



Sustaining online communities involving seniors

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Abstract

Many online communities involving seniors have come into existence, yet not all of these have survived. There are numerous reasons for success and failure in the creation, management and maintenance of these online communities. Through an exploration of two communities, NEAT and GreyPath, numerous factors are uncovered for the successful sustenance of such online communities. Both communities have reached maturity successfully, one continues to enjoy success, the other is on the precipice of continuing to survive or to cease to exist. Two critical success factors discovered were valuing members in peer based interaction through a flat structure, and hybridity.

Keywords

Ageing, design, human computer interaction, reflexivity.

INTRODUCTION

Across the globe the proportion of the population who are old or elderly has increased steadily over the 20th century. This trend can be expected to continue well into the 21st century as a consequence of sustained low fertility rates and increasing life expectancy, especially in many developed nations. Consequently online communities involving seniors have been studied in China (Xie, 2007), the USA (Ito, O'Day, Adler, Linde, & Maynatt, 2001; Xie & Jaeger, 2008), the UK (Pfeil & Zaphiris, 2010), Australia (Burmeister, 2010a), and elsewhere. More seniors than ever are making use of the internet and becoming aware of the opportunities this can create in terms of socialisation. As technical ability increases amongst the over 50s, so do demands for better online services, a greater variety of activities and the desire to explore different possibilities for online socialisation.

Reported studies of the network of education, ageing and technology (NEAT) (Foskey, 2002; Foskey, Hazzlewood, Barnett, & Lewis, 2002) and GreyPath community (Burmeister, 2009; Lepa & Tatnall, 2006) have been disparate studies, each time looking at a single community in isolation. In this paper an attempt is made to bring together lessons learned in multiple communities for seniors, yet focusing in particular on these two Australian-based communities. This is done through integrating insights from key informants in those communities, including the founders of both communities. It is also done through drawing on findings from an interpretivist/constructivist study of the GreyPath community.

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This paper explores several questions in relation to the experience of NEAT and GreyPath for seniors online communities. How do we create and sustain an engaging online community for seniors? What are the factors that lead to vibrant, active participation in an online community for seniors? What are the advantages to seniors who become involved in online communities? What lessons can be learnt from successful, growing online communities; ones specifically targeting the ageing market?

The two case studies reveal numerous factors for successfully sustaining online communities involving seniors. However, the two factors that stand out are valuing members within peer-based interaction via a flat online structure, and hybridity. The first of these, flat online structure, is multi-dimensional or multi-faceted. Seniors who participate in age-designated online communities appear to value personal recognition, along with the opportunity to learn from peers, and to interact socially with members of their peer group. This is facilitated through a flat site structure, to encourage the emergence of reciprocal relationships among members. On GreyPath, for example, many seniors value being able to make meaningful contributions to their online community, and in doing so, to give back to their virtual community.

Hybridity has also been identified as being critical to the long-term success of a seniors online community. Hybridity requires site management which allows for continuous innovation, allowing the community to continue to cater to different and changing member requirements. Arnold (2007) described hybrid online communities as instrumental, technical, social, and hierarchical. Successfully combining a flat relational structure and hierarchical technical structure within a seniors online community is obviously complex to implement and maintain. Other important factors in sustaining seniors online communities identified within this study were the dynamic membership allowing for a succession of key contributors, and access to adequate funding to sustain site activities.

Introducing NEAT

The network of education, ageing and technology (NEAT) is a basic low-tech unsophisticated Australian-based email listserv. The list evolved from an Australia-wide 1999 International Year of Older Persons event *Making the Connections: Non-metropolitan Older People and Technology* (Foskey 2000). The three components of the *Making the Connections* event had drawn together some of the key people then involved in seniors technology initiatives across Australia at that time through a combination of virtual and face-to-face activities.

NEAT has always existed as an unfunded, and thus informal, network of people interested in a broad range of issues associated with older people, technology and learning. From its inception in December 1999 until mid-2007 NEAT was moderated by Foskey through the University of New England. In 2007 when Foskey changed jobs most of the membership of the list decided they wanted it to continue and the day-to-day management of the list was taken over by Russell Hardidge from Melbourne, although Foskey has continued on as the back-up moderator. In mid 2010 when Hardidge was no longer able to continue as moderator Foskey again took on that role when subscribers indicated the list continued to play a significant role in networking and in access to information. Foskey discusses her NEAT experience:

I am in no way a sophisticated user of technology, as the more technology-literate members of my family will certainly attest! However, as someone with a background in community work and applied research I have long been interested in exploring how we can utilize new forms of media to extend the possibilities for grassroots engagement by older Australians regardless of where they live, and their socio-economic and personal characteristics. When I came up with the idea of holding an event focused on older rural people and technology back in 1999 I never expected that this would result in the generation of a community of interest called NEAT in which I would still be involved over a decade later. I am forever grateful to those who have supported the list over those years for so freely sharing their information, advice, expertise and time, and also to the University of New England for hosting the list without charge for eight years, given that it was never able to attract external funding.

The benefits of NEAT have extended far beyond what is shared between members via the text of an online discussion. As an example, the Seniors Education Center at the University of Regina in Canada, particularly Don King then Director of the Center, were both virtually and personally involved in the initial *Making the Connections* events in 1999 and this international connection to Canada has continued on NEAT to the present day. I know I am not the only member for whom connections made through the list have extended into personal contact during visits to other parts of Australia and overseas.

Foskeys experiences illustrate an important point: that the social ties established through virtual connections do not remain static, nor do they always remain only virtual. Over the past twelve years members of NEAT have collaborated on projects and research, with a focus on older adults and technology via a combination of virtual and physical [particularly conference attendance] venues. The list is an example of Faris (2002) glocalization, strengthening rather than diminishing local cultural identity. The forum NEAT provides focuses on enriching peer group networks, sharing local and global ideas and creating a place through which information can be exchanged. As Hazzlewood, cited in (Foskey, et al., 2002), has suggested:

NEAT is a clearinghouse of easily accessible cross-sectoral information, advice and assistance with the accent on sharing of experiences, ideas and links to further

information. The basic list service format enables multi-source multi-destination exchanges with the focus on the three aspects we are all involved in passionate about - education, ageing and technology. Members are involved in some way in helping older adults, who grew up in a vastly different and less complicated era, who want or need to access and continue to use new technology via computers and the internet.

In June 2010 when the list moderation was being renewed, subscribers reflected on the value of the network, for example:

Yes we want the NEAT network to continue. .. We wouldn't be a network if Ros hadn't started us off; we wouldn't have stayed a network if Russell hadn't kept us going; we won't stay a network if we don't all support NEAT. (Member One. Retiree President of a National Online Seniors Initiative)

Living in a small rural town in the middle of Australia it is good to know what's going on in the world. Thank you Russell, Ros and everybody for your contributions. I often pass on links to our local library, health service and to friends overseas and sons in IT, people we meet on our travels; along with our local seniors. (Member Two Retiree involved with seniors IT initiatives in rural Australia)

I too find the NEAT posts most helpful, even with the Aussie slant! Russell did a marvelous job of periodically finding us wonderful articles, special events, activities and newsworthy items and I felt - and still do - as if I had my own librarian researcher. (Member Three, adult educator at seniors learning centre, Canada)

The four authors of this paper are all current members of NEAT. Yet whilst NEAT may draw us together within a shared community of interest, we also bring into this paper our very different experiences in establishing, participating in, collaborating on and researching online communities for seniors. Rather than synthesising our diverse perspectives into a single voice we have tried to integrate some of these differences in perspective into this paper to enrich and enliven the discussion.

Introducing GreyPath

GreyPath Pty. Ltd. manages the portal greypath.com.au. Membership is restricted to seniors, which it defines as 50 years of age and older. According to GreyPath management, most of the active members are in their late 60s. Most members reside in Australia, though some reside overseas and many travel overseas, yet maintain contact with their friends through this online community. In sociological terms, participation is not spatially determined, as traditional communities may have been (Wellman & Leighton, 1979), but rather it is ubiquitous (Wellman, 2004). GreyPath has 35 volunteer contributors who support the site remotely via online means. All these volunteer contributors are seniors, who freely give of their time and skills to maintain the site.

As at August 2009 there were approximately 100 million web sites worldwide. GreyPath traffic ranked 1.3 million according to the web information organisation Alexa (<http://www.alexa.com/>), placing it in the top 1.5 percent of world-wide sites by traffic. Compared to sites such as TripAdvisor or Facebook, the traffic on GreyPath is minuscule. However, when one considers that this is a site dedicated to Australian seniors, then it begins to show that this is indeed a popular site with a particular age cohort. Within Australia it is the largest site for seniors.

According to site management pre-October 2006 membership was approximately 45,000 seniors. In October 2006 GreyPath changed their site dramatically from the initial design, developing a new format with a more accessible and easier to maintain interface. However, that 2006 restructure cost the GreyPath community dearly, in terms of membership. Prior the restructure, the majority of the active members were in their late 70s and early 80s, whereas the majority of the active members in 2008 were in their late 60s (Burmeister, 2008). It seems that many previously active members ceased participation as a direct result of the restructure. Possible explanations for this generational change in site membership are explored later in this paper.

The value of a website such as GreyPath is its multi-faceted approach. It allows older adults to use either a toe on the Super Highway tarmac approach or to explore the highway in cruise control and also the many byways, taking part in surveys, enrolling in free or nominal cost courses, contributing or receiving information on a wide variety of topics. A GreyPath members online destinations will be dictated by their interests and time constraints. GreyPath is also a safe place, in that it is moderated by volunteer contributors who each have placed their name and face on the site.

Who accesses GreyPath? A snapshot shows that there is a definite group of people who participate in a number of the various options available, such as the forums and chat rooms. GreyPath management continue to innovate, with the development of routine video editorials, a multimedia seniors course development engine, a possibly unique approach to a three-dimensional (3D) seniors game, and simple broadcasts of GreyPath internet TV.

A skim of the participants and the times of interaction might be a basis for a research study on

what motivates the contributors. Does a consistent after midnight participation, for example, suggest shift work, insomnia, time when the sole family computer can be accessed, hedge against loneliness as person being cared for is sleeping? Or, are they members living in a different time zone? Hazzlewood, a GreyPath as well as a NEAT member, described her experience:

On several occasions I joined a GreyPath chat group and noted that the same people were coming in and they knew each others nicknames. There was very friendly banter - was nothing ugly or unhappy about it - and I found out that if you look at different times, you could speak to overseas members. I was delighted to find a chap from Montreal who said he would see if he could help my husbands elderly cousin with her computer problems.

ONLINE ENGAGEMENT

Internet-based communities are cultural products that exist within specific historical, social and political contexts. It is important to consider the subtle differences in practice between groups and individuals, and to explore the reasons for the choices people make in whether or not to use particular forms of technology (Liff & Shephard, 2004). The early adopters of online technologies were usually well-educated and of high socio-economic status and it was this cohort of seniors who tended to be most capable of productively employing the Internet to meet their needs and interests (DiMaggio, Hargittai, Neuman, & Robinson, 2001; Wilson & Peterson, 2002). However, as the Internet extends its reach across society, the late adopters are a more diverse cohort of older people (Liff & Shephard 2004, p. 7).

Diversity of social engagement

With the changing nature of the cohort accessing the Internet, it is important to acknowledge that it is not only the skills of the user that can present a barrier to the uptake and ongoing use of virtual networks. Late adopters tend to be faced with a technology that has been shaped by the interests and preferred methods of interaction of early adopters and this can inadvertently contribute to their continued exclusion (Liff & Shephard, 2004, p. 7). In order for technology to be integrