptions about the computer and its practical benefits. For instance, many older persons believe that computers do not go together with older age, are difficult to use and have not practical benefit. Well-designed information campaigns are

therefore seen as an important remedy. A majority of internet users are convinced that the internet has a positive influence on their lives. They are convinced that they would miss the internet if they could not use it. Interestingly, women prefer e-mail while men are more in favor of information searches. Men are also more frequent to report internet shopping and the use of the internet for banking matters. Thus, these diverse groups of potential users need to be addressed with different offers and strategies. In order to develop an interest in computers and the internet, persons need to see a practical benefit. Relevant subject matters include communication with family and relatives, general interests and hobbies as well as social interests. Computer and internet courses can function as important entryways to the world of computers and the internet. The design of course materials should take into account that many participants will have no prior IT experience whatsoever and are afraid of using a computer.

It is important to note that the use of online technologies does not only differ according to age but also according to gender, physical challenges, marital status and level of education. In the case of older persons these different factors frequently interact, resulting in new disadvantages. This is one of the reasons why the age-dependent digital divide proves to be very resistant to change (Godfrey & Johnson, 2008, p. 637).

In a study with older persons living in two sheltered housing complexes in London, Sourbati (2009) found that non-use of the internet could not simply be overcome by providing access. Moreover, age turned out to be only one and probably not the most important factor in non-use of the internet. Thus, framing the discourse about a digital divide solely around the factor of age is simplistic. Both a lack of skills in using new media as well as a perception of internet-use as being irrelevant for one's personal life –situation were common. Many participants were dependent on the assistance of care workers when accessing the internet. Thus, an effort to get more older persons in similar social circumstances online would have to include an investment in human capital.

In Switzerland, Schelling & Seifert (2010) conducted a representative telephone and face-to-face survey of persons aged 65 and older on the reasons for non-use of the internet. A general interest in technology and the assessment of the use of technological tools as being difficult or easy proved to be very good predictors of internet use. The complicatedness and the effort needed in learning were mentioned as dominant reasons for non-use among offliners. Both onliners and offliners were concerned about security issues (data protection and internet crime). However, these concerns did not prevent onliners from using the internet. The cost of hardware and lack of access were mentioned by only one third of offliners as barriers. However, two thirds of offliners are not ready to spend any money at all on internet use. Health reasons play a comparatively minor role. Two thirds of offliners consider the state of their health to be rather or very good. There is no widespread fear that non-participation in the internet could lead to societal exclusion. Merely 16% of offliners and 32% of onliners feel (potentially) excluded from society when or because of not using the internet. The study could not respond to the question of why onliners see a greater risk in internet non-use than offliners.

22

The use of the internet is correlated with the frequency of internet use in one's immediate social environment. The use of the internet by onliners' partners, siblings, and friends of the same age group is twice as high as that of offliners. Moreover, onliners receive the advice to use the internet three times more often than offliners. In a multivariate analysis the number of mentioned interesting uses of the internet, technological affinity, recommendations by persons from one's social environment to use the internet, the general attitude towards the internet, and age were the most important predictors of internet use. Level of education and income played a considerable role in predicting actual internet use but not in predicting interest in internet applications (Schelling & Seifert, 2010, II-III).

In their use and non-use of the internet, persons are not only influenced by "hard" factors such as access and computer literacy but also by their perceptions of personal competence. People hold certain beliefs about their abilities to use the internet in a competent way. These beliefs can be called internet efficacy (Adams, Stubb & Woods, 2005, p. 4). While internet efficacy is usually related to actual i.e. observable computer or internet literacy, this relation-ship is far from linear. Thus, it is to be expected that a certain number of internet. Kurniawan, King, Evans & Blenkhorn (2006) also point out that older persons show a greater hesitancy to exhibit behavior that they think might be incorrect and show less confidence about their ability to use computer anxiety" (Adams, Stubb & Woods, 2005, p. 4). Persons suffering from computer anxiety will react with negative emotional reactions to the use or even just the anticipated use of computers.

In a study of 91 predominantly immigrant older adults in downtown Los Angeles psychological variables proved to be stronger predictors of enrolment in free training (and beginning use of computers and the internet) than age or prior experience with computers (Jung et al. 2010). These psychological variables consisted of computer anxiety and aging anxiety (i.e. anxiety with regard to changes that come with aging). The negative relationship between aging anxiety and enrolment seems especially interesting since aging anxiety is not in any obvious way connected to the use of computers and the internet.

Non-use of computers and the internet is often not due to lack of access. It is also not true that older persons are estranged from new technologies in general. Mobile phones, for in-stance, are broadly used by older persons. Therefore, Selwyn, Gorard, Furlong & Madden (2003) see the main reason for non-use in the lack of relevance of ICT for the everyday life of older persons. Many older persons simply do not see a necessity to use a computer or the internet and do not have an interest to do so. In order to stimulate the interest of older persons in ICT a clear connection between individual quality of life and ICT has to be related. That is why the authors propagate an abandonment of a technological-deterministic perspective according to which older persons need to be "re-trained" or "re-educated". They see a greater chance of success in an increased participation of older persons in creating and re-creating ICT. The most important place of ICT-use by older persons is the private

home. Therefore, approaches of visiting ICT-integration seem more promising than the establishment of publicly accessible internet terminals (e.g. in libraries; Selwyn, Godard, Furlong & Madden, 2003, pp. 577-579).

It is important to realize that many internet users are more concerned about their privacy than is commonly reported. Moreover, persons seem to have a tendency to relate intimate details in chat rooms and forums on a voluntary basis. Reips (2008) believes that this is due to the lack of visibility of individual features of a communication partner. This can promote an impression of similarity, which enhances a greater openness among those engaged in communication (p. 10).

Functional impairments can play an important role in the non-use of the internet by older per-sons (Kurniawan, King, Evans & Blenkhorn, 2006). The most important of these impairments are visual impairments, motor impairments, which make use of a mouse difficult or even impossible, cognitive impairments (e.g. reduced working memory) and hearing impairments, which have become more relevant through the prevalence of multimedia contents.

Dickinson, Eisma & Gregor (2010) report as an important conclusion of their study with older novice computer course students that conceptual or cognitive barriers were more important than visual or motor-control limitations. These conceptual barriers can be divided into primary, medium term and longer term barriers. Primary barriers included the fear of losing one's work and the failure to establish a relationship between Menu labels and icons on a toolbar. Medium term barriers included the use of scrollbars and the ability to distinguish between applications and documents. Longer term barriers could not be overcome while the course was running. They included a difficulty with the multiple ways in which a task can be carried out. Another central problem was saving and retrieval of files. Physical objects such as floppy disks were preferred to the more abstract concept of files on a computer.

In qualitative research approach Richardson, Zorn & Weaver (2007) investigated older non-users' narratives of computers. They believe that an important reason for the non-use of computers lies in an incompatibility between non-users' existing narratives acquired over a lifetime and the computer-related narratives. Thus, non-users find no convincing reason to use computers. The "test of significance" with which non-users evaluated stories about the computer was that of personal utility. While many non-users acknowledged positive aspects of computer usage on a general level, they did not consider these sufficiently relevant for themselves at the current time. For this particular group of participants, there was no significant compatibility between the stories of the new computer and their existing narrative commitments, and therefore, no convincing reason to take-up computing.

2.1.5.2 Barriers in the use of online communities and the participation in online collaborative networks

De Souza & Preece (2004) identify two keys to the success of an online community, namely its sociability and its usability (p. 580). While sociability refers to the social interactions of the online community, usability is concerned with the human-computer interface. Because these two factors are

crucial for the success of an online community, most barriers in the use of an online community can also be retraced to difficulties with one or both of these elements. Preece (2001) names three main components that define good sociability, namely purpose, people, and policies. Purpose refers to the shared focus on interests, information or support. It is the main reason why members are part of a community. Sociability is dependent on the interaction of people. These people have different needs and will take on different roles. The language and protocols of interaction will lead to the development of policies. These policies can be either informal (i.e. social norms expressed through folklore and rituals) or formal (e.g. behavioural codes, registration policies). Informal and formal policies are the defining elements of community governance.

Usability, on the other hand, is concerned with how easily and intuitively a person can learn to use a technology and to interact with it (Preece, 2001). Preece (2001) proposes four main usability issues for online communities. 1) Dialog & social interaction support, 2) information design, 3) navigation, 4) access.

- Dialog & social interaction support refers to all aspects of the used surface that pro-mote interaction. How easy is it to execute commands? Can avatars be moved without difficulty?
- Information design deals with whether the community information is readable, understandable and aesthetically pleasing.
- A good navigation will allow the user to move easily and to find that which he or she is looking for.
 Many online communities face problems of insufficient compatibility between imported software modules and the website housing the community.
- Access to the online community is dependent on the prerequisites of a full usage of the community software. This includes questions of required bandwidth and state-of-the-art hardware and operating systems. Text versions of community information should be available as alternatives. If certain prerequisites are essential, it should be made clear how they can be fulfilled (Preece, 2001).

Matzat (2010) believes the reasons for non-participation in online communities to be mainly rooted in problems of sociability, i.e. problems caused by the characteristics of the social interaction taking place. He sees three main problems of sociability in online communities, namely 1) a lack of trust, 2) free riding and 3) insufficient membership stability (p. 1172). For instance, a lack of trust can develop in a situation of information exchange. If a person provides information to others and is never rewarded for this then this will decrease his or her readiness to share information in the future. Thus, the initial provision of information in this kind of setting is always risky because there is no guarantee that it will be answered by an equivalent investment. Online communities invite free riding. While everyone can profit from following a discussion, the discussion may actually only take place between very few active communicators. Free riders avoid the costs of active contribution they receive the same benefits as active discussants. Therefore, many online communities provide specific incentives

for active contributors. Finally, members of online communities are free to leave the community at any time. A low level of membership stability, however, can reduce the general motivation for long-term commitment. If there is a high risk of persons leaving the community shortly after having profited from others' information this will reduce the readiness to provide information on a regular basis.

A study by Lehtinen, Näsänen & Sarvas (2009) suggests that many older adults, especially babyboomers, perceive the internet in general as a place that is unsuitable for sociality. Moreover, they often consider social networking sites to be crowded by people seeking publicity and superficial relationships and they believe these motives to be incompatible with values of older adult life. In addition, the frames of social interaction that have developed in long-lasting friendships are not easily transformed into a new environment.

Busemann & Gscheidle (2010) report on the most important reasons of internet users aged 60 and older for not having an active profile on a private online community. The most frequent reasons were:

- I use other channels to communicate with my friends (96%)
- Communities are uninteresting to me/they do not offer me any advantages (81%)
- I fear a misuse of data (73%)
- I do not wish to be "findable" on the internet (70%)
- The effort needed is too great (60%)
- I do not know about the possibilities of communities (56%)
- I do not know anyone who is a member of a community (55%; p. 366)

With relation to Wikipedia, Schmidt, Glott & Ghosh (2010) identified the following reasons for nonactive use of Wikipedia in the age group 60+. 1) Most users are happy with just reading contributions. 2) Many users are convinced they do not have anything interesting to contribute. Further reasons for non-active use were lack of knowledge about the creating and editing contributions, uneasiness in correcting and editing contributions of others, a lack of routine in using technology and insufficient time resources.

2.1.6 Integration, Activation and Retention of New Members

2.1.6.1 Integration and Activation

As Stadelhofer & Marquard (in press) point out, in order to create interest in the internet in persons aged 60 and older, the internet must come across as an enrichment of life and as an opportunity for a broadening of the personal realm of experience. Only if methods for "teaching" internet applications to older adults take this into account can they be successful. Instead of demanding from older adults that they learn how to use the internet, Stadelhofer & Marquard (in press) propagate a change of perspective. If the existing competencies, strengths, and interests of older adults are sufficiently taken into account, reservations against new media can be overcome. Strategies for activation should

therefore be designed for different target groups of older adults (Oehmichen & Ridder, 2010). For example, "culture-oriented traditionalists", or "multi-interested" must be addressed differently from "home-oriented" or "withdrawn" persons (my translation). Differential approaches are needed so that diverse groups of older adults may experience the internet.

It is important to note that a large number of older internet users are self-taught. Other sources of learning that older users name are – in descending order of importance – peers, relatives and internet classes (Eastman & Iyer, 2004, p. 314).

Successful educational approaches often use settings that allow for mutual assistance and peermentoring. Choosing locations that are familiar to older persons will facilitate the linkage of technology with everyday experiences. Moreover, engaging older persons' existing social network in the learning process and showing how the internet and online communities relate to pre-existing topical interests have proved to be successful strategies (Godfrey & Johnson, 2008).

The quality of the learning environment and the way in which education is offered can pro-mote or prevent older persons from using online technologies. Mutual assistance and peer mentoring in the framework of existing peer groups can facilitate learning. The use of non-threatening settings such as volunteer groups, clubs and organizations permit the linkage of technology with everyday experiences. This is also a good way of attaining access to persons who are, as it were, marginalized both socially and digitally (Godfrey & Johnson, 2008, p. 637). Moreover, the connection between new technologies and existing topical interests fosters motivation, e.g. if the technology helps to find information on a topic of interest. An important role is also attributed to a person's existing social network. Persons who have such a network are more likely to use new technologies in a sustainable manner (Godfrey & John-son, 2008, p. 637). Finally, the use of media competent mediators who are active in local offline communities and in other organizations (p. 640).

As Selwyn (2004) points out, however, educational efforts alone are not sufficient. Rather, older persons should be given more weight in the development and design of ICT. Only this strategy could guarantee that ICT attains true relevance for older persons' everyday lives.

Eastman & Iyer (2004) believe the "topical interest approach" to be the most promising strategy for the mobilization of non-users. In addition, privacy and security are two issues that must be addressed with potential internet users. The shared use of terminals can also be a way of combining learning and community in a playful way. From a costs and benefits perspective buying a computer may not always be a reasonable option for older persons. In some cases it may be more efficient to install internet-terminals in retirement homes or other infra-structures that are strongly frequented by older persons (Eastman & Iyer, 2004, p. 220).

Semi-structured interviews with 23 individuals aged 55-75 showed that use of the internet was positively related to a perception of usefulness, ease of use, and internet-efficacy. Moreover, results indicated that growing internet experience led to perceptions of ease of use, efficacy and reduced complexity of navigation. The authors conclude that internet use by older persons could be promoted

through age-specific marketing, adjustments in the design of internet sites (more simple, more uniform), user-friendly online help, easy to understand error message terminology, and more training (Adams, Stubbs & Woods, 2005, p. 3).

From the perspective of social psychology, participation in online communities can be seen as a behaviour that is to be established through social persuasion. Social persuasion must address relevant attitudes, cognitions, and behaviors (Zimbardo & Leippe, 1991). Thus, a positive attitude towards online communities must be evoked first. Second, the relevant target groups must be informed about the advantages of participation in online communities. Finally, the addressed older persons must be capable of carrying out the desired behaviour and be given the opportunity to practice the new behaviour. In order for a persuasive process to be successful the target group must direct its attention to the message and the message must be intelligible. The target group hast to accept the message so that an attitude change can take place. Finally, the new attitude must be sustained and lead to the desired behaviour (participation in an online community; Zimbardo & Leippe, 1991, p. 137). As Bishop (2007) points out, even when an online community has "the right tools, the right chat platform and the right ethos" (p. 1887) there is still no guarantee that community members will actually be active. The literature on actually changing the behaviour of non-participating community members is sparse. One of the reasons for this is that more traditional methods of behaviour modification are not useful in virtual environments. For instance, following Skinner's (1938, quoted from Bishop, 2007, 1888) theory of operant conditioning, one would suppose that rewards for participatory behaviour lead to the repetition of that behaviour. However, this approach cannot explain why a person would take that first step and start being active in the first place. Bishop (2007) believes that in order for a person to engage in participatory behaviour he or she needs to have a desire to do so. In addition, the desire needs to be in line with a person's goals, plans, values, beliefs and interests. Moreover, a person must have access to the required tools and be capable of carrying out the action. Vice versa, in order for a person to be ready to change from non-participatory to participatory behaviour, non-participation would have to be dissonant with a person's existing beliefs, plans or values. In social psychology, one typical approach of attitude change is through the use of persuasive messages. Simply put, a persuasive message is presented, processed, and, if everything works well, the person's attitude can change in the desired direction. The new or revised attitude can then, under certain conditions, lead to an adapted behaviour (Crano & Prislin, 2006). However, the process of persuasion can only be successful if the message is elaborated or systematically analyzed. In order for this to happen, a person must be motivated and the message must be well reasoned, data based, and logical (Crano & Prislin, 2006). If, on the other hand, receivers of the message are unmotivated (or perhaps unable) to elaborate the message they will resign to peripheral cues (e.g. the optical attractiveness of the community website) or to heuristics (e.g. "all the people in online communities are superficial") in forming their attitude (Crano & Prislin, 2006). In the context of online communities, Bishop (2007) stresses the importance of credibility and trustworthiness of those

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who communicate the persuasive message (i.e. the appeal to participate). Another strategy of turning lurkers into novice contributors is by demonstrating to lurkers that novice contributors are treated well. In other words, an online community willing to appeal to potential contributors should make a special effort to demonstrate that it cares for new active members (e.g. by answering quickly to their posts). The desire to participate can be increased by way of mediating artefacts (e.g. hyperlinks). These artefacts can be perceived as affordances of certain actions (e.g. clicking) and lead to the development of a respective plan of action. Well-placed artefacts can enhance the experience of a state of flow (Csikszentmihalyi, 1990, quoted from Bishop, 2007, p. 1889). In a state of flow, an actor will be focused on acting out desires and thus be more likely to engage in participatory behaviour. In summary, one could say that a community with artefacts and actors that do not create dissonance facilitate the emergence of a state of flow in the potential participant which in turn encourages the spontaneous acting out of the desire to be social.

2.1.6.2 Retention

Hinchcliffe (quoted from Schaffert & Wieden-Bischof, 2009) describes a life-cycle of members in online communities. He distinguishes between the phases of discovery (visitor), joining (novice), engaging (regular), ascending (leader), changing (elder) and departing. Visitors will participate rather from the outside and in an unstructured manner. Novices have started to contribute actively, most frequently by commenting on others' posts. Regulars have already contributed for some time and have become an established part of the community. Leaders take on both the role of participator and mediator and are usually highly regarded by the community. Elders, finally, will leave the community due to a change in interests, new relationships or different outlooks and positions (Schaffert & Wieden-Bischof, 2009). Wenmoth (2006, quoted from Schaffert & Wieden-Bischof (2009) distinguishes between four succeeding stages of member participation, which he calls the four C's. The first stage would be that of consumer, followed by the stage of commenter. The third and fourth stages are those of contributor and commentator. A consumer will merely read and explore the contributions of others. Commenters concentrate on making comments to posts of others. Contributors are the ones who actually initiate new discussions. Finally, a commentator frequently takes a meta-position and tries to have a broad view of the goings-on, offering to link the work of different contributors and thus providing a kind of leadership to the community.

In order to be sustainable social structures must provide access to a pool of resources and they must also support the process that translates these resources into benefits for participants. According to Moreland & Levine (1982, quoted from Butler, 2001, p. 347) social structures are sustainable if they produce a benefit that outweighs the cost of membership. Larger social structures have access to more resources than do smaller ones. It can therefore be expected that they should be in a better position to benefit their members and to be sustainable. On the other hand, an increase in size can

29

also have negative effects when dealing with the task of materializing an actual benefit from potential resources. The reason for this lies in the excessive number of potential partners for interaction who one cannot possibly know in total. This, however, decreases the probability of solid personal relationships and of the exchange of information and support. Greater structures also carry a higher risk of little contribution by single individuals because everyone is convinced that others are doing enough (Petty et al. 1977, quoted from Butler, 2001, p. 349). Thus, positive and negative consequences of membership size are in a complex interactive relationship. At the core of social processes that create benefits stands communication. Thus, more communication will lead to greater benefit. However, more communication also leads to greater costs for those who communicate. This is why the internal structure and the technology of the community should be directed at keeping contributors' costs as low as possible. The increasing size of an online social structure can both lead to a further increase of memberships as well as to a decreased ability to retain members (Butler, 2001).

In their study of an online discussion community, Ridings & Wasko (2010) point out the importance of social dynamics for the retention of members. In their view the increase in resources that comes with an increase in membership will not always lead to more communication activities. They see the decisive factor in the way in which people participate. Thus, if there is a foregrounding of information exchange then that will be attractive for new members but will not increase active communication. On the other hand, if the emphasis on information gives way to increasingly social and interactive communication then that will lead to more communication activity by existing members. However, the more social communities can have difficulty in attracting new members. If potential new members come as information seekers, the increasingly social nature of the community makes it more difficult for them to find information. On the other hand, communities with strong social interactivity may appear as a kind of a closed circle to the newcomer and may induce perceptions of "us" and "them".

2.1.7 The Effects of Participating in an Online Community

In starting out, it is important to note that persons are not just passively influenced by technology. Rather, they play an active role in determining and influencing the uses of technology. The relative anonymity of the internet tends to encourage self-expression. In addition, the absence of physical and nonverbal elements of interaction can facilitate the forming of relationships that are based on different foundations (e.g. shared values and beliefs). When relationships that were formed in the internet have reached a sufficient amount of trust, persons frequently transfer them into their "real lives", i.e. to the level of face-to-face interaction and telephone conversations. On the other hand, the way in which communication in the internet takes place can leave many things unsaid and undone and thus open to interpretation and suggestion. This is the reason why the assumptions and attributions we make about our interaction partners in the internet are largely determined by our own wishes and goals.

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Satisfaction and disappointments with the quality of social interaction in the internet is therefore largely dependent on our own expectations and desires. There is no empirical evidence, however, that the internet depresses people or leads them into loneliness. Moreover, the internet does not seem to be a threat to community life. Rather, the internet has simplified communication and has promoted close ties between families and friends. This is especially true in cases where long distances would otherwise make it difficult to stay in touch (Bargh & McKenna, 2004). The fact that the perceived quality of social interaction in the internet is strongly determined by our personal wishes and projections is relevant for the question of how older persons are affected by the use of online communities. A view of "older people" as a homogeneous group with comparable needs seems overly simplistic. The way in which a person is affected by online social interaction is clearly not only determined by age but also by a large number of other factors such as socio-economic status, education, personality, experiences of self-efficacy and a person's individual biography (see for instance Mosler, 2010). In other words, "older persons" are enormously diverse and the ways in which the use of an online community will affect an older persons are bound to be diverse as well.

Wright (2000) was able to show that in older persons who used SeniorNet and other online websites for social support the intensity of participation was correlated with a lower amount of perceived life stress. A further result of his study was that frequent users rated the online network of social support more highly than non-frequent users. This could be an indication that the greater familiarity with technology can lead to a more positive evaluation of the online social contacts.

Slegers (2006) investigated the potential effects of computer and internet use on cognitive abilities, autonomy, everyday functioning, wellbeing and the social network of older adults. In order to examine these potential effects, a randomized controlled intervention study with multiple control groups was carried out. However, none of the potential beneficial effects could be proved. In other words there were no significant differences between the intervention and the control group on measures of cognitive functioning, autonomous living, wellbeing and social network. On the other hand, the use of a computer over a twelve-month period did not lead to upper limb complaints or reduce functional health in older adults nor did the intervention group show signs of cognitive or deterioration or decreases in wellbeing. It was also shown that computer training and internet usage had no effect on the use of other everyday technology (Slegers, van Boxtel & Jolles, 2007). Slegers (2006) concludes that computer training and the stimulation of internet use over a twelve-month period is not an effective method to help older adults age successfully.

In a critical review of studies on computer use and wellbeing in older persons, Dickinson and Gregor (2006) conclude that there is no empirical foundation for suggesting that computer use has a positive effect on wellbeing in older persons.

Drawing from a list of older adult centres Blit-Cohen & Litwin (2004) conducted semi-structured interviews with 10 computer users and a matched control group of 10 non-users. They identified three

31

important dimensions in which belonging to the third-age group and computer technology are associated.

- Through use of an (online) computer older persons expand their connections to their group and their social network. They become more strongly involved in the exchange of social capital (p. 395).
- The second important dimension refers to the concept of time. Older internet users seem to be
 more strongly oriented towards the future and look forward to new challenges. Non-internet-users,
 on the other hand, were rather backwards-looking and mentally focusing on the past. Internet
 users seemed more integrated into the current social discourse and expressed a wish for active
 participation. They recognized the internet as an apt means to reach that end (p. 395).
- The third dimension concerns the relationship between internet-users and their computers. Older computer users frequently attribute human traits to their computers; they "humanize" them. Thus, the computer itself can become an element of the social network of an older person (p. 395). In these cases, the mere act of using a computer becomes a kind of a social activity in its own right. From a perspective of learning theory, one can explain this as the result of classic conditioning where the computer is at first used as an emotionally neutral medium to attain positive experiences (e.g. beneficial social exchange in an online community). After a certain amount of time, however, the computer itself will be associated with these positive consequences.

2.1.8 Characteristics of Successful Online Communities

Following Preece (2001) it seems plausible to suggest that, on a general level, sociability (social interaction in community) and usability (human-computer interaction) are key to the success of online communities. Other important factors of success are more dependent on the functional nature of the community. For instance, Bürbaumer & Mellacher (2009) stress that with regard to knowledge communities the quality of contributions is of great importance. From this it follows that the assurance of quality must be a key priority in these kinds of online communities.

Adams, Stubbs & Woods (2005) are convinced that a simpler and more uniformly designed Internet would be much more accessible to older persons. They name the following 10 criteria that should be taken into account when designing web pages so that they are usable for older age groups:

"Ensure web pages are:

- 1. Transparent
- 2. Comprehensive
- 3. Responsive

- 4. Self-explanatory
- 5. Adaptive
- 6. Efficient
- 7. Forgiving
- 8. Flexible
- 9. Informative and timely
- 10. Consistent with the user's other familiar designs" (pp. 15-16).

They also emphasize that attitudes towards the internet and online communities can only be positively affected through concrete experience and exercises.

As Pfeil, Arjan & Panayiotis (2009) point out, young users' online social network is typically larger than that of older persons. Older persons' lower number of "friends" could be an indicator that they need more information about other persons before accepting them as "friends". In addition, older persons were more reticent in the use of extra features such as music, videos, and commenting functions. Older users' focus in online communities seems to be narrower than that of younger users. Moreover, older persons tend to use more formal language than younger ones. On the other hand, in their presentations younger persons tend to be more focused on themselves and their emotions (Pfeil, Arjan & Panayiotis, 2009).

Matzat (2010) reports evidence that free-riding is less common in online communities that are embedded in offline networks (i.e. that are a mixture of online and offline community). Embedded online communities show less problems of trust than communities that are not or not well embedded. On the other hand, fluctuation of members cannot be explained with the social embeddedness of an online community. Mixed communities have certain advantages over purely virtual communities with regard to sociability. The reason for this lies in the greater density of the offline network, which allows for social control, which promotes the development of relational interests, i.e. community members want other members to think well of them. Relational interests reduce uncooperative behaviour which in turn diminishes free-riding and reaffirms the stability of membership. It need not be the case that all members are in face-to-face contact. It is sufficient if a certain portion of members do because even that seems to foster mutual trust and facilitate collaboration.

In a quantitative content analysis Nimrod (2010) identified 13 major themes that are being discussed in older adults' online communities. They are – in order of frequency – 1) Fun, 2) Retirement, 3) Family, 4) Health, 5) Work & Studies, 6) Recreation, 7) Finances, 8) Religion & Spirituality, 9) Technology, 10) Aging, 11) Civic and social issues, 12) Shopping, 13) Travel. In discussions, positive terminology outweighs negative terminology by a ratio of 1.26:1. The emotional intensity of positive terms is higher than that of negative ones. The average emotional intensity across all terms used (positive and negative) is 0.34 (with a minimum of -3 and a maximum of +3). This shows that – on the whole – the tone being used is very moderate. One of the reasons for the growing popularity of the examined online communities was the broadness of topics for discussion and the diversity of forms of

AAL Joint Programme

emotional expression. While the predominant tone was moderately positive the communities did offer an opportunity for the expression of emotions such as grief, anger, mourning but also of positive emotions such as happiness and playfulness. The most important functions of online communities were 1) medium of communication; 2) a source of information; 3) an instrumental task-oriented tool (e.g. shopping, financial affairs, travel planning); 4) as a leisure activity. The importance of the theme "fun" shows that older persons will turn to a community if they can make entertaining, amusing and playful experiences. On the whole, a combination of agreeable interaction, entertaining activities and practical information can be seen as key to success of a older adult online community. In addition, the communities can offer social support, which can be seen in the discussions on topics such as retirement, family and health. The sharing of emotions between peers can lead to mutual understanding and good advice. Moreover, social interactions and leisure activities can take on coping functions in the sense of self-preservation, self-restoration and personal growth. In other words, they can soften the effects of negative life events through distraction. This is why the author argues for a perception of online communities as resources for coping, the consequence being that an active participation in online communities can contribute to the wellbeing of older persons.

2.1.9 Conclusion

The past ten years have seen a strong increase in the use of the internet and online social media by older adults. Nevertheless, older adults remain sub-represented among internet users and, more specifically, concerning the use of online communities and online collaborative networks. Since all indicators point to an undiminished growth of opportunities for online participation in communal and societal affairs, full access of older adults remains a political priority and an important field of research.

There exists a multitude of definitions of online communities and communities can serve a number of different functions such as social relationships, knowledge building, etc. A common trait of online communities and online collaborative projects is that the communicative investment of different participants creates a body of information that can be seen as a community's resources. Sustainable online communities provide reliable access to their re-sources and facilitate a process by which this access is converted into a practical benefit for participants.

The number of preconditions that need to be met before a person will actively engage in an online community is quite stunning. Research on the motivation to contribute actively to online communities suggests that participation has to fulfill a desire, and needs to be consonant with important personal cognitions (beliefs, plans, etc.). In addition, active participation is dependent on certain abilities and means. This shows that the integration of new members into online communities and the stimulation of active participation are quite complex endeavors. Frequently, integration and activation have to be a stimulated through a persuasive process aiming to create "cognitive dissonance" between non-

participation in the internet and online communities and a person's other attitudes and cognitions. While this is quite a difficult undertaking in any case, it becomes even more challenging with regard to older adults who are more prone to perceptions of the internet as being dominated by pornography and illegal activities and who tend to worry more about breaches of privacy.

What has also become clear is that older adults' e-inclusion and increased participation in online communities should not be framed as knowledgeable young persons "explaining" the internet to older persons. Desires and cognitions cannot be addressed solely through information. Rather, in order to be successful, strategies for integration and activation have to start out by focusing on older adults' competences, interests, and needs. However, it should be avoided to conceive of older adults as a homogeneous group. While it may useful to address target groups defined by age, the diversity of lifestyles, interests, aspirations, values, and experiences of persons who are members of the same age group must be taken into ac-count.

Randomized controlled intervention studies have failed to prove positive effects of internet use on the cognitive functioning, autonomy, wellbeing, and the social network of older adults. However, it seems too early to close the debate on this topic. On the one hand, longitudinal data over a course of several years are lacking and, on the other hand, qualitative research suggests that some of the positive effects may be difficult to measure with quantitative de-signs.

Many older adults are not as interested in using a multitude of options when they participate in an online community. Rather, they tend to opt for a clear focus on those elements that truly interest them. This suggests that an online community aiming for the participation of older adults should allow for this kind of partial usage. In addition, older adults are more hesitant in making new "friends" in online communities. They take more time to be sure they can trust their social contacts. One way of establishing trust is through real-life community meetings. Thus, communities that exist both online and offline may be ideally suited to attract older adults.

2.2 How Online Communities Can Make a Contribution to the Social Integration of Persons Aged 60 to 75: An Exploratory Study¹

Executive Summary

Aim and method

Aim: To identify solutions for promoting older persons' use of online communities

To identify the dominant obstacles for persons aged 60 to 75 years in using online communities and to infer how online communities could become more attractive to potential users of that age group.

Sample: Average older adult internet users, not beginners

The study was carried out with 18 internet literate persons aged 60 to 75 years. The sample included 6 active users (3 f, 3 m) of online communities, 6 persons (4 f, 2 m) expressing an interest in joining an online community (intenders) and 6 persons (3 f, 3 m) not showing an active interest in online communities (hesitators). A group of 6 sceptics (refusers; 1 f, 5 m) were interviewed by phone. Means for age were 64.5 (SD=3.8) for active users, 65.7 (SD=2.2) for hesitators, 70.0 (SD=5.1) for intenders and 65.0 (SD=2.1) for refusers. The participants were diverse with regard to place of residence (German-speaking Switzerland only) and concerning professional and educational background. Since the sample consisted of "younger" older adults, access to the internet was not an issue.

Method: Lab tests and panel interviews

Active users were treated to one usability test session while intenders and hesitators went through two usability test sessions. Each test session included a series of tasks (scenarios) and was preceded and followed by a semi-standardized interview. A semi-standardized telephone interview conducted four weeks after the second test session marked the end of the study.

Results

Unsatisfactory user experience with all online communities tested

Users were confronted with significant usability barriers throughout the whole process of using online communities. This included unattractive content, lengthy and complex registration processes, insufficient overview of the whole website and the specific community features as well as difficulties contributing to and thus becoming involved with the online community. These problems are mainly

¹ This study was generously supported by: Zürcher Kantonalbank, Swisscom, Coop, Zeix
rooted in a lack of user guidance and missing fundamental explanations. This experience left many test participants with mixed feelings about their membership. Moreover, hardly any of the test participants would have been able to master the registration process without help from the test administrators.

Active users have found their niche

Active users entered online communities either by introduction through close family members, by "ideological affiliation", i.e. contributing their knowledge to a cause in accordance with their values or beliefs, or in order to be informed about social real-life activities with people sharing their interests. All of them derived a personal benefit from using a certain online community. They were either very motivated to overcome any hurdles in joining the respective communities and/or were supported by family members in doing so.

No big differences between intenders, hesitators and refusers

Hesitators' attitudes towards online communities were rather critical to begin with, while intenders were quite optimistic that online communities had something in store for them. At the end of the study, the persistent non-users in both groups came to share the same scepticism about using online communities. Refusers ruled out deriving any imaginable benefit from using online communities and indicated privacy and security issues as reasons for not wanting to participate in online communities.

Link to everyday life decisive for further community usage

In spite of the mentioned difficulties, 5 out of 12 community beginners (3 intenders and 2 hesitators) intended to keep on using the tested online communities after the study had ended. They had managed early on to establish a link between their everyday lives and the respective communities and were able to focus on a limited number of tasks within the community offers. Others did not find content that made them want to return or held perceived risks, such as possible loss of control or privacy and security breaches, accountable for not continuing to use online communities. A lack of reciprocity as well as a general dissatisfaction with the contacts established in the online community were also among the reasons for discontinuing usage.

User profiles: Age not the decisive factor

Users of online communities are not a homogeneous group. Motivations, interests and hobbies as well as real-life social network activities differ as strongly between test participants as they do between members of younger generations. Only a small number of participants appreciated a community focus on older age groups (as in the case of seniorweb.ch). Many perceived risks were similar to those mentioned by younger user groups and discussed by ICT professionals. Thus, online

communities do not simply appeal to one particular type of older adult user. Rather, online communities are a means to an end and its users benefit from specific domains.

Limited options for social integration through online communities

This study suggests that socially less well integrated individuals might also face more difficulties participating in an online community than socially well integrated individuals. Nevertheless, online communities can make a contribution to preventing or decelerating social isolation by helping older adult users organize and structure their lives and by assisting to keep up social integration after retirement. To a certain extent, online communities can also motivate for certain activities and connect people with similar interests. In addition, successful participation in an online community can strengthen one's self-efficacy and self-esteem.

Recommendations

A model of action: attracting and retaining (senior) members of online communities

In order to turn potential users of online communities into active ones, it is necessary to take action on three levels. Firstly, users have to be attracted and activated by attractive content and clearly worked out and communicated benefits. Secondly, they have to be guided through the process of registration and familiarization with the online community. (user-centred design is an approved process for reaching these aims.) Thirdly, new members have to be rewarded swiftly for their first contributions and efforts in the community.

Success through collaboration of different stakeholders

Making use of online communities for social integration requires efforts from many different actors. Community operators face the challenge of developing an attractive platform by investing in high quality content for the target group, by providing a proven-to-be user-friendly application and by building trust through adequate, well-tailored communication. Current community members, offline organizations, businesses from the private sector and the media will be in charge of creating a supportive framework for the development of online communities and their contributions to social integration.

Quality guidelines needed

It is essential that quality guidelines for effective online communities are set, legal protection of privacy is ensured and that quality improvement in services offered by non-commercial and commercial stakeholders are promoted. This can be achieved through establishing and promoting a database of user-friendly communities and by initiating regular checkups and incentives (e.g. awards) for existing online communities.8 1. Introduction

2.2.1 Introduction

2.2.1.1 Starting situation

Older adults use the internet and online communities far less frequently than younger age groups even though the number of active users above the age of sixty years has increased rapidly over the last ten years (Zickuhr, 2010; Initiative D21, 2010; European Commission, 2010). The focus of this study is on the usage of online communities – virtual social spaces where people come together to engage in multiperson social communication – by persons aged 60 to 75.

"Misconceptions" about the internet have often been cited as the main reason for the non-use of the internet by older adults (Lenhart et. al, 2003; Eastman & Iyer, 2004). It is quite conceivable that the same kinds of stereotypes – e.g. that the internet is dominated by pornography and criminal activities – are also at the root of older adults' scepticism towards online communities.

In addition to these fears of being victimized there is also a widespread sentiment among older adults that the internet and its applications have been designed for younger generations and that older persons are not meant to participate in online communities.

Preece (2001) argues that most barriers in using online communities are related either to usability or sociability, two concepts that will be defined in the following chapter.

2.2.1.2 Definitions

Good usability is widely understood to be crucial for success or failure of an application or service. According to Nielsen (1993) "usability" comprises learnability, efficiency, good memorability, error tolerance and satisfaction. Another important aspect is the emotions of the users, i.e. is the use pleasant or even enjoyable?

Usability used to be considered as a means to answer questions of the type "should a button be placed to the left or the right?" or "should it rather be blue than red?". We apply a broader concept of usability in this study, based on Zeix' long-term experience in usability and user-centred design:

Are the planned functions really useful (utility)? Do users accept and use them (user acceptance)? Are the business model, contents, terms used within a site as well as its name understandable and credible (branding aspects)? Is the user satisfied with the possible options? Does he or she feel intimidated by contents and functionalities he or she did not expect and maybe not even want? Or is his or her image of the brand distorted by the experience he or she gets?²

² Zeix Usability Guide 7, User-Centred Design – it's the method which makes the difference (2005).

Rubinoff (2004) argues in the same line and composed the following graphic, which also includes content, branding and functionality as parts of a satisfactory user experience.

Sociability, on the other hand, refers to the purpose of the community and the ways in which persons are allowed to interact. The concept of sociability also includes aspects of community governance, i.e. the formal and informal policies that are in force.



Figure 1 The four elements of user experience defined by Rubinoff (2004)

Another important concept used in this study is that of social integration. In our context, the term "social integration" refers to the extent to which a person is involved in networks of relations to other people. These networks can include membership in voluntary associations but also the participation in informal activities. It is assumed that differences in social integration can have an effect on the readiness to participate in online communities and online social networks³.

Communities in general create a "sense of community" (McMillan & Chavis, 1986), which is an important prerequisite for mutual trust and the readiness to engage in volunteer activity (Omoto & Snyder, 2002). Online communities provide a virtual social space where people come together to engage in multiperson social communication (Preece, 2001; Butler, 2001). These acts of

³ The concept is related to that of social capital. See Scott & Marshall (2009).

communication lead to an organic growth of information, which defines the richness of an online community.

What constitutes the added value of an online community as opposed to any other website containing interesting information? In the best of cases, online communities have the ad- vantage that their contents are authentic, real and usually free of commercial intents. The contributions of community members can be called empirical insofar as they are imprinted by personal experience.

2.2.2 Method

2.2.2.1 Aims of the Study

The following goals were relevant to the study:

- to identify different online community user-profiles among persons aged 60-75 years;
- to recognize the dominant obstacles in using online communities;
- to examine what kind of social contacts participants desired and how online communities could respond to these desires;
- to discern differences in participants' use of online communities depending on the nature of their real-life social networks;
- to recognize how online communities could be more attractive to older persons.

2.2.2.2 Test Objects

The online communities used in this study can be subdivided into three separate types that serve different principal functions.

The main function of communities of interest is the exchange of information and support concerning one or several specific topics or causes (e.g. cooking, health, photography). Knowledge communities, on the other hand, have as their main functional principle the collection and retrieval of information and the management of knowledge. Communities of relationship offer the opportunity to stay in touch with other persons and to make new social contacts. Some communities of relationship focus on business contacts; others are rather aimed at informal social relationships. Dating and searching for a partner can also be a focus of this type of online community.

Community of	Knowledge based	Community of
Interest	Community	Relationship
 Topic-based exchange	 > Senior citizens as	 > Prototype of online
of information and	experts and editors > Contribute to a good	Community > Fast rising number of
support	cause	senior members
seniorweb.ch		
CHEFKOCH. DE VITACLIC	WIKIMEDIA	facebook

Figure 2 Three different types of online communities were included in the study

While certain online communities make a deliberate effort to address older persons many others do not. However, certain communities of interest (e.g. those focusing on health) can of course be of particular relevance to older persons. Chapter 2.4 will provide more details about the role of these online communities in the design of the study.

2.2.2.3 Sample

The following criteria were observed in recruiting the sample:

- The sample was to consist of persons between the ages of 60 and 75 years.
- The sample was to include persons with a strong real-life social network as well as persons with intermediate and weak social ties.
- It was to contain both persons still working as well as retired persons.
- Both persons living mainly in urban areas and persons living in rural areas were to be included.
- The sample was to consist of an equal amount of men and women and to be sufficiently disparate with regard to age.
- Persons eligible for the sample had to have access to the internet (not necessarily at home) and have basic computer and internet skills (i.e. they should know how to use e-mail and Google).
- Participants' profiles were assigned to the following four groups: 1) Active users: persons who are current users of an online community (either seniorweb.ch or de.wikipedia.org or facebook.com). 2) Intenders: persons who are not active members of an online community but are interested in becoming an active member. 3) Hesitators: Persons who could imagine on principle becoming involved in an online community but who cannot see how they would

benefit from doing so. 4) Refusers: persons who are not willing to get involved with any online community. Each of these groups was to consist of six persons.

In order to find potential participants, the following groups of persons were contacted for a telephone screening interview:

- 1) Persons who had earlier agreed to have their contact details saved on the Zeix database.
- Users of the online community seniorweb.ch, which is aimed specifically at older persons and was thus ideally suited for our recruitment purposes, were specifically addressed with an ad on seniorweb.ch.
- Stemming from other research activities, the Bern University of Applied Sciences could provide contact information about contributors to de.wikipedia.org aged 60 to 75 years. These persons were also contacted.
- 4) Finally, Zeix co-workers asked friends and family, who fit the predefined criteria, to participate.

In the course of a telephone screening interview the eligibility and readiness of contacted persons was examined. Because of its importance for the overall research question, the screening interview aimed to arrive at a rough judgment of persons' social integration by asking about the nature of a person's neighbourhood, whether a person was an active member of a club, of another social organization or regularly getting together with other persons in a more loosely organized form.

24 telephone screening interviews were conducted. A total of 18 persons (six persons per group "active users", "intenders", and "hesitators") participated in the lab study. The nine men and women were equally distributed among active users, intenders and hesitators. 9 of the 12 hesitators and intenders were contacted via the Zeix database and three persons were recommended by Zeix co-workers. Of the active users four could be recruited via seniorweb.ch. One person was recommended by the Bern University of Applied Sciences and one person was reached via the Zeix database.

Six persons (five men and one woman) who fit the sample but refused to get involved with online communities were only interviewed by phone about their online behaviour and reasons for the dislike of online communities ("refusers").

Social integration was considered to be average for three active users, four hesitators, four intenders and three refusers. It was considered to be lower than average for two active users, two hesitators and three refusers. One active user's and two intenders' social integration was considered to be above average.

According to their self-assessment three active users lived in a rural setting and three in a more urban one. Of the six hesitators, four lived in an urban setting while among hesitators urban and rural settings were again distributed evenly. All of the refusers reported to be living in a rural setting. In order to cover travel and other expenses connected to the test sessions, participants received 100 Swiss francs (active users) or 150 Swiss francs (hesitators, intenders), respectively.

2.2.2.4 Measurement Instruments

All participants went through a screening interview. Participants were treated to one or two test sessions. Active users went through one lab test session with the community they were familiar with.

Table 2 User Groups	and corresponding test sections
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	Screening interviews Motivation and readiness	First test session Getting started	Second test session Contribute and socialize	Final telephone interview Evaluation
Intenders	\checkmark	\checkmark	\checkmark	\checkmark
Hesitators	\checkmark	\checkmark	\checkmark	\checkmark
Active users	\checkmark		\checkmark	
Refusers	\checkmark			

Hesitators and intenders were asked to choose two online communities, one of which had to be de.wikipedia.org, seniorweb.ch or facebook.com. The second online community per participant could be chosen by the participant. If no other community was known, the test team offered a selection of 12 communities, which reflected the authors' intention to include a broad array of existing online communities (see Table 1).

The selection of these communities reflected the intention to present participants with online communities that focused on one specific topic. This topical focus is a feature of many online communities but not of the three online communities constituting the first choice (seniorweb.ch, de.wikipedia.org, facebook.com). The topics health/fitness, cooking/food, pets and gardening seemed sufficiently diverse in order for participants to find a topic to their liking.

Intenders and hesitators went through a panel setup: they were invited to a second lab test session four weeks after the first one. In addition, intenders and hesitators were questioned by telephone interview four weeks after their second test session. Each test session was started and closed with a semi-standardized interview. Refusers were interviewed only by phone.

The topics covered in the interview heading off the first test session included the amount of current computer and internet use, the expectations and existing knowledge concerning online communities,

the motivation for using online communities or for participating in the test sessions and participants' preferred means of communication with friends and acquaintances.

The interview at the beginning of the second test session asked for participants' general impressions after four weeks of using two online communities (including high and low points). Participants also reported on whether they had been able to complete self-prescribed tasks. A further section of this interview was dedicated to difficulties that participants had experienced as well as to a verbalization of the purpose of the online community with which they had made themselves familiar.

Name	Type of online community	Main function	Specific focus on seniors?
seniorweb.ch	Community of interest	Exchange of information and support concerning a number of specific topics or causes	yes
de.wikipedia.org	Knowledge community	Collection and retrieval of in- formation; knowledge manage- ment	no
facebook.com	Community of relationship	Staying in touch; making new social contacts	no
xing.com	Community of relationship	Staying in touch; making new social contacts (in business)	no
vitaclic.ch quevita.ch; symptome.ch	Community of interest	Exchange of information and support concerning health and fitness	no
gutekueche.ch*; chefkoch.de	Community of interest	Exchange of information and support concerning food and cooking	no
gartenfreunde.ch*	Community of interest	Exchange of information and support concerning gardening	no
myfreund.ch*; tierforum.de*	Community of interest	Exchange of information and support concerning pets	no
feierabend.de*	Community of interest	Exchange of information and support concerning a number of specific topics or causes	yes
seniorentreff.ch*	Community of relationship	Staying in touch; making new social contacts	yes
50plus-treff.ch*	Community of relationship	Making new social contacts; dating	yes

* These online communities were offered to the test participants but were not chosen.

The test sessions consisted of participants' working through several "scenarios", a series of tasks, while being observed by two test administrators. These tasks included getting started with a community, adjusting privacy settings, adding a contribution and sharing content with other members. The participant worked by him- or herself on a computer workstation, the scenarios being presented in written form on paper. The two observers were sitting in an adjacent room without direct eye-contact. The observers could follow all actions that participants performed on their own computer screen. One observer recorded participants' actions while the other observer was responsible for giving instructions or answering questions by microphone, if necessary.

Table 4 Overview of study participants

	Age	Gender	Profession	Level of social in- tegration	Computer experience (Assessment by Zeix AG)	Place of dwelling	1st choice of commu- nity	2nd choice of commu- nity
Active users	60	female	IT-supporter (employed)	Average	Expert	Urban	Wikipedia	
	62	male	Web designer (formerly self- employed, unem- ployed)	Below Average	Expert	Urban	Facebook	
	62	female	Nurse (retired)	below average	very expe- rienced	rural	Facebook	
	65	female	Accountant (retired)	average	experienced	urban	Seniorweb	
	69	male	Painter (retired)	average	experienced	rural	Seniorweb	
	69	male	Shop owner (self-employed)	above average	experienced	rural	Wikipedia	
Hesitators	63	male	information tech- nologist and web publisher (retired)	average	expert	rural	Wikipedia	Seniorweb
	67	male	Concierge, sailor, and foreign legi- onnaire (retired)	below average	rather inexpe- rienced	urban	Seniorweb	Vitaclic
	66	female	Controller (retired)	below average	experienced	urban	Seniorweb	Gutekueche
	69	male	Insurance Agent (retired)	average	experienced	urban	Seniorweb	Quevita
	65	female	linguist and nurse (retired)	average	experienced	urban	Facebook	Seniorweb
	64	female	professional networker (retired)	average	experienced	rural	Facebook	Xing
Intenders	63	female	switchboard ope- rator and banking clerk (retired)	average	experienced	urban	Facebook	Vitaclic
	69	female	Secretary (retired)	average	experienced	urban	Seniorweb	Quevita
	75	female	Veterinarian (reti- red), housewife	average	rather inexpe- rienced	rural	Facebook	Chefkoch
	76	male	Electrician (retired)	above average	experienced	rural	Seniorweb	Vitaclic
	71	female	shop assistant/ shop owner (retired)	above average	experienced	urban	Seniorweb	symptome.ch
	66	male	Engineer (retired)	average	experienced	rural	Wikipedia	Chefkoch
Refusers [*]	69	male	manager of a purchasing depart- ment (retired)	average	not surveyed	rural		
	64	male	Teacher at a voca- tional school	below average	not surveyed	rural		
	65	male	construction engi- neer (retired)	below average	not surveyed	rural		
	64	male	manager of an office organisation firm (retired)	average	not surveyed	rural		
	63	female	Dance and exercise therapist	below average	not surveyed	rural		
	65	male	Physicist (retired)	average	not surveyed	rural		

* Refusers were only surveyed by telephone.

Post-session interviews aimed to capture participants' immediate impressions after the test session; these interviews also asked whether participants had kept their sense of orientation during the test session, what their rating of the usability and accessibility of the community website was, whether they felt they had had all the necessary information, and what their next steps in using the online communities would be.

The telephone interviews, finally, asked participants for a kind of summary or conclusion after the eight weeks of trying out two online communities. It explored whether participants had developed a

natural routine in using these websites or whether they had committed themselves for eight weeks only and were looking forward to stopping their involvement once the tests were over. Otherwise, the telephone interviews repeated many of the questions asked in the pre- and post-test-interviews in order to examine whether significant changes of attitude or behaviour had taken place in the meantime.

The handwritten protocols of test sessions and interviews were filled into a predefined Excel spreadsheet. One line was used per interview question and scenario task, respectively, whereas one column was used per test participant. This procedure made it easy to draw comparisons between test participants. In the course of the data analysis the important categories per spreadsheet line (interview question, test scenario) were elaborated and brought into context with other categories in order to arrive at hypotheses and theory building.

2.2.3 Results

2.2.3.1 Interviews

2.2.3.1.1 General user behaviour

Before going into the details of the usability tests it should be mentioned how the study participants used the internet in general.

Some internet activities were carried out frequently by all participants. Apart from the use of e-mail, these activities included information retrieval (e.g. telephone numbers, weather reports, timetables) as well as the booking of hotels and other travel arrangements.

Intenders differed from hesitators, however, in that they also used the internet for e-banking and shopping – activities that were not mentioned by hesitators. E-banking and shopping activities include the actual transfer of money whereas many travel booking activities only require a credit card as a security without actual money transfer being initiated on the internet. This difference between intenders and hesitators cannot be explained by the level of internet experience, which is similar in both groups (cf. Table 4).

Active users of online communities take internet usage one step further by contributing self-authored content to websites. Their active role in dealing with the internet was further underlined by other mentioned activities, such as web design and running an e-business (e.g. a shop for medicinal plants).

2.2.3.1.2 Motivations for the use of online communities

Active users of facebook.com and of seniorweb.ch showed quite a high similarity of motives. Their motivation was centred on nourishing established social contacts. There was however a difference

insofar as seniorweb.ch appealed to older persons who were interested in social contacts with their peers. There was also another interesting difference between facebook.com and seniorweb.ch users: One user (male, 69 years, shop owner) explained that the motivation for using seniorweb.ch was to remain in touch with persons he had first encountered offline and had grown to like. The facebook.com users cited different motives: Apart from getting to know new persons, due to its enormous popularity, facebook.com offers the opportunity to search for people one knows but has lost touch with. Once this connection is re-established facebook.com can be used to stay in touch (there was no mention of offline-meetings). It can also be interesting to use facebook.com to establish contact with a person that is otherwise hard to reach. In other words, one of the specific affordances of facebook.com is that it can work as a means for contacting persons one already knows who are unavailable for other forms of social contact. But users of facebook.com also reported another, somewhat more straightforward advantage of facebook.com. They preferred facebook.com over standard e-mail software because they did not have to think about how to disseminate information. It sufficed to write something once in order to have all "friends" know about it.

The motives cited for being an active user of de.wikipedia.org are again different from those of users of facebook.com or seniorweb.ch. One could call these motives "ideological". Both contributors to de.wikipedia.org stated that they found it attractive to participate in a good cause, namely the development of an online encyclopaedia.

Curiosity was the dominating motive for participation among both hesitators and intenders. However, hesitators voiced more precautions than intenders and tended to stress that they felt no real need to participate. They were participating because it was an opportunity to try out something new and to check out whether online communities could in fact have something useful in store for them after all. Other than hesitators, intenders were quite convinced of the potential usefulness of online communities to begin with. However, so far they had not succeeded in finding an online community that they considered sufficiently interesting.

2.2.3.1.3 What did participants expect from online communities?

Participants were asked in a general manner what they expected from an online community.

Active users' expectations differed according to the choice of community

Facebook users expected to be able to reconnect with contacts that they had lost touch with and hoped to be able to stay in touch with these contacts more easily through facebook.com. They also mentioned the opportunity to make new contacts both for private as well as for business purposes. Moreover, they conceived of an online community as a flexible and fast alternative to more traditional ways of communication (e.g. e-mail). A specific feature of facebook.com mentioned by active users is

its international appeal. Accordingly, it is a convenient tool for maintaining contacts across great distances.

Seniorweb users expected social contacts with different nuances. For them, the desired social contact seemed to be of a "chattier" nature. One user explicitly used the verb "talk" to describe the preferred form of conversation. Interestingly, users of seniorweb.ch emphasized staying in touch with nice persons they had met offline (but belonged to the same community). Thus, the meeting of new people was featured less prominently than among users of facebook.com.

Finally, an important difference in expectations between users of facebook.com and users of seniorweb.ch was that the latter expected an online community to be the starting point for activities and functions that take place offline.

Wikipedia users added further expectations, namely that an online social community should allow for the expression of one's personality, that it should include the opportunity for original contributions, and that it should be a place where persons assist each other (e.g. by giving advice).

Hesitators' expectations: Time eaters or something useful?

Hesitators' expectations towards online communities were again characterized by the presence of reservations. One way in which this was expressed was by denying the existence of any expectations whatsoever. Most expectations were of a rather theoretical and impersonal nature. For instance, one hesitator (male, 67 years), who used to work as a sailor and foreign legionnaire, expected an online community to be a place where he could search for old friends with whom he had lost touch. He had no intention to "get to know friends via the computer".

Another expectation expressed by hesitators was that online communities were places where one could chat, chatting being defined as an activity where anyone can "put in what's important to them". This emphasis on personal expression was rather frowned upon by hesitators. One participant (male, 69 years, insurance agent) worried that online communities were nothing but "time eaters". The most optimistic expectation was that online communities could have something useful in store and that participation in the test sessions provided an opportunity to learn about that.

Intenders' expectations: Finding friends is a privilege of the young

Intenders expressed somewhat more specific expectations. For instance, a banking clerk (female, 63 years) said she expected online communities to be safe, adding that this was probably also dependent on one's own sense of responsibility. She wanted to find out about the precautions against criminal activity. Another female intender (71 years, former shop owner) expressed the hope to find friends, but "not a partner", through an online community. Other expectations included the provision of information and an opportunity to engage in charitable activities. However, among intenders as well, certain reservations were expressed. These included the belief that online communities were mainly designed for young persons and were useful to establish contacts between college students. Thus,

one female participant (75 years, housewife) said she expected online communities to be of little personal use.

Refusers' expectations: Putting one's privacy at risk

Persons who refused to participate in the study expected that dealing with an online community meant that they would have to reveal personal details to other persons. Clearly, their image of online communities was that of a place for self-presentation, revelation of personal matters and a kind of fake intimacy. They associated a considerable risk of misuse with all of these supposed ingredients of online communities. Since all of these persons had heard about facebook.com, it seemed quite clear that facebook.com – or rather what they believed facebook.com to be about – was what they expected online communities to be like in general. There was little room for other notions of what an online community could be about (e.g. collaboration, creativity, etc.).

Limited perception of benefits, long list of risks

In sum, it seems striking that both hesitators and intenders know in theory why using an online community could make sense. However, both groups have a whole set of counter-arguments, which make sure that the non-use of an online community creates little or no cognitive dissonance. Due to their lack of experience with online communities, hesitators and intenders have a limited mental model of what the uses of an online community could be. Thus, while most participants believe that online communities are about "meeting new people" the actual benefits of online communities can in fact be much more diverse. In other words, part of the reservations expressed by hesitators and intenders are rooted in a too limited perception of the potential benefits of online communities. If the actual diversity and richness of possibilities was known it would also be more difficult to use simple counterarguments against getting involved.

Concerning risks, hesitators found more issues to be worried about, touching various categories. A first category would be the way in which people communicate in online communities. Here, hesitators were worried that communication in online communities was somehow unreal and impersonal. A second major concern is related to the reliability and the trustworthiness of personal communications in online communities. Some hesitators feared that communications were highly unreliable, that people were able to hide their real identities and that it was easy to be untruthful in one's statements. A third section of concerns addressed the factor of time. Some hesitators expected online communities to be "time eaters". They were quite sure that they would have to invest a lot of time in order to use an online community and they felt weary about having to do that. A further important dimension that was considered risky concerns privacy. On the one hand, it was pointed out that online communities offered the opportunity to find out things about others without having to ask them directly. Most hesitators themselves were very concerned about revealing too much about themselves to persons they did not really know. Hesitators felt quite uneasy about "offering a piece of private

information to strangers". It was also mentioned that persons with fraudulent intentions might violate one's privacy.

Intenders voiced clearly fewer concerns than hesitators. The belief that posts could not be removed and could be found on the internet "forever" was one fear that was voiced. An interesting second topic that was raised touches on the question of "healthiness" of online communities. Some intenders feared that online communities had a potential for addiction.

2.2.3.1.4 Prior experience with online communities

How active users got started

One active user of facebook.com (male, 62 years, formerly self-employed web designer) got onto the community because his son was using it too. This is mirrored by a female user of facebook.com (62 years, former nurse) who also recalled that she got started through her children. "They were talking about it so I got registered too." However, she made it clear that she did not use facebook.com for staying in touch with her children – she insisted on having only "real-life" relations with them.

A 60 year-old former IT-supporter regularly uses de.wikipedia.org. She recalled that her start in the community was simply a coincidence. She had heard about this "encyclopaedia to write along" and liked the idea. Her first contribution was the correction of a spelling error. A 69 year-old male user (former shop owner) of de.wikipedia.org also started contributing to Wikipedia because he considered it a "good thing".

A woman (65 years, former accountant) using seniorweb.ch had originally conducted an internet search using the terms "activities" and "third age". This led her to the online community seniorweb.ch. The second active user of seniorweb.ch (male, 69 years, former painter) recalled that he stumbled upon seniorweb.ch while surfing the internet. He was intrigued by the announcement of an excursion to the museum of communication in Bern. After this first real-life meeting he joined a regional group in the canton of Argovia, which had a regular offline get-together. That is how he got to know other members of seniorweb.ch and developed an interest in meeting them in the online community as well.

From these stories we can identify different pathways of entry into an online community. One could be called a "pathway of kin" whereby children (or other close relatives) introduce their parents to the online community. In our case, this happened with the users of facebook.com. The building of trust is simplified by the fact that well known and trusted persons are already members of the community and represent a kind of guarantee that the online community is trustworthy (e.g. "If my children are doing it, it can't be that bad.")

A second pathway would be of a more "philosophical" or "ideological" kind. Here, it is an appealing vision or philosophy of the community that attracts the new user. We find this pathway in both of our active contributors to Wikipedia.

The third pathway is the networking-based approach, (which pertains to many young users as well): The joining of an online community is the result of a goal-directed search for activities that are specifically geared towards persons of the same age group or towards a distinctive group of interesting people with whom one wants to relate not only at regular offline meetings but also by means of the online community.

Panel participants' prior experience

Both hesitators and intenders had little or no prior experience with online communities. Compared to hesitators, intenders were less concerned about data protection and approached online communities with a certain openness and curiosity.

Among the active users we find two subgroups: The seniorweb users were active in one online community only whereas the users of de.wikipedia.org and facebook.com were active in several online communities. The other participants had heard of facebook.com and associated it with the term "social network". This was also true for persons who refused to join the panel⁴³.

2.2.3.1.5 Sum-up: Refusers

Refusers were very clear in their unwillingness to participate in the test session as well as their refusal to engage in online communities presently or at any time in the future. The group of refusers consisted of five men and one woman, all living in rural environments. Most of them were or had been working in professions requiring a high education (teacher, engineer, physicist etc.). The dominant reason stated by refusers for not using online communities was the fear that personal data would not be protected sufficiently and could be seen – and potentially misused – by almost anybody. In that respect, refusers are comparable to the participating hesitators. The fear of insufficient data protection must be interpreted with caution. It is typically cited in ICT-related surveys when participants do not see any personal benefit in using a service – i.e. a benefit to outweigh the risk – or when they believe to be lacking the necessary skills for using online communities⁵.

During the brief telephone interview refusers made it abundantly clear how strongly they associated facebook.com with the terms "online community" or "online social network". They had heard about problems concerning the protection of personal data and the erasability of profile data on facebook.com. Refusers did not show a lack of (reported) internet versatility nor were there striking differences in levels of education compared to test participants. It is true, however, that most refusers live in rural areas. Whether and how this fact had an influence on their willingness to engage in online communities cannot be answered on the basis of our data. It does, however, seem rather unlikely that

⁴ All of these persons mentioned facebook.com when asked if they knew any online social networks.

⁵ E.g. Zeix (2010). Mobile Studie.

this factor would play a decisive role since persons living in rural areas are not underrepresented among active users, hesitators and intenders.

Thus, we can detect two main reasons for refusers' unwillingness to engage in online communities: Firstly, they consider online communities to be unsafe with regard to the protection and accessibility of private data. Secondly, they identify facebook.com (or their image of facebook.com) with online communities in general. Because they are uninterested in what facebook.com has to offer they are uninterested in online communities in general. They are largely unaware of the other options that online communities provide (e.g. opportunities for authorship, creativity, collaboration).

An additional argument for staying away from online communities was the notion that online communities are aimed only at young people. Moreover, online communities can be perceived as a misfit with the personal lifestyle. Thus, one refuser (63 years, female) was working as a dance and exercise therapist and physical activity was an important part of her life. She stated that she did not like to sit at the computer and that she preferred real-life social contacts. From her perspective, spending time in front of the computer contradicted an important value ("be physically active").

2.2.3.2 First test session

2.2.3.2.1 First lab tests: Getting started

Intenders and hesitators worked through three scenarios for each of the two online communities they were testing. Table 5 provides an overview of the main topic of the scenarios, the focus of observation for test administrators and the criteria used for assessing goal attainment. The scenarios used for the self-chosen topical communities are identical to those used for seniorweb.ch. What becomes evident when looking at Table 5 is that engaging in the actual community functions of an online community requires a user to have successfully managed registration and login processes (with the possible exception of de.wikipedia.org) and to possess a sufficient amount of orientation in navigating the online community site.

Active users participated in a usability test only once. The scenarios they worked through are the same ones that were presented to intenders and hesitators in the second lab test. Hence, the results of the usability tests with active users are integrated in chapter 2.2.3.2.2.

Table 5 Scenarios used in the first test session for intenders and hesitators

Community	Scenarios	Main focus for observation	Criteria of goal attainment
seniorweb.ch	1 Registration	Participant's awareness of need/option for registration Registration process	Successful regist- ration
	2 Get an over- view	Login process Navigation, orientation	Participant is ab- le to get an over- view of general func-tionalities and offers
	3 Try out com- munity functio- nalities	Participants' interests Navigation, orientation	Participant is able to get an overview of com- munity-related functionalities
facebook.com	1 Registration	Participant's awareness of meed for registration Registration process	Successful regist- ration
	2 Get an over- view	Login process Navigation, orientation	Participant is ab- le to get an over- view of general func-tionalities and offers
	3 Look at priva- cy settings	Problems in personalizing priva- cy settings	Participant knows how to adjust privacy settings
de.wikipedia.org	1 Get an over- view	Registration Participant's awareness of the community-related activities	Participant knows how to ac- cess the author's portal
	2 Rules	Does participant find informati- on pertaining to requirements and rules for contribution?	Participant finds material on rules and regulations
	3 Plan contribu- tion	Participant's focus in assemb- ling a plan for contributing an article	Participant knows the neces- sary preparatory steps for contri- buting an article

2.2.3.2.2 Usability findings

Our test participants encountered many problems during the usability tests. The first barriers appeared right at the beginning.

Registration processes are difficult to manage

Lengthy and complex registration processes, which our test participants encountered with seniorweb.ch and facebook.com (de.wikipedia.org doesn't require registration), are bound to set back even the most highly motivated user right from the beginning. Hardly any of our test participants mastered the registration process without help.

The first hurdle on **seniorweb.ch**: Due to a suboptimal design, the button to start the registration was overlooked by most intenders and hesitators.

Figure 3 The button for registration on seniorweb.ch is easily overlooked.



After working through a lot of text to find out which is the free membership to choose, test participants had to fill out their personal account details. There, most of them struggled with the input of a password: seniorweb.ch provides an instant password strength check, which is creditable. But seniorweb.ch only considers passwords as sufficiently secure, if they contain a minimum of six characters, numbers, punctuation marks and minor as well as capital letters –a standard, which requires quite a complex password. The serious usability problem our test participants encountered was the fact that passwords with only a low or a medium strength are highlighted in the warning colours red and orange. Additionally, a comment box in the same colour shows up, which increases the impression of making a mistake. Believing erroneously that the form could only be completed with a "green" password, test participants became quite desperate while aiming to meet this requirement.

Figure 4 Finding a secure enough password was quite a challenge for the test participants

eniorweb.ch	Starthilfe 🖗 Registrieren Support 🖬 fr de It ÜBER UNS STARTSEITE
Semior web.ch	
PARTNERSUCHE AB51	MAGAZIN CLUB DIENSTE UNTERHALTUNG TERMINE SPONSOREN
rtseite » Benutzerkonto	
KATEGORIEN	Benutzerkonto
Arbeit	Registrieren Anmelden Neues Passwort anfordern
Bildung	Kontoinformationen
Elektronik	
Freizeit Gesellschaft	Benutzername: *
	Testuser
Gesundheit Konsum	Leerzeichen sind erlaubt; außer Punkt, Bindestrich und Unterstrich sind keine Satzzeichen erlaubt.
Kultur	E-Mail-Adresse: *
Lehen	testuser@test.com
Partnerschaft	Eine gültige E-Mail-Adresse. Alle E-Mails der Website werden an diese Adresse geschickt. Die Adresse wird nicht
Recht	veröffentlicht und wird nur verwendet, wenn Sie ein neues Passwort anfordern oder wenn Sie einstellen, bestimmte
Umwelt	Informationen oder Benachrichtigungen per E-Mail zu erhalten.
Vorsorge	Bestätigen Sie Ihre E-Mail Adresse: *
Zum Testen	testuser@test.com
Lum resten	Bitte geben Sie ihre E-Mail-Adresse ein zweites Mal zur Bestätigung ein.
SPEZIELLE LINKS	Passwort: *
	···· Passwortstärke: Niedrig
FREIE FAHRT	Passwort bestätigen: *
N3 III	Passwörter stimmen überein: Ja
Kursgruppen	
Ratgeber-Videos	Es wird empfohlen, ein Kennwort mit mindestens sechs Zeichen zu wählen. Es sollte Ziffern, Satzzeichen und sowohl Groß- als auch Kleinbuchstaben enthalten.
Club Nachrichten	Please choose a password for your account; it must be at least 6 characters.
Expertenrat	
Gesundheitsfragen	Newsletters
Generationen im Dialog	Select the newsletter(s) to which you wish to subscribe.
Gruppen	
Grusskarten	Vews DE
Kleinanzeigen	News FR
Regionalgruppen	News IT
Spiele	
TAO Projekt	Nutzungsbedingungen
Umfragen	Für alle Mitglieder von Seniorweb gelten die AGB und Datenschutzbestimmungen.
Vergünstigungen	
"Wiki loves monuments"	Ich willige in die Erhebung, Verarbeitung und Nutzung meiner Daten entsprechend der
	Datenschutzerklärung ein. Mir ist bewusst, dass ich meine Einwilligung jederzeit mit Wirkung für die Zukunft widerrufen kann.
Die wichtigsten Themen	
Sitemap Matrix	Ich akzeptiere die Bedingungen. *
🕈 Share 🕴	Wort-Überprüfung: *
und i	
	HGIBB -
Finde uns auf Facebook	(Audio-Funktion überprüfen)
seniorweb.ch	
mierweb.	Geben Sie die Zeichen ein, die in den oben gezeigten Bild zusehen sind. Wenn die Zeichen unlesbar sind, senden Sie das Formular ab und ein neues Bild wird generiert. Groß-und Kleinschreibung wird nicht beachtet.
291 Personen gefällt seniorweb.ch.	
	Nächste Schritt 2 von 3
	* Dieses Formular enthält Pflichtfelder.

Further on, test participants were required to enter a "CAPTCHA" in order to complete the form. Because not only the "CAPTCHA" had to be re-entered, but the password as well, missing the correct letters made more than one test participant lose his nerves: "This registration process is excruciatingly complicated," the former electrician said (male, 76 years).

Another test participant clicked on the register card "Anmelden" ("sign on") on top of the page after having completed the form, because it looked like the next logical step in the registration process. In fact, he had to learn that this was the login mask for already registered members. Switching back to the register card "Registrieren" ("register") made him lose all previous entries.

The third step of the registration process required a test participant's name and address, which did not create any problems. However, many test participants ignored the following message that the email address had to be confirmed. Consequently, they assumed that the registration process was finished and tried to log themselves in. This, in turn, created an error message that again most of them did not recognize.

Figure 5 The last step of the registration process, confirming the e-mail address, was ignored by many test participants



Overall, the registration process of seniorweb.ch is overly complex and loaded with usability hurdles, which make registration difficult not only for older persons but for any new user regardless of age. Without the help of the test facilitator none of the test participants would have managed to register.

Test participants who tried to register for facebook.com⁶ encountered similar problems. Admittedly, registration itself is simple: just a few basic personal details are needed and users are guided with a process indicator. But the registration process is then followed by basic settings, such as "finding friends", "educational details" and "adding a picture".

During the first step of these settings a serious usability problem occurred. A text field, opened by default, invites users to add their hotmail address in order to find friends. Be- cause the text field is labeled unspecifically with "Deine E-Mail" ("your e-mail"), test participants added their non-Hotmail addresses and got an error message in return without understanding why. They could have clicked the link "Diesen Schritt überspringen" ("Skip this step") at the bottom of the page, but none of the test participants actually saw the link.

⁶ Facebook.com undertook some modifications of their interface between the usability tests and the writing of this report. These modifications are mostly of a "cosmetic" nature insofar as none of the usability barriers detected in the usability tests have been eliminated. Nevertheless, the screens displayed in this study may differ slightly from what the test participants experienced.

Because clicking the button "Freunde finden" ("find friends") is seemingly the only option for interaction on this page, the only way out was to close the browser window.

Figure 6 Test participants were trapped on this page, because they didn't see the link at the bottom.

facebook 📌 💷 (Suche	Q	•
		Schritt 3 Profiloid	
	Sind deine Freunde bereits bei I Viele deiner Freunde sind vielleicht schon hier. Da schnellste Weg, um deine Freunde auf Facebook	as Durchsuchen deines E-Mail-Kontos ist der	
	Windows Live Hotmail Deine E-Mail: Freur	nde finden	
	Y ahoo!	Freunde finden	
	Anderer E-Mail-Anbieter	Freunde finden	
	Anderer E-mair-Andieter		

Finally, with the help of the test facilitator, all test participants managed to get through the three steps of personal settings. The end of the process is marked by a "Welcome" page, which made all our test participants feel completely lost: the page shows the three steps of personal settings again, which the users had just worked through and did not provide any further guidance. Another grave usability problem is that the message requiring the e-mail address to be confirmed first in order to complete the registration process is placed above the header of the website, where it was overlooked by all test participants – as was the case with seniorweb.ch.

Again, as on seniorweb.ch, all test participants seriously struggled with the registration process and needed assistance.

Figure 7 As on seniorweb.ch, test participants did not see the message requiring them to confirm their e-mail address.

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Lack of orientation for new users

Once this first step (registration) is managed, insufficient overview of functionalities and central community features can put a swift end to older persons' beginning involvement in an online community.

On seniorweb.ch test participants complained about the information overload on the home- page. This had to do with the fact that test participants considered the box "Kategorien" ("categories") on the left to be the main navigation and lost themselves in blog posts hi- ding behind the categories listed there. Most of the test participants did not recognize the horizontal main navigation by up to a very late point during the usability test.

Figure 8 The grey box on the left was wrongly considered to be the main navigation

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This fact intensified the problem that the actual community features on seniorweb.ch are situated on the second navigational level. Only by clicking on the not very meaningful register card "Club" did test participants have the chance to actually see them. Consequently, all test participants struggled when trying to find out about the seniorweb.ch community. Even the former web publisher (63 years, hesitator) stated that during the whole test session he had remained unaware of the fact that there were "other persons" (i.e. com- munity members) on seniorweb.ch. In other words, he had not been able to experience the community aspect of seniorweb.ch even though that aspect would appear to be the true heart and soul of seniorweb.ch.

Figure 9 The seniorweb.ch community hides two levels below the homepage



All three tested communities were perceived as being overloaded with information. In the case of facebook.com, the former professional networker (female, 64 years) said she was surprised by how complicated facebook.com was. Participants also had difficulties handling the basic community features: to find other users, to invite them and to respond to friendship requests. All test participants expected to find these features by clicking on "Freunde finden" ("find friends") in the navigation. But when doing so they once more were only offered to find friends through adding their e-mail address (or skype name). In order to find people they knew by entering a name they had to use the search field in the header – a spot that test participants more or less found by chance only after searching for quite a while. For the same reason test participants missed out on friendship requests (see second test series).

Figure 10 Basic community features such as friendship requests and the search field for finding friends were overlooked during the usability tests

facebook 📌 🛛 🖇	Suche
	The Freundes Freundesliste verwalten
FAVORITEN Willkommen Neuigkeiten Konderichten Veranstaltungen	Füge persönliche Kontakte als Freunde hinzu Du kannst jederzeit zur der Lege fest, wie du mit Freunden kommunizieren möchtest. Finde heraus, wie es funktioniert oder verwalte deine importierten Kontakte. Du kannst jederzeit zur der Hauptansicht von Facebook zurückkehren, indem du auf das Facebook-Logo klickst. Schritt 1 Schritt 3 Freunde finden Füge Freunde hinzu
A Freunde finden	S Skype
LISTEN	Skype-Name: Finde weitere Freunde Skype-Passwort: Freunde finden Freunde finden Der Freunde finder ist jetzt besser als jemals zuvor. Probiere in aus.
Notizen	Windows Live Hotmail Freunde finden E-Mail Passwort
 Links Anstupser 	Yahoo! Freunde finden Pein Passwort wird von Facebook nicht
C Freunde im Chat	hotmail.ch Freunde finden
	Anderer E-Mail-Anbieter Freunde finden Freunde finden Freunde finden birenehoppe.ch
	Andere Funktionen Freunde finden GUTSCHEIN Profi Fotoshooting inkl Styling

Both in the case of facebook.com but to a lesser extent also of seniorweb.ch, privacy was a matter of some concern to hesitators and intenders. In the case of facebook.com, the possibility of adjusting privacy-settings was appreciated. However, all test participants had trouble actually finding the privacy settings which are only accessible by clicking on a small arrow in the header. The actual handling of the adjustments was found to be complicated and rather confusing: none of the test participants understood the default settings without having to think about them very carefully. Moreover, customizing privacy settings was definitely asking too much of our test participants. "There are so many links I could click, it's confusing!", the former banking clerk said (female, 63 years).

Figure 11 Privacy settings were appreciated by test participants but hard to find and even harder to understand.

facebook 🙏 🗉	Suche Q Suche Startseite V
	Privatsphäre-Einstellungen Kontoeinstellungen Kontrolliere deine Privatsphäre, wenn du etwas postest Abmelden Du kannst die Privatsphäre deiner Statusmeldungen, Fotos und Informationen mithilfe der Inline- Hilfe
	Publikumsauswahl verwalten - während du die Inhalte teilst oder im Nachhinein. Denke daran: Die Personen, mit denen du Inhalte teilst, können deine Informationen stets mit anderen Personen oder Anwendungen teilen. Bearbeite dein Profil, um zu sehen, wie das funktioniert, oder erfahre mehr dazu. Was machst du gerade?
	Kontrolliere die Standardeinstellung für deine Privatsphäre Diese Einstellung bezieht sich auf die Statusmeldungen und Fotos, die du von einer Facebook-Anwendung aus in deinem Profil postest, welche nicht wie Facebook für Blackberry über die Inline-Publikumsauswahl verfügt.
	Öffentlich Image: State of the state of
	Eunktionsweise von Verbindungen Bestimme, wie du dich mit Personen, die du kennst, verbindest. Einstellungen bearbeiten
	Funktionsweise von Markierungen Bestimme, was passiert, wenn Freunde dich oder deine Inhalte markieren. Einstellungen bearbeiten
	Anwendungen und Webseiten Bestimme, welche Informationen mit Anwendungen, Spielen und Webseiten geteilt werden. Einstellungen bearbeiten
	Beschränke das Publikum für ältere Beiträge Schränke die Sichtbarkeit deiner Meldungen ein, die du mit Freunden von Freunden oder öffentlich geteilt hast Sichtbarkeit älterer Beiträge verwalten
	 Blockierte Personen und Anwendungen Verwalte die Personen und Anwendungen, die du blockiert hast. Blockierungen verwalten
Facebook © 2011 · Deuts	Über uns · Werbung · Seite erstellen · Entwickler · Karrieren · Datenschutz · Impressum/Nutzungsbedingungen · Hilfe

An important finding concerning **de.wikipedia.org** was that its community character was not even recognized by intenders and hesitators. However, community features are not necessarily at the core of de.wikipedia.org. Some users might just contribute by editing articles. But this undertaking requires overcoming many usability barriers and a lot of perseverance.

The entire process of getting started as an active contributor was considered complicated and timeconsuming. Once the test participants had found the author portal they were surprised and in some cases even dumbfounded by the complexity of active contribution: the number of links, guides, references and manuals was simply overwhelming. In any case, our test participants did not know where to begin. Even a very experienced author admitted that it was easy to lose track if one did not "exercise" regularly. Above all, one hesitator (male, former web publisher, 63) mentioned that he found the language being used in instructions and manuals to be "too highstanding". He also came to the conclusion that he would need to have better English skills in order to become an active contributor.

Figure 12 Getting started on Wikipedia involves a lot of reading and requires perseverance

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A MA	Projektseite Diskussion	Lese	Quelltext anzeigen	versionsgeschichte	Suche Q
WIKIPEDIA	Wikipedia:Autorenportal				Abkürzung: WP:P
Die freie Enzyklopädie	Autorenportal				
Hauptseite Über Wikipedia Themenportale Von A bis Z Zufälliger Artikel	Das Autorenportal gibt einen Überblick über alles, was für A Entwicklungen und wichtige Diskussionen sowie Einblick in d Für Neulinge gibt es zudem Grundinformationen über Wikiped Fragen zur Wikipedia stellen. Auf der Seite Projektdiskussion kann über die Weiterentwicklich	lie Organisationsstrukturen. lia sowie erste Beteiligungsformen i	m Überblick. Für Exper	imente gibt es die Spi	
Neuen Artikel	Aktuelles			Neu bei Wi	kipedia?
anlegen Autorenportal Hilfe Letzle Ånderungen Kontakt Spenden	Adminkandidaten: Liesel Wiederwahlen: Logograph Schiedsgericht: Wahl Meinungsbilde: Wiedereinführung der Kandidaten für lesenstv Umfragen: Wiki Loves Monuments 2011 • "Wissen" im B		rrecht? • Relevanzkriteri	Tour für Lese Persönliche Hinweise für Beteiligen - B	Erste Schritte - Tutorial für Autoren - Fragen von Neulingen Betreuung durch Mentoren Dozenten und Studenten Jlinde Benutzer
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বাংলা	Förderung	Wartung			Bildrechte · Musikrechte
Brezhoneg	Literaturstipendium · Bibliotheksstipendium ·	Qualitätssicherung · QS von heu	te ·	Sonstige Hi Browser-Unt	rren erstützung · Benutzerdefinierte
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Català	Wikimedia Deutschland · Community-Projektbudget	Belege-Diskussion		-	mehr
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2.2.3.2.3 Topical communities: Little activity, no benefits

At the outset, the test administrators asked intenders and hesitators if there was a website with community features that they would like to explore. None of the participants could come up with such a website. Therefore, the test team facilitated the selection of a second online community by presenting participants with a list of possible choices (cf. Table 3).

The topical online communities chosen by the participants covered the areas of health, cooking and business networking. However, all participants lost interest in these topical online communities quite quickly and discontinued using them. The main reason for this was that these online communities are embedded in websites that can easily be used without being a member and logging in. Participants were quite content simply to use the websites for matters of information retrieval and refrain from actual community activity. Moreover, because they were mainly interested in a speedy retrieval of information, they preferred to use a general search engine (mainly Google) and felt that logging into a specific online community was inconvenient and provided no additional benefit. This can be illustrated with online communities focusing on cooking (e.g. chefkoch.de, gutekueche.ch): Our participants lost interest in these online communities because they could not identify any use above and beyond finding recipes. But since they already had strategies of finding recipes on the internet they did not need an online community to do so.

Figure 13 Low quantity and quality as on the Diabetes forum of vitaclic.ch is a common problem of topical online communities



In some cases, participants made the experience that the general level of activity in these communities was quite low. Thus, when they tried to engage in community activities they did not get any responses or could not find original contributions. Clearly, asking new members to initiate activity in an online community is too much to ask. It must also be said that the quality of content in many of

the topical communities was clearly below standard. This was underlined by participants' statements: "I personally know more biking routes than are listed here" (male, 69 years, former insurance agent) or "I know more about diabetes than the people writing in the expert forum" (male, 76 years, former electrician).

Another case in point is slow or even missing responsiveness. This was experienced by an intender (male, 66 years, former engineer) who contributed a recipe to an online community focusing on cooking. He found the review process for recipes to take so long that he had no interest in contributing again ("It takes them months to review a recipe. I get an e-mail with a "thank you"... But the recipe still isn't online".)

2.2.3.2.4 What did participants like?

Seniorweb: regional strength and suitable age group

In the interview following the first test session hesitators said they liked the fact that there were real people behind seniorweb.ch and that you could meet these people in real life and in some cases quite close to your own home (via regional groups on seniorweb.ch). One hesitator (male, 69 years, former insurance agent) specifically appreciated that seniorweb.ch was targeted at older persons. Another aspect of seniorweb.ch that was found to be at tractive was the diversity of contents and the selection of topics. One intender (female, 69 years, former secretary) said she found the name seniorweb.ch specifically apprealing.

Facebook: curiosity vs. privacy

With regard to facebook.com a prominent issue was privacy. Participants were relieved to see that one could take steps in order to make one's facebook posts more private. Being able to follow other persons' activities was considered fascinating. One hesitator (female, 64 years), who used to work as a professional networker, admitted that it thrilled her to see what others were writing. Clear structure and good overview were two aspects mentioned by intenders though they had obvious difficulties finding all necessary functions and clusters to get their profile going during the test. Of course, the huge number of participants was considered an attractive feature of facebook.com.

de.wikipedia.org: free access to knowledge as an attractive concept

Accessing the community features of de.wikipedia.org was considered quite easy. While registration is recommended it is not required in order to get started and the possibilities for contribution become available immediately. Login and registration processes that often proved to be difficult in test sessions with other online communities were therefore not an issue with de.wikipedia.org, a fact that was well received by the participants.

Participants were intrigued by the idea of contributing to a widely used and accepted encyclopaedia. However, they were also rather in awe of the rules and regulations that needed to be followed in order to make a contribution acceptable.

2.2.3.2.5 What did participants not like?

In the interview following the first test session, participants were asked to name aspects they had not liked about their first experience with an online community. The things that annoyed hesitators during the first test session can be categorized as typical usability problems. Login and registration created difficulties both on seniorweb.ch as well as on facebook.com. One hesitator (female, 66 years, former controller) was unhappy about having to provide her home address when registering on seniorweb.ch. Also referring to seniorweb.ch there were remarks stating an overload of information. It also seems important to note that some negative emotionality was reported as in the case of the former professional networker (female, 64 years) who said that she had felt insecure during the test session with facebook.com and that she wanted to get a better grasp of "the whole thing" first.

One hesitator (male, 63 years, former IT-professional and web designer) dealing with de.wikipedia.org had a more specific problem. Despite his professional experience he could not figure out if it was possible to contribute in his Romansh dialect (Ladin), which he had expected it would be. Not surprisingly, he was disappointed.

Difficulties were also encountered by the intender focusing on de.wikipedia.org (male, 66 years, former engineer). He found it hard to understand what he was supposed to do in order to work through the scenario presented and clearly felt that he would have needed much more time to be successful.

Quite clearly, intenders' negative experiences in the first test session were very similar to those of hesitators. Even experienced Internet users struggled with getting started (registration, login) and were surprised at encountering more difficulty in using facebook.com than they had assumed. They were rather taken aback by the amount of information presented (seniorweb.ch) and experienced some negative emotions, mainly in the form of irritation at having "beginners' problems" as quoted by an intender (female, 75 years, housewife).

It seems striking that after their first test session hesitators did not mention any aspects concerning social relations among the things that they did not like. The reason for this is probably that they did not get as far as actually interrelating with other members of the respective communities.

2.2.3.3 Second test session

Four weeks after the first test session, hesitators and intenders were invited for the second session.

2.2.3.3.1 Experiences at home (pre-interview)

In the time between the two test sessions participants (hesitators and intenders) continued to use the two online communities they had chosen before the first test session. During the pre-interview of the second test session they were then questioned about their experiences.

More activity than expected

On the whole, participants were more active in testing the online communities that were attributed to them by the test administrators (facebook.com, seniorweb.ch, de.wikipedia.org). Almost all intenders visited these online communities on a daily basis. A first step often consisted of completing profile data. Quite a few participants had not truly completed that first step during the test session and felt a need to return and "finish the job". A typical example of this is the intender (female, 63 years, former banking clerk) who adjusted privacy settings on facebook.com.

All participants tended to visit the self-chosen topical online communities less frequently. We can assume that they were kept busy enough with finding out how their "main communities" actually worked. They used the additional communities mainly as databases for topical information (health, cooking, hiking). Only one intender (female, 69 years, former secretary) actually tried to contribute content (to the online community quevita.ch). She was asked to fill in an additional form and considered that a hassle. Consequently, she lost interest and did not make another effort to provide personal content to the online community.

Intenders: Finding the assets of their communities

Intenders seemed to have had more fun in the four weeks following the first test session than hesitators. Three out of six intenders made use of the opportunity to contribute con tent to the online communities. The other three intenders visited their online communities no less frequently. However, they refrained from actively contributing any content or from contacting other community members. Some participants were exploratory in getting to know their online communities. For instance, one intender (female, 63 years, former ban king clerk) reported that she clicked on all the icons on facebook.com to learn about them. In a similar vein, another intender (female, 69 years, former secretary) reported that she liked to "crisscross" through seniorweb.ch. Other participants showed a somewhat more conservative behavior. For instance, one intender (male, 76 years, former electrician) stated that he worked systematically through the seniorweb.ch starting page. He would choose no more than one topic per day.

Concerning seniorweb.ch, one intender (female, 69 years, former secretary) enjoyed looking at all the pictures. Moreover, it was positively mentioned that seniorweb.ch was a platform for organizing a

large range of concrete activities in the "real world". Seeing people of that age group being active and dynamic was a further positive aspect mentioned. One intender (female, 69 years, former secretary) uploaded a greeting card designed by her husband to the respective interest group on seniorweb.ch, and a further participant (female, 63 years, former banking clerk) asked a health expert a question.

With regard to facebook.com, one intender (female, 63 years, former banking clerk) had re-connected with two old friends she had met in the USA and found it exciting to be in touch with them again. However, another intender couldn't come up with anything specifically positive about facebook.com.

The most enthusiastic response came from a 66 year-old male intender (former engineer) who had dealt with de.wikipedia.org. He had authored a contribution which – after some corrections – was accepted. He was proud that he had accepted that challenge and happy to have succeeded.

Hesitators: not convinced after 4 weeks of trial

After four weeks of using online communities independently, hesitators were rather reserved with regard to mentioning positive aspects of their experience. Compared to intenders, hesitators showed a somewhat lower frequency of visiting their online communities. None of them did so on a daily basis. Hesitators also differed from intenders in that they did not actively contribute to the online communities. Said one hesitator (male, 69 years, former insurance agent): "I had planned to post a comment about pensions but then I felt that the discussion was taking another turn [so I did not post it]." Another hesitator (female, 64 years, professional networker) reported about her use of facebook.com: "I just search for names a little bit. Then I get a list of 10 names and I don't know which one's the right one. You would have to make a friendship request."

Two of them had nothing positive to say about seniorweb.ch. One hesitator mentioned the appealing structure of the website. With regard to facebook.com, as in the first test session, the sheer size of the network was mentioned as an asset. The hesitator (male, 63 years, former web publisher) who had started out being interested in de.wikipedia.org had stopped using it due to the fact that he thought he could not work in his Romansh dialect (Ladin⁷).

Struggling with settings and functions

A majority of hesitators and intenders reported having had no or only minor difficulties in using their assigned online communities. The secretary (female, 69 years old) reported having had difficulties

⁷ Given the usual policies of wikipedia.org it seems quite unlikely that a contributor could not use his preferred idiom. It is much more likely that a contributor using a less prominent idiom would have to begin a new article and would face certain difficulties in contributing to existing articles. Thus, it seems implausible that the reason given by our hesitator is truly valid. On the other hand, his perception of this situation as a problem and an obstacle to participation remains important. It illustrates how potential contributors can be kept from participating by how they interpret previous contributions.

with changing her username – she had been advised to do so because she had used her full e-mail address as a username. It took the same intender long to find out where she could upload her personal photo. She kept searching for her user account but would have needed to access her user profile ("Mein Konto") and then click on "Bearbeiten" ("edit"). She concluded that the problem was that she did not speak English very well – a clear indication that English computer jargon is very much present on seniorweb.ch.

Figure 14 Finding the place for adding personal data on seniorweb.ch is quite a challenge for new users



One intender (female, 71 years old, former shop assistant) still reported having had problems with logging in and logging out of seniorweb.ch even though she was an experienced computer and internet user.

Staying patient with work flows

Concerning Wikipedia, one hesitator (male, 63 years, former web publisher) admitted that the reason he did not encounter any handling problems was that he didn't "go in deeply." The former engineer (male, 66 years, intender) dealing with de.wikipedia.org reported that while logging in was really easy "finding out how it really works takes hours!" Obviously, authors must bring along a very strong motivation to contribute to the community and perhaps have a lack of alternatives, both for expression of one's personality – and for social networking.

What participants liked

During the telephone interview four weeks after the second test session positive points mentioned with regard to seniorweb.ch were that it was fun, that it offered an opportunity for social contacts and that it featured an attractive selection of topics.

Concerning facebook.com the professional networker (female, 64 years) mentioned that she liked the fact that she could see what others were doing without having to write anything herself. Finding friends and making contacts was another point mentioned as being positive although she was quick to add that this was mainly true for others and not for herself.

Intenders offered a somewhat broader array of aspects they liked about seniorweb.ch. They seemed to enjoy the fact that seniorweb.ch was about older persons being active and getting together to do things in the real world. The opportunity to be creative was also seen as an enjoyable element of seniorweb.ch (e.g. in designing greeting cards). Similar to the hesitators they seemed to agree with the selection of topics featured on seniorweb.ch.

Unlike the hesitators dealing with facebook.com intenders tended to emphasize the chance for reconnection with existing social contacts as something they liked about facebook.com. Potentially, the opportunity to play games could also be alluring to the target group. How- ever, one intender (female, 63 years old, banking clerk) said she was scared of getting addicted to playing games on facebook.com and cited that as an important reason why she was considering quitting facebook.com altogether. An interesting aspect of facebook.com mentioned by hesitators was its potential for intergenerational contact and exchange. However, it is worth noticing that one intender (female, 75 years old, housewife) concluded that facebook.com was mainly something for the young, as she did not succeed in finding contacts on facebook in her generation.

De.wikipedia.org's diversity, the opportunity it offers for being creative and the fact that one can discuss with others a topic one cares about were mentioned as being attractive elements.

Growing insecurities at home

One hesitator (male, 67 years) who used to work as a sailor and foreign legionnaire clearly had trouble trusting the seniorweb.ch site. He became concerned that he would suddenly be confronted with bills for using the website and more or less argued that the interesting things on seniorweb.ch had to be paid for. Concerning facebook.com, hesitators felt, on the one hand, that older persons were out of place and that facebook.com was merely something for "the young". On the other hand, one remark concerning the options for social contact on facebook.com seems particularly interesting:
One hesitator (female, 65 years, former linguist and nurse) made it clear that she was not interested in "her contacts' contacts".

It is important to note that test participants did not name very many particular usability problems. It would, however, be short-sighted to conclude from this that they did not en- counter any such problems. Because of their limited knowledge about online communities it is difficult for test participants to pin down verbally their experiences so that they can be categorized easily. Rather, they often expressed a kind of general uneasiness or insecurity about their dealings with online communities. It does not seem far-fetched to assume that usability problems play an important role in creating these feelings even if they are not voiced in a concrete manner.

Critical reflections about the idea of an online community

Aspects of social relations in online communities play a more prominent role in intenders' comments on what they did not like about their experience between the first and the second test session. For instance, concerning seniorweb.ch, comments were made that reflected a concern that real social relations would be replaced by contact via the computer, the former clearly being preferred. Another intender (female, 71 years, former shop owner) stated that she hated the fact that she had "to produce herself". In particular, she disliked the fact that among the features of seniorweb.ch there was a partner search opportunity. Social relations also figure among the topics raised concerning facebook.com. One intender (female, 63 years, former banking clerk) asked: "What about true social contact?" Thus, she obviously felt that the kind of social contact offered by facebook.com was in some way lacking. This was partly due to her irritation about the games available on facebook.com, which she found distracted persons from actually relating to each other.

Lack of support in every community

A certain lack of support was another topic that intenders commented on. Thus, in the case of facebook.com the former banking clerk (63 years, intender) was troubled because a wrong school showed up in her profile and she could not figure out how to change that information. Support was also an issue with regard to de.wikipedia.org, which was considered to be too complicated for starters. The former engineer (66 years, intender) expressed a clear wish for more guidelines and clearly visible first steps. He felt he had to collect instructions from many different places.

Some intenders repeated that seniorweb.ch was overloaded with material – a complaint that had already appeared earlier. It is noteworthy that what was considered as "overloaded" is probably the result of a lack of structure in the contents and agitated graphical design. The challenge for online communities is to find the right mixture between sparseness and clarity, on the one hand, and variety and multiplicity, on the other, in order to appeal to a large number of potential contributors. The more content is available, the more support and user guidance the users need for exploring it successfully.

2.2.3.3.2 Second lab test: Becoming active

As in the first test session, intenders and hesitators worked through different scenarios for each of the two online communities they were testing. However, the second test session focused exclusively on seniorweb.ch, facebook.com and de.wikipedia.org. This allowed for a greater number of scenarios per online community (up to six scenarios instead of three).

Active users were presented the same scenarios as intenders and hesitators. However, they participated in a usability test only once. The results are included in this chapter.

Table 4 provides an overview of the main topic of the scenarios, the focus of observation for test administrators and the criteria used for assessing goal attainment. While in the first test session the focus was on registration and getting a basic overview and orientation, the second test session had a clear emphasis on actual community functionalities (i.e. looking for and writing contributions, interacting with other members, finding out about rules and restrictions when authoring content).

Community	Scenarios	Main focus for observation	Criteria of goal attainment
seniorweb.ch	1 Catch up	Typical behavior when going on seniorweb.ch (goal-oriented, surfing, etc.) When do people login?	Participant is able to get an overview of what happened during the last two weeks
	2 Look for speci- fic contribution	How does participant search for content?	Participant realizes that there aren't any contributions on that specific topic yet
	3 Write a contri- bution	Does participant use toolbox? How are text and photo connec- ted?	Successful up- load of photos
	4 Alert your friends to your contribution	What functionalities does participant use? Does Participant know how to get assistance? How does participant alert others?	Participant has successfully contacted other member(s) via seniorweb.ch
	5 Review image gallery	Grasp of user menu in "my seniorweb"	Participant is able to remove image
	6 Participate in forum	What functionalities does parti- cipant use? Does participant know how to get assistance? How does participant alert others?	Participant is successful in con- tacting other(s) Participant has alerted others to his/her contri- bution

Table 6 Scenarios used in the second test session for intenders, hesitators and active users

(Table 6 continued)

Community	Scenarios	Main focus for observation	Criteria of goal attainment
facebook.com	1 Catch up	Typical behavior when going on facebook.com Noticing of friendship request	Participant is able to get an overview of what happened during the last two weeks.
	2 Post a newspaper article	Does participant use facebook icon? Does participant find/follow up on posted article?	Participant uses facebook icon on newspaper website Participant ma- kes sure article was posted
	3 React to fri- endship request	Reaction to friendship request	Acceptance of friendship request
	4 Upload and share photos	Does participant find privacy settings for uploaded photo?	Successful up- load of photo Participant correctly adjusts privacy settings
	5 Edit personal profile	Does participant find settings in personal account?	Participant correctly adjusts message settings
	6 Send a perso- nal message	How does participant find recipient's address?	Participant sends personal message
de.wikipedia.org	1 Search for information	Is participant confident in fin- ding information?	Participant finds information
	2 Correction	Knowledge of contributor prerequi-sites Use of IP identification or login Access to editor mode Grasp of quality assurance	Participant knows contribu- tor prerequisites Participant understands con- cepts of editing and quality assurance
	3 Follow-up of edit	Grasp of feedback concept Use of version history and dis- cussion page	Participant un- derstands feed- back concept Participant finds discussion Participant is able to follow-up on an edit
	4 Authors' com- munity	How does participant initiate interaction? Does participant find informati- on on real-life meetings?	Participant finds personal pages Participant finds ways of estab- lishing contact Participant finds information on real-life meetings
	5 Authoring, rules, copyright	Does participant check on relev- ance criteria? Is participant sensitive to copy- right issues? Does participant use authors' portal?	Participant adheres to im- portant rules Participant knows where to seek assistance Participant is capable of contri- buting an article

2.2.3.3.3 Second test session: Usability findings

After struggling with registration processes and getting an overview of basic functionalities as well as community features in the first test session, intenders and hesitators now had difficulties in contributing to and in getting involved with the community. Active users stumbled over identical usability problems, although to a lesser extent the more involved they were in the community.

Sharing and participating made complicated

The test participants still had a considerable amount of difficulties in working through the scenarios. The encountered problems seemed to be quite basic: For instance, in the case of seniorweb.ch, all test participants (hesitators, intenders and active users7) found it difficult to upload photos and felt that a great effort was needed to create a blog entry.

Starting a blog entry was considerably easy for all test participants: all of them quickly found out how to begin. However, this was the only step of editing a blog entry they managed without help. The main problem was that in order to include a picture in a blog entry of **seniorweb.ch** the picture has to be added to a picture gallery first. These two processes are combined in an unfortunate way: while editing a blog entry, all test participants expected to be adding a picture by clicking on "Durchsuchen" ("Search") and picking a file from the computer's hard drive – as in an e-mail (see figure 16). But this way, only pictures that have already been uploaded to the picture gallery can be chosen. In order to do this, test participants had to click on "Hochladen" ("Upload") first. Moreover, test participants got even more confused trying to upload a picture because this entry mask looks exactly the same as the one for editing a blog. Many test participants ended up writing their blog entry in this window not understanding that it only refers to the picture. Eventually, none of the test participants managed to post a blog without help.

Figure 15 Adding a picture to a blog contribution is a challenging mission on seniorweb.ch

	Abmelden Starthilfe 🚱 Support 🔽 fr	de it 🔍	
seniorweb.ch	Mein Konto Mein Seniorweb	Erstellen ÜBER UNS STARTSEITE	
PARTNERSUCHE AB51	MAGAZIN CLUB DIENSTE UNTERH	🕼 Bild hochladen - Google Chrome	
Startseite » Inhalt erstellen		www.seniorweb.ch/noderef_image_helper/upload/edit-field-sw-mag-image-rel-0-nid-nid Bild erstellen	
KATEGORIEN	Blog erstellen	Die Inhalts-Sprache ist <i>Deutsch</i> . Um die Sprache zu ändern, wechseln Sie bitte	
> Arbeit	blog erstenen	die Sprache oben im Cockpit.	
> Bildung	Im Blog können Sie Ihre persönlichen Beiträge einstelle	Titel: *	
> Elektronik	oder freut, oder führen Sie Ihr öffentlich einsehbares		
> Freizeit	der Startseite, im «Club», in Ihrem Profil und, wenn Si	e Vokabulare	
> Gesellschaft	Blog werden kommerzielle Inhalte gelöscht! Benu	t Kategorie: *	
> Gesundheit		- Bitte auswählen - 💌	
> Konsum	Die Inhalts-Sprache ist Deutsch. Um die Sprache zu än	Ordnen Sie Ihren Beitrag einer der 13 Kategorien zu.	
> Kultur	Cockpit.	Themen: *	
> Leben	Titel: *	0	
> Partnerschaft		Geben Sie das oder die Themen ein, die in Ihrem Beitrag angesprochen werden. Die am häufigsten genannten Themen Ihrer Kategorie sehen Sie oben eingeblendet. Bitte nach jedem	
> Recht		Thema ein Komma setzen.	
	- Vokabulare		
> Umwelt		Gruppen	
> Vorsorge	Kategorie: *	Autorenwechsel	
> Zum Testen	- Bitte auswählen - 💌		
	Ordnen Sie Ihren Beitrag einer der 13 Kategorien zu.	Partner:	
SPEZIELLE LINKS	Themen: *	- Keine - Quellen-Nachweis auf Inhalts-Partner. Das Partner-Logo wird in der Info-Spalte dargestellt.	
IN FAHRT			
S FREIE FAHRT	l Geben Sie das oder die Themen ein, die in Ihrem Beitrag ange	Bild: *	
	Ihrer Kategorie sehen Sie oben eingeblendet. Bitte nach jedem		
> Kursgruppen		Maximale Dateigroße: 200 MB	
> Ratgeber-Videos		Erlaubte Erweiterungen: png gif ;pg ;peg	
> Club Nachrichten	Gruppen		
> Expertenrat	Autorenwechsel	Beschreibung:	
Gesundheitsfragen	Autorenineensei		
> Foren	Partner:		
> Generationen im Dialog	- Keine -		
> Gruppen	Quellen-Nachweis auf Inhalts-Partner, Das Partner-Logo wird in		
> Grusskarten			
> Kleinanzeigen	Hauptbild:		
> Regionalgruppen		0	
> Spiele	Das Bild, das im Anrisstext Ihres Beitrags gezeigt wird. Laden S		
> TAO Projekt	Mediensammlung von Seniorweb. Eigene Bilder müssen separat	S www.seniorweb.ch/noderef_image_helper/browse/edit-field-sw-mag-image-rel-0-nid-nid	
> Umfragen	Hochladen Durchsuchen	Bilder suchen	
 Vergünstigungen 	Beschreibung:		
> "Wiki loves monuments"	🗄 Quelloode 🚽 🖹 👔 🖓 🖓 🗛 🗛 🖪 7	Kategorie Thema	
 wiki loves monuments 		- Alles -	
	📧 📰 📄 Stil 🛛 🔻 Format 📃 💌 🕸	Titel Benutzername	
> Die wichtigsten Themen		Eine kommenstenste Licte von Benutzernamen	
> Sitemap Matrix	•	Eine kommagetrennte Liste von Benutzernamen.	
🔁 Share 🛛		Übernehmen	
		Schwan schwarz Winterwanderung Winterwanderung	
Finde uns auf Facebook			
seniorweb.ch			
Gefällt mir			
		5. Januar 2012 - 15:11 / 5. Januar 2012 - 14:41 /	
303 Personen gefällt seniorweb.ch.		480x329 px / 27.42 KB 480x329 px / 27.42 KB	
		5. Januar 2012 - 19:49 /	
		1740x2088 px / 1.97 MB	
	to a blog contribution is a shall-spin a sinci-		
	to a blog contribution is a challenging mission	Rest.Signal Wil Wohnen im Alter Hirsenhalme	
on seniorweb.ch			
		5, Januar 2012 - 12:25 / 4, Januar 2012 - 20:47 /	
		5. Januar 2012 - 12:25 / 4. Januar 2012 - 20:47 /	

On **facebook.com** hesitators and intenders were also quite similar with regard to their struggles in connecting to others. The former banking clerk (female, 63 years) did not notice a friendship request on facebook.com until she returned to the second test session where it was brought to her attention

by the test administrators. None of the test participants realized that friendship requests are indicated by an icon in the header (see figure 11, page 29). All test participants expected to be notified by email, which is the case by default. This seems to be a beginners' problem, because it was no issue for active users.

Sharing a photo with a specific contact brought up usability problems as well. Only one intender and one active user managed to do this without help by clicking on the correct link for uploading a photo. The others had troubles because they did not know where to begin: one test participant chose the recipient first and looked for a possibility to share content on the recipient's facebook page. The others chose the picture on the hard drive of the computer first and tried to upload it to facebook by drag and drop. Apparently, the more complex a task, the greater the chance that active users will be struggling as well.

The difficulties in meeting the requirements for writing an article on **de.wikipedia.org** are of a different nature. Only the former engineer (66 years, intender) went on using Wikpedia. Although he had managed to contribute to an existing article to Wikipedia at home, he was not able to recapitulate his procedure. Moreover, doing research for editing a new article during the usability test made him lose himself in information and start all over again (see figure 17). He felt that he was under time pressure during the test scenarios and said that de.wikipedia.org "needed someone who could bring more structure into the whole thing".

Figure 16 Editing an article on Wikipedia requires a lot of research – for instance about relevance criteria.



2.2.3.3.4 What did participants like?

In the second test session the participants seemed to grow more aware of the social nature of seniorweb.ch and of the opportunity to take part in blog discussions. Thus, the opportunity to make friends, to upload photos that can be seen by others and in general to contribute to discussions were

found to be positive aspects. One hesitator specifically mentioned the user-friendliness of seniorweb.ch – perhaps a result of the greater familiarity with the website.

Seniorweb.ch received a good evaluation as a resource of information. On facebook.com the possibility of uploading and sharing material was well liked. However, other than in the case of seniorweb.ch privacy was again mentioned – albeit positively, i.e. in the sense that it was possible to specify privacy settings and to remove old posts, two functionalities the participants knew due to the interventions of the test administrators.

2.2.3.3.5 What did participants not like?

After the second test session hesitators' comments on negative aspects of their experience with seniorweb.ch again centered on usability problems and a lack of support.

Intenders and hesitators felt they had received too little guidance while trying to upload a photo and had had to do too much searching for information on their own. The forms needing to be filled in for blog contributions or in order to upload a photo were considered overly complicated. These statements were largely mirrored by comments made about facebook.com concerning "too much information" and difficulties with adjusting user-defined settings. Concerning social relationships, the web publisher (male, 63 years) referred to the internet as a medium that "lets you go sour" [with waiting]. Thus, he thought that the time spent on the internet was mostly wasted.

With regard to facebook.com, the former secretary (female, 69 years) was irritated by the fact that she had not managed to find the notification settings. The former banking clerk (female, 63 years) was annoyed by the fact that she had not understood the term "poke" correctly. She had also unknowingly failed to answer a friendship request and felt bad about that.

The time-span for completing the de.wikipedia.org scenario was considered too short and de.wikipedia.org was perceived as lacking in structure. The intender in question (male, 66 years old) expressed his frustration about the fact that during the test session he had been unable to find certain materials that he had been able to retrieve at home. Obviously, establishing a routine procedure posed a real problem to him.

Especially intenders were disappointed because they felt that they had not lived up to their own expectations. As the former shop assistant/owner (female, 71 years) said: "I just didn't get it. You had to help me and I would have liked to be able to do it by myself."

2.2.3.3.6 Sum up: Active users

Active users are a heterogeneous group. They are all quite experienced Internet users, living both in cities as well as in rural environments. Two of them were former professionals in IT / web design. A former painter (male, 69 years) and a former nurse (female, 62 years) also figure among the group of

regular online community users – even though their former professions do not involve any substantial use of information technology.

What active users have in common is that they draw a clear benefit from their use of online communities. They show very different patterns of usage. Thus, we find some heavy users who spend several hours per day engaging with different online communities and contributing eagerly. Others are content with using just one online community and restricting their use to specific functionalities or sections of interest. In other words, active users have found their particular niche. They feel that their involvement in online communities is beneficial to them and they consider the amount of personal investment to be adequate in view of what they get in return.

This does not mean that active users did not encounter any difficulties during the test session. Even the 62 year-old former web designer using facebook.com came to the conclusion that the process of adjusting privacy settings in facebook.com was not very user friendly and sometimes confusing. A female user of seniorweb.ch (65 years, former accountant) admitted that she found the website overloaded and hard to navigate while even the veteran user of de.wikipedia.org stated that there were some things on the website that she had to search for over and over again.

Thus, we see that while active users are content with what they get from their involvement in online communities, this does not mean that they do not encounter any usability problems. However, due to the clearly identified personal benefits, occasional difficulties are not central to their experience.

2.2.3.4 Final telephone interviews

In the final telephone interview four weeks after the second test session the test administrators aimed to find out who among the participants would keep using their online community and why.

2.2.3.4.1 Sum up: Hesitators vs. intenders

Some interesting changes in the course of the study could be observed. On a general level, it is to be noted that while statements and reasons for not using online communities tended to be somewhat stereotypical in the beginning of our study, participants now arrived at more nuanced assessments of the strengths and weaknesses of online communities. Interestingly, some of the conclusions they made do not differ strongly from those that are also discussed by younger users as well as the professional ICT community.

Hesitators' attitudes towards online communities were clearly more critical than those of intenders to begin with. They could name a lot more potential risks of using an online community in the beginning and denied the existence of potential personal benefits.

However, after the first test session, they seemed rather positively surprised about what online communities had to offer. That optimism had all but disappeared when they returned four weeks later. Clearly, they had not profited from their autonomous use of the online communities. It is quite likely that hesitators would have needed a much greater amount of positive reinforcement and immediate feedback upon entering the community for the first time. Moreover, hesitators tended to be somewhat less aware of the social nature of online communities during their autonomous use in between the two test sessions and were more reliant on the inputs of the test administrators to realize some of the social opportunities of their communities. None of the hesitators actively contributed to the online communities between the two test sessions or during the four weeks between the second test session and the telephone interview. Most of them had voiced intentions to contribute but then did not act on them. Clearly, "posting something just to see what will happen" was not a valid option to them. They wanted to be very sure how a contribution would reflect on them and how it would be received by the community. In other words, the hesitators continued to hesitate and did not change into a more proactive and exploratory mode of behaviour.

Many intenders started out with quite high expectations concerning not only the online communities but also their own internet and computer literacy. Before starting into the first test session, the main outlook was one of curiosity. They were quite optimistic that online communities had something valuable in store for them even though they were unsure about what exactly that would be. Moreover, compared to hesitators, intenders identified much fewer risks connected to the participation in online communities. Intenders also were quite confident about their own internet and computer literacy, i.e. they expected from themselves a high level of mastery and competence in the use of online community features.

After the first test session intenders were on the one hand able to identify an even larger number of benefits of participation in online communities but on the other hand they also saw more risks involved in using online communities. Furthermore, being confronted with certain limitations and a considerable amount of usability problems – at least in the initial stages of the test session – was probably even more of a problem for them than for hesitators and left them disappointed.

Though intenders were more optimistic than hesitators in the beginning of the study, in the end the general mood among intenders was almost exactly as sceptical as that of hesitators. Hesitators, on the other hand could not overcome their insecurities by using the communities for a limited amount of time.

Only three out of six intenders continued to use the tested online communities while two out of six hesitators were expected to continue using the community after the study.

2.2.3.4.2 Reasons for continued use

Among the test participants who voiced that they would continue to use the online communities that they had familiarized themselves with were persons who showed a real interest and even a desire to contribute actively. The web publisher (male, 63 years) knew that he would like to post on seniorweb.ch a piece of travel writing about Thailand and the Philippines. The former electrician (male, 76 years) said "he had to" continue using seniorweb.ch because he was waiting for an answer to his blog post. This utterance seems quite important because it shows that once a person enters into a communicative process the principle of reciprocity becomes important and can have the effect of drawing a person into the community.

Concerning de.wikipedia.org the former engineer (male, 66 years) had no trouble naming quite a few reasons for continuing his involvement. He was at the time working on a project that offered itself very well as a contribution to de.wikipedia.org. It also became clear that because he had a very high opinion of the quality of de.wikipedia.org he was proud about the opportunity to contribute. During the eight week experience with de.wikipedia.org he already contributed an extension to an existing article, which gave him a feeling of happiness and satisfaction. It should also not be neglected that he hinted at the fact that de.wikipedia.org appealed to his ambition. He seemed to like the challenge involved in contributing an article. Finally, it is also worth noting that he saw de.wikipedia.org to normal work.

It is noticeable that those participants who at the end of the study showed a clear commitment for continued use of the tested online community were able to make a clear connection early on between the online community and certain important aspects of their everyday life. Thanks to that connection,

they felt an intrinsic motivation to return to the online community and follow up on those aspects that were relevant to them. Thus, an intender (female, 71 years) showed a strong interest to find out more about the hobbies of seniorweb.ch community members. As a former owner of a tea shop she had a large network of social contacts and did not feel a need to make more friends. However, sharing interests or hobbies with others was intriguing to her and made her return to seniorweb.ch on a regular basis. She had been going to leisure exhibitions and therefore found it easy to make a connection between a familiar "real world activity" and the opportunity offered by seniorweb.ch.

On the other hand, it was the social aspect of facebook.com that motivated the former linguist and nurse (female, 65 years) to continue using this online community. She stressed that she found it more convenient to communicate with established faraway friends through facebook.com than having to write to each of them individually. She had spent a large portion of her professional life in Cameroon and Tchad and still had a network of social relations in these countries. Thus, to her, facebook.com was actually a tool that saved her some effort in keeping in touch with people she knew. She saw a clear personal benefit in using facebook.com and felt she was getting quite a lot in return for her time.

2.2.3.4.3 Reasons for non-use

Altogether, four hesitators and three intenders are unlikely to continue using the tested online communities any further. Although, for instance, the professional networker (female, 64 years) stated that she would continue to use facebook "maybe once a month" it is more realistic to assume that she will give up on it. This tendency towards hypothetical narratives could be observed in many responses of "non-users". Examples of these narratives are "Online communities are a good idea. But they just weren't made for me." or "Maybe later in life, when I won't be able to go outside anymore, I'll become a member of an online community." Some test participants who made it clear that they would not return to the tested online community had obviously reached their decision at an early point as well. For instance, one hesitator (female, 66 years, former controller) stated after the first test session: "My [negative] expectations were confirmed. This didn't knock me out of my chair."

Probably the most salient argument that some hesitators voiced against using seniorweb.ch was quite simply that they had not developed a true interest in the online community and felt no need to belong to the community. They could not come up with an answer to the question "why?" In other words: For them there was simply no point in participating in online communities.

On the one hand quality and quantity of content was criticized. With regard to seniorweb.ch, some test participants did not manage to cope with the amount of content and felt that they needed to invest too much time in order to participate. For instance, the former insurance agent (male, 69 years) felt he had to work his way through a lot of useless stuff in order to arrive at something interesting. He came to ask himself: "What's the use of blogging?" While he found it "nice", on principle, that there existed a

AAL Joint Programme

platform for older adults, he made it clear that he considered voicing one's opinion on "everything" a rather vulgar habit. He did not want to be a part of it: "I wasn't actively searching for something like this." The ex-sailor and foreign legionnaire (male, 67 years) – who was supposed to be a perfect candidate for nourishing his international contacts via an online community – had not been able to clear up his confusion about which services on seniorweb.ch were free and which ones had to be paid for. Therefore he commented quite harshly on seniorweb.ch's content – which did not suit his needs. In addition, the former secretary (female, 69 years) said that she was rather irritated by the amount of commercial ads on seniorweb.ch, which she could not distinguish from original content.

On the other hand, the absence of interest in the online community can be attributed to a certain feeling of alienation as expressed in the sentiment "This is not my world" or "Facebook was not made for me." The professional networker (female, 64 years) as well as the housewife (75 years) stated that they felt somehow in the wrong place because their age group was not really present on facebook.com. In particular, the specific type of social exchange practiced on facebook.com was not to everyone's liking. As the former banking clerk (female, 63 years) said: "I don't need to know all these things about others."

The same test participant was finally convinced that facebook.com led to "negative social effects". Instead of being kept up to date with her nieces (who did not accept her friendship request) she had been attracted to playing games on facebook.com and was concerned about the addictive potential of these games. This led her to the conclusion that facebook.com was not really about social relations but actually kept people in front of the computer and thus away from real-life social contacts. Apparently, this potential loss of personal control can be frightening to some test participants. This was illustrated by the former legionnaire's statement that he did not want an online community to "control him". It is possible that this fear of not being in control is related to one's efficacy in dealing with the personal computer and in using the internet. Clearly, a person fearing a loss of control will not be motivated to use an online community.

Critical remarks made by test participants about privacy issues on facebook.com point in the same direction. The professional networker (female, 64 years) felt uneasy about a perceived lack of privacy. She felt it could be dangerous not to know your counterpart. Probably for the same reason the former controller (female, 66 years) kept up her opinion that she did not like to expose herself in an online community. There were also some additional arguments voiced that were specific to facebook.com, namely that facebook.com had a bad press and was sometimes used to organize large gatherings of people that could get out of control and be downright dangerous. Furthermore, some test participants believed that posts on facebook.com were irremovable and that even if you thought you had deleted something it was in fact still retrievable.

Another reason why test participants stopped using an online community was a low level of interaction, i.e. only a small number of other users were present and there were no or only slow

responses to our participants' contributions. The test participants who actively tried to share their own knowledge had to find out that their contributions did not elicit any reactions from the community. In other words, one of the main principles of a community, namely reciprocity, was not implemented in these communities to a sufficient extent. Investing into an online community without receiving a sufficient amount of benefit in return violates the important principle of reciprocity and prevents the development of a true "sense of community" (McMillan & Chavis, 1986), which is an important principle for the establishment of a functioning community.

A second reason was the slow processing of contributions for reasons of quality assurance. While quality assurance is an important issue particularly for topical online communities, it is important to find ways of organizing it without making contributors wait for too long. Seeing one's contribution on the website is a rewarding and reinforcing experience that online communities should try to provide as quickly as possible. Perhaps, accepting a contribution on a provisional basis and indicating that a contribution is still under review could be a way of rewarding contributors without neglecting quality assurance.

2.2.4 Conclusions

2.2.4.1 What makes communities attractive to older persons

seniorweb.ch: Manifold activities

Participants enjoyed the authenticity and liveliness of seniorweb.ch. In particular, they liked the fact that seniorweb.ch transports an image of older persons as being active. The diversity of the contents was not seen as a disadvantage. However, participants differed in their views concerning the name "seniorweb" and the fact that the online community is targeted at a specific age group. While some participants did not mind the age-specific orientation others felt they were categorized as being "old", which they found difficult to identify with.

A strong point of seniorweb.ch is that it contains material that is fun to use (e.g. read artic les, be inspired by other people's hobbies, to play virtual card games). Those participants who were certain to continue their activities on seniorweb.ch did so because they found a topic that interested them (e.g. travel writing).

The opportunity to make social contacts was also mentioned as a positive feature of seniorweb.ch. Nevertheless, a clear majority of participants remained very reticent to make use of that opportunity and did not count the posting of original contributions among the benefits even though one would assume that to be at the core of community activities. Interestingly, while seniorweb.ch was seen as a place where you could get to know someone new it was made clear that the actual goal was to meet persons in real life. This regional differentiation and the initiation of offline meetings on a local level

are facilitated by functionalities of seniorweb.ch, which allow to search not only for persons sharing one's interests but also to restrict that search to one's own geographical region. This finding is backed by the experiences of active users who stayed with the online community due to pleasant experiences with the same people offline. We consider this aspect as crucial for advocating social integration in the target group.

facebook.com: Large and intergenerational

The sheer number of members and the internationality of the network were aspects that were mentioned as being positive. Therefore, typical "lurking" behavior such as looking at other people's posts and pages out of curiosity was a tempting activity for some test participants.

On the other hand, test participants considered the possibility to stay in touch with people they already knew as a major benefit. Especially communicating with people living abroad was considered to be more attractive and more efficient than by using e-mail. In addition, due to its broad appeal, facebook.com has the potential for intergenerational communication even though it is viewed by some older persons as "something for the younger generations".

Finally, the possibilities of adjusting personal settings to one's needs were appreciated even though participants had some difficulties when actually trying to do so. However, it seems that facebook.com does have quite a serious image problem in that respect.

de.wikipedia.org: Special interest needed

de.wikipedia.org was seen as an enormously diverse community for persons caring deeply about a specific subject and wanting to share their information with others. Its potential benefit was seen in the opportunity to actually contribute something, namely a translation of existing articles or a new article based on travel experiences and simply to "serve a good cause".

What became quite clear during the test sessions is that de.wikipedia.org is attractive to persons enjoying an intellectual challenge, who want to stay mentally fit and are perhaps interested in a certain sense of competition.

Quality of content is seen as the defining element of de.wikipedia.org. Ultimately, it is at the root of most discussions taking place in the community and it is also responsible for the way in which de.wikipedia.org is perceived by its users. In any case, the possibility to join these discussions was appreciated but not considered during the course of this study.

Topical communities: Attractive promise

The main incentive for participating in a topical community is its attractive subject matter. Especially topics such as health and cooking are doubtless appealing to many persons in our target group. While

information can be collected through other channels as well, a topical community has the added value of the authentic, hands-on experience of other human beings.

Topical online communities were chosen by our participants because they expected to receive valuable information and inspiration in a specific field of interest. In turn, they were willing to share some of their own expertise.

2.2.4.2 Dominant obstacles in using online communities

In the following paragraphs we distinguish reservations the test participants mentioned in the interviews from problems the test administrators identified by observing users' behaviours during the lab test sessions.

2.2.4.2.1 Usability problems lead to an unsatisfactory user experience

The tested online communities left the test participants with an unsatisfactory user experience. The cause of this was on the one hand the sheer amount of usability problems test participants were confronted with in the respective communities. On the other hand, many usability problems were so serious that they actually prevented participants from using the online community.

Significant barriers appeared throughout the whole process of using online communities.

1. Many online communities drop out at a very early stage because they are either unknown or unattractive for potential users. The reasons for this are manifold and not always in the area of influence of the community provider:

- People tend to be "diverse". It is a complex matter for a community provider to meet the interests, beliefs and needs of the target group.
- Insufficient quality and quantity of content can put off users.
- Community features are not appreciated by everybody. A cooking community like chefkoch.de offers quite a lot to users without them actually having to join the community and being able to write contributions.

2. Lengthy and complex registration processes contain the risk that potential users never arrive at actually using the online community. Either because they simply do not master the registration process or because the registration process creates negative emotions in beginning users that will be attributed to the online community as a whole, the encountered usability barriers are manifold:

- Missing or unclear process indication.
- Unclear indication of possibilities for taking action, e.g. imprecise naming, poorly perceivable links

- .Suboptimal design of error messages and references.
- Poor marking of optional action steps.
- Complex password requirements.
- Non-readable "CAPTCHA".

3. Lacking overview of the website and its functionalities can nip any beginning motivation to use an online community in the bud. An insufficient overview of the community and basic functionalities is particularly grave with regard to features such as finding members, inviting them and responding to friendship requests. This has to do with the absence of an elaborated concept for the website:

- Lack of coherent information architecture and user guidance (clustering and labelling, characteristics of navigation, orientation aids, integration of specific functionalities etc.).
- Lack of a stringent concept for providing different modes of access (navigation, search, indexes, thematic and target group access etc.)
- Insufficient definition of processes (e.g. find, comprehend, decide, take action, share).
- Inadequate graphic design.
- Unclear identification of paid and user-generated content.

4. Usability problems can complicate or even render impossible the contribution to and the involvement with the community. This concerns the act of actually adding a contribution (e.g. an article or a post, a picture) as well as the manner and frequency of interaction. Test participants had to deal with:

- Missing or unclear process indication as well as unclear indications of possibilities for taking action (the same barriers as experienced in the registration process).
- Little activity in the community and missing responsiveness.
- Inappropriate or even rude conversations.

The main problems are rooted in a lack of user guidance and missing fundamental explanations about how "the whole thing" works and what it is supposed to be about. Too many essential steps in participating in an online community require users to have a mental representation – a cognitive schema – of what he or she is supposed to do (e.g. login, registration, posting, blog, etc.). When these schemata are lacking much more fundamental guidance and explanation would be needed in order for persons to have a satisfying first encounter with an online community. While an experienced online community user will search for information fitting this pre-existing cognitive schema, many of our participants would have needed much more guidance in order to be able to carry out the actions required for working through the scenarios.

These phenomena seem to be only partly related to age: In the comparative usability tests during the study "Digital Natives vs. Digital Immigrants" (Zeix, 2010), groups of older adult users (50+) and native users (15+) worked through the same scenarios. Both groups faced the same usability problems, e.g. on facebook.com when trying to upload photos. However, all typically community-related functions such as "being friend" with someone or posting an update proved to be easier for the digital natives as they all had schemata (mental models) of how communities are supposed to work.

In sum: All of the online communities which were used during the test contained many usability problems that have a negative impact on a person's user experience and can actually increase preexisting insecurities.

2.2.4.2.2 Perceived risks

From the perspective of the test participants using an online community entails quite a few risks.

Online communities are time eaters

Some of the stated risks pertain to quality and quantity of the content. Some test participants considered the large amount of content as a potential source of distraction. The former insurance agent (male, 69 years) felt that he had to navigate through large amounts of information that were irrelevant to him in order to arrive at what he wanted. The effort involved in participation was simply perceived to be too great in light of what one could profit from doing so.

Consequently, test participants feared that they would have to spend too much time in front of the computer, time that they felt they could use to do other, more worthwhile things. While the more diplomatic statements referred to online communities as being time consuming, the less diplomatic ones called them simply a waste of time.

Finally, some test participants had not expected to be confronted with commercials and seemed rather irritated about that fact. For the former foreign legionnaire (male, 67 years) this created the impression that "they're only after my money".

Online communities make you lose control

Two aspects concerning the healthiness of using online communities were also brought up. One test participant clearly found that online communities had the potential for creating addictions. Another, more psychological aspect of wellbeing, was referred to as "losing yourself" in an online community. Thus, the danger expressed here is one of losing one's true identity amid the many options offered by online communities.

Concerning the topic of social contacts it was pointed out that an involvement in online communities has the potential to reduce the amount of real-life social contacts and that existing relationships could

be neglected. The former electrician (male, 76 years old) was even convinced that using an online community would promote loneliness instead of preventing it. Another test participant even thought that online communities could have a detrimental influence on society due to their potential for organizing large turnouts of people that could get out of hand.

Online communities as a hostile environment

Furthermore, uneasiness with a perceived lack of rules and regulations was expressed. Thus, the former foreign legionnaire (male, 67 years) was convinced that online communities could be used to badmouth others without having to prove one's claims. In a similar vein, the web publisher (male, 63 years) worried about the rough tone of language that some contributors to online communities used. He saw a need for regulation in that respect.

Some reservations were expressed with regard to blog discussions, which one hesitator considered as being "somehow suspicious". The former insurance agent (male, 69 years) expressed his feeling that online communities could turn into a platform for the dissatisfied. Clearly, he did not want to be associated with such a platform.

Online communities are unsafe places

Among the potential risks voiced by test participants were aspects of privacy and security. Some test participants voiced concerns such as the impersonal nature of online contacts and the trustworthiness of communications in the communities. For instance, the professional networker (female, 64 years) stated that it could be dangerous not to know your counterpart.

Therefore, test participants expressed a considerable amount of insecurity concerning the question of who was allowed to see what part of their personal information. The experience that changing privacy settings was difficult and not always clear in its consequences intensified these concerns. Hence, the former insurance agent (69 years, hesitator) said he would never post pictures of himself. Furthermore, some test participants were worried about the persistence of "forever" traceable statements on the web. One test participant mentioned "programs that spy on you". Even though he did not make a direct connection between spyware and the online communities he had dealt with, the concerns he had did certainly not help to motivate him to use online communities. In addition, the former banking clerk (female, 63 years) pointed out that there was a lot of "fine print" that most people probably did not read. She felt that online communities were – on a very general level – unsafe places.

Clearly, test participants' mental model was that they were publishing private details to an anonymous audience spying on them. They considered it possible that users of online communities could lose their anonymity and had come to the conclusion that they needed to be very careful when entering an online community.

2.2.4.3 Contribution of online communities for social integration

One could hypothesize that, due to their large number of existing social contacts, socially well integrated persons would be less inclined to participate in online communities than socially less integrated persons who would be more interested in the offered social contacts of online communities to compensate for the lack of social contacts in their "real" lives.

Although our study is not quantitative, the results contain data that are in opposition to this hypothesis. While all intenders and hesitators with an above average level of social integration chose to continue using an online community, intenders and hesitators that were considered to be socially less integrated did not. Intenders and hesitators with an average level of social integration were more or less equally distributed among the "continuers" and the "non-continuers".

Thus, our study suggests that socially less well integrated individuals might also have more difficulties participating in an online community than socially well integrated individuals. According to our data, socially less well integrated persons tend to be more reluctant to accept the offerings of social exchange even when they take place in the virtual realm. A reason for this could be that these offerings, too, demand a certain willingness to open up and put forward a required minimum of personal information. This, apparently, can already be unacceptable for some socially less well integrated persons.

Perhaps, then, social exchange in online communities is in fact not so different from social exchange in other areas of daily living and poses similar challenges to individuals. This would lead to the assumption that online communities are populated by a higher share of well integrated persons and are not primarily used by individuals showing a rather low level of social integration. It goes without saying that this assumption would not only adhere to our target group but to younger persons as well. Our data can only raise this question without offering any conclusive answer. It is also important to stress that the data does not include information on socially less integrated intenders, which would have allowed for some interesting juxtapositions. However, the very fact that our sample does not contain any less well integrated intenders may in itself be an indicator that a low level of integration and the intention to join an online community is not a very frequent combination. How-ever, this type of participant would have helped to shed light on the complex interrelations between the level of social integration, attitudes and beliefs about online communities and actual participation.

These conclusions reflect the multidimensionality of necessary steps to improve social integration by means of online communities.

Considering the study results, online communities can reinforce social integration by:

• Organizing social life: Providing easy-to-use tools to organize existing offline contacts. The users bring their own contacts but benefit from efficient communication in their spare time, their club activities, their (larger) family.

- **Bridging retirement:** Helping to sustain social integration after retirement. Work colleagues, retired members of the same company etc. can stay in touch with younger company employees, not only but also across large distances.
- **Motivating for offline activities:** Online communities with offline activities encourage potential users to join real-life meetings, thereby enlarging the online network with newly added contacts.
- **Improving self-esteem:** The (successful) authorship of articles, experiences of self-efficacy and increased social visibility for socially less integrated persons were experiences, which made test participants decide to continue using an online community.
- Connecting people with similar interests: According to the test participants' behaviour, this
 was the "weakest" benefit to be gained from joining an online community. In most cases, this
 benefit will be related to the possibility of personal meetings with community members, e.g.
 visiting a museum exhibition before participating in the online community.

2.2.4.4 Evaluation of possible user profiles

Active users of online communities are not a homogeneous group. We find among these persons diverse levels of usage intensity and a variety of motives for participation. For instance, one everyday, intensive user of facebook.com (male, 62 years, formerly self-employed web publisher) finds his participation helpful for establishing a daily routine and structure. On the other hand, a rather superficial use of facebook.com is rewarding for a 62 year-old former nurse who has a large circle of friends and enjoys participating in an online community without attributing too much importance to it. This illustrates that online communities do not simply appeal to one particular type of user.

Many of our test users simply did not find the community content that fit them. Neither did they come across good enough content to keep on reading, nor did they encounter relevant motivations to get into contact with community members. This is not surprising, as interests, predispositions, talents and existing networks differ in older persons as much as they do in younger ones. Thus, age is not the decisive indicator. However, beneath the surface of a "homogeneous" age group we find persons whose diverse lifestyles and experiences have led them to develop strongly differential motives for using the internet and, potentially, online communities. Keeping in mind the diversity of our target group it is not surprising that even well-designed online communities will not appeal to everyone.

Therefore, the challenge both for providers as well as for potential users lies in establishing a fit between the "offer" and the person. What is more, personal plans, beliefs and values have to be consonant with using an online community in order for a person to stick to it (Bishop, 2007).

The fact that the person-community-fit is often hard to achieve is also connected to the limitations of knowledge that many older persons have with regard to online communities. Their expectations are dominated by a concept of online communities limited to meeting new persons and making friends.

The diverse other uses of online communities such as collaboration, authorship, discussion etc. are overlooked due to a lack of experience. Consequently, these diverse aspects are not included in selecting an online community or in searching for specific content, which reduces the probability of a good match between person and community.

However, it became clear that simple exposure to an online community is in many cases not sufficient for motivation and integration even if a person has the intention to participate.

Rather, older persons should be encouraged to find out about the offered community features when they encounter online communities and they should find the necessary user guidance for contributing successfully. Only if this is the case will they keep on using an online community that best fits their motives. An interesting finding in that respect is that those persons in our study who showed an authentic interest in the tested online community managed to focus on those very aspects of the online community that were truly relevant to them while ignoring features of lesser relevance.

2.2.5 Recommendations

Now, how can online communities contribute to the social integration of persons aged 60-75? Note that many of the following recommendations do not only adhere to the motivation and integration of older persons but pertain to all target groups regardless of age. However, since older age groups are currently underrepresented in online communities and online collaborative networks a special focus is laid on the target group 60+.

2.2.5.1 A model of action

In order to turn a potential user of an online community into an active one, it is necessary to take action on three levels.



Figure 17 A model of attracting and retaining (older adult) community beginners

1. Activate the user

One of the major obstacles to using online communities is that users do not know about them. Therefore, they have a limited concept of the potential relevance of online communities for their everyday lives if they have one at all. In addition, it must be said that many of the one-topic communities contain content of poor quality that is simply not attractive.

Thus, on a primary level, measures for activating the target groups are required: First, provide attractive content of good quality as well as interesting functionalities and services. Second, work out the key benefits and communicate them so that users understand immediately what is going on and what their benefits are. Not until then you get outstanding contributions that are appreciated by other users and therefore an online community that is recommended by word of mouth.

2. Guide the user

Once the user is interested, he or she has to pass the hurdles in managing registration and executing all steps necessary to establish an online identity (e.g. complete user profile, find friends, answer to friendship requests). Unfortunately, due to a lack of user guidance and insufficient or poorly formulated explanations, many beginning older users are left with an unsatisfactory initial user experience. For what is worse, this initial experience can prevent the development of trust in the community, which is the foundation of sustainable participation.

Therefore, on a second level, measures to guide the users through registration and the first steps as a community member are necessary. In order to provide a good user experience it is crucial to know about users' expectations, needs and prior experiences.

3. Reward the user

Once users get started it is important that they be involved by contributing actively to the community. This step can be complicated in many ways: Users do not know where to start, posting content can be overly complicated and sometimes users do not evoke any reactions to their contributions.

So, on a third level, it is crucial to reward users for their first efforts. A couple of easy-to-do suggestions for participation would help beginners to get involved with the community life. Beyond that, once the new member has posted a contribution, encouraging feedback is necessary as soon as possible.63

2.2.5.2 Main success factors

Many actors contribute in making an online community work and therefore in pushing social integration.

Figure 18 Actors involved in the process of developing an online community



All of the identified actors for improvement can take important measures to make it easier to include older users in online communities.

2.2.5.2.1 Community Operators

The operators of communities are confronted with the big challenge of developing an application without hurdles for participation. Hence, all other actors will be in charge of creating a helpful framework and supporting the development of integrating communities (see following chapters).

1. Focus on themes instead of age

Communities can focus on an age group or on a topic or on a combination of both (e.g. tips for retirement, traveling without effort etc.) Concerning the activation of persons 60+ with regard to online communities, it is unclear whether communities focusing on "older persons" have any advantage in reaching the target group.

Our data suggest that they will only have that advantage if they also choose the right topics (as seniorweb.ch did successfully). On the other hand, an online community not explicitly focusing on older age groups will be attractive to older persons if it features the right, high- quality content. What becomes clear is that a broad strategy of activation is bound to be too unspecific in light of the diverse interests and preferences of persons 60+.

In our opinion it will be enough to make visible to new members that persons of a com- parable age are among the contributors of valuable content and activities. For instance, online communities could highlight "stories" of some of their older community members.

2. Enable community membership by providing usable applications

Excellent usability is the essential prerequisite not only for a satisfactory user experience but also for an initial build-up of trust in the online community. Keep in mind: Basic usability rules apply to users of all ages.

So check your communities concerning:

- Quality of content: Choosing the right topics is useless if the quality of the content is unsatisfactory. Many "one topic" online communities suffer from outdated content, a lack of contributions and insufficient quality assurance. Only content of quality can attract quality contributions from users. Thus, less will often turn out to be more.
- Coherent information architecture: The basis of a usable online community is a strin-gent concept for the structure of the site in order to allow users to get an overview of content and functionalities easily and to facilitate orientation. This is achieved by choosing the right classification of content and distinct labels as well as providing the adequate navigational features. The core community features must be highly visible and must not be buried under piles of other information and features.
- Sufficient user guidance: It is very important that users are guided intuitively. I.e. they have to
 know at all times where they are, what their options for action are and how they can get where
 they want to go. Steps that require previous knowledge have to be explained to the users.
 Finding out about those needs implies that community operators know their target group well.
- Elaborated processes: All processes have to be thoroughly defined. I.e., it must be clear to users how to start, where in the process they are currently standing, which steps are optional and which ones are essential and how the process will be completed.
- Good graphical design: Last but not least, a suitable graphical design is needed that supports the usability of the online community in an optimal way.

Applying user-centred design for creating user interfaces and processes in an online community is a promising strategy of designing online communities for everyone. The operator will involve users in the development process. This approach has a high probability of creating community features and processes, which guarantee that persons regardless of their age will be able to use community features successfully.

3. Building trust through communication

Media reports focusing especially on facebook.com influence users' expectations of online communities in general. Thus, communities have to address the perceived risks:

• Tell us about you: Persons are motivated to participate in an online community if they feel that this community is congruent to their own values. Thus, in order to create a clear profile, an

online community should be able to communicate its values. Vice versa, administrators of online communities should know something about the values of their target group.

- Moderation and motivation: Once a person starts to contribute, they will return to see how other community members have reacted. It is thus of great importance that new members start contributing as quickly as possible – even if their contributions are only minuscule – and that they receive feedback.
- Talk about benefits: Persons will continue to use the online communities if they see a very
 clear personal benefit in doing so and if this benefit is greater than the perceived "cost" of
 contributing. Clearly communicating this benefit is mandatory for online communities aiming to
 attract new members regardless of their age. Moreover, it is important to point out that online
 communities are not only about getting to know new people, but that they provide manifold
 other possibilities (e.g. simplified communication, an agenda for joining offline activities, an
 opportunity for sharing knowledge with others, etc.).
- Promote active users in the target group: Target well integrated older adult users and their networks first, in order to attract the necessary number of members from that particular age group. Probably, the most promising approach in this respect is using models or positive examples, i.e. by demonstrating how persons who are similar in important respects (personality, interests, age, level of education etc.) profit from their participation in online communities. This, however, requires a more detailed definition of the target group so that the persuasive messages can be tailored fittingly.
- Address privacy issues: Users should easily be provided with transparent information concerning the data that are visible to others and on how they can change respective settings. The default settings after registration should be restrictive.

2.2.5.2.2 Current community members and offline associations

Often, the decisive impulse for any new user to join an online community is coming from their regular social networks. Thus, clubs and associations, family members, alumni networks etc. that provide agendas, discussions, photo series etc. in a community space can create the necessary benefit for older users to make them join and contribute in the respective online platform. Especially family members, e.g. a person's own children, can be an important motivating factor for older persons to join an online community.

2.2.5.2.3 Private sector (companies)

Companies who support communities as part of their social responsibility or marketing projects can include criteria such as usability, user guidance and content quality in their decisions for sponsoring or advertising.

If they decide to become operators of a community, they should take into account the recommendations concerning content quality, user-centered design and communication.

2.2.5.2.4 Media

Media reports play an important role concerning the image of online communities as the test results have shown. They could encourage older adult users to join online communities by promoting older adult community users' stories or by reporting about best practices of communities and efforts in social integration.

2.2.5.2.5 TAO project groups and public sector

If social integration is an objective for running online communities, operators and future users will need support from public institutions. The core tasks for the public sector will be to set quality guidelines for effective online communities, to provide legal protection for privacy and to reward high quality offers from all stake holders, e.g. by promotion, quality labels and contests.

Some suggestions:

- Promote best practices of user friendly communities: e.g. by offering a database of communities with their features and criteria for selecting the right one
- Initiate a (usability) check-up for online communities on a regular basis (comparable to the Accessibility Studies published by access-for-all.ch every three years).
- Promote older adult community users' stories.
- Encourage "regular" associations and organizations to add some online community activities with the objective of keeping older members integrated in the community for as long as possible.
- Provide sound legal protection for privacy issues.

2.2.6 Final remarks

In the course of the past ten years, the number of older adults using the internet and on line social media has increased sharply. In light of the ever growing importance of online participation in exercising civic rights and duties but also in organizing and structuring our social lives, acquiring

knowledge about the related specific needs of older persons will remain a highly important topic of research and development.

As was shown in this study, involving persons in an online community is a complex task, relying on the collaboration of many different actors. Ideally, all these actors should have in common an interest in the existing competences and needs of older persons. In reality, however, much attention is paid to – often wrongly assumed – shortcomings of older persons with regard to the use of online media. A resource oriented approach to the topic of older persons' use of online communities has important repercussions for the design process. Online communities designed for all ages will have to take into account the diverse interests, fields of knowledge and needs of older persons as much as those of younger ones. Instead of "young persons" explaining the "correct" use of online communities to older persons the design as well as the actual use of "all-age" online communities should be marked by a dialogue and collaborative effort between persons of all age groups.

While we believe that this study was able to shed light on some important aspects many questions await further research. Especially, there is a need for more data on the effects of the use of online communities on persons of different ages. Moreover, while focusing on older persons can be a rewarding research strategy it is also important to compare different age groups in terms of their motivations, needs, interests, and difficulties with regard to online communities. Efforts are also needed in the area of knowledge dissemination. In line with the collaborative spirit of online communities, the TAO research group is in the process of writing a handbook on motivation, integration and retention of older persons in online communities using the publicly accessible Wikiversity.

3 Preliminary Study on Volunteers

3.1 Volunteer Older Adults as Multipliers for Online Communities & Cooperation: A Literature Review

3.1.1 Introduction

The "Volunteers" review essay was prepared to illustrate the current state of research relating to the topic of volunteer work and its relevance to the AAL research project "Third Age Online". The focus here is especially on older adults, who are willing to be volunteers and dedicate their free time on matters relating to the Internet, on online collaboration projects and taking part in online communities. Of particular interest in our research of written material are the following questions:

- What steps can be taken to attract the interest of older adults in becoming volunteers?
- What motivates older adults to perform volunteer work? How can older adults be bound longterm to volunteer work?
- Which underlying conditions describing volunteer work are important to older adults?
- Can dedicating one's free time to a voluntary cause contribute to active and successful aging?
- Which fields of activity and involvement exist in correlation with online communities and online collaboration?

In Part I, we will elaborate on the terms "honorary office", "civic involvement" and "volunteer work", we will illustrate how the terms developed in society through history, and we will discuss the essential significance of voluntary involvement to people in the later stages of their lives.

Part II discusses key findings from volunteer research. In it, we describe the situation as it stands in Germany, Switzerland and The Netherlands and also provide a brief outlook on the situation in other European countries.

In the two following sections, we concern ourselves with the motives of the volunteers and how they perceive the role they play, as well as the problems concerning monetary issues for those in any honorary office.

In Part 5 we discuss the underlying conditions of volunteer work and we provide details about the subject of volunteer management. In Part 6, we will take a closer look at the use of the Internet in the context of volunteer work and on how older adults are being included as volunteers in online communities, digressing briefly on the subject of Wikipedia and then we discuss the term online volunteers.

Finally, we will sum up our findings by formulating several key hypotheses against the backdrop of the results of the research of the available written information and comprise these into further-reaching

theses and strategies that can be used in conjunction with the TAO activities. In the process, the following more detailed questions are of significance:

- How can we attract the interest of older adults to work as volunteers in online communities?
 How can older adults support online communities as volunteers?
- What effects will result for the organization itself by involving older adults as volunteers in online communities?
- What effects do volunteer older adults have as multipliers for other older adults in terms of how the Internet is used, in particular with regard to how they can be motivated to collaborate online and to be involved in the work and also be integrated into online communities?

3.1.2 Definition of Terms

The word "voluntary" appeared for the first time in the 16th century and represented general problems that were based on the relationship between an individual and society. When discussing voluntary work, there were two lines of tradition that were differentiated. On the one hand, there is the republican line describing an engagement in state-related issues, constituting an integral part of coexistence in society. On the other hand, there is the liberal tradition, i.e. being involved in something outside of state-related issues, which is based on an individual's freely made decision (cf. Reifenhäuser; Hoffmann; Kegel 2009, p. 36ff).

All in all, it is extremely difficult to accurately define and differentiate the field of what is considered volunteer activities. This also has to do in part, but not solely, with the wide range of differences between each of the countries in this area. In Europe, very different manifestations of voluntary activities have developed over several centuries, which have been influenced by both cultural and political factors.

Yet still, there have been frequent attempts to find a single definition of what is considered volunteer activities ("volunteering"). One such attempt provides the following definition: "[Volunteering is]... the commitment of time and energy for the benefit of society and the community; the environment; or individuals outside one's own immediate family. It is undertaken freely and by choice, without concern for financial gain" (The Volunteering Unit (1995), p.3). However, because of the large deviations, it would seem to be expedient to consider how the situation plays out in each of the countries separately.

In the following, we will attempt to define and differentiate the various terms used for volunteering in **Germany**, **Switzerland** and in the **Netherlands**. This description can by no means be considered exhaustive in its ability to classify the entire range of voluntary activities in Europe. In fact, the authors are fully aware of the necessary gaps in this description. The choice of countries in this case is owing to the project and its framework, within which the report was prepared.

In **Germany**, there is a differentiation between *an honorary office, a civic engagement and volunteer work*. What needs to be emphasized here is that the social sector in Germany has changed significantly over the last few years. This has also had an impact on the terms used to define volunteer activities. Up until now it has not been possible to bundle all activities and refer to them using the same term (cf. Bock 2002, p. 12 ff).

Historically, the roots of what is a classic honorary office date back to the early 19th century at the dawn of the up-and-coming middle class. An honorary office is understood as an activity for which the reward is honour and which one feels obligated to perform because of moral and ethical motives. Honorary offices are held on the one hand in political circles, on the other hand in conjunction with church duties or at traditional clubs and associations (cf. Steinfort 2010, p. 29). While social honorary offices are more often than not held by women, political honorary offices are mostly held by men, especially as these offices concern local self-government. The term "honorary office" was long considered a voluntary activity performed on behalf of an institution, e.g. clubs or associations, that was not geared towards monetary gain. According to the German Centre for Gerontology, three perspectives have in the meantime developed to describe a person's involvement in an honorary office. On the one hand, the general understanding of what an "honorary office" is has changed significantly over the last few years. On the other hand, the fields in which work is performed in an honorary office have differentiated themselves noticeably; and thirdly, the motives of persons holding an honorary office and someone who does volunteer work have changed (cf. German Center for Gerontology 2006, p. 48 ff). A change is underway in what is understood as "honorary office" from the traditionally organized work structures bound to a particular institution towards a more self-organized and open form. However, just how much change the involvement of older adults in an honorary office has seen in terms of quantity over the last twenty years is not easy to assess, because the available data is multifaceted and varies greatly. As far as Germany is concerned, and the situation is similar in Austria, the degree of engagement depends on the senior's age (cf. German Centre for Gerontology 2006, p. 48 ff).

What needs to be considered when defining the term is that there is a difference between an honorary office and *civic engagement*. The term "civic engagement" is used to describe taking voluntary and conscious action on a matter concerning the political and social public welfare. It is not for the purpose of material gain, it is performed publicly and is often a collaborative effort (cf. Gensicke; Picot; Geiss 2006, p. 34). Martinson and Minkler understand the term in the following manner: "Civic engagement" can refer to a wide variety of activities: e.g. voting, involvement in political campaigns, paid & unpaid community work, staying up to date on news, helping one's neighbour, etcetera" (Martinson, M. & Minkler, M., 2006, p. 320).

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Primarily, we would like to limit this study to focus on the understanding of the term *volunteering*. The idea behind volunteer work is derived from the Anglo-Saxon concept of "volunteering", which is also a widespread phenomenon in The Netherlands (cf. Reifenhäuser; Hoffmann; Kegel 2009, p. 13ff). Volunteer work is understood as work performed that requires human, social and cultural capital: "...volunteer work is (1) productive work that requires human capital, (2) collective behaviour that requires social capital, and (3) ethically guided work that requires cultural capital" (Wilson & Musick, 1997, p. 694). Volunteer work is based on a voluntary decision by an individual to engage himself or herself to the benefit of the public domain. In German speaking countries, it represents a modernized form of the honorary office concept, which volunteers are increasingly distancing themselves from. Followed by the term honorary office, the term voluntariness in Germany is the most popular (cf. Reifenhäuser; Hoffmann; Kegel 2009, p. 13 ff). Whereas the term that defines a traditional honorary office suggests that a person assumes a role of responsibility on behalf of society, volunteering today is considered an expression of a person's character traits and his/her situation. While the terms duty and service are becoming less meaningful, today more subjective claims are being pursued. As such, the decision to perform volunteer work is always marked by a period of deliberation for each individual:

"...volunteering is marked by several key characteristics: The helper must seek out the opportunities to help, the helper arrives at this decision after a period of deliberation, the helper provides assistance over time, and the helper's decisions about beginning to help and about continuing to help are influenced by whether the particular activity fits with the helper's own needs and goals" (Clary, E. G. & Snyder, M. p. 156).

It is quite difficult to find one standard description of a person who works as a volunteer. With regard to the multitude of activities that are considered volunteer activities, the names for them are broadly defined accordingly. In its usage in the Anglo-American language, the term "volunteering" is understood by anyone and everyone knows exactly what is meant by it, whereas in Germany one is generally irritated when it comes to finding the suitable name for an activity of this nature (cf. Steinfort 2010, p. 30 f). Bussel and Forbes (2002, p. 4 ff.) attempt to come closer to a description using basic W questions "Who, why, where, what":

"It is extremely difficult to define volunteers, as they take up such varied roles, have varied backgrounds and skills, and cannot be considered to be a homogeneous group. The authors developed a classification model of the '4 W's of Volunteering': Who, What, Where and Why. Although the volunteers are not a homogeneous group, there are some general findings.

- Who: volunteers are more likely to belong to the higher socio-economic groups, tend to be more females, more in the age of 50+ (40% of 60+ are engaged in organization volunteering), and more with a part-time job (than fulltime or no job). Young people volunteer more if their parents volunteered as well.

- Why: desire to help others, but volunteers also act on egoistic motives: to satisfy important social and psychological goals. Or because a family member benefits from the organization. Or because they are asked to volunteer.
- Where: in many different environments
- What: many different roles and tasks"

Term	Meaning	Consequence
Honorary office	 An activity that is rewarded with honour and that one feels obligated to perform Moral and ethical motives Duty and service This term is used in conjunction with church, political and traditional institutions. An activity bound to a tradition and an institution Assuming responsibility on behalf of society 	Strongly focused on moral and ethical circumstances. Older adults may align more strongly with this understanding of free will. Sense of duty is very strong Volunteer work was performed less due to a person's own intrinsic motivation
Civic engagement	 Self-organized and open activities. Civic engagement refers to a wide variety of activities: Voting, being involved in political campaigns, paid and unpaid community work, neighbourly service, etc. Taking action voluntarily and consciously Political and social public welfare Not focused on material gain Public Is performed as a community-based and cooperative activity 	More freedom in the scope of tasks. Larger selection, wider and more open understanding of volunteer work for volunteers
Volunteering	 An expression of personal character traits and circumstances. Subjective claims are aspired An activity that requires human, social and cultural capital Is based strongly on voluntary action Engagement for the public welfare Modernized form of honorary office concept Providing helpful service to others Includes both formal and informal engagement 	Voluntary work includes all areas in society The term relates to the informal and formal area. Opportunity for self- realization

In **Switzerland**, the term "*Voluntary engagement*" is used. Understood under this term is any activity for which time (or money) is expended to the benefit of organizations and persons without the expectation of any compensation in return. When discussing a voluntary engagement, we differentiate between donations and volunteer work. In turn, when referring to volunteer work, we differentiate

between informal voluntary activities and formal volunteer activities, and among these the formal voluntary activity in general on the one hand and the honorary activity in particular (cf. Freitag; Stadelmann-Steffen 2010, p. 4).





Informal, unpaid activities are such performed in private settings, not such bound to a particular institution, which might include helping neighbours, caring for children, services, caring for and looking after relatives and friends, who themselves do not live in the household (cf. BFS 2008, p.4).

One particularly Swiss concept is the idea understood with the term "*Miliz*" (= roughly "militia"), which is strictly associated with a citizen's active role in the Swiss political system. The term Miliz refers to the principle of an extra-professional function for which no compensation (or only symbolic) is received - due to the central function of honorary offices in the public organization, assuming a function of this kind is an integral part of citizenship. Originally, the term originated from the military (civilian army/militia), today, the term is also used to reference voluntary activates and honorary offices in public administration, in an association and sometimes even in a commercial business. (cf. Kley 2009, p.1).

In the **Netherlands** there are several expressions in the Dutch language used to describe the concept of volunteer work. The Ministry of Health, Welfare and Sports uses the term "volunteer work" or "volunteer measures", however organizations that promote volunteer work prefer to use the term "vrijwillige inzet", which translated means as much as "honorary contribution" or "voluntary engagement" (CEV 2007, p. 3).

The term voluntary work ("Vrijwilligerswerk") is described by the Volunteer Policy Committee (1982) as work performed in an organized context for the welfare of another by society on a voluntary basis

Source: Freitag; Stadelmann-Steffen 2010, p.4.
and for which no payment is received.⁸ The Dutch Welfare Policy describes volunteer work as work performed for the welfare of another or for the community independent of how the person who does this work makes his/her living⁹ (CEV 2007, p.3).

So, in all three of the countries being reviewed, we can find the three characteristics we used at the beginning of this chapter to describe volunteer activities: no consideration in return or rather independent from one's own livelihood; voluntarily performed; the work is of benefit to the community or other individuals. In addition, in part there is also yet another trait that can be found in all of these countries by which the activity is performed within associations or institutions (Ger: honorary office; CH: formal engagement, Miliz; NL: part of the general definition) - if this is not the case, oftentimes a different term is used (volunteering, informal engagement). In the Netherlands, the trait by which compensation in return is lacking is interpreted differently: In order for an activity to be considered volunteer work, the engagement must be performed independent of one's personal livelihood. This does not exclude any compensation in return per se.

In Switzerland, the term voluntary engagement is generally interpreted much broader than in Germany or in the Netherlands - it not only includes donations, but also providing help on a personal level to members of one's own family. Moreover, with its Miliz, volunteering in Switzerland is also more strongly anchored in political-public living as compared to Germany or the Netherlands.

3.1.3 Social Importance of Voluntary Engagement

Voluntary engagement beginnings in Germany coincided with the Age of Enlightenment and the Industrial Revolution (end of the 18th century / beginning of the 19th century) and with the changes in organizational structures associated with those times. On the one hand, the association became the prototype of the organization and on the other hand it powered modernization (cf. Reifenhäuser; Hoffmann; Kegel 2009, S.38f). Combined with this modernization, the term "milieu" emerged in sociology. Milieus is a term used to describe lifestyles of specific social groups. Milieus do not represent objective factors such as a field of work and a financial standard, but instead they represents factors such as image, style, attitude, values, standards, life goals, etc. (cf. Schulz; Hausschild; Kohler 2009, p. 37 ff). If we consider the numbers and how the level of engagement is distributed among the civilians, we can see a relationship between engagement and milieu. Thus, the different milieus are of significance for the engagement itself, meaning one can see that the

⁸ "werk dat in enig georganiseerd verband onverplicht en onbetaald wordt verricht ten behoeve van anderen of de samenleving" (Centraal Bureau voor de Statistiek 2009, p. 54).

⁹ "work done in any organized context that is carried out without obligation and without pay for other people or the community whereby the person doing the work is not dependent on it for his or her livelihood" (CEV 2007, S.3)

engagement is closely associated with the social structures and the milieus of the volunteers (cf. Rosenkranz, Görtler 2002, p.31). Rosenkranz and Görtler (ibid) break milieus down by how complex/simple they are or rather by how spontaneous/regulated the experiences are. As such, they break the society down into the following milieus:





Source: http://www.milieus-praktisch.de/34.ht

Coinciding with the modernization of our society and the social changes associated with it, which in social sciences is grouped under the term "individualization", the concept of honorary work or rather volunteer work is changing dramatically (cf. Schäfer 2009, p. 17 f). Individualization describes a development or rather a change in the relationship between society and the individual, which initially emerged at the end of the 19th century and which again started to take on significance in Germany after World War II. According to Beck, individualization refers to the necessity for a social environment that has become too complex to restructure itself. The individual needs to continuously make decisions, to set priorities and to assume responsibility for the consequences of his decisions. Therefore, the human being must continuously re-establish his own biography and plan it (cf. Beck 1996, p. 59 ff).

If the term that defines a traditional honorary office suggests that a person assumes a role of responsibility on behalf of society, volunteering today is considered an expression of a person's character traits and his/her situation. Whereas the significance of terms such as duty and service is

diminishing more and more, today subjective claims are being aspired to, e.g. meaning and selfrealizations, fun and recognition due to the voluntary activity, but also co-creation and having a say in something (cf. Schäfer 2009, S. 17 f). One significant change in the modernized honorary office concept can be seen in how regularly an engagement is practiced. Any constant, continuous and long-term engagement has in the meantime become the exception. The rule of thumb these days is that the engaged persons and their activity frequently change (Schäfer 2009, S. 17 f).

3.1.4 Significance of Voluntary Engagement for People in Their Third Age

People in their third age have the option, but also a need, to fill this stage of their life with meaning and to make use of their time. Once retirement begins, many older adults become unsure of their place in society and about what their desires are for the remaining years of their life. They begin searching for new meaning in their life and attempt to form and fill their new stage in life. Voluntary engagement may be a response to the question relating to the meaning of an individual's activities during the retirement stage of his or her life. As a result of staying active, older adults can develop a feeling of being satisfied with their lives (cf. Steinfort 2010, p. 24 ff).

"Voluntary engagement can be seen as a possible area in which a person takes responsibility for himself and offers important options to exchange with significant others. Older adults can continue to experience themselves as productive, they can expand their skills and can experience themselves as competent as a result of their engagement in a specific voluntary activity, which in turn plays a role in the development of their identity. Moreover, they develop self-recognition, but also experience a sense of being recognized by others" (Steinfort 2010, p.61 ff).

3.1.5 Volunteering in Germany

In the following, we will introduce the key findings from our research of the written work on the subject. In German-speaking countries, a bit more than a third of all people are involved in voluntary work. An above-average number of people who are volunteers are men, wage earners, young people in various stages of their education, highly educated people and such persons with a higher professional profile (cf. BFSF J 2009, p. 95 ff).

The region where the person lives and the person's education are quite significant with regard to how often a person volunteers in Germany. What is less noteworthy is any differentiation by gender, occupation, health or family status (cf. Künemund, Harald 2006, p. 306 ff). Volunteer work is impossible without the relevant resources: "...volunteer work is (1) productive work that requires human capital, (2) collective behaviour that requires social capital, and (3) ethically guided work that requires cultural capital" (Wilson & Musick, 1997, p. 694). Volunteer work often requires specific

linguistic and social competencies, which make it easier to approach others and correlates to the socio-economic status (cf. Wilson & Musick 1997, p. 709).

Older adult volunteers in Germany

In current discussions on the subject, the significance of volunteer work for older adults is emphasized over and over again. "The current discourse about older people and civic engagement stimulates them to 'enter later life with many healthy, productive years ahead', as they 'have the potential to become a social resource by contributing to the civic life of their communities'" (Martinson, M. & Minkler, M.; 2006, p. 318).

The percentage of older adults who perform volunteer activities has increased over the last few years. However, the highest ratio of volunteers is among the 35-49 year-olds. This underlines the significance of volunteer involvement in families. (cf. BMFSFJ 2009, p. 20).

However, we can see based on a recent Eurobarometer that engagement among older adults is hardly any less significant than the numbers that represent young adults: 41% of those over the age of 55 declared that they were active as volunteers. As such, the generation of older adults was a mere two percentage points behind the group of 15-54 year-olds in terms of their commitment to a voluntary cause. (cf. European Commission 2012: Factsheet on Germany, p. 2)





Source: BMFSFJ 2009, p.19.

Among older adults, there was a consistent increase in their volunteer engagement from 23% in 1999 to 26% in 2004 and up to 28% in 2009. The ratio of older adults up to the age of 70 engaged in a voluntary cause is especially high. One reason for this is the increased fitness level and the improved level of education among older adults. As a result, they are much more open to being involved in a volunteer cause, but they are also more critical and self-confident. As concerns the future potential for volunteer engagement, the demographic and economic developments appear to be especially relevant. What is expected is an increasing number of older adults becoming involved in volunteer work and an increased demand for older adults to become volunteers (cf. BMFSFJ 2009, p. 20 and p. 155). What is especially interesting here is the fact that 28.6% of older adult volunteers say that they do feel it is possible to expand (in terms of time) their involvement (which is equal to 8% of the overall population of people ages 65 and older in Germany) (cf. BMFSFJ 2009, p. 109).

Primarily, the volunteer activities of older adults consist of taking care of other older adults, who are in poor health and/or are older. Furthermore, their engagement is also increasingly focused on being directly involved in public welfare issues Among the most favored areas in which volunteer work is performed, the inclination is similar among older adults as well as among younger citizens towards areas involving church, social activities, culture/music and recreation/sociable causes. The area involving schools/kindergartens is less popular among older adults. The large area involving sports/fitness also appears to be more appealing to the younger generation. (see in this regard Chart 15 and cf. Gensicke 2010, p. 33). Based on this division of interests, it may be possible to draw conclusions on the motives behind why a older adult engages in such activities. The area relating to recreational activities (sports, cultural activities) and activities geared towards interpersonal relationships (social and sociable activities) appear in general to be more appealing than subjects that are much more political in nature such as political engagement or being involved in a professional association.

Figure 22 Areas of volunteer activities (Germany): Overall population and older adults ages 65 and older



Source: Gensicke 2010, p.33.

Professional job requirements

Generally, the chart from WZB shows that in 2004 the relationship between engagement and a person's professional job skill level was positive (cf. WZB 2009, p. 46).



Illustration 2.2-B: Engagement ratio by level of professional skills, 2004, in %¹



¹ People currently dependently employed in a full-time or part-time job.

Amount of time spent on a voluntary engagement

The significance of the voluntary engagement manifests itself in a person's life in the form of a medium to long-term commitment to the volunteer activity they perform. One third of all volunteers are involved for up to two hours a week, another third between three and five hours a week. 17% persons engaged in a volunteer activity provided six to ten hours of services a week in 2009. For people ages 66 and older, the total length of time active in volunteering increased from 16.8 to 17.8 years in the decade between 1999 and 2009. For persons the ages of 46 to 65, this amount of time decreased somewhat. Those volunteers who worked in the "voluntary fire department and emergency services" was especially long, while volunteer activities in the field of "schools and kindergartens" are more likely to be set short term (cf. BMFSFJ 2009, p. 194 ff).

In total, 90% of volunteers work at least once a month, 56% once a week and 33% even several times a week (cf. Gensicke, Thomas 2010, p. 19).

Source: WZB 2009, p. 46.

3.1.6 Volunteering in Switzerland

In Switzerland, there is a differentiation between voluntary involvement in associations (formal engagement) and an informal involvement outside of associations or other organizations (cf. Freitag; Stadelmann-Steffen 2010, p. 5 and 11). Since the surveys were completed in 2006, a comparison of the figures to those from 2009 shows no significant changes in the level of voluntary engagement: Close to a quarter of the Swiss population was involved in a club or association of some kind (formal engagement) on a volunteer basis (cf. Landeszentrale für politische Bildung BW; BW Regional Center for Political Education, 2009 p. 26 ff.). In German-speaking Switzerland, there were more people involved at this level than there were in the Latin language area of Switzerland (cf. Freitag; Stadelmann-Steffen 2010, p. 7). In addition, there were big differences within the different language regions with regard to the type of involvement in a volunteer activity. The lowest percentage of volunteers is found in the Cantons Tessin, Geneva, Neuenburg and Waadt (cf. BFS 2008, p. 10 f.). Also, all in all, more men were involved (28% in 2008) in formal offices than were women (20% in 2008) (cf. BFS 2008, p. 4). With a percentage of the population of a good 10%, the largest percentage of people active in a voluntary engagement of some sort are those in sports and recreational clubs. Less than 2% are involved in political parties or in human rights and environmental associations. The social status, meaning a high level of education, a high level of household income and a good professional position, is generally conducive to a person's voluntary engagement. By comparison, the amount of available time is not a key characteristic for formal volunteers, i.e. those persons who have larger time resources which they could dedicate to a voluntary engagement for the most part only volunteer to a lower than average degree (cf. Landeszentrale für politische Bildung BW 2009, p. 26 ff.).





Source: Freitag; Stadelmann-Steffen 2010, p.5.

The involvement ratio sorted by age groups increases in area of formal volunteering up to those people between the ages of 40-54 and then drops slowly after age 54. For persons age 75 and older, this number is noticeably lower, and so by comparison, the group of young people between the ages of 15 and 24 are involved to a similar degree as are older adults (cf. BFS 2008, p. 6).



Figure 25 Formal volunteering by age group and gender (Switzerland, 2007)

If we compare the involvement ratio of the formally engaged volunteers with the number of the informal volunteers, the engagement ratio amongst men and women as well increases steadily up to the younger retirement ages, i.e. the latter group are more frequently involved in providing helpful services. After ages 75 an up, the involvement ratio for both genders declines drastically (cf. BFS 2008, p. 7).





Source: BFS 2008, p.6.

Source: BFS 2008, p.7.

According to Freitag and Stadelmann-Steffen, close to 30% of people residing in Switzerland were active outside of clubs and organizations, meaning *informally volunteering* in 2009. In 2006, this percentage ranged higher at 37% (cf. Freitag; Stadelmann-Steffen 2010, p. 10f). Women play a significantly more active role in informal engagement - as opposed to formal engagement - in all age groups than is the case for men (cf. BFS 2008, p. 4). In terms of content, the character of social engagement in Switzerland is strongly marked by personal involvement to helping friends and acquaintances, care giving and looking after children. Close to three quarters of the informal volunteers dedicate their engagement by offering help, providing care and support. As compared to the figures in 2006, we can see a decrease in several areas in the figures for 2009. For example in the areas that involve exchanging with/meeting with others and catering to educational needs, the figure decreased by 6% between 2006 and 2009 (cf. Freitag; Stadelmann-Steffen 2010, p. 10 f.).



Figure 27 Areas of informal volunteering (Switzerland, 2006 and 2009)

Source: Freitag; Stadelmann-Steffen 2010, p.10.

If we consider the motives for formal and informal volunteering in Switzerland, we can establish the following: The strongest motive for formal volunteering is how much fun the activity is and for an informal engagement, the primary motive is the ability to help other people. The benefits for a person's professional career and any expectations from the social environment, on the other hand, are motives of lesser importance for either formal or informal volunteering (cf. Freitag; Stadelmann-Steffen 2010, p. 12).



Figure 28 Motives for formal and informal volunteering (Switzerland)

Source: Freitag; Stadelmann-Steffen 2010, p.12.

If we look at the amount of time spent on volunteering in Switzerland, then we see that on average the entire population personally takes the initiative and spends three hours a month performing unpaid work in clubs and organizations, for helping neighbours and for providing other helpful services. If we look at this in terms of hours, we see that around 700 million work hours are spent each year, half of which is spent on informal, the other half on formal volunteering. Per month, this equates to persons actively volunteering an amount of time of approximately a half of a work day each week (cf. BFS 2008, p. 8).

Figure 29 Time spent on volunteering (volunteers/overall population), by type of activity and gender (Switzerland, 2007)



Source: BFS 2008, p.8.

3.1.7 Volunteering in The Netherlands

41% of the population in the Netherlands were regularly involved in clubs and charitable institutions in 2008. For the last 25 years or so, the Dutch government has been encouraging civic engagement. By implementing extensive support structures on state and province levels and also at a community level, civic engagement has been solidly renewed. (cf. Münz 2008, p.1 f). As such, volunteer work has been encouraged in local *Vrijwilligerscentrales* (volunteering centres) for example by arranging for volunteers to be placed in suitable organizations. Moreover, there are also support organizations on a national level, who represent the interests of volunteer organizations and centres. With regard to how the Netherlands supports volunteering, it is described as a partially public system, in which the most significant legislation relating to volunteer work and government incentives are combined with independent volunteer centres (Hilger 2010, p. 8 f).

On average, adult citizens in the Netherlands worked up to one hour a week performing volunteer activities in 2009. People who do not have paid work spent more than an hour and a half volunteering their time each week. Those who receive unemployment benefits invest on average more than two hours a week working as volunteers. Retirees also invest a lot of time volunteering (on average about an hour and a half each week). School students, university students, employees and the self-

employed spend by comparison to the other figures the least amount of time volunteering (cf. Statistics Netherlands 2011).





More than 22 percent of the adult population of the Netherlands, thus around 2.8 million people, worked as volunteers in an institution or organization in 2009. This percentage has risen slightly since 2001. In this regard, this development is so minor that in studies this ratio of engagement is often simply assessed as being stable. The chart below shows a trajectory indicating volunteering in the Netherlands from 2001 to 2009. It illustrates on the one hand the percentage of volunteers in the population overall and on the other hand the hours spent performing volunteer work per week and per person (cf. Centraal Bureau voor de Statistiek 2009, p. 55)

Source: Statistics Netherlands 2011.



Figure 31 Percentage of the population and amount of time dedicated by volunteers in the Netherlands (2001-2009)

Source: Centraal Bureau voor de Statistiek 2009, p. 55.

In 2008, more than 40% of people the age of 55 and older were involved in volunteer work (cf. Coumans; Rielem 2010, p. 1): "Older people relatively often do volunteer work in care and for religious or ideological organizations. They also tend to be more active in hobby clubs and cultural associations. Among over-75s, the share of volunteer workers was evidently lower: 24 percent of them were active in volunteer work".

Based on a special Eurobarometer issued in January 2012, the ratio of older Dutch people engaged in volunteering is even higher at 56% and thus the peak number in Europe. (cf. European Commission 2012: Factsheet on the Netherlands, p. 2) Also according to this survey, older adults in the Netherlands are in comparison to their fellow citizens often actively involved in volunteer work: Among people between the ages of 15 to 54, the number comes in at merely 50% (which is nonetheless second place in the EU ranking behind Sweden). (cf. European Commission 2012, p. 88 ff.)



Figure 32 Volunteering and informal help by age group (The Netherlands)

Source: European Commission 2012, p. 88ff.

Especially in the area relating to providing informal help, the older age group in the Netherlands is particularly active. Older adults between the ages of 55 and 75 are relatively often active as informal helpers, irrespective of the organization. "In 2008, 40 percent of 55 to 64-year-olds and 35 percent of 65 to 75-year-olds provided informal help. People older than 75 far less often provided informal care. With 16 percent, the proportion of providers of informal help above the age of 75 was far below average" (Coumans; Rielem 2010, p. 1).

3.1.8 A European Comparison of Volunteering

The international comparison of engagement ratios shows that in all countries in which the welfare system is well organized, the engagement ratio is high, while the engagement ratios are lower in countries with a welfare system that is not quite as strongly organized (cf. Landeszentrale für politische Bildung BW 2009, p. 22 ff).

Based on a survey conducted in several European countries, what becomes evident is that at 17% almost every fifth citizen in the countries surveyed held an honorary function or performed unpaid activities of another kind in an organization. The peak positions are held by Norway at 37% and Sweden at 35%. By comparison, Germany at 26% and the Netherlands at 29% lag somewhat behind. At the lower end of the list are Italy and Portugal, each with 5%, as well as Greece and Spain at 6% (cf. Priller 2008, p. 51 ff).

Yet another current survey, also an international comparison, restricts its review to persons ages 50 and up. In the program, the ratio of honorary activities and unpaid networked aid (helping friends, neighbours or members of the family) was surveyed. At 25.6%, the Netherlands is far ahead among the honorary activities performed by older adults. Sweden and Denmark at 21% each are also at the very top. Germany, with 12.9%, is at the medium level, while Poland at 2%, Greece at 2.2% and the Czech Republic at 4% come in at the very bottom (cf. BMFSFJ 2009, p. 64).

Figure 33 Percentage of volunteers compared to the overall population (country comparison, 2006)



Source: BMFSFJ 2009, p.64.

The special Eurobarometer based on a face-to-face survey on the subject of "Active aging" resulted in a significantly higher engagement ratio among older adults. In the entire EU (27 Member States), 27% of the older adults ages 55 and up stated that they were active as volunteers. In comparison: In the age group of those between 15 and 54, the ratio is at 26%. (cf. European Commission 2012: Report,

p. 88 ff.) So, older adults volunteer somewhat more often than do young adults. However, there are significant differences between the Member countries. The latest twelve Member States show a general engagement ratio that is significantly lower. On the other hand, by comparison many more older adults are involved in volunteer activities in Germany and in the Netherlands. 41% of older Germans and an incredible 56% of the older Dutch report that they volunteer. (cf. European Commission 2012: Factsheets on Germany and the Netherlands, in each on p. 2). So, behind Sweden, the Netherlands has the highest engagement ratio in the EU. The Eurobarometer did not collect any data for Switzerland.

3.1.9 Motivation and Self-Image of Volunteers

What motivations can be satisfied by being involved in volunteer activities? Clary and Snyder (1999) differentiate between six functions to which volunteer work may contribute: 1) Values, 2) Understanding (learning), 3) Enhancement (growing), 4) Career, 5) Social, 6) Protective (reduce personal problems). Two thirds of volunteers follow more than one goal in pursuing volunteer work (cf. Clary & Snyder 1999, p. 157).

Generally, what we need to consider is that if various motives are satisfied consistently, a better result can be achieved. "Individual differences may be more strongly influential on behaviour and outcomes in weak situations that have fewer clear norms or rules. Intentions to volunteer elsewhere are much lower than intentions to continue at the same organization. The satisfaction of multiple important motivations in volunteering is linearly related to positive outcome" (Stukas; Worth; Clary; Snyder 2009, p. 24 ff).

In volunteer research, we differentiate between the following three motives: focus on interests, focus on public welfare and focus on socialibility. If we compare these three motivation types in the years 1999, 2004 and 2009, we can determine a redistribution among these motives. In principle, we can assume that for the total number of volunteers, the focus on public welfare has gained in significance in the yearly comparison. And yet, where the older adults ages 66 and older are concerned, this motive has seen a slight decline (from 41% to 38%) and the focus on personal interests has increased dramatically (24% to 35%). While the younger and the older persons engaged in volunteer work show noticeable changes between the years, the motives of those persons in their middle years who are involved in volunteer work remains relatively stable (cf. BMFSFJ 2009, p. 124 f).

Figure 34 Expectations of volunteer activities by age group (Germany, 1999-2004-2009)

Chart B29

Typology of expections of volunteer engagement over the course of time (4 age groups)

All people engaged as of age 14



Source: BMFSFJ 2009, p.125.

Public welfare made up the subjective foundation for volunteer activities in 2009. "The desire to have fun and to take on responsibility increases [...] the personal significance of the engagement for those involved in volunteer work, however both take a back seat to public welfare." (BMFSFJ 2009, p.119). However, the results of a different study show that selflessness, charity and performing a duty to society plays a much lesser role today as a commitment than does following one's own interests, learning new skills, making meaningful use of one's time and autonomy (cf. Künemund 2006, p. 48 ff) Moreover, because of increased mobility and flexibility in our society, there are now new motives and reasons why a person might perform volunteer work. Some of these new motives include the link-up options providing people who have relocated to a new locations the opportunity to become integrated into a new community, to pursue professional and social interests and to see an engagement as a form of recreation. At the same time, scepticism is on the rise towards joining clubs and associations (cf. BMFSFJ 2009, p. 119).



Figure 35 Motives for volunteer activities (Germany, 2009)

Source: BMFSFJ 2009, p.119.

Motives of Older Adults

With regard to the question about how to attract the interest of older adults to be active as volunteers, it helps to have an idea about what exactly the motives of engaged older adults are and how high the general motivation is among older adults. "Identification of motives that cut across activities may be useful to activity coordinators. If some older people are known to have a strong global motivation to be active, activity coordinators can be relatively confident that they will respond positively to a variety of activity opportunities. If other older people have weak global activity motivation, activity coordinators may find them willing to participate in activities that are attractive to them because of features that are specific to those activities" (Caro; Caspi; Burr; Mutchler 2009, p.194).

The results of the aforementioned study prepared by BMFSFJ (cf. chart p. 29) show that the expectations of older volunteers (>66 years) in 2009 were hardly any different to those of any other age group age 31 and older. Focus on public welfare (38%) and personal interests (35%) play a greater roll then sociability (27%). Only the youngest of volunteers surveyed (14-30 years old) place stronger value on their interests (40%) and by comparison on sociability (30%) then on the focus on public welfare (30%). Still, we can see a slight decrease in the focus on public welfare among the group of older adults 66 years of age and older - a development that is in contradiction to the

development in other age groups. During the period of time between 1999 to 2009, the focus on (personal) interests among volunteers ages 66 and older increased from 24% to 35% (both genders). Among older women, the focus on interests increased even as much as from 25% to 40% and in the meantime even surpasses the focus on public welfare (cf. BMFSFJ 2009, p. 125).

The results of another study show that older volunteers are more likely to be motivated by altruism, social duty and personal satisfaction than other age groups. Instrumental motives dominate among younger volunteers (Wardell, Lishman & Whalley, 2000, p. 237). In accordance with these results, we can see from the chart below that especially among older adults the qualification does not represent any significant motive for volunteer work (cf. Gensicke, Thomas 2010, p. 31). These results are also supported by the study prepared by BMFSFJ (BMFSFJ 2009, p.118).





Source: Gensicke, Thomas 2010, p.31.

According to Brauers, the motives of older adults have changed as a result of the change in values since the 1960s. This change, which allows the values personal development and participation to increase in importance, characterizes and influences even the generation of today's older adults, who are refocusing their lives after their professional and family oriented stages in life, and who want to

express their personality: "Due to the uncertainties of aging and in response to experiencing breaks, more and more older adults are reacting with a stronger need to stay autonomously active, to move in collective associations and networks and to express their personalities in their local environment" (Brauers, 2006, p. 218).

In conjunction with this, the Sixth Report on the Elderly published by the German Federal Government underlines the significance of images of aging (cf. BBE 2012). A positive self image about aging - the image of one's own aging process - increases the likelihood that a person will remain active and healthy as he/she grows older. However, what also plays a role is the public image about aging, defined based on the idea of aging that other people have. They have a huge impact on how society interacts with older adults. It makes sense to campaign for a change in the perception of aging: The Fifth Report on the Elderly established that there had never been a generation of elderly with so many resources (time, education, material wealth) as the current generation of older adults. (cf. ibid). Based on a recent Eurobarometer on active aging, the majority of European citizens already have a positive attitude towards older adults and recognize their importance in many different areas of society. (European Commission 2011, p. 21 ff and 29). This coming together of a positive image on aging and a great number of resources adds significant potential to volunteer work.

According to Brauers, there are three different barriers that might prevent the ability to make use of this potential: Among them are the psychological barriers, a lack of access points and a discontinuity in the level of engagement. In turn, this brings along the following challenges: We must instill more self-confidence in our older adults, a new scope of activities must be created and new access options allowing civic engagement must be made available. Moreover, there must be more options for discontinuity and to re-enter into society. (cf. Brauers 2006, p.218 ff).

When motivating older adults to become more involved in volunteer work, older adult volunteers themselves can play an important role. They can both be of importance as multipliers to advertise for a certain cause, and they can also successfully support other volunteers in the manner of a peer-to-peer approach while performing online activities (Final report "Learning as a Team via the Internet" 2005, p. 75 and 165).

Society's Motives for Engaging Older Adults

Civic engagement is an activity that requires that a older adult continues to develop on a psychological-intellectual and a social-communicative level. Kruse (Kruse 2006, p. 13) illustrates that our society is losing valuable resources if it robs older adults the opportunity of becoming involved in the public domain.

If older adults are given less opportunities to prove their knowledge, their experience and their dedication to a specific cause, we are at risk of losing valuable knowledge and experience and of losing potential new innovations. Older adults' achievement potential, their satisfaction with and their

quality of life can remain intact much longer if society makes good use of the resources they have to offer. This will have direct effects on a senior's self-image (cf. ibid), which, as already mentioned above, is of great importance to his/her own feeling of well-being and on how active he/she stays.

Commitment and Quitting Volunteer Work

"One problem is that oftentimes only the hard core of very dedicated volunteers perform the majority of the work. Sometimes these volunteers then suffer under the weight of their responsibility. Overcommitment and over-involvement may lead the person to giving up on the volunteer work altogether." (Wardell, Lishman & Whalley, 2000, p.239¹⁰). To keep older adults from quitting, institutions that offer volunteer opportunities should be clear about the motives that will allow them to keep the engaged volunteers. "Highly significant predictors of the intention to remain volunteer are (and therefore, when these demands are not met, people might stop their volunteering):

- o Good social relationships inside the organization
- o Support from the organization staff
- o Positive evaluation of the job one performs
- o Training one receives
- o Interesting job with some autonomy"
- (Hidalgo & Moreno 2009, p. 598)

Organizations that provide services depend on the ability to schedule people and have them available. With regard to the risk of a volunteer suddenly quitting his volunteer work, this circumstance may in fact have the effect that contracts need to be introduced for volunteers, and that a precise and accurate job description must be introduced and require a greater sense of duty from the volunteer (cf. Wardell, Lishman & Whalley 2000, p. 238 ff.). Introducing written agreements and contracts is a complex undertaking. On the one hand they serve to precisely clarify the tasks and responsibilities of the volunteers, and on the other hand the volunteer work is thus on the verge of becoming a proper employment relationship. This is oftentimes formally rejected by the volunteer (cf. Wardell, Lishaman & Whalley, p. 243).

Boezemann and Ellemers established in their study that organizations with certain characteristics are able to convey a feeling of pride and respect to their volunteer employees. According to them, it is exactly this feeling that determines whether a person decides to perform volunteer work. This is why the results of their research can be used to support organizations in expanding their scope of volunteer opportunities by taking a range of steps with which to convey a sense of pride and respect to volunteers.

¹⁰ Wardell, Lishman and Whalley arrived at their results by surveying a group of British volunteers who were engaged in providing social work to adults with disabilities.

Examples of binding measures of this kind include the introduction of an internal newsletter, setting up informal meetings between the volunteers and clients of the organization or setting up a clear set of rules and regulations for volunteers. The authors of the study do note that relationships to colleagues amongst volunteers is a less relevant motivation than it is for employees. Volunteers are more likely to focus on the people who benefit from the work the organization performs. (cf. Boezeman and Ellemers 2008, p.53 ff.).¹¹

Finkelstein, Penner and Brannick (2005, p.414-416) are of the opinion that organizations need to make an effort to help volunteers towards being able to and wanting to identify with their role as a volunteer by acknowledging their efforts and encouraging them: "Committed volunteers are the ones who have made the voluntary work a part of their personality. We can encourage them by acknowledging and supporting their voluntary role. The persons who are most likely to engage in on-going helping are those who internalized a prosocial role. They strongly feel that others expect them to continue in that role. To use this, organizations who work with volunteers could facilitate the development of a volunteer identity, and apply (light) social pressure; f.e. by letting volunteers chat with members of the organization, or by encouraging the volunteers to recruit others in their circle of friends (who might feel socially obliged then to help as well)" (Finkelstein, Penner & Brannick 2005, p. 414-416).

3.1.10 Monetarization

The term "monetarization" is derived from the Latin word "moneta" (=mint) and means that something is converted into money or that a financial benefit is drawn from it (cf. ZZE 2009, p. 9). With regard to a voluntary engagement, the following dimensions are listed in terms of monetarization: "When viewed from an economic standpoint, a value is calculated accordingly by multiplying the number of hours volunteered by a monetary equivalent. [...] Approaching the topic in this manner often comes with the disadvantage that the value of a voluntary engagement for the public welfare is only portrayed to a very limited extent." (ibid) Furthermore, monetarization refers to an indirect or direct payment of money, the amount of which is calculated based on the organization's view of itself and

¹¹ An organization can induce feelings of pride among their volunteers by arranging informal meetings between the volunteers and the organization's clientele, so that the volunteers hear from the organization's beneficiaries what their efforts mean to them. Respect can be enhanced by communicating (f.e. in a regular newsletter) how the organization appreciates the volunteers (emotion-oriented support), or by compiling a manual that provides guidelines for the volunteer activities (task-oriented support). Boezeman and Ellemers also note that the interaction with one's colleagues has not the same influence on the commitment among volunteers and paid workers. Whereas this interaction is a primary source of commitment in regular (paid) employment situations, team relations may be less important as a source of commitment for volunteers –since their interactions are usually less frequent. Instead, it could well be that the commitment to the clientele of the organization, is more important.

that of its volunteering employees. Finally, the term represents an increase in the various forms of activities that can be categorized as either unpaid voluntary activities or paid work.

In volunteer work the need for compensation is growing more and more. This is especially true as concerns older adults and their difficult economic situation after they retire. According to Zentrum für Zivilgesellschaftliche Entwicklung [=Center for Civic Development], approx. 16% of volunteer work was compensated in Baden-Württemberg in 2004. At a federal level (Germany), the percentage of compensated activities as compared to the total amount of volunteer work at the same time was at 14%. Based on the chart it is clear that the percentage of compensated volunteer work is on the rise:

Figure 37 Percentage of honorary activities in Baden-Württemberg "compensated to a certain degree" (1999/2004)



Source: ZZE 2009, p. 16.

The percentage of compensation varies depending on the field of activity *cf. ZZE 2009, p. 15 ff.). The chart shows that at 24% compensation was paid most often for work in the social field in 2004. In sports, the percentage is at 17%, in church-religious fields at 9%, in schools/kindergarten and culture/music at 6% in each case:

Figure 38 Percentage of honorary activities in Baden-Württemberg "compensated to a certain degree" by field of engagement (1999/2004)



Source: ZZE 2009, p. 17.

As far as voluntary work is concerned, monetarization is divided into basic categories of forms of material exchange. As per the principle of giving and receiving, a certain degree of balance is required even for volunteer work (cf.ZZE 2009, p. 19 ff):

- 1. Direct money payments: Among these are monetary payments that are also referred to as compensation for expenses [such as travel expenses and other costs, note from authors].
- Payments in kind: Among these payments are remunerations that are not made directly in the form of money, but instead in the form of payments that have an equivalent monetary value (e.g. products, room and board, educational measures, use of technical infrastructures)
- 3. Reduced payment obligations: These are a form of remuneration in kind that are not provided by the organization itself. They are only effective in conjunction with certain payment obligations (discounts, tax privileges)
- 4. Time accounts: In this case, the currency is not money, but time. For some activities, a service equalling an equivalent length of time can be claimed to cover one's own needs.

- 5. Qualifying periods towards a pension fund scheme: In this case, it is supplemental income with a time delay. For example, various communities pay contributions to a private pension insurance fund for volunteers in the fire department.
- 6. Or, in other cases the volunteer organizations may assume the costs of accident and liability insurance as compensation for the volunteer work.

Against this backdrop, what is interesting is which functions and interests are appealed to among the volunteer employees with any direct or indirect monetary payments.

What is of primary importance for volunteers today is that the volunteer work matches their current situation in life and not necessarily traditional values and standards. These life situations each depend on an individual's personal competencies and resources. So, a direct payment of money may be a motive of central importance as an economic resource depending on the person's situation. In addition to this practical aspect, money can also be understood simply as a token of appreciation and recognition for the volunteer work. If we use the statement "If it costs nothing it's worth nothing!" as an argument, the potentially high relevance of economic means to place a value on volunteer activities is clear (cf. ZZE 2009, p.27 ff.).

However, more recently, the assumptions made above especially have been contradicted by research from various disciplines. Studies in social sciences, but also biological studies, show more and more that humans are born with a natural inclination to want to cooperate:

"Moreover, researchers have found neural and possibly genetic evidence of a human predisposition to cooperate. Evolution may actually favour people who collaborate and societies that include such individuals." (Benkler 2011, p.164) These findings also have practical implications for organizations that rely on the work of volunteers: "Organizations would be better off helping us to engage and embrace our generous sentiments rather than assuming that we are driven purely by self-interest. We can build collaborative systems by encouraging communication, ensuring that claims about community are authentic, fostering a feeling of solidarity, being fair, and appealing to people's intrinsic motivations." (ibid) In this regard, a movement towards monetary compensation cannot be seen as a natural desire; organizations can actively pursue other options instead.

In addition to discussing monetary compensation for volunteer work, the sector of "Silver Workers" should also be considered. The term "Silver Workers" is used for paid retirees or those that work on an honorary basis (cf. Deller & Maxin 2009, p. 2). The significance of retirement has changed noticeably as a result of increased life expectancy. More and more retirees continue to be professionally active after they have reached retirement age. So, the desire to be able to continue to work, possibly in a minimized form, remains until a person reaches a high age. The decision to take up work during retirement is not made short term, but instead as a part of a longer process. Factors influencing the decision are both personal in nature as well as environmental factors. What is important when making a decision to continue to work after working life are an individual's personal

attitude towards professional life and retirement. The more content a person was with his or her profession, for example, the more likely that person is to be willing to continue to work after retirement age.

Retirees feel especially drawn to an organization if it matches their individual interests and if it can tailor the work conditions to their personal needs (cf. Deller & Maxin 2009, p. 1 ff.). One form of continued employment that is becoming increasingly popular is the option to pull back from the job market step-by-step in cases when compensated work allows a greater amount of flexibility as a person grows older and enough leeway to pursue extra-professional activities. In Germany, there are some organizations that are now beginning to place retirees into volunteer or paid activities within a company (cf. ibid, p. 3).

3.1.11 Volunteer Management

Hand-in-hand with the diverse range of orientations, motives, expectations and possibilities available in volunteer work, there is also an increased need for consulting, support services and structuring in the field of volunteer work. Today, organizations would be well advised to initiate professional volunteer management. Volunteer management is meant to help plan, organize, coordinate and assess the volunteer work performed in an organization (cf. Reifenhäuser; Hoffmann; Kegel 2009, p.58 f.). If we consider the trends in society and their consequences for clubs and other volunteer organizations, then volunteer management must be fully aware of the following issues (cf. Deutscher Sportverbund [German Sports Association] and Commerzbank 2004, p. 5 f): These days, people have become more critical, more self-confident and no longer easily accept the authority of another. Each individual is increasingly demanding that his or her voice be heard instead of making himself subordinate. A person's interest in taking up a volunteer activity starts where one's own needs are being appealed to the most. The volunteer wants to have the freedom to seek out and design his/her field of work on his/her own. Furthermore, volunteers tend to prefer work that is focused on a particular goal. Because volunteers are in short supply, institutions should create specific offers and be active in advertising the personal benefits of volunteer work.

Areas of volunteer management

The chart below shows the key management areas in a non-profit organization, meaning an organization that is not organized as a profit-oriented enterprise but instead as a needs-based enterprise (cf. Reifenhäuser; Hoffmann; Kegel 2009, p. 58 f.).



Figure 39 Areas of volunteer management in non-profit organizations

Ill. 14: Volunteer management areas in NPO (Th. Kegel, AfED, Berlin 2009)

Source: Reifenhäuser; Hoffmann; Kegel 2009, p.58 f.

The areas needed in volunteer management can be summed up briefly with the Dutch formula "*Binnenhalen, Begeleiden, Belonen, Behouden, Beëindigen*" (Acquire, support, reward, keep, terminate; CIVIQ 2005, p.1).

"In Germany, the concept of volunteer management is still a relatively new one. The key function of a volunteer manager is seen in his/her ability to determine the need for any strategic changes in the areas organization and human resources as well as in the structure and workflow in order to then initiate changes that influence the long-term orientation and planning as well as the structures within the organization. Volunteer management must clearly focus on the motivations, expectations and needs of volunteers, coordinating them with the objectives, functions and interest of the organizations, whereby it is not up to the volunteers to adjust to the organization, but instead it is the organization's responsibility to provide forms of involvement that are in keeping with the times to the benefit of their cause and target groups." (Schäfer 2009, p. 29 f.).

In an organization, volunteer management can only be successful if the executive board's decision to introduce a volunteer management is clearly supported by everyone in management. Mission statements pertaining to volunteer work need to be developed, basic principles defining the specific implementation and the cooperation with the employees must be formulated and a budget for volunteer work must be prepared. In addition, quality criteria must be formulated for volunteer work

and they must be integrated into an organization's quality management (cf. Reifenhäuser; Hoffmann; Kegel 2009, p.60 ff.).

According to Reifenhäuser, Hoffmann and Kegel, the following general conditions would be necessary within an organization for volunteers: Principles by which to clearly differentiate between volunteer work and work performed by employees in the organization must be defined, cooperation must be initiated between full-time employees and honorary employees, support systems and a recognition culture must be introduced for the volunteer activities, volunteers must be offered training options to learn more skills and the quality of the volunteer work must be evaluated (cf. Reifenhäuser; Hoffmann; Kegel 2009, p.60 ff.). The function of volunteer management is to create these basic conditions and to uphold them.

Specific suggestions for volunteer managers

Reifenhäuser, Hoffmann and Kegel (2009) list the following tasks at the responsibility of volunteer management: The volunteer manager's first responsibility is to identify activities that can be performed by volunteers. To this end, the tasks that need to be performed in each division of the organization must be collected. Then, the manager must evaluate which of these functions would be appealing for volunteer work in order to be able to specify in a next step the time requirements and the necessary skills. These details can be used to describe a specific and appealing offer from the organization in the language of the target group. In an initial meeting with volunteers, specific general terms and conditions can be listed and the organization and the volunteer can come to a mutual agreement. The meeting should be used to clarify in what ways the organization and volunteers are a good fit. As soon as volunteers have decided to take up an activity in the organization, he or she should be introduced to the activity he or she is assigned to based on an orientation plan. This should also include information about the future colleagues, offices, rules, goals and the organization's mission statements, materials, etc. (ibid).

In addition to these orientation tools, it would also be expedient to offer the volunteers a "trial period" to try out their new activity under supervision. Other support functions that the organization could provide might include, among other things, compensation for expenses, playing a mediating role or helping to settle disputes. Motives are crucial in finding ways to bind volunteers long term. This is why one of the main functions of volunteer management is to identify the motives and expectations of volunteers and to satisfy them. Creating career opportunities, for example, would make an engagement more appealing (ibid).

Volunteers should also be in direct contact with instruments of human resources development. Among these should also be instruments with which to promote, qualify and recognize volunteers. Qualification should be focused on the participants and on be practical, because the primary intent should not be learning, but staying active, having fun, contributing to the public welfare and being sociable. Among these qualification measures, we can sum up the following: Mentoring, self-learning, exchanging experiences, consulting among colleagues, advanced and continued education, coaching, supervision, etc. (ibid.)

Volunteers, who end their activities at an organization should be given a written certificate, and in it there should again be emphasis on the value of their work and recognition for their willingness to volunteer. We recommend quality management be applied when reviewing and assessing the volunteer work being performed in an organization. Data should be collected and analyzed on a regular basis for this purpose. Examples for key figures should include: The number of requests for volunteer engagement; the access paths to a volunteer activity; the actual number of volunteers; the number of terminations, etc. Ideally, these data collection systems should be so simple that they can be integrated into the day-to-day work routine (tally sheet, documented final meetings, etc.) (cf. Reifenhäuser; Hoffmann; Kegel 2009, p. 77 ff.).



Figure 40 The engagement cycle of volunteers

Source: Reifenhäuser; Hoffmann; Kegel 2009, p.78.

In 2004, an initiative made up of Deutscher Sportverbund and Commerzbank developed a collection of informative texts to be used for volunteer management within sports associations. In a quick checklist used for volunteer management, the following central issues were compiled (cf. Deutscher Sportverbund and Commerzbank 2004, p. 2 ff).

1. "When teams made up of full-time employees and honorary members interact, in practical experience promoting unity is often especially challenging. What is important to achieve this is

to have an executive board that attempts to bring all participants to the table and to encourage them to openly communicate about their needs, problems and conflicts.

- 2. All club members should be offered a wide range of activities. This must be planned and distributed by persons in responsibility, resulting in multifaceted array of activities.
- "Just do it!" is not the right way to distribute tasks. Volunteers need clear instructions and must be able to prepare themselves for what to expect.
- 4. What is recommended would be to survey the volunteers in order to determine how satisfied they are with their work and function.
- 5. The creation of new tasks also creates new challenges. This is why it is important in these kinds of situations to supervise and support the volunteers.
- We cannot take volunteer work for granted. As such, we must express a suitable amount of recognition on a regular basis. Advanced training for volunteers would be one possible form of appreciation.
- 7. An organization should account for the needs, wishes and interests of the volunteers, e.g. by conducting a member survey.
- 8. The purpose of volunteering should not be to the ability to have all tasks completed. Instead, something else is much more important, namely to view volunteers as the embodiment of the charitable ideal."

The range of responsibilities in volunteer management is multifaceted, however management should not be seen as a "jack of all trades" solution (Deutscher Sportverbund and Commerzbank 2004, p. 7). One of responsibilities to be fulfilled by management is first off to prepare a needs analysis for volunteer work. What can be realized with this kind of work? What time range is necessary based on that?

After determining the needs, a schedule of costs must be prepared, which must cover, among other things, the workplace for the volunteer, training and recognition tools. In addition, the tasks must be clearly defined and listed. For orientation purposes, a **checklist of appealing tasks** may be a helpful tool (cf. Deutscher Sportverbund and Commerzbank 2004, p.10):

\checkmark	Do you offer a wide array of different	\checkmark	Do you prepare a requirements profile
	assignments so that there is something		and do you determine the necessary
	available for various target groups?		competencies so that the volunteer
			knows what is expected of him or her?
\checkmark	Important: Do you offer manageable tasks and also temporary ones?	V	Do you combine appealing and less appealing tasks so that none of the fields of activities are less exciting?
\checkmark	Do you clarify rights and duties and do	\checkmark	Do you advertise for volunteer tasks to
	you provide enough leeway for		the same extent as for club activities?
	volunteers to make their own decisions?		

Source: Deutscher Sportverbund and Commerzbank 2004, p.10.

Following this plan that has been formulated, the goal is to be able to find suitable volunteers for the activities. Here, what is important is, among other things, to find a support person who will be available to the volunteers in initial meetings, during the instruction phase, for regular feedback meetings and to care for any other needs. Even after the volunteer activity has come to an end, it is the responsibility of management to organize a suitable way to say farewell. Not only during the farewell event, but also generally, value should be placed on recognizing the volunteers for their work. The following small tips can be listed for saying thank you and giving them recognition:

- Say thank you
- Smile and be friendly
- Say their name when greeting them, no matter how hectic things are
- Take the time to talk to them
- Give them recognition for any extraordinary performances
- Do not simply ignore any unspectacular engagement
- Send a card on a birthday or get-well wishes
- Offer a coffee break with cake every now and then
- A thank you letter for the employer or the family
 - (Deutscher Sportverbund and Commerzbank 2004, p.13)

What is generally important is to create favourable basic conditions prior to and during volunteer employment. Among these should include reliable office hours, good support, being open and honest, the freedom for volunteers to make decisions, support of the engaged volunteers, recognition,

suitable workspace and furnishings, among other things (cf. Deutscher Sportverbund and Commerzbank 2004, p.16).

3.1.12 Internet and Volunteer Engagement

Making use of the Internet in volunteer work

Today, the Internet plays a significant role even for volunteer work. Between 2004 and 2009, use of the Internet in conjunction with volunteer engagement has risen from 44% to 59%. Even though to target group of older adults ages 60 and older remain less rarely represented, still, older adults do use the Internet to the same extent during an engagement as they have access to new media in general. The Internet is used on the one hand to obtain information about the engagement fields and on the other hand in conjunction with the engagement itself.

Figure 41 Use of the Internet in volunteering by age group (Germany, 2004/2009)



Source: BMFSFJ (2009), p. 242

In addition to age, the volunteer's level of education is also decisive with regard to the degree that the Internet is used by volunteers as a part of their engagement. Today, the Internet is being used not only as a tool to obtain information, but more and more also for social networking (cf. BMFSFJ 2009, p. 242 ff.).

Discourse: Wikipedia

"Wikipedia is a free online encyclopaedia that is written and maintained entirely by volunteer authors" (Schroer aus Dorsten 2008, p. 5 ff.). Since the year it was established in 2001, Wikipedia has grown to be one of the most well-known websites in the world. Technically, Wikipedia consists of a Wiki software, which allows users to not only call up pages, but to also modify them. Thus, the goal of Wikipedia is to provide users the ability to actively participate in the creation of the website quickly and easily, which is the origin of the term "Wiki", from the Hawaiian language and which translated means "quick". On the other hand, the goal is to create an encyclopaedia that can be freely accessed by the general public free of cost. Wikipedia follows five basic principles:

- 1. It should not include any personal opinions nor should any findings from scientific primary studies be represented in it that have not yet run through the scientific publication process.
- 2. Wikipedia is unbiased and neutral.
- 3. Wikipedia consists of free and open content.
- 4. The authors should refrain from attacking each other on Wikipedia personally. The authors should respect each other even if they do have a difference of opinion.
- 5. Wikipedia claims that it does not have any fixed rules (cf. Schroer aus Dorsten 2008, p 5 ff.).

According to the results of a survey of Wikipedia authors, their work for Wikipedia is characterized mostly as being autonomous, meaningful and requiring a diverse set of skills. Other motives they listed included the ability to pass along information, the joy in their work and generativity. The time spent on average by the participants for work on Wikipedia was more than two hours a day. However, most of the contributions and changes are only written by a small group of authors. As a typical sample for online communities overall, what can be established is that: The topic of each article influences the distribution and number of authors. Where special articles of interest are concerned, a small number of authors makes a comparatively large number of modifications. For articles that are in demand and popular, the number of authors is larger and at the same time the contribution of individual authors is smaller by comparison (cf. Schroer aus Dorsten 2008, p. 72 ff.).

Online Volunteering and Online Volunteers

Online volunteering is defined as follows: "Virtual Volunteering refers to volunteer tasks completed, in whole or in part, via the Internet and a home or work computer. It's also known as online volunteering, cyber service, telementoring, teletutoring and various other names" (Ellis, Cravens 2000, S. 12). In Anglo-American countries, "virtual volunteers" are wide spread. Among their tasks are, for example, creating website, preparing translations, doing online research work, consulting in forums or via email and much more. This has several advantages: Not much office space is needed, people can be quickly recruited via e-mail, forums and online communities, and volunteers in part own better computer equipment than the organizations themselves. Online volunteering can make sense especially for tasks that do not require too much security, which have to do with processing

information and that do not require work in a team. Examples for tasks of this kind can be found in administration, in accounting, data processing and administration, reading, archiving, research work, support, technical assistance and writing activities (s. Connors, 2012, p. 124).

Online volunteering appears to be yet another modern option to experience engagement - especially for persons with limited mobility. Based on the results described above relating to how volunteers can be motivated, for a given focus on public welfare, activities that involve a computer might represent an option for a number of volunteers - provided that these activities also promise to be fun and offer social networking options, which, despite any altruistic motives, is what a large number of volunteers want (BMFSFJ 2009, p. 125).

Authors who are involved explicitly as online volunteers do tend to have a different opinion. For many Internet users who would like to become involved online, the medium itself appears to be a significant motive. They see this activity as another possible personal reference, which they can include in their resumes. Skills that a person has learned outside of an employment environment have a particular appeal. In addition, potential online volunteers often have a higher educational degree. In addition to fulfilling their own interests, many volunteers are also interested in doing something for society - so a focus on public welfare also plays an important role for online volunteers. (cf. Seifert, Placke 2007, p.10 ff).

Online volunteers need to be recognized and motivated differently than do their "offline" counterparts. A volunteer receives more recognition by being assigned more responsibility. For any opportunity that might present itself, the person engaged as a volunteer should also be informed soon about the effects of his or her activity. Furthermore, it is important to strengthen the team concept (cf. Seifert, Placke 2007, p. 18 ff.).

Also, organizations that would like to offer online volunteering should also keep in mind that they will need to offer these virtual volunteers the ability to become linked on a personal level and to foster a sense of community. "The human being is inclined to want to build up personal relationships in an initially impersonal online environment. The effectiveness of a team increases when trust is strong among the members of the team. Therefore, in order to effectively create a team, it is advisable, especially at the beginning of a teamwork phase, to also work with means (video, personal meetings) that allow trust to be created and provide the opportunity to get to know each other. In addition, a highly recommended communication path is Wiki that the users can employ to write each other messages (Seifert, Placke 2007, p. 7)".

3.1.13 Findings and Research Questions

Findings

The following conclusions can be drawn from the study at hand that are relevant for the TAO project:

- 1. Well-being: Voluntary engagement may contribute to increased well-being in older adults.
- 2. Huge potential: Today's generation of older adults provides a significant source of volunteers. As compared to earlier generations of older adults, this one has more resources such as education, time, experience and wealth. Older adults are engaged today up to an age of around 75 just as frequently as the younger generations. The general motivation why older volunteers would like to be engaged in a cause is similar to the focus on public welfare, personal interests and sociability motives that can be found in other age groups.
- 3. An adjustment to needs is necessary: As a result of a trend towards individualizing, today there are a wide range of different lifestyles among older adults. In order to make use of the huge potential this group has to offer, volunteer organizations must focus on the desires and needs of older adults. Barriers set up by society must be overcome by creating suitable basic conditions and discontinuity options (flexibility in terms of time for any engagement) must be put in place.
- 4. Diverse fields of activities: As diverse as the target group consisting of older adults is, the more varied the fields of activities can be in volunteer engagement. Differentiation the wide range of activities for online communities can be both a challenge and an opportunity.
- 5. Volunteer Management: New volunteering activities for older adults require a well thought-out recognition culture and well prepared underlying conditions. Organizations that today rely in part or exclusively on collaboration by volunteers need the right approach to volunteer management.
- 6. Peer-to-Peer Approach: In the area of Internet use and in online communities, older adult volunteers can represent a peer-to-peer approach to encouraging other older adults to come to terms with the Internet and to increasingly also be able to make use of online communities.
- 7. Internet Use: Volunteers, among them also older adults, are increasingly making use of online resources in the volunteer activities. Older volunteers make use of the Internet to a somewhat lesser degree than other age groups. This is equivalent to general findings pertaining to the use of the Internet.
- Online Volunteering: There is not many conclusive written discourses on the topic of online volunteering. It is nonetheless obvious that the field of online volunteering is quite differentiated.

Research Questions

Against the backdrop of the findings, the following research questions can be formulated, which can be examined in more detail during the course of the TAO project:

- How does being involved in online communities contribute to the overall well-being of older adults? Which fields of activities are decisive for increasing their overall well-being?
- What steps can be taken to appeal to older adults in particular and interest them in volunteering?
- What are the desires and needs of older adults relating to an engagement in online communities? How do their needs differ from those of other age groups?
- Which fields of activity are especially appealing to older adults in online communities? How can the (potential) volunteers become familiar with them?
- What are the basic elements of a volunteer management that is appropriate for older adults? Do older adults require other forms of management than other age groups?
- In how far can a peer-to-peer approach be applied to enable older adult volunteers to interest other older adults to collaborate?
- How can older adults be introduced to online volunteering? In how far do qualification courses for "offliners" promise to be successful for volunteer work? How can "onliners" be attracted to online collaboration?

3.2 Volunteers Study: An Empirical Exploration in the Context of TAO

3.2.1 Introduction

The Literature Study on Volunteers discusses the state of research on "volunteers and older adults". It shows their potential as volunteers and facilitators for online communities. The study also makes clear that only little research has been published on online volunteering so far – this is all the more so concerning older adults. That is why the TAO research partners built upon the results and research questions of the volunteers study to conduct an empirical exploration in the context of the AAL project TAO.

Older adult participants and volunteers of online communities were asked about their needs, preferences, attitudes and interests. These interviews took place individually, in focus groups and workshops. The empirical results of this explorative study provide a basis to analyse and compare the situation of volunteers and volunteer management in the TAO community partners. Also, they provide answers to the research questions from the literature study.

A comparison of volunteer work of the TAO community partners will serve as an example showing which concepts of volunteering in online communities are recommendable. The different organizational and volunteering cultures need to be taken into account, just like the concrete types of tasks. The latter can generate different types of older adult volunteers. The research's aim is to describe successful strategies of the community partners and draft general recommendations.

Finally, the results of the literature study will be discussed with regard to conditions for volunteering and cooperation in online communities. The analysis will cover diverse fields of activities and the effect that integration into and cooperation in online communities can have on older adults' well-being. As will be shown, peer-to-peer and facilitator approaches as well as volunteer management play an important role in this context. Against this background, following questions from the literature studies will be answered:

- How does being involved in online communities contribute to the overall well-being of older adults?
- What are the benefits to be expected from increased participation of older adult users in online communities?
- How can older adults be introduced to online volunteering? In how far do qualification courses for "offliners" promise to be successful for volunteer work? How can "onliners" be attracted to online collaboration? In how far can a peer-to-peer approach be applied to enable older adult volunteers to interest other older adults to collaborate?

- What are the desires and needs of older adults relating to an engagement in online communities? How do their needs differ from those of other age groups?
- Which fields of activity are especially appealing to older adults in online communities? How can the (potential) volunteers become familiar with them?
- What reaction is to be expected from existing (younger) community members when more new/elderly users join the community?
- What would be effective incentives to get existing users to make efforts to actively mobilize and integrate new elderly users?
- What enhancements to the community platforms would be appreciated most by existing community members?
- > What are the basic elements of a volunteer management that is appropriate for older adults?

Implementation and Methods

The empirical exploration was implemented jointly by BUAS and ZAWiW. It is integrated into the concomitant research on TAO activities. As a start, several focus groups were organized to approach the issue from a broad angle. Then, interviews with individual members of online communities were conducted to validate the results from the literature study and the focus groups. The results of the focus groups and interviews were partly recorded and documented in writing by the researchers. Different methods were used (focus groups, interviews) and several researchers participated, which allowed for triangulation on the levels of methods, data and researchers.

The results thus gained were presented in workshops and discussed with representatives of implementation and community partners in order to draw up possible strategies and recommendations. On this basis, the research partners jointly compared the community partners with regard to their volunteer work. They also established a comparative analysis of the results of the literature study and the empirical exploration. Key results will be integrated into the TAO Handbook and further developed together with the implementation and community partners.

Focus Groups

The focus groups were implemented as moderated discussions following questions or theses on the topics of volunteers/volunteering in online communities. They were partly recorded and then documented by the researchers. The aim was to identify existing needs, advantages, interests and concepts at an early stage of the TAO project, using them to develop conclusions for further work. Individual guided interviews were conducted to obtain a more detailed knowledge of the matter. The interviews' results were put into writing and evaluated.

The focus groups and individual interviews were implemented in following contexts:

- > Focus group in the context of a research seminar in Bad Urach, 30 January to 2 February 2011
- > Focus group and interviews in the context of "Free Cruise on the Internet" (Seniorweb CH)

> Interviews and focus group in the context of Silberwissen

Workshops

The workshops aim to transfer the findings from the literature studies and the concomitant research to the community partners, and to simultaneously validate these findings through a common critical reflection, taking into account the partners' practical experience. In addition, strategies and recommendations are further developed and discussed within the context of the various backgrounds. Therefore the workshops are to be understood as a communication tool, in terms of training and quality assurance, as well as a research tool for validation and concomitant research. While the first workshops were designed to transfer and develop the research findings, strategies and recommendations within the TAO project, the "Open TAO Workshop" opened up for the first time to 'customers' from outside of the TAO project, e.g. providers of online services or online communities and representatives of older adult organizations. The objective is to further develop such "Open Workshops" in order to present them in the TAO community of practice as well as in the TAO Consulting offer (cf TAO business model).

Overview workshops:

- Workshops in the context of 'Freie Fahrt ins Internet' (Free Cruise on the Internet) (4x, 2010-2012)
- Workshop of the TAO community partners (November 2011)
- Open TAO workshop (May 2012)

3.2.2 Focus Group during the Research Seminar in Bad Urach (February 2011)

Setting of focus group

During a three-day research seminar, 15 older adults interested in continuing education dealt with the opportunities of ICT for older adults. The participants all use the internet, many of them also for their volunteer work (e.g. as older adult internet helpers, in a group of learning by research or as members of an online community).

In focus and small working groups, different questions concerning the target group of older adults and their needs and problems were discussed: media and internet competence, opportunities of virtual collaboration, involvement and volunteer work in online communities. The aim was to develop hypotheses and first ideas on strategies and recommendations, based on key questions. The discussions in the focus groups were recorded, put into writing and evaluated by ZAWiW researchers. The results on volunteering are briefly presented below.

Results

The participants first concentrated on possible **volunteering activities**, basing their discussion on the volunteering activities they had been involved in so far. These were a broad range of activities, from social involvement in the context of churches, civic engagement in citizens' initiatives or political associations up to activities of older adults' work and existing online communities. The participants mentioned activities as lecturers, older adult internet helpers, tutors, moderators of online learning groups, regional spokespersons of online communities and the participation as learners in Learning by Research in the Third Age. Two factors were intensively discussed by the group when thinking about in how far the previous activity profiles could be transferred to online communities:

- (1) The relation between real (offline) and online activities and
- (2) The level of activity, i.e. to what extent you are involved in the community by receiving, giving or cooperating.

During the discussion, it appeared that participants prefer being lead from well-known activities to new ones following a step-by-step strategy. That is, they wish to be lead from offline to online activities or from rather passive, receiving roles to active roles in an online community. Volunteer careers should thus evolve from familiar to new types of activities.



Figure 42 From Familiar to New Volunteer Activities

Competence and Qualification: Qualifying volunteers and strengthening their competences is a crucial aspect for developing new types of activities. The participants first stated that technical competences were necessary to participate in online communities. But during the discussion, it turned out that content-related and especially social competences can also be very important. The

participants made a point of being able to build on their existing competences and getting involved in new types of activity corresponding to their interests and needs.

Motivation and Appreciation: In the discussion, participants stated very different motives when asked why they volunteer. While some stressed personal interests and needs, others emphasized social reasons and the desire to get involved for society as a whole. Content-related, technical and social aspects were also stated as motives. Some participants wanted to improve and/or bring in their own technical competence; others wanted to study contents or pass on their own knowledge. Finally, a key motive was building up and maintaining social contacts. A special focus was on intergenerational contacts.

For online communities, this means that types of activities and their profiles need to be clearly described and attributed. It must be clear for the volunteers to what extent their motives and needs will be met when they engage in certain types of activities, taking up according roles and tasks.

Win-Win-Win Situation: It became clear that for the participants, the benefit for an online community and for society as a whole counts as well (though to different degrees) – not only their own interests. A win-win-win situation was seen as ideal. To reach it, it is necessary to know the interests, needs and motives from each perspective and to make them transparent.

In the last part of the discussion, different strategies to involve older adults as volunteers in online communities were examined by the group.

(1) The participants deemed important to have role models for new types of activities, i.e. people who present or exemplify the tasks/volunteering through their own life.

"You have to get an idea of what to expect." (older adult internet helper, 67 years old, volunteer since 6 years)

Participants recommended a sort of "ambassador" principle, i.e. having people speak for an online community and act as facilitators to quell fears that may keep newcomers from joining.

- (2) People must be able to experience online communities, i.e. communities should offer opportunities of testing them and/or provide "safe" and noncommittal spaces for trying out new possibilities.
- (3) You have to approach people! One of many suggestions was to organize a "Tupperware party" for online communities.
- (4) A link between virtual/online and real/offline activities must be established. This is possible e.g. through regionalisation and offering personal meetings. Feierabend.com was stated as an

example of good practice, providing a tight network and direct local personal contacts through its regional groups.

- (5) Communities must offer support. Volunteers in online communities should have access to appropriate support and accompaniment. Volunteers should not be left alone, but be supported and accompanied in case they have proplems. For instance, appropriate solutions could be a programme of mentors, as it is offered by Wikipedia, or local personal assistance by qualified older adult internet helpers.
- (6) Technology should not exclude, but be easy to use! Technical obstacles should not even be allowed to develop online communities need to provide a low-threshold access.

"And then the technology is just there." (member of Working Group Media, lecturer, 63 years)

(7) Facebook as an easy entry point: A female older adult described her first experience with Facebook, how she was able to send mails and establish contacts to others very easily.

"Participating must be made as simple as possible!" (senior, 58 years, active in Facebook for one year)

(8) Personal and social contacts should be the main focus!

"To me, a special appeal is to meet interesting people I might not meet otherwise." (member of ViLE, 66 years)

3.2.3 Focus Group and Interviews in the Context of "Freie Fahrt ins Internet" (Free Cruise on the Internet)

Setting of focus group and individual interviews

To grasp the experiences and recommendations of Seniorweb CH's volunteers, twelve individual interviews with the volunteers (1.5 hour/interview) and one additional focus group with three of the most active volunteers (1.5 hour) were conducted in Bern by the BUAS-team. For the focus group, an additional representative of ZAWiW also engaged in the organization and implementation.

To complement these findings concerning the voluntary work of Seniorweb CH, the BUAS-research team also observed the volunteers during twelve course occasions (12 x 1 hour) and analyzed the volunteers' evaluating questionnaire about the first edition of *Freie Fahrt ins Internet* (12 questionnaires).

Positioning and objectives of Seniorweb CH concerning its voluntary work

With the TAO-campaign *Freie Fahrt ins Internet*, the TAO consortium partner Seniorweb CH wanted to present the internet and its possibilities to older adults and create an environment where they could explore the internet at their own pace. Moreover, Seniorweb CH aimed to strengthen its own online community and encourage course participants to engage in it. Most of the *Freie Fahrt ins Internet*-activities were organized and conducted by a very active group of some twenty Seniorweb CH-volunteers. The campaign consisted of an information stand (Help Point) and low-threshold internet workshops and seminars in a shopping mall, all organized and implemented by volunteers. During these courses, the workshop instructors and one to four assistants supported the participants¹².

About attachment to Seniorweb CH

"I have so many social contacts via other hobbies, I don't need Seniorweb for that. I'm seldom on the Seniorweb website. Mostly, I wanted to help older people on internet, because I think that this would have helped to ease the isolation of my own mother in law." (Course instructor, male, 60-70 years)

"Seniorweb in itself does not mean so much to me. More important is it to be among people, and to help the course participants." (Course assistant, female, 60-70 years) "I have little or no attachment to Seniorweb, I just wanted to help older people to get on the internet. I would be very happy if my own mother would learn that." (Course instructor, female, 60-70 years)

¹² The first edition of *Freie Fahrt ins Internet,* which took place from February to March 2011 in the Bern shopping mall Wankdorf Center, is documented in this report.

Positioning of the volunteers

The volunteers described their work for Freie Fahrt ins Internet as without obligation and with more flexibility and room for improvisation than in 'professional, paid work'. Simultaneously, they acknowledge that the necessary knowledge and skills for the voluntary task were not always present. Most volunteers did not describe their personal attachment to Seniorweb CH as very close. Indeed, their main motivation to work as a volunteer was not to help *Seniorweb*, but to help *older adults* and to facilitate their access to the internet. Several volunteers mentioned that they consider the use of the internet for older adults as a way to fight loneliness and social isolation; some volunteers are personally inspired by such cases in their family. Another important motivation for the voluntary work is to maintain or to get new social contacts among the team of volunteers.

Tasks and roles of volunteers

The volunteers staffed the Help Point and created, organized and carried out the internet courses. There were three main roles for volunteers: course instructor, course assistant or Help Point-advisor.

- **Course Instructor**: Every course had one instructor, who not only developed the course and the accompanying hand-outs, but also presented the course in front of the class. These tasks made the role of instructor extremely time-consuming for the volunteers.
- **Course assistant**: The course instructor was supported by two assistants who functioned as a soundboard in the course development phase, helped the instructor during the course itself, and guided the participants with practical advice. The tasks of the assistants demanded significantly less time than the ones of the instructor.
- Help Point-advisor: The information stand Help Point was opened three days a week in the shopping mall, and was mostly staffed by two advisors who welcomed the visitors, attempted to answer their questions, and informed them about the *Freie Fahrt ins Internet*-courses. These tasks took place during the opening hours of the Help Point and (usually) did not demand preparation on beforehand.

Types of volunteers

Various types of volunteers with different tasks and skills were involved in the Freie Fahrt ins Internetcampaign. The three main roles for the volunteers asked for following types of volunteers:

- Course instructor, the extrovert teacher: is good at speaking in public, able to teach clear and systematically, prepares clear didactic material and has the flexibility to react on remarks from the course participants.
- Course assistant, the quiet force in the background: is patient and attentive towards course participants, helps in the background and does not distract the attention, edits and corrects the didactic material of the course leader, is well-prepared and knows a lot about the course subject.

 Help Point-advisor, the friendly first contact: is open and likes to talk to people, has a broad general knowledge about computers and internet, quickly understands the questions from the visitors, is assertive and able to redirect the conversation towards *Freie Fahrt ins Internet*-relevant topics.

Management of volunteers

Volunteers need to be paid as well, just not in cash but through respect and recognition; that summarizes the viewpoint of the Freie Fahrt ins Internet volunteers. It is clear that the management of volunteers requires another style than that of paid employees: Since volunteers are not paid for their work they cannot be forced to do something. Volunteers offer their time and effort voluntarily –or not at all. The volunteers additionally mentioned that any voluntary organization also needs a strong management with a quick decision process. Moreover, when financial payment is not a motivation, other aspects become crucial, e.g. the recognition of one's work, a positive work atmosphere and solidarity between the colleagues. If these motivational requirements are not met there is a risk that volunteers will simply leave the organization.

About the management of volunteers:

"The atmosphere within the team of volunteers is very good. I got to know great people, which I would never have met otherwise." (Help Point advisor, male, 60-70 years) "After my retirement, I did not "have to" do anything anymore". I did not quit the "to do's" in my job only to get new "to do's" in a voluntary activity. Now I choose what I want to do." (Course instructor, male, 60-70 years)

"For me, the management could be a bit firmer. Of course, it's different when you have to lead a voluntary organization, but every organization needs strong decisions. Endless discussions are good for nothing." (Course assistant, female, 60-70 years)

Successful strategies

The majority of the volunteers already applied to continue their voluntary work for Seniorweb CH in the future, and perceived the first edition of Freie Fahrt ins Internet as a successful campaign. As supporting factors for this success they mention the peer-to-peer principle of an organization by older adults for older adults. Since the volunteers are older adults, just like the course participants, they say to explain things step-by-step and have more patience. This diminishes the participants' fear of "not being able to follow the young instructor". This peer-to-peer approach gives the volunteers much satisfaction, as do the solidarity among the volunteers indicate that this satisfaction is the sine qua non for further voluntary engagement.

Problems and challenges for volunteers

Despite the overall positive evaluation, the volunteers also indicated some points that have potential for improvement.

• Absence of knowledge management system stresses the individual volunteer:

The course instructors had to develop their courses and hand-outs individually, which they perceived as a complex and time consuming task. Moreover, there was no formal preliminary evaluation which could help to improve the courses beforehand. Instead, the course instructors and assistants developed an informal evaluation system, in which the assistants commented on draft versions of the hand-outs, and in some cases organized a course try-out with themselves in the role of 'course participants'. Although this course development and evaluation system worked reasonably well, the accumulated expertise stayed within the course-group and was not formally distributed to others.

In fact, this had as a result that new course instructors did not automatically benefit from his/her predecessor's experiences, but instead had to go through the whole learning process again. As a result, the volunteers often felt stressed; which had a negative impact on their motivation.

• Not enough communication and recognition for work:

All volunteers signaled that they were not updated on the newest decisions, guidelines, etc (e.g. about course payments, waiting lists) by the management. This was very frustrating, as they were the ones 'in the field' who had to explain this to the course participants. However, most volunteers say that after a difficult project start, the communication from the Freie Fahrt ins Internet-management became better and more frequent. Because of the better communication towards them, they also felt more recognized for their voluntary work.

• Not enough attention for sustainability:

There are currently no formal substitutes for the course instructors. When current volunteers –who have gathered valuable expertise– do not develop or grow in the organization and become course instructors, dropouts are difficult to compensate. This renders the current sustainability of the Freie Fahrt ins Internet-courses fragile.

About the challenges: "What stressed me very much was designing the course and the hand-outs. It took so much time; I almost did not know how to combine it with my everyday activities." (Course instructor, female, 60-70 years)

Recommendations

The volunteers mentioned some general recommendations that would greatly facilitate their efforts:

- First, the creation of a strong knowledge management system to share expertise.
- Second, the development of measures to ensure the sustainability of the *Freie Fahrt ins Internet*-courses.

- Third, the organization of transparent flow of communication from the management and the steering board to the "lower level".
- Fourth, more attention for specific other (non-financial) forms of recognition for the voluntary work from the management.

3.2.4 Individual Interviews and Focus Group of Volunteers (Instructors and Older Adult Authors) in the Context of Silberwissen

Methods of the Interviews

The TAO research partners organized a focus group in Berlin (Senior Computer Club, Centre of Berlin) and conducted interviews with Wikimedia instructors and participants (future older adult author) in different locations (Ulm, Worms and Wessel).

Four volunteers participated in the focus group in Berlin. They are responsible for the organization and contents of Silberwissen activities in Berlin. The discussion took place after the first workshop cycle in March 2011. The Wikimedia instructors and participants of the Silberwissen workshop were interviewed in spring 2012, after the workshop series (follow-up interviews) in each location. Some of the interviews had to be conducted via telephone slightly after the workshop. The focus group and the individual interviews were implemented as open guided interviews. The results were documented in detail by the researchers.

Results

The results of the focus group and individual interviews held on the project Silberwissen must be considered from the different perspectives of the volunteers involved. Three groups of volunteers were questioned:

- Wikipedia instructors as members and ambassadors of the Wikipedia community,
- Participating older adults as potential older adult Wikipedia authors and
- Volunteer multiplicators supporting Silberwissen at the different locations.

Wikipedia Instructors as Volunteers

In the project Silberwissen, Wikipedia instructors are the link between the community and the older adults that are targeted to become Wikipedia volunteers. As Wikipedians, the instructors identify with Wikipedia; they wish to communicate the idea of "free knowledge" and promote the activities of a (senior) author for Wikipedia. They are (volunteer) Wikipedia authors themselves, but partly distinguish this activity from their role as an instructor. This specially shows by their asking for remuneration for the courses. So there is a subtle differentiation between their voluntary work and what is seen as a professional task or service for the Wikimedia association. This shows a general discrepancy between Wikipedia's pretension to gather free knowledge from the community without

having to pay for it and the increasing professionalization of the Wikimedia Foundation and the Wikimedia Chapters. This issue was brought up several times by the instructors. Other Wikimedia roles (for instance, there are administrators among the instructors) were not considered in these interviews. As they are exclusively volunteer activities, they are unproblematic in this respect.

The instructors see themselves mainly as imparters of knowledge who motivate and assist the participants of the courses. This is done on the basis of a common agreement between the instructors, which stipulates the following aims for the courses: After the courses, the participants should "...be able to edit Wikipedia pages on their own, from correcting spelling mistakes, amending an existing article up to writing a new article." Other criteria for success are the creation of a user account and "being able to upload pictures in Wikimedia Commons and embed them in an article." The instructors consider it important to be able to work correctly with sources and insert evidence, basic skills for sound work on articles.

There are conflicting aims here: on the one hand, instructors aim at offering low-threshold courses to attract new Wikipedia authors; on the other hand, they have high standards for working in Wikipedia. These standards are handled very differently by the instructors. Some emphasize them a lot in their courses, others act pragmatically and adapt to the participants' skills and interests. This is particularly important because for the participants, the instructors represent the Wikipedia community. Through their attitude, they indirectly signal whether Wikipedia is an open community or presents itself as a "closed shop".

This does not challenge the normative idea that everybody can participate in Wikipedia – all instructors agree that every new Wikipedian is welcome – but it does concern the fact whether Wikipedia signals that it is open to all or whether it excludes people. There can be considerable differences between self-perception and the perception by others.

For many instructors, it is important to "communicate not only contents, but also a special desire, enthusiasm and their own experiences to the interested older adults." During their work as instructors, they attach importance to receiving positive feedback from the participants. They wish to do a good job, irrespective of remuneration. For instance, this shows in the following statement of an instructor: "When I drove home yesterday evening, I was very unsatisfied because I had the feeling of having treated all subjects only superficially." Positive feedback from the participants is an important part of a "positive culture of appreciation". In Silberwissen, this culture should also be supported by the concomitant evaluation.

It is of particular importance to the instructors that participants really do become (senior) authors. To reach this aim, they are willing to support the participants even after the courses and to answer questions personally, both on a volunteer basis. Some instructors already try to bring participants with similar interests together in their workshops. This is seen as a possibility of directly experiencing the community in local groups and of creating structures that will facilitate the older adult authors' entry

157

into Wikipedia. If this entry works out, the instructors also see this as a personal success and are more motivated to be involved in the project Silberwissen.

Attracting older adults as authors for the community

In a first step, participants were questioned as to their motives for participating in a Silberwissen course and for volunteering as authors in Wikipedia. With regard to the course participation motives included "wanting to stay mentally fit and up to date", "hold one's own in a conversation about Wikipedia", and wanting to know how Wikipedia works. One of the surveyed older adults summarized his feeling in the following way: "All of a sudden, I see Wikipedia in a totally different way after I got a chance to look behind the curtain. For many older adults Wikipedia's work has remained obscure."

A further motive that was mentioned was the opportunity to make social contacts. One of the statements was: "I would like to get to know other people."

Only in a next step did the surveyed participants state the motive to personally contribute to Wikipedia. At first, smaller corrections were mentioned, e.g. typos, punctuation or corrections of content. Concerning the authorship of personal articles many older adults remained sceptical at first. One of the barriers named was a lack of time. Other voluntary activities, the involvement in family matters or remaining professional duties were some of the time-consuming obligations mentioned. This was followed by technical difficulties such as the Wiki syntax, and the navigation and structure of the Wikipedia pages. Only then did the participants mention a perceived lack of personal competences with regard to possible content. Having to search for sources and evidence, which is necessary when writing and completing an article, was also referred to as a big obstacle. In this regard, the demand on Wikipedia authors as expressed by instructors seems to create inhibitions that do not have an immediate connection to questions of online collaboration or contributions to an online community. Discussions on relevance and certain other contributions to discussion pages reinforce these kinds of anxieties and reservations expressed by some older adults.

Older adults expressed the wish for further workshops where they would have the opportunity to repeat step by step what they had learned and where they would receive personal support. The current offers were often considered as insufficient. What participants expressly liked was being able to immediately repeat on their own computer the steps shown by the instructor. Said one of the older adults: "And the nicest thing here was that it was possible to try it out right away and I did try it out because I'm pretty quick with the mouse and the keyboard and I could test it".

It was also stressed that it is of great importance "to have the content communicated by a human being and not by a machine". The personal interaction with Wikimedia instructors turns the abstract Wikipedia community into something graspable.

Participants did not see the activity as Wikipedia authors as an opportunity for volunteer engagement. As participants they perceived of themselves first and foremost as learners. Mentally, it seems to be quite a step to understand that because one contributes to Wikipedia one is now a part of the Wikipedia community.

Those older adults who are truly interested are also ready for further activities such as a regular gettogether, working group meetings or an exchange in a forum. Only through these further activities will older adults begin to see themselves as volunteer members of the Wikipedia community.

It is however interesting that certain older adults reflected on whether they themselves would not be suited as multiplicators of Silberwissen. In the sense of "from and for older adults" they could take on a role as examples and build a bridge to the Wikipedia community. These reflections hint at the fact that these older adults are beginning to perceive themselves as part of the Wikipedia community.

Volunteer multiplicators at the different locations of Silberwissen

There are volunteers at selected locations who represent their older adult Internet initiative or computer club and work as multiplicators for Silberwissen. They seem to have a special go-between function. They are excited about the Wikimedia project "Silberwissen" because it is offering them new opportunities for their local work and because they see the cooperation with Wikipedia as a type of public relations work, which distinguishes their initiative positively from other comparable computer clubs. At the same time, these multiplicators are enthusiastic about the idea of free knowledge.

They themselves are part of the target group of older adults and therefore take a realistic view concerning the recruitment of older adults for Wikipedia. Basically, they regard only those older adults as potential authors who are knowledgeable and capable of contributing to the discussion. This knowledge can stem from professional life or from a personal hobby. They know about the critical issues such as the fact that a Wikipedia article is never one person's sole product but always a result of collaboration. "Several persons contribute to the knowledge, it is not elitist." In the focus group it was stressed that, in collaboration with the older adults themselves, those topics and aspects need to be identified to which older adults can contribute. It was considered important, however, that older adults do not identify themselves too strongly with their articles because this can hamper the readiness for collaboration with others. While they see in the Silberwissen project a new field of activity they regard it as only one aspect of the club life. They have other offerings concerning content, technology and social issues that they want to follow up on as well.

In the context of Silberwissen a new task and role as volunteer ambassador is created, which has the potential to mediate between older adults' organizations, institutions of continued learning, older adults' computer clubs, older adults' Internet initiatives and the Wikipedia community.

It will be an important task of Wikimedia to negotiate between volunteers' different roles and tasks and to clear the path for older adults to contribute to the Wikipedia community.

3.2.5 Workshops in the Context of "Freie Fahrt ins Internet"

Setting and Goals

Four workshops were carried out in the context of FFI. The first workshop took place on 11 November 2010. It involved 12 volunteers from Seniorweb CH as well as three researchers from BUAS. A second workshop took place on 29 June, 2011, involving 14 volunteers from Seniorweb CH and three researchers from BUAS. A third workshop on 26 October, 2011, again involved 12 Seniorweb volunteers and one researcher from BUAS. On 24 January, 2012, 10 Seniorweb volunteers from different locations of FFI convened for a workshop moderated by a researcher from BUAS. This fourth workshop was also attended by the person in charge of educational matters at Pro Senectute Thurgau.

The workshops addressed the following goals:

- Define different possible roles for volunteers to become active in FFI and to clarify the interplay between research and action in the framework of action research.
- Identify strengths and weaknesses of the first half year of FFI not only but also with regard to volunteers' roles.
- Identify key issues in the mobilization and motivation of volunteers.
- Identify organizational strengths and weaknesses of FFI with a special emphasis on voluntary work.

Results

The larger interests of the organization are not always identical with volunteers' interests

The workshops made clear that Seniorweb CH has the aim to position itself with an interesting offer for older adults (introduction to the internet and Web 2.0) and wants to propagate its online community platform. While most volunteers identify themselves with these aims they also have additional needs and interests such as social interaction with their peers, sharing their personal knowledge, and retaining their flexibility with regard to working hours. A further aspect refers to the topic of varying velocities. Quite often, an organization's ambitions and eagerness for action can lead to an overcharging of volunteers. This workshop made it quite clear that volunteers – other than regular paid-for workforce – will not react favourably to pressure. It is also important to note that FFI volunteers (at least concerning the activities in the city of Bern) identified themselves most strongly as members of a regional group – which while having an online presence on Seniorweb.ch – defines itself mainly through its regular offline meetings and activities. An important part of the motivation to volunteer for FFI lies in the opportunity to collaborate with other members of that group and to experience this spirit of community. However, this sub-community perceives itself as quite autonomous and independent from the Seniorweb leadership. This exemplifies again that the volunteers doing the grassroots work may have reasons for their voluntary work that can be quite different from the overarching aims of the organization for which they are working.

Regular information and opportunities for mutual exchange are crucial ingredients of volunteer management

While volunteers' satisfaction with FFI was quite high, on average, some aspects regarding the treatment of volunteers are noteworthy. For instance, quite a few volunteers felt that they were not well informed about the bigger picture of FFI. This makes clear that volunteers should be informed about the context and the interrelations of the project in which they are involved. With regard to FFI that refers to the relationship between FFI and TAO and the longer-term goals of TAO.

A second important aspect regards the exchange of information between volunteers. An organization relying on volunteers should provide volunteers with ample opportunities for exchanging experiences and knowledge. In the case of an online community, real-life meetings should be complemented with opportunities for online meetings and exchange. A challenge that was identified in this context was the moderations of these kinds of forums or communities of practice.

Do's and don'ts concerning volunteers' motivations

In terms of compensation for volunteer work the collaboration with Pro Senectute – Switzerland's largest organization in all aspects concerning older adults – provided FFI volunteers access to its rich program of continued education.

Several motivating factors were identified including personal contact, establishing a culture of open feedback and information, developing volunteers' competencies and empowering volunteers, recognition of volunteers' value, and the establishment of clear rules that are binding for everyone.

At the other end of the spectrum there are a number of factors that are detrimental to volunteers' motivations. They include overcharging and a lack of support, a climate of harsh criticism, the lack of a clear strategy (i.e. what goals are we working for?) and of a clearly structured program for new beginners.

Voluntary resources must be used as efficiently as paid-for resources

An important concern of volunteers is that their resources be used in an efficient way. Unfortunately, due to a perception of older adult volunteers having ample time at their discretion, the planning of the volunteer work episodes is sometimes not carried out with sufficient attention. Quite often, the leading motto seems to be: "The more, the merrier!" Thus, too many volunteers are involved at the same place and at the same time leading to a frustrating experience for those volunteers who are not occupied.

One of the aspects of efficiency mentioned is that of standardized processes. It should be avoided that volunteers who are newly involved in an organization have to start out from scratch even though other volunteers have already dealt with the same problems.

Clear rules relieve volunteers from unnecessary burdens

Finally, a question posed by quite a few volunteers is that of the reliability of commitments made in the context of voluntary work. It became quite clear that it is in fact helpful for volunteers to have clearly defined rules concerning voluntary work including sanctions if these rules are not followed. The existence of these rules dispenses volunteers from having to chide their volunteer colleagues, which many volunteers feel uncomfortable about. Instead, they can simply refer to the agreed-on rules.

3.2.6 Workshop of the TAO Community Partners in Bern, November 2011

Setting of the TAO community Workshop about Volunteers

Within the framework of a TAO project meeting, the TAO community partners carried out a workshop about "The Do's and Don'ts in the recruiting, activating and binding of senior volunteers" (November 2011, Bern, Switzerland). The workshop was organized around three volunteer topics (recruitment, activation and binding) which were all discussed during thirty minutes. Simultaneously, the community partners also elaborated upon their recruitment channels and the main requirements for their older adult volunteers. The results were documented via a system of discussion sheets on the wall. Seniorweb NL, Wikipedia CH and Wikipedia GE participated in the workshop with one representative each, while Seniorweb CH participated with several representatives.

Results

Recruitment of older adult volunteers

The objective of this discussion round was to exchange positive and negative experiences about the recruitment of older adult volunteers.

	Do's	Dont's
	Find volunteers in senior clubs or	Do not put too much emphasis on the
	interest clubs	membership
	Be modern and sexy (in the	Raise curiosity
Recruitment of older	middle of the society)	
adult volunteers	Have an appealing website:	
	Attractive	
	Informative	
	Clearly structured	
	Have an interesting newsletter	

Activation of the older adult volunteers

The community partners discussed and listed their best practices to activate older adult volunteers within their organization.

	Do's	Dont's
	Distribute an interesting	External communication about internal
	newsletter	conflicts
	Provide training or education	No training or time to get acquainted
		with the organization
	Have an active community	Leave the volunteers on their own, not
Activation of older	management (plan and organize	asking for their experiences
adult volunteers	activities)	
adult volunteers	Stimulate the volunteers & take	No loyalty among employees and
	them by the hand	volunteers
	Engage in personal interaction	Engage in disputes or professional
		discussions
	Create links and connections	Overpriced service & underpriced
	Detect barriers and try to remove	service
	them	

Binding of the older adult volunteers

Within this discussion round, the TAO community partners exchanged their ideas and experiences about the binding of older adult volunteers in their organization.

	<u>Do's</u>	Dont's
	Enable the exchange of	Anonymity
	experiences	
	Provide training or education	Heavy criticism (destructive)
Binding of older	Arrange open encounters	Excessive demand
adult volunteers	Provide coaching and training	Information overload (irrelevant)
addit volumeers	Reward, praise and appreciate	Unclear orders
	the volunteers	
	Provide role models (e.g. of the	No value for money
	same age)	
	Provide an user-oriented offer	

Recruitment channels for older adult volunteers

The TAO community partners also discussed and compared the channels through which they successfully recruit older adult volunteers.

	Wikipedia DE	Seniorweb CH	Seniorweb NL
	& Wikipedia CH		
Recruitment channels for older	Partner	Website and newsletter	Combined membership
adult volunteers	Fairs	Regional meetings	Door-to-door magazines
	Computer clubs for older adults	Partner (Terzstiftung)	TV and radio commercials

(offline) Interest clubs; especially the "computer section"	Communication means	Magazine (Plus)
Older adult education	Interest clubs	
	Volunteers database	
	Fairs	

Main requirements for older adult volunteers

Communities may have specific requirements which their older adult volunteers should preferably meet. The TAO partners therefore elaborated upon the main requirements for the older adult volunteers within their organization.

	Wikipedia CH & Wikipedia GE	Seniorweb CH	Seniorweb NL
Main requirements for older adult volunteers	 Online Eager to learn Competent Online & offline contacts Co-creation (wanting to collaborate) 	 Online & offline contacts Being active Bring and get new knowledge Interest in real life Being curious 	 Eager to learn Online & Offline

3.2.7 Open TAO Workshop in Ulm, 23 May 2012

Setting of the Open TAO Workshop

The open TAO Workshop aimed at developing effective strategies on how to activate and motivate older adults for long-term cooperation in online communities, services and other offers for older adults. Given the importance of volunteers in online communities, the major focus of the workshop was on volunteering. In order to achieve the goals, the participants exchanged good practices and experiences.

The workshop started with inputs from the TAO research partners concerning the results of the volunteers study. Afterwards, the participants discussed their own experiences in a working group and elaborated common recommendations.

The participants of the workshop were TAO community partners as well as representatives of older adult organizations, online communities and online services for older adults: Five volunteers from Seniorweb Switzerland and one representative of, respectively, Seniorweb NL, Wikimedia Germany and Wikimedia Switzerland, a volunteer from the network ViLE e.V., two representatives of commercial online services for older adults and researchers from the TAO partners BUAS, UM MERIT and ZAWiW. The workshop was prepared, implemented, documented and evaluated by the TAO researchers.

Researchers' Input on Volunteer Management

The volunteers study has shown that older adult volunteers represent a great potential for online communities, but that diverse obstacles need to be overcome to turn the potential into an actual benefit.

Volunteer management is a crucial factor for the success or failure of communities relying on volunteers. The Dutch principle of the "**Five Bs**" (CIVIQ 2005) reminds us of different aspects that need to be kept in mind when dealing with volunteers. It concerns the five phases of volunteer involvement: attracting new volunteers; accompanying them; keeping them active; rewarding them and, finally, to see them off once their involvement ends. All these phases need to be taken care of and call for appropriate solutions.

The TAO research team also presented some recommendations concerning the management of online communities for older adults (60+). These recommendations rely on the literature study 60+ and USI tests and are closely linked to the results of the volunteers study. The guiding principles are related to the five Bs mentioned above: It is the management's job to activate, guide and reward the users. Online communities should concentrate on the following aspects:

- Topics treated in the community and their quality,
- Usability (coherent information architecture, graphic design following the principles of accessibility and tested on a regular basis by users)

 Creating an atmosphere of trust (by communicating its own values, talking about advantages and users' experiences, moderating and motivating users, using facilitators among the users and clearly expressing its principles concerning data protection).

Results from the Working Group on Volunteers

The participants formed several working groups to exchange experiences and work on recommendations concerning different topics. One of the working groups concentrated on ways to bind volunteers to a community. They suggested different solutions:

- 1. Building up a mentoring ("buddy") system, i.e. providing each new member with a personal contact person he/she may ask for help. This offer should be very easily found on the website of the community, presented in a welcome mail sent to new members and made known via other channels.
- Offline meetings were identified as an important and effective means of creating team spirit in a community. Older adults attach particular importance to personal meetings. But offline meetings can also be beneficial for the staff of the community.
- 3. According to the participants, one of the main incentives to volunteer is helping other people. This is a motivation the online community should encourage, e.g. by showing appreciation for the volunteers' work (maybe small financial benefits) and by organizing social contacts with the team of volunteers and the people benefiting from their work.

Results from the Working Group on Qualification

Another working group discussed the qualification of volunteers. All volunteers have skills; identifying, using and developing them was seen as one of the main challenges for volunteer management. Accordingly, successful volunteer qualification can lead to benefits both for the volunteers and for the organization. While participants concentrated on the qualification of volunteers, they also saw the necessity of regular training for the community's staff. Following aspects were identified as factors for successful volunteer qualification:

- Establishing a portfolio of competences for each volunteer. This portfolio should include the competences and tasks of (possible) volunteers. It can also take into account the wishes of volunteers concerning their own way of living old age and their motivations to become volunteers (e.g. general interest, social orientation, interest-oriented). Volunteers may be induced to sign a contract in which they oblige themselves to qualify themselves – yet, several participants of the workshop were afraid this might discourage them from getting involved at all.
- Establishing a list of the organizations' and volunteers' needs and interests concerning voluntary work. This will help to find out which qualifications should be offered to volunteers. The needs of the volunteers could for instance be established through activating interviews.

- 3. The organization itself should also constantly learn from and with its volunteers, with a focus on making learning fun for all concerned.
- 4. Activating learning is a good strategy for the qualification of volunteers, i.e. they should be actively involved in projects and the creation of the curriculum. Different types of learning should be considered. Learning should be made a social event.
- 5. Constant exchange, feedback and communication should be ensured among all participants for quality assurance. This exchange can help to find out what a community's members expect from it, and make suggestions for improvement. Exchange of best practices among different online communities may also lead to successful methods being tested together with the members and maybe adopted.
- 6. Different types of facilitators and forms of learning should be involved for qualification. For instance, learning can take place with the assistance of professionals, peers or in intergenerational settings. It can be mobile and/or involve new forms of learning such as visual art net. Low-threshold learning should be offered, online or in other settings. Some potential members may need training in using online tools; this should also be offered (e.g. as an instructive video).
- 7. External partners for qualification could be an interesting solution (e.g. businesses or students).

Results from Collective Discussion

Addressing Potential Members

Before the working groups, the workshop participants collectively collected ideas on different topics related to online communities.

One of the main concerns was how to reach potential members and get them to join a community. First, a community should know its target group, where to reach it, what they can offer to and expect from them. The target group's interest should be aroused and its fears dispelled. As commercial marketing campaigns are too expensive for most online communities, the participants mentioned different channels of publicity, for instance social media, distributing brochures in educational centres or older adults' residences or word-of-mouth advertising. A focus should lie on topics that are interesting to the target group.

Activating and Creating Bonds with Members

The participants wondered about the best way to create long-lasting bonds with their members and proposed some ideas on this. Generally, the motives of members should be considered before each activity of the online community. People with different motivations, e.g. meeting people or passing on one's knowledge, should be equally addressed. Hence, both work on common topics and the

organization of offline meetings were seen as a good way to reach potential members and keep them active for a long time. Personal bonding in online communities ("virtual friendships") were considered an important motivation to remain active. A particular challenge for communities was seen in finding the right balance between homogeneity and heterogeneity – the members need to have things in common, but be sufficiently different to remain interesting to each other. Qualification offered by the community was seen as a good way of creating a bond between volunteers and communities.

Online Offers and Collaboration

The participants saw the usability of online platforms as a crucial factor for the success of cooperation. A simple structure with a clear user guidance and support offers as well as the possibility of giving feedback were deemed necessary for the success of an online community. All offers should be regularly tested by users with regard to usability and relevance for their expectations. Again, meeting the needs and interests of community members (and potential members) was judged the crucial condition for success of an online community.

Additionally, participants recommended providing opportunities for personal contact (with staff and other users, online and offline – e.g. in regional meetings). Users should have the occasion to found own groups (e.g. regional or pertaining to certain topics). Potential users should be motivated by small-scale, positive experiences with online tools, e.g. in offline trainings. Also, linking with other online communities (small or large, national or international) was seen as a chance for success.

All participants expressed the wish to continue exchanging on the topic of older adults in online communities. They welcomed the idea of joining the TAO Community of Practice to this end.

3.2.8 Comparison of Community Partners Concerning Voluntary Work

(1) For the online communities engaged in the TAO project voluntary work is a constitutive element. However, there are differences between the online communities with regard to the perception of voluntarism. While questions of content and age seem less important in this regard there seems to be a clear relationship between the perception of voluntarism and the organizational culture and structure as well as the organizational development of the online community.

If we look at the history of the organizations we find that Wikimedia DE and Wikimedia CH as well as Seniorweb CH and Seniorweb NL developed from bottom-up structures and have always been based on the principle of voluntarism. The Wikimedia or Wikipedia community, respectively, has always been imprinted by a content-driven and political demeanour focused on free access to knowledge. In the case of Seniorweb CH and Seniorweb NL the topic of voluntarism is not immediately motivated by content or ideology but rather through a self-perception as an "older adults' organization". Nevertheless, the empowerment of the target group, especially of the volunteers, is of great importance and composes a substantial part of the self-image of Seniorweb.

(2) While the organizational structures of Seniorweb CH and Wikimedia CH are still strongly based on voluntarism, Seniorweb NL and Wikimedia DE have a professional organizational structure and a main office with different divisions.

Seniorweb CH and Wikimedia CH are both going through a period of change during which for the first time certain tasks have been assigned to paid staff (general management, project management). The leadership still consists entirely of volunteers and now needs to handle this new wave of professionalization.

Seniorweb NL and Wikimedia DE, on the other hand, do not only have a main office but also leadership structures consisting both of volunteers and paid staff. This combination seems to be an important prerequisite for the further professional and organizational development of an online community.

(3) Concerning the perception of voluntarism and the concrete shaping of voluntary work, an online community's content matter and the attention paid to aspects of age are of central importance. Both in the case of Seniorweb CH and Seniorweb NL the perception of voluntarism is imprinted by an empowerment according to the motto "from older adults for older adults". The main elements of this empowerment are the collaborative shaping of meaningful aging and the benefits of new media for older adults. In the case of Wikimedia, as was described above, the focus is more content-oriented and imprinted by an ideological commitment to freely accessible knowledge. Concerning the perception of voluntarism, age is not an important factor for Wikimedia/Wikipedia.

Community-	Seniorweb.ch	Seniorweb.nl	Wikimedia.de	Wikimedia.ch
Partner				
Positioning &	Non-profit organization	Seniorweb NL wants to	Free knowledge	Same as Wikimedia.de
objectives	based on voluntary work.	act from, by and for older	elaborated by volunteers:	
concerning	Aim: to raise the number	adults:	freely accessible online	
voluntary work	of (paying) members as	- Volunteers are the	encyclopaedia	
	well as the number of	human face of Seniorweb	(Wikipedians).	
	volunteers both for daily	- Volunteers are the		
	business as well as for	antennae into the country	Crowd intelligence	
	outreach activities.	(feel what is happening,	(collaboration on the	
		what needs there are)	internet)	
	Campaign "Freie Fahrt	- Thanks to the		
	ins Internet" (FFI):	volunteers Seniorweb is	The important thing is to	
	- aims to present the	able to stay accessible:	contribute; socio-	
	internet to older adults	costs remain low	economic status, gender,	
	- organized & conducted		age, etc. are irrelevant	
	by group of ca. 20 older			
	volunteers from		Everybody can contribute	
	Seniorweb CH			

Figure 43 Comparison of Community Partners Concerning Voluntary Work

Organizational	Is run almost entirely	Volunteers are active	Wikipedia: Bottom-up &	So far Wikimedia
structure &	through voluntary work	under the banner of	no central leadership	Chapters have been led
relationship	provided by a network of	Seniorweb	Autonomous organization	by volunteer Wikipedians
volunteers and	roughly 100 volunteers	Fach group of voluntaara	of Wikipedia	Consolution TAO hiring
professionals	from all over Switzerland.	Each group of volunteers has a contact point at	Separation between	Especially for TAO hiring of a paid staff member;
	Paid staff accounts for	Seniorweb NL	Separation between Wikipedia, Wikipedia	staff management is a
	only 5% of the total	headquarters	Foundation & Wikimedia	challenge
	workforce and is used for	neadquarters	Chapter	challenge
	providing and	Participation of members	onaptor	Professionalization
	programming the online	and volunteers in the	Paid staff for securing the	through the
	community, for	national members'	technical infrastructure,	establishment of a main
	administrative tasks and	council/board:	otherwise the only paid	office with a paid general
	for the coordination of	- Policies and strategic	staff are in the Wikimedia	manager
	specific projects (e.g.	decisions are made by	Foundation & Wikimedia	
	Freie Fahrt ins Internet)	the national office, but	Chapter.	
		approved by national		
	Leadership team consists	members' council/board	Professionalization of	
	of volunteers.	and the management	Wikimedia DE through	
	There is comparatively	board	the establishment of a	
	little collaboration between paid staff and	Training of volunteers	main office, change in the club structure by	
	volunteers.	and professional	installing a paid board (as	
		development	of a half year ago) and	
			volunteer supervisory	
		Support: insurance	board.	
		coverage, access to		
		intranet, newsletter,	Occasionally tension	
		online learning system	between Wikipedians and	
			Wikimedia DE	
		Volunteers are the first to	concerning the question	
		hear about new	of volunteers vs.	
		developments at	professionalization	
		Seniorweb		
Perception of	Seniorweb CH has no	Policy of the 5 "b's":	"We are Wikipedia!"	Same as Wikimedia.de
the volunteer	overarching concept of	acquire, support, reward,	Wikipedians see their	
role	volunteer work.	retain and terminate	voluntary work as a	
			societal engagement for	
	Starting with volunteer	Meaningful and	free knowledge!	
	training in the framework	rewarding work:		
	of outreach activities (e.g.	satisfaction when an		
	Freie Fahrt ins Internet)	older adult customer is		
	,	satisfied		
	FFI-volunteers describe	satisfied		
	FFI-volunteers describe their work as:	satisfied Significant contribution to		
	FFI-volunteers describe their work as: - Without obligation	satisfied Significant contribution to the mission of Seniorweb		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility &	satisfied Significant contribution to		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility &	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work'	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine		
	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine		
T	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER)		
Tasks and	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres:	In the framework of	Educational activities:
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities:	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians,	Silberwissen mainly	Give presentations in the
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards,	Silberwissen mainly Wikipedia contributors	Give presentations in the framework with
Tasks and roles of volunteers	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador - Course instructor	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards, ambassador location,	Silberwissen mainly Wikipedia contributors (authors and helpers) as	Give presentations in the framework with Seniorweb CH' "Freie
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador - Course instructor - Course assistant	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards, ambassador location, trainers	Silberwissen mainly Wikipedia contributors	Give presentations in the framework with Seniorweb CH' "Freie Fahrt ins Internet" and at
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador - Course instructor	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards, ambassador location, trainers PCHulp: helpers and	Silberwissen mainly Wikipedia contributors (authors and helpers) as well as (senior) authors	Give presentations in the framework with Seniorweb CH' "Freie Fahrt ins Internet" and at Universities of the Third
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador - Course instructor - Course assistant	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards, ambassador location, trainers	Silberwissen mainly Wikipedia contributors (authors and helpers) as	Give presentations in the framework with Seniorweb CH' "Freie Fahrt ins Internet" and at
roles of	FFI-volunteers describe their work as: - Without obligation - With more flexibility & improvisation than in 'professional, paid work' - Necessary skills not always available - Most volunteers do not claim a close personal attachment to Seniorweb CH Four roles in outreach activities: - Ambassador - Course instructor - Course assistant - Help Point advisor	satisfied Significant contribution to the mission of Seniorweb NL: without volunteers there would be no member services (except quarterly magazine ENTER) Learning Centres: teachers, technicians, local boards, ambassador location, trainers PCHulp: helpers and	Silberwissen mainly Wikipedia contributors (authors and helpers) as well as (senior) authors Examples:	Give presentations in the framework with Seniorweb CH' "Freie Fahrt ins Internet" and at Universities of the Third Age in French-speaking

	Seniorweb CH.	juror, web contact	- Cleaning squad: Spelling, punctuation,	
		Miscellaneous: advisory	formatting	
		commission, editorial assistants, reviewers		
		Influence on national		
		policy: National Executive, Member		
		Council, focus groups, panels		
Types of volunteers	Volunteers in outreach activities evenly divided	Gender: 73% male, 27% female	Gender: 88% male, 50% single (in 2009)	Low number of volunteers
	according to gender and educational background.	Age: average of 67 y	Age: - average age of 33 y	So far exclusively male, well educated
	Ambassador: Extroverts with a flair for	Education: 6% primary education, 35%	- mostly between 13-23y - often students	wein eulicaleu
	salesmanship	secondary education,		
	Course instructor: extrovert teacher	59% tertiary education (university (college))	Motivation: for over 80% expanding and	
	Course assistant: quiet		deepening one's	
	force in the background Help Point advisor:		knowledge	
	friendly first contact			
	Volunteers in the core organization of			
	Seniorweb CH often have			
	leadership experience			
	and tertiary education.			
	There are more men than women among these			
	volunteers.			
Management of	There is no organization-	- 3128 volunteers are	Main office in charge of	Currently ongoing
volunteers	wide management of volunteers.	supported by 7 professionals from national HQ	coordination(currently 4 persons)	establishment of a main office, volunteer management still needs
	Volunteer training has	- 5 B's and Seniorweb	Strategic goals of	to be developed
	begun in the framework	policy - Communication through	volunteer management	
	of specific projects (e.g. Freie Fahrt ins Internet)	newsletters and intranet	(Kompass 2020) - Acquire authors - Authors should mirror	
	Volunteers wishes	development through	societal diversity	
	towards the leadership team:	training, meetings, peer- to-peer contacts and	- Foster continuous collaboration	
	- Respect and recognition	online learning system	- Wikimedia support	
	for their work	- 450 Ambassadors have	should be competent and	
	 Clear communication Clear tasks 	already received a gold pin for 10 years of loyal	widely appreciated - Volunteers'	
	- Positive work	service	performance is	
	atmosphere		recognized by the club	
	 Solidarity between the colleagues 		-	
Problems and	Lack of strategy for	Learning centres are	Challenge for authors to	Challenge for authors to
challenges for volunteers	volunteer management can hamper volunteers'	emptier because there are fewer beginners, they	write personal contributions; to adhere	write personal contributions; to adhere
. Stantosi S	identification with the organization's	must innovate	to formal and technical prerequisites; to expose	to formal and technical prerequisites; to expose
	overarching goals	There are more and more	oneself to criticism with	oneself to criticism with
	The management of	devices and applications (e.g. smart phones and	topics, competencies; to face discussion and to	topics, competencies; to face discussion and to
	volunteers by volunteers	tablet computers),	prevail amid a sometimes	prevail amid a sometimes
	may be an overcharging	applications are	, harsh tone.	

r				
	task	intertwined and	Lanah daalaa wiida Bula	
	Dana davis al situations	increasingly difficult to	Lonely tasks with little	Going through a period of
	Paradoxical situation:	explain	social interaction;	organizational change
	The commitment of	Different lands of any	networks have to be	with first steps towards
	volunteers will lead to an	Different levels of pre-	developed slowly (e.g.	professionalization
	increased	existing knowledge	thematic groups, regular	
	professionalization	among members	get-togethers)	Little prior experience Lack of standards
		Volunteer work is not	A greater number of older	
		without obligation:	adults are to be recruited	
		Volunteers have to agree	as authors	
		to the mission and the		
		Seniorweb NL policy		
		Keep up with new trends		
		and communicate them		
		to the members		
		Volunteers have to quit		
		because of age, they		
		should be aware of this		
		and look for successors		
		in time		
Successful	Volunteers gain	Offer free membership,	Volunteers are supported	Learn from more
strategies	satisfaction from:	insurance and expenses	professionally	experienced community
	- Peer-to-peer approach:	to volunteers	(educational programs,	partners
	older volunteers teach	<i>au i i i i i i i i i i</i>	mentors and community	
	other older adults	Offer frequent contact	support)	
	- Solidarity among the	with national office		
	voluntary team		Recognition of voluntary	
	- Social contacts with	Repeat policy and	work (e.g. rewards for	
	other volunteers	conditions	contributions, contests	
	- Social contacts with	Define roles and	such as Wiki Loves	
	course participants	responsibilities,	Monuments)	
		expectations and		
Decembra de f	Creation of a stress	opportunities	Dov attention to the	Intensify approximation with
Recommendati	Creation of a strong	Listen to volunteers, take	Pay attention to the	Intensify cooperation with
ons	knowledge management	volunteers seriously	effects of increasing	Seniorweb CH and
	system	1	professionalization on the	Wikimedia DE
1			relationship to the	
	Ensure sustainability of		relationship to the	
	Ensure sustainability of		relationship to the Wikipedia community	
	Ensure sustainability of courses		-	
	courses		-	
	courses Transparent		-	
	courses Transparent communication towards		-	
	courses Transparent		-	
	courses Transparent communication towards volunteers		-	
	courses Transparent communication towards volunteers Attention for non-financial		-	
	courses Transparent communication towards volunteers		-	

(4) The closer definition of volunteers' tasks and roles is related to the community's global tasks and challenges. While in the case of Wikimedia DE and Wikimedia CH volunteers' tasks and roles are strongly imprinted by factual and technical questions concerning the work on the online encyclopaedia, volunteers with Seniorweb CH and Seniorweb NL are confronted with social and educational tasks as well. However, the differentiation of task profiles seems to depend on the organizational setup. In the case of Wikimedia, this organizational development does not only take place on a national level. Rather, it is affected by the entire Wikipedia community whose online encyclopaedia demands a high degree of functional differentiation.

(5) With regard to different types of volunteers we re-encounter some of the differences mentioned above. The rate of male members is much higher in the Wikipedia communities and volunteers are usually adept to technology. Members tend to be highly educated and the average age is 33 years (the largest subgroup is that of persons aged 18 to 23). This is not the least reason why Wikipedia and Wikimedia are addressing older adults and women and trying to motivate them to collaborate in Wikipedia.

In the case of Seniorweb NL and Seniorweb CH, the rate of older adults is of course much higher due to the target group of these online communities (average age of members of Seniorweb NL: 67 years). However, here as well we find more male than female volunteers. While with Seniorweb the volunteers' tasks and roles are potentially broader, we still encounter a strong focus on the technological use of new media and the handling of online communities, respectively. Concerning these topics we still observe a male dominance. It is important to note that we find a higher rate of females in those areas of voluntary work that have more of a social focus. Accordingly, the rate of female volunteers in Seniorweb CH's outreach activities, which do have a strong social component, is more or less equal to that of male volunteers although there are some gender differences with regard to role profiles.

(6) Seniorweb NL and Wikimedia DE have clear concepts of volunteer management that are coordinated and led by professional main offices. In the case of Seniorweb CH and Wikimedia CH, on the other hand, volunteer management is in its initial stages and strongly dependent on professionalization and the establishment of a main office with paid staff. As became clear in the TAO workshops, the exchange between online communities with different organizational structures is very fruitful. This exchange should be intensified in the further course of the project and embedded in the framework of the TAO consulting concept.

(7) A problem or challenge to all TAO community partners is the recruitment of further volunteers in order to broaden the array of services and activities and especially to strengthen online activities. While in the case of Seniorweb CH the focus is on the general recruitment of older adult volunteers, Seniorweb NL would like to stimulate existing volunteers to engage more strongly in online activities. The challenge for Wikimedia DE and Wikimedia CH is to recruit volunteers that have not had a strong presence in the Wikipedia community so far, namely older adults and women. Seniorweb CH and Wikimedia face the challenge of not only having to recruit and activate these new volunteers but of also having to integrate them into the existing community. Seniorweb NL, looking back on a long and successful history of volunteer work, needs to take into account additional aspects, for instance volunteers' aging and the fact that in the near future some volunteers may not be able to continue their volunteer work do to ailments related to high age.

(8) Concerning lessons learned and recommendations it can be pointed out that Seniorweb NL and Wikimedia DE already have a strongly diversified volunteer management with a broad array of successful strategies directed especially at fostering the attachment to the organization. Moreover, we find in these two organizations clear definitions of tasks and roles and a culture of recognition aiming to reinforce volunteers in their commitment. While in the case of Wikimedia DE and Wikimedia CH the content-oriented and political-ideological focus on free knowledge can unfold a reinforcing effect, Seniorweb CH and Seniorweb NL use a peer-to-peer approach aiming to empower older adults through other older adults. Based on the empirical material collected so far we can assume that the development of Seniorweb CH will be inspired by that of Seniorweb NL while Wikimedia CH will orientate its development on the example of Wikimedia DE.

In summary, it can be noted that professionalization and volunteer work do not constitute opposites but that in fact – in order for a successful volunteer management to develop – the one depends on the other.

3.2.9 Conclusions

Considering the empirical exploration, the questions raised at the beginning of the chapter are answered below.

- How does being involved in online communities contribute to the overall well-being of older adults?
 - The involvement in online communities provides ample opportunities for social contacts (to other volunteers and other participants, persons one would not meet otherwise). Thus, the activity contributes to the size and quality of older adults' social networks and its positive effects on well-being (cf. Charles & Carstensen, 2009).
 - The feeling of being active is generally considered to be a positive experience.
 - Being active in an online community provides experiences of personal competence (self-efficacy).
 - The involvement in an online community and the collaboration on online community projects lets older adults be part of a bigger purpose (e.g. free knowledge, empowerment). In other words, the activities in the online community are meaningful and can be deeply satisfying.
- How can older adults be introduced to online volunteering? In how far do qualification courses for "offliners" promise to be successful for volunteer work? How can "onliners" be

attracted to online collaboration? In how far can a peer-to-peer approach be applied to enable older adult volunteers to interest other older adults to collaborate?

- It is of primordial importance to communicate to older adults the relevance of online volunteering for their personal everyday life.
- A step-by-step strategy starting out with familiar offline activities and moving on to new online ones has proved to be a successful approach of introducing older adults to online volunteering.
- So called "warm experts" and other multiplicators can help to address older adults in an adequate and trust-building manner.
- Instead of concentrating on what older adults may not know about the Internet and Web 2.0 it is more promising to start out by building on older adults' existing competences (professional or private).
- Addressing older adults for online volunteering is not simply a question of technology. Offline
 activities such as courses and workshops require qualifications that need to encompass
 technological but also social and didactic competences. Offline trainings are also an
 opportunity to establish a relation of confidence to the online community through personal
 contacts to peers.
- An important prerequisite for the attraction of new online community members and volunteers is that the use of the online community platform be kept as simple and straightforward as possible (usability).
- What are the desires and needs of older adults relating to an engagement in online communities? How do their needs differ from those of other age groups?
 - Older adults have diverse desires and needs (as do younger persons) meeting these various expectations is a challenge for online communities.
 - A difference between older adults and younger generations is older adults' specific lack of experience with social media. That is why older adults require special guidance when using online communities.
 - Older adults should be addressed via their personal interests, not as part of an age group. Reducing older adults to their age is a one-dimensional and stigmatizing approach.
 - Online communities should adhere to the principle of "design for all". Thus, the goal should not be to design specifically for older adults but to pay attention to the "age-fairness" of functionalities.
- Which fields of activity are especially appealing to older adults in online communities? How can the (potential) volunteers become familiar with them?
 - Many older adults appreciate activities that allow them to meet and interact with other people.

- Fields of activity that allow the use and development of one's competences are particularly attractive.
- A mix of offline and online activities is a promising way of approaching older adults.
- Many older adults do not know about the diverse activities offered by online communities.
 Thus, online communities should actively communicate their different fields of engagement (social, content-related, technological).
- Ideally, online community offers should be developed in collaboration with older adults (cocreation; user-centred design). These strategies ensure an orientation towards older adults' needs.
- Potential new members should have opportunities to test an online community's functionalities as well as its offline offers.
- What reaction is to be expected from existing (younger) community members when more new/elderly users join the community?
 - In general, all communities are interested in attracting new members.
 - However, younger users tend to be reluctant about accepting older newcomers. This has to do
 with the fact that younger users have high expectations towards all newcomers and are
 unwilling to change their standards for older adults (this concerns intergenerational
 communities such as Wikipedia). Moreover, there may be a line of conflict between the wish to
 conserve a small, exclusive and perhaps elitist community and the necessity to attract new
 members.
- What would be effective incentives to get existing users to make efforts to actively mobilize and integrate new elderly users?
 - Online communities aiming to stimulate existing users for outreach activities should invest in defining clear roles and responsibilities, creating interesting activities, offer appropriate rewards/appreciation for volunteer work, and in general take volunteer management seriously.
 - One of the attractive things about volunteering for an online community is the opportunity for personal contact to potential new members.
 - Role models and particularly active members of the online community can serve as a motivating example for other online community members.
- What enhancements to the community platforms would be appreciated most by existing community members?

- An online community's core activities circle around the communication between its members. Whatever contributes to simplifying this communication between members is highly welcomed.
- > What are the basic elements of a volunteer management that is appropriate for older adults?
 - Online communities should develop a strategy of volunteer management that is well accepted in the community. An example of this are the "5 B's" [in Dutch] used by Seniorweb NL (attracting, accompanying, keeping them active, rewarding, saying goodbye).
 - General principles of volunteer management are applicable to all age groups. However, they need to be adapted to the needs of the specific older adult target group that is being addressed.
 - Good volunteer management requires a certain extent of professionalization. Professionalization and good volunteer management go hand in hand.
- What are the benefits to be expected for online communities from increased participation of older adult users?
 - Online communities profit from the competences, perspectives, and the experience of the new older adult members.
 - As a rule, older adults are not involved as heavily in professional activities anymore and can use their time in a more flexible way than younger persons.
 - Involving new groups of older adults may give an online community access to new funding resources.

These results will be collected in the TAO Handbook (<u>http://en.wikiversity.org/wiki:TAO</u>) and made accessible to the public. In the TAO Community of Practice, they will be further developed and amended.

4 Conclusions and Recommendations

The number of older adults using the Internet and online social media has been on the rise for the past ten years. However, compared to other age groups in society, the number of active older adult users and contributors to online communities remains low. In light of the fact that the use of online social media is becoming an ever more important way of social participation, the importance of bridging the generational divide in this area remains undiminished.

The value of online communities is largely created by voluntary contributions of its members

The value of online communities is created by its own members through acts of communication. The conversion of these "raw community resources" into an easily accessible benefit for community members is one of the key tasks of online community management. Most importantly, this task includes making crucial community activities (such as the contribution and sharing of user-generated content) as easy as possible. In other words, good usability is at the heart of successful online communities. It is a crucial feature of online communities that they need the voluntary contributions of their members to generate value. Therefore, voluntarism is an essential part of online communities and the topic of online communities cannot be discussed without taking into account the important features of voluntarism in general, and more specifically with regard to these communities themselves.

Because online communities cannot exist without committed members online communities need to think about creative ways to reward their active contributors. The simplest way of positively reinforcing active contributions is by being responsive and providing adequate feedback. Online communities who are planning to engage volunteers in outreach activities (such as user education, user support or even public relations) need to establish an adequate management structure, which is dependent on a certain degree of professionalization. Because of the lack of financial compensation non-monetary ways of recognizing important work become all the more important.

Recommendation: Online communities should reward their active voluntary contributors. In order to improve the management of volunteers, online communities must follow through on a process of professionalization.

The target group of older adults is characterized by diversity

The reliance of online communities on volunteers is an important reason for their increased interest in older adults. Compared to earlier generations, today's generation of older adults is well-off, educated, and in possession of freely disposable time and important experiential knowledge. Until the age of 75, older adults engage as much in voluntary activities as do younger persons. Thus, they have a lot to offer to online communities. However, older adults' lifestyles are highly diverse. This means that organizations relying on older adult volunteers need to accommodate differential motives and needs.

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A logical consequence is to allow for a broad array of possible voluntary contributions with a high degree of self-selection. In addition, most older adult volunteers will not be willing to give up their newly gained flexibility, which means that organizations need to provide options for non-regular contributions. Online communities can greatly increase the probability of having active members if they appeal to their users' important personal cognitions (especially beliefs) and desires. This presupposes a good knowledge of one's target group. Defining "older adults" as a target group is quite possibly too broad of an approach because it neglects the fact that older adults' lifestyles, interests, values and aspirations are highly diverse. Notwithstanding this diversity, research has identified some behaviours that seem to be typical of many older adults. One is a self-inflicted restriction in the use of online communities. I.e. many older adults prefer to focus on one aspect of an online communities. Older adults seem to evaluate more carefully whom they can trust. Thus, online communities. Older adults seem to evaluate more carefully whom they can trust. Thus, online communities wishing to engage older adults should think about ways of letting members establish trustful relationships. This can be enhanced by providing opportunities for offline meetings.

One of the consequences that can be drawn from the fact that older adults are highly diverse is that age is not a good criterion for target group specification. Thus, older adults should be addressed not as members of an age group but as individuals with specific needs, interests, desires and values some of which they will have in common with existing online community members. While these needs, interests, desires and values can be related to age this need not be the case and should not be at the forefront of recruitment strategies. Rather than communicating "Because you are old you would fit in well" online communities should try to convey the message "If you are interested in topic x, y or z you will fit in well".

The fact that age is not a good criterion for target group specification does not mean that older adult members of online communities are not important when reaching out to potential new members. In fact, demonstrating how older adults benefit from using online communities and involving older adults in peer-to-peer user education and support are an authentic, credible and trust-inducing way of attracting new members among older age groups.

Recommendation: Online communities should accommodate the diverse motives of older adult volunteers and must allow for the establishment of trustful relationships between community members.

Many older adults have a greater need for user guidance when joining an online community

Many older adults have a greater need for user guidance when joining an online community than the average younger user. However, the reason for this is not their higher age but the lack of experience with the typical affordances of online communities. As is shown in the empirical part of the exploratory study "Beginning users 60plus", joining and becoming active in an online community involves quite a

large number of actions (e.g. registration, login, uploading content, adjusting one's user profile). Many of these steps are not self-evident to a person who is not familiar with Web 2.0 applications. Community providers should provide measures to guide the users through registration and the first steps in the community.

Online communities striving for a higher share of older adults among their members should rigorously test their community platforms in order to identify and provide instructions for functions that are not self-explanatory. Projects for new online communities should try to involve older adults in the process of designing their communities using techniques of user-centred design and co-creation.

Recommendation: Online communities should involve older adults in the process of designing new applications and functions

Activation and integration of older adults can be seen as a process of social persuasion

Successful strategies of integration and activation start out by asking about older adults' competences, interests and needs. From a perspective of social psychology one could describe the activation and integration of older adults into online communities as a process of social persuasion. The goal of this process is to create "cognitive dissonance" between non-participation in an online community and important personal attitudes and cognitions.

In other words, participating in an online community must become a personally relevant activity which fits in well with other important attitudes and beliefs. A quite important obstacle to this undertaking is the fact that many older adults perceive the Internet as a rather unsafe place, which is often used for criminal or obscene activities. Online communities should therefore actively inform their users about their values as well as safety and privacy measures.

Recommendation: Online communities should demonstrate to older users how participation is relevant and safe for them

The long-term effects on older adults of participation in online communities are not clear yet

Randomized controlled intervention studies have not been able to prove that Internet use has positive effects on cognitive functioning, autonomy, well-being and the social network of older adults. These results, however, cannot be called definitive. They will be further examined within TAO in the framework of the Impact Analysis in Subproject 5 (cf. future deliverable 5.5).

Recommendation: The long-term effects of participation in online communities need to be examined in further studies.
5 References

Adams, N., Stubbs, D., & Woods, V. (2005). Psychological barriers to Internet usage among older adults in the UK. Medical Informatics and the Internet in Medicine, 30(1), 3-17.

Ammann, H., Hasse, R., Jakobs, M. & Riemer-Kafka, G.(Hrsg.) (2008). Freiwilligkeit – Ursprünge, Erscheinungsformen, Perspektiven. Heidelberg: Seismoverlag.

Bargh, J. A., & McKenna, K. Y. A. (2004). The Internet and Social Life. Annual Review of Psychology, 55(1), 573-590.

Baytiyeh, H., & Pfaffman, J. (2010). Volunteers in Wikipedia: Why the Community Matters. Educational Technology and Society, 13(2), 128-140.

Beck, U. (1996). Reflexive Modernisierung – Eine Kontroverse. Frankfurt am Main: Suhrkamp.

Benkler, Y. (2011): The unselfish gene. Harvard Business Review, 89 (7-8), 76-85, 164.

Bishop, J. (2007). Increasing participation in online communities: A framework for human-computer interaction. Computers in Human Behavior, 23 (4), 1881-1893.

Blit-Cohen, E., & Litwin, H. (2004). Elder participation in cyberspace: A qualitative analysis of Israeli retirees. Journal of Aging Studies, 18(4), 385–398.

Bock, Th. (2002). Vom Laienhelfer zum freiwilligen Experten. In A. Möhringer (Hrsg), Freiwilligenarbeit. Einführung in das Management von Ehrenamtlichen in der Sozialen Arbeit (S. 11-20). Weinheim/München: Juventa Verlag.

Brauers, S. (2006). Potenziale der Älteren in Kommunen nutzen. In M. Erlinghagen & K. Hank (Hrsg.), Produktives Altern und informelle Arbeit in modernen Gesellschaften. Theoretische Perspektiven und empirische Befunde, Wiesbaden: VS Verlag für Sozialwissenschaften.

Bundesamt für Statistik BFS (2008): Freiwilligenarbeit in der Schweiz. Neuchâtel.

Bundesamt für Statistik BFS (2010). Internetnutzung in der Schweiz. Downloaded on the internet: http://www.bfs.admin.ch/bfs/portal/de/index/themen/16/04/key/approche_globale.Document.25576.xls (14 June, 2011).

Bundesministerium für Familie, Senioren, Frauen und Jugend (Hrsg.; 2010): Hauptbericht des Freiwilligensurveys 2009. Zivilgesellschaft, soziales Kapital und freiwilliges Engagement in Deutschland 1999-2004-2009. München. Downloaded on the internet:

http://www.bmfsfj.de/BMFSFJ/Service/Publikationen/publikationen,did=165004.html (25 Feburary, 2012).

Bundesministerium für Familien, Senioren, Frauen und Jugend (Hrsg.; 2009): Bericht zur Lage und zu den Perspektiven des bürgerschaftlichen Engagements in Deutschland. Berlin:

Wissenschaftszentrum Berlin für Sozialforschung. Downloaded on the internet: http://www.bmfsfj.de/BMFSFJ/Service/Publikationen/publikationsliste,did=129162.html (25 February, 2012).

Bundesnetzwerk Bürgerschaftliches Engagement (BBE), Kampagnenteam (Hrsg.; 2012). Altersbilder in der Gesellschaft. Zentrale Aussagen des sechsten Altenberichts der Bundesregierung. Infoletter 1/2012. Downloaded on the internet: http://www.engagement-macht-stark.de/index.php?option=com_content&view=article&id=887&Itemid=460 (9 March, 2012).

Bürbaumer, C. & Mellacher, D. (2009). Virtuelle Communities: Identifikation von Erfolgsfaktoren und Prüfung ihrer Bedeutung. Hamburg: Diplomica Verlag.

Buseman, K., & Gscheidle, C. (2010). Web 2.0: Nutzung steigt – Interesse an aktiver Teilhabe sinkt. Media Perspektiven, 7-8, 359-368.

Bussell, H.; Forbes, D. (2002): Understanding the volunteer market: the what, where, who and why of volunteering, in: International Journal of Nonprofit and Voluntary Sector Marketing, Vol. 7/3, September 2002, S. 244–257.

Butler, B. S. (2001). Membership size, communication activity, and sustainability: A resource-based model of online social structures. Information Systems Research, 12(4), 346-362.

Caro, F., Caspi, E., Burr, J. & Mutchler, J. (2009). Global Activity Motivation and Activities of Older People. Boston: Taylor & Francis Group.

Centraal Bureau voor de Statistiek (Hrsg.; 2009): Vrijwilligerswerk onder werkenden en nietwerkenden. Downloaded on the internet: http://www.cbs.nl/NR/rdonlyres/DD935239-4D77-4F4F-B430-1628D51A7CDF/0/2011k2v4p54art.pdf (27 October, 2011).

CEV (2007), cf. European Volunteer Centre.

Charles, S. T. & Carstensen, L. L. (2009). Social and Emotional Aging. Annual Review of Psychology, 61, 383-409.

CIVIQ (2005). 5 X B!. Binnenhalen, Begeleiden, Belonen, Behouden, Beëindigen. Voor het vinden en binden van (nieuwe) vrijwilligers. Downloaded on the internet: http://www.movisie.nl//Publicaties//Civig/372/5xB_werkboek_2005.pdf (5 June, 2012).

Clary, E. G., & Snyder, M. (1999). The motivations to volunteer: theoretical and practical considerations. Current Directions in Psychological Science, 8 (5), pp.156-159.

Colman, A. M. (Ed., 2009). «schema n.» A Dictionary of Psychology. Oxford: Oxford Uni versity Press 2009. Downloaded on the internet:

http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t87.e7351 (19 September, 2011).

Connors, T. D. (2011). The Volunteer Management Handbook. Leadership Strategies for Success, Hoboken: Wiley.

Coumans, M. & Rielem, S. (2010). Most older people still socially active. In Statistics Netherlands (Ed.), Web magazine, 27 April 2010 15:00. Downloaded on the internet: http://www.cbs.nl/en-GB/menu/themas/bevolking/publicaties/artikelen/archief/2010/2010-3085-wm.htm?Languageswitch=on (27 October, 2011).

Crano, W., & Prislin, R. (2006). Attitudes and persuasion. Annual Review of Psychology, 57, 345-374.

De Souza, C. S. & Preece, J. (2004). A framework for analyzing and understanding online communities. Interacting with Computers, 16 (3), 579-610.

Deller, J.; Maxin, L.M. (2009): Berufliche Aktivitäten von Ruheständlern. Zeitschrift für Gerontologie und Geriatrie, 42 (4), S. 305-310.

Deutscher Sportbund & Commerzbank (2004). Danke! Sport braucht dein Ehrenamt: Downloaded on the internet: http://www.ehrenamt-im-sport.de/fileadmin/fm-

ehrenamtimsport/Freiwilligenmanagement/FwManagement.pdf (27 October, 2011).

Deutsches Zentrum für Altersfragen (Hrsg.; 2006): Gesellschaftliches und familiäres Engagement älterer Menschen als Potenzial. Expertisen zum Fünften Altenbericht der Bundesregierung. Band 5. Berlin: Lit Verlag.

Dickinson, A., & Gregor, P. (2006). Computer use has no demonstrated impact on the well-being of older adults. International Journal of Human-Computer Studies, 64(8), 744-753.

Dickinson, A., Eisma, R., & Gregor, P. (2010). The barriers that older novices encounter to computer use. Universal Access in the Information Society.

Döring, N. (2001). Virtuelle Gemeinschaften als Lerngemeinschaften!? Zwischen Utopie und Dystopie. Texte online des Deutschen Instituts für Erwachsenenbildung. Downloaded on the internet:

Eastman, J. K., & Iyer, R. (2004). The elderly's uses and attitudes towards the Internet. Journal of Consumer Marketing, 21(3), 208 - 220.

Eastman, J. K., & Iyer, R. (2004). The elderly's uses and attitudes towards the Internet. Journal of Consumer Marketing, 21(3), 208 - 220.

Ellis, S.J.; Cravens, J. (2000): The Virtual Volunteering Guidebook. How to Apply the Principles of Real-World Volunteer Management to Online Service. Downloaded on the internet: www.serviceleader.org/vv/ (25. February, 2012).

Erlinghagen, M. & Hank, K. (Hrsg.; 2006): Produktives Altern und informelle Arbeit in modernen Gesellschaften. Theoretische Perspektiven und empirische Befunde. Wiesbaden: VS Verlag für Sozialwissenschaften.

Europäische Kommission, Generaldirektion Forschung (Hrsg.; 2012). Special Eurobarometer 378. Active Ageing. Factsheet Germany. Brussels. Downloaded on the internet: http://ec.europa.eu/public_opinion/archives/ebs/ebs_378_fact_de_en.pdf (09 March, 2012).

Europäische Kommission, Generaldirektion Forschung (Hrsg.; 2012). Special Eurobarometer 378. Active Ageing. Factsheet Netherlands, Brüssel Downloaded on the internet:

http://ec.europa.eu/public_opinion/archives/ebs/ebs_378_fact_nl_en.pdf (09 March, 2012).

Europäische Kommission, Generaldirektion Forschung (Hrsg.; 2012). Special Eurobarometer 378. Active Ageing. Report. Brussels. Downloaded on the internet:

http://ec.europa.eu/public_opinion/archives/ebs/ebs_378_en.pdf (09 March, 2012).

European Commission (2010). Information society statistics. Downloaded on the internet: http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables (12 June, 2011).

European Commission (2010). Information society statistics. Downloaded on the internet: http://epp.eurostat.ec.europa.eu/portal/page/portal/information_society/data/main_tables (28 June, 2011).

European Volunteer Center (CEV) (2007): Volunteering in the Netherlands. Facts and Figures Report. Brussels. Downloaded on the internet: http://www.cev.be/data/File/Facts_Figures_NL_FINAL.pdf (25 February, 2012).

Freitag, M. & Stadelmann-Steffen, I. (2010). Der Freiwilligen-Monitor Schweiz 2010. Vortrag auf der Tagung Grenzen-Los! 2. Internationale Vernetzungskonferenz. Rüschlikon, 26.10.2010. Downloaded on the internet: http://www.freiwilligenmonitor.ch/static/files/service/downloads/Monitor-CH-Freitag-Stadelmann.pdf (25 February, 2012).

Gensicke, Th., Picot, S. & Geiss, S. (2006). Freiwilliges Engagement in Deutschland 1999-2004. Wiesbaden: Verlag für Sozialwissenschaften.

Gensicke, Th. (2010). Freiwilliges Engagement in Deutschland 1999 – 2004 – 2009. Ergebnisse der repräsentativen Trenderhebung zu Ehrenamt, Freiwilligenarbeit und bürgerschaftlichem Engagement. In Bundesministerium für Familie, Senioren, Frauen und Jugend (Hrsg.), Monitor Engagement, 2. Berlin. Downloaded on the internet: http://www.bmfsfj.de/RedaktionBMFSFJ/Broschuerenstelle/Pdf-Anlagen/Monitor-Engagement-Nr-2,property=pdf,bereich=bmfsfj,sprache=de,rwb=true.pdf (25 February, 2012).

Godfrey, M., & Johnson, O. (2009). Digital circles of support: Meeting the information needs of older people. Computers in Human Behavior, 25(3), 633-642.

Hagel, J. & Armstrong, H. (1997). Net Gain: Expanding Markets through Virtual Communities. Boston: Harvard Business School Press. Hidalgo, M.C. & Moreno, P. (2009): Organizational socialization of volunteers: the effect on their intention to remain, in: Journal of Community Psychology, Volume 37, Issue 5, pages 594–601.

Hilger, P. (2010). Volunteer Centres and Volunteering Infrastructure. European Examples (Report for Kansalaisareena r.y., Citizen Forum – Service, development and information centre for voluntary actors in Finland). Downloaded on the internet:

http://www.kansalaisareena.fi/VolunteerCentresAndVolunteeringInfrastructure2010Hilger.pdf (5 June, 2012).

Hoisl, B., Aigner, W. & Miksch, S. (2007). Social Rewarding in Wiki Systems – Motivating the Community. In D. Schuler (Ed.), Online Communities and Social Computing (pp. 362-371). Heidelberg: Springer.

Initiative D21 (2010). (N)Onliner Atlas 2010. Eine Topographie des digitalen Grabens durch Deutschland. Downloaded on the internet: http://www.initiatived21.de (15 June, 2011).

Jung, Y., Peng, W., Moran, M., Jin, S.-A. A., McLaughlin, M., Cody, M., Jordan-Marsh, M., et al. (2010). Low-Income Minority Seniors' Enrollment in a Cybercafe: Psychological Barriers to Crossing the Digital Divide. Educational Gerontology, 36(3), 193-212.

Kley, A. (2009). "Milizsystem". In Historisches Lexikon der Schweiz. Downloaded on the internet: http://www.hls-dhs-dss.ch/textes/d/D43694.php (10 February, 2012).

Klie, Th., Stemmer, Ph., Wegner, M. [u.a.] (2009). Untersuchung zur Monetarisierung von Ehrenamt und Bürgerschaftlichem Engagement in Baden-Württemberg (Im Auftrag des Ministeriums für Arbeit und Soziales Baden-Württemberg). Freiburg: Zentrum für zivilgesellschaftliche Entwicklung (ZZE).

Kollock, P. (1999). The economies of online cooperation: gifts and public goods in cyber-space. In M. A. Smith & P. Kollock (Eds.), Communities in Cyberspace (pp. 219-239). Lon-don: Biddles Short Run Books, King's Lynn.

Kruse, A. (2006). Altern, Kultur und gesellschaftliche Entwicklung. REPORT. Zeitschrift für Weiterbildungsforschung 3/2006, S.9-19.

Künemund, H. (2006). Partizipation und Engagement älterer Menschen. In Deutsches Zentrum für Altersfragen (Hrsg.), Gesellschaftliches und familiäres Engagement älterer Menschen als Potenzial. Expertisen zum 5. Altenbericht der Bundesregierung, Band 5 (S.283-431). Berlin: Lit Verlag.

Kurniawan, S. H., King, A., Evans, D. G., & Blenkhorn, P. L. (2006). Personalising web page presentation for older people. Interacting with Computers, 18 (3), 457-477.

Landeszentrale für politische Bildung Baden-Württemberg (Hrsg.; 2009). Grenzen los! Freiwilliges Engagement in Deutschland, Österreich und der Schweiz. Dokumentation zur Internationalen Vernetzungskonferenz Konstanz 16./17. Februar 2009. Downloaded on the internet: http://www.lpbbw.de/fileadmin/lpb_hauptportal/pdf/grenzenlos.pdf (25 February, 2012).

Lehtinen, V., Näsänen, J., & Sarvas, R. (2009). "A Little Silly and Empty-Headed"–Older Adults' Understandings of Social Networking Sites. Proceedings of the 2009 British Computer Society Conference on Human-Computer Interaction (pp. 45-54). British Computer Society.

Lenhart, A., Horrigan, J., Rainie, L., Allen, K., Boyce, A., Madden, M., & O'Grady, E. (2003). The Ever-Shifting Internet Population. A new look at Internet access and the digital divide. Downloaded on the internet: http://www.pewinternet.org (21 January, 2010).

Lenhart, A., Horrigan, J., Rainie, L., Allen, K., Boyce, A., Madden, M., & O'Grady, E. (2003). The Ever-Shifting Internet Population. A new look at Internet access and the digital divide. Downloaded on the internet: www.pewinternet.org (29 May, 2011).

Li, X. (2011). Factors influencing the willingness to contribute information to online communities. New Media and Society, 13(2), 279-296.

Martinson M.; Minkler M. (2006): Civic engagement and older adults. A critical perspective, in: Gerontologist 2006, Vol. 46, S.318–324.

Matzat, U. (2010). Reducing Problems of Sociability in Online Communities: Integrating On-line Communication With Offline Interaction. American Behavioral Scientist, 53(8), 1170 -1193.

McMillan, D. W. (1996). Sense of community. Journal of Community Psychology, 24(4), 315-325.

McMillan, D. W., & Chavis, D. M. (1986). Sense of Community – A Definition and Theory. Journal of Community Psychology, 14(1), 6-23.

Möhringer, A. (Hrsg; 2002). Freiwilligenarbeit. Einführung in das Management von Ehrenamtlichen in der Sozialen Arbeit. Weinheim/München: Juventa Verlag.

Morris, A., Goodman, J., & Brading, H. (2007). Internet use and non-use: views of older users. Universal Access Information Society, 6, 43-57.

Mosler, S. (2010). "Alt ist nicht gleich alt" – Zur Ausdifferenzierung der älteren Generation. In E. Oehmichen & C.-M. Ridder (Eds.), Die MedienNutzerTypologie 2.0. Aktualisierung und Weiterentwicklung des Analyseinstruments (pp. 253-270). Baden-Baden: Nomos Verlagsgesellschaft.

"motivation n." A Dictionary of Psychology. Edited by Andrew M. Colman. Oxford University Press 2009. Oxford Reference Online. Oxford University Press. Downloaded on the internet: http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t87.e5239 (31 May, 2010).

Münz, A. (2008). Förderung und Qualifizierung des bürgerschaftlichen Engagements von Migranten und Migrantinnen in den Niederlanden. In Stiftung Mitarbeit (Hrsg.), Newsletter Wegweiser

Bürgergesellschaft, 24/2008. Downloaded on the internet: http://www.buergergesellschaft.de/106746/ (25 February, 2012).

"need for affiliation n." A Dictionary of Psychology. Edited by Andrew M. Colman. Oxford University Press 2009. Oxford Reference Online. Oxford University Press. Downloaded on the internet: http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t87.e5387 (31 May, 2011).

Nielsen, J. (1993). Usability Engineering. San Diego: Academic Press.

Nimrod, G. (2010). Seniors' Online Communities: A Quantitative Content Analysis. The Gerontologist, 50 (3), 382-392.

Oehmichen, E., & Ridder, C.-M. (Eds.). (2010). Die MedienNutzerTypologie 2.0. Aktualisierung und Weiterentwicklung des Analyseinstruments. Baden-Baden: Nomos Verlagsgesellschaft.

Office of Communications (Ofcom) (Hrsg.; 2008). Social Networking. A quantitative and qualitative research report into attitudes, behaviors and use. Downloaded on the internet:

http://stakeholders.ofcom.org.uk/market-data-research/media-

literacy/archive/medlitpub/medlitpubrss/socialnetworking/ (25 February 2012).

Omoto, A. M., & Snyder, M. (2002). Considerations of community – The context and process of volunteerism. American Behavioral Scientist, 45 (5), 846-867.

Oreg, S., & Nov, O. (2008). Exploring motivations for contributing to open source initiatives: The roles of contribution context and personal values. Computers in Human Behavior, 24(5), 2055-2073.

Peterson, N. A., Speer, P. W., & McMillan, D. W. (2008). Validation of A brief sense of com-munity scale: Confirmation of the principal theory of sense of community. Journal of Community Psychology, 36(1), 61-73.

Preece, J. (2001). Sociability and usability in online communities: determining and measuring success. Behavior and Information Technology Journal, 20(5), 347-356.

Priller, E. (2008). Zivilgesellschaftliches Engagement im europäischen Vergleich. In H. Ammann, R. Hasse, M. Jakobs & G. Riemer-Kafka (Hrsg.), Freiwilligkeit– Ursprünge, Erscheinungsformen, Perspektiven, Heidelberg: Seismoverlag.

Reifenhäuser, C., Hoffmann, S. & Kegel, Th. (2009). Freiwilligen-Management. Augsburg: Ziel Verlag.

Reips, U.-D. (2008). Potenziale jenseits der Privatsphäre. Risiken und Chancen internetbasierter Kommunikation. Psycoscope, 7/2008.

Richardson, M., Zorn, T. E., & Weaver, C. K. (2007). Not "Getting-on": Older Non-Users' Narratives of Computers. Presented at the International Communication Association Conference, San Francisco.

Ridings, C., & Wasko, M. (2010). Online discussion group sustainability: Investigating the interplay between structural dynamics and social dynamics over time. Journal of the Association of Information Systems, 11(2), 95-120.

Rosenkranz, D. & Görtler, E. (2002). Woher kommen in Zukunft die Freiwilligen? Demografische Überlegungen zum Sozialen Management. In A. Möhringer (Hrsg), Freiwilligenarbeit. Einführung in das Management von Ehrenamtlichen in der Sozialen Arbeit (S. 31-42). Weinheim/München: Juventa Verlag.

Rubinoff, R. (2004). How to Quantify the User Experience. Downloaded on the internet: http://www.sitepoint.com/article/quantify-user-experience (31 January, 2012).

Schäfer, C. K. (2009). Corporate Volunteering und professionelles Freiwilligen-Management. Eine organisationssoziologische Betrachtung. Wiesbaden: VS Verlag für Sozialwissenschaften.

Schaffert, S. & Wieden-Bischof, D. (2009). Erfolgreicher Aufbau von Online Communitys. Konzepte, Szenarien und Handlungsempfehlungen. Salzburg: New Media-Lab.

Schelling, H. R. & Seifert, A. (2010). Internet-Nutzung im Alter. Gründe der (Nicht-)Nutzung von Informations- und Kommunikationstechnologien (IKT) durch Menschen ab 65 Jahren in der Schweiz. Zürcher Schriften zur Gerontologie, 7.

Schlussbericht zum Modellprojekt 'Räumlich und zeitlich entkoppeltes ,Forschendes Lernen' als Motor einer neuen Lernkultur Kenntitel: "Gemeinsam lernen übers Netz" (2000 – 2005) Band 1: Projektbeschreibung, Ergebnisse. Downloaded on the internet:

http://www.gemeinsamlernen.de/theorie_erfahrungen/abschluss_html.html (15 May, 2012).

Schmidt, Ph., Glott, R. & Ghosh, R. A. (2010). Analysis of Wikipedia Survey Data. Reasons for Non-Contribution. Downloaded on the internet:

http://wikipediasurvey.org/docs/Wikipedia_NonContributors_15March2010-FINAL.pdf> (19 April, 2010).

Schroer aus Dorsten, J. (2008). Wikipedia: Auslösende und aufrechterhaltende Faktoren der freiwilligen Mitarbeit an einem Web-2.0-Projekt. Berlin: Logos Verlag GmbH.

Schulz, C., Hausschild, E. & Kohler, E. (2009). Milieus praktisch. Analyse- und Planungshilfen für Kirche und Gemeinde. Göttingen: Vandehoeck & Ruprecht GmbH & Co.

Schweizer Lexikon (Hrsg.) (1992): Schweizer Lexikon 91, Band 4, Luzern.

Scott, J. & Marshall, G. (2009). «social capital». A Dictionary of Sociology. Oxford University Press. Oxford Reference Online. Downloaded on the internet:

http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t88.e2113 (22 November, 2011).

Seifert, W. & Placke, G. (2007). Das Bürgerschaftliche Engagement ist flach. Das Management des Online-Volunteerings. Downloaded on the internet: http://www.b-be.de/uploads/media/nl0708_online_volunteering.pdf (25 February, 2012).

Selwyn, N. (2004). The information aged: A qualitative study of older adults' use of information and communications technology. Journal of Aging Studies, 18, 369-384.

Selwyn, N., Gorard, S., Furlong, J., & Madden, L. (2003). Older adults' use of information and communications technology in everyday life. Ageing & Society, 23(5), 561-582.

Slegers, K. (2006). Successful Cognitive Aging: The Use of Computers and the Internet to Support Autonomy in Later Life. Maastricht: Neuropsych Publishers.

Slegers, K., van Boxtel, M., & Jolles, J. (2007). The effects of computer training and internet usage on the use of everyday technology by older adults: A randomized controlled study. Educational Gerontology, 33(2), 91-110.

Sourbati, M. (2009). "It could be useful, but not for me at the moment": older people, internet access and e-public service provision. New Media & Society, 11(7), 1083-1100.

Stadelhofer, C., & Marquard, M. (2011). Internetnutzung älterer Erwachsener in der allgemeinen wissenschafts-fundierten Weiterbildung. In Press.

Statistics Netherlands (Hrsg.; 2011). Unemployed more engaged in volunteer work than people with paid jobs. Downnloaded on the internet: http://www.cbs.nl/en-GB/menu/themas/arbeid-sociale-zekerheid/publicaties/artikelen/archief/2011/2011-3389-wm.htm?Languageswitch=on (27 October, 2011).

Steinfort, J. (2010). Identität und Engagement im Alter. Eine empirische Untersuchung, Wiesbaden: VS Verlag für Sozialwissenschaften.

Stukas, A., Worth, K., Clary, G. & Snyder, M. (2009). The Matching of Motivations to Affordances in the Volunteer Environment: An Index for Assessing the Impact of Multiple Matches on Volunteer Outcomes. Nonprofit and Voluntary Sector Quarterly, 38 (1), 5-28.

The Volunteering Unit (1995). Make a Difference: An Outline Volunteering. Strategy for the UK, London: Office Public Relations Branch.

Wardell, F., Lishman, J. & Whalley, L. (2000). Who Volunteers? British Journal of Social Work 30 (2), 227-248.

Wenger, E., McDermott, R. & Snyder, W. M. (2002). Cultivating Communities of Practice. Boston: Harvard Business School Press.

Wissenschaftszentrum Berlin für Sozialforschung (WZB)(Hrsg.)(2009). Bericht zur Lage und zu den Perspektiven des Bürgerschaftlichen Engagements in Deutschland. Berlin.

Wright, K. (2000). Computer-mediated social support, older adults, and coping. Journal of Communication, 50(3), 100-118.

Zeix (2005). Usability Guide 7. User-Centered Design – it's the method which makes the difference. Zurich.

Zeix (2010). Digital Natives vs. Digital Immigrants. Downloaded on the internet: http://news.zeix.com/2011/01/19/der-generationentest-digital-natives-versus-digital-immigrants/ (31 Ja nuary, 2012)

Zeix (2010). Mobile Studie. Downloaded on the internet: http://news.zeix.com/2010/02/02/zeix-mobile-studie-ergebnisse-zur-nutzung-mobiler-dienste-in-der-schweiz/#more-661 (31 January, 2012).

Zickuhr, K. (2010). Generations 2010. Washington, D.C.: Pew Research Center. Downloaded on the internet: http://pewinternet.org/Reports/2010/Generations-2010.aspx (22 June, 2011).

Zimbardo, Ph. G. & Leippe, M. R. (1991). The Psychology of Attitude Change and Social Influence. New York: McGraw-Hill.

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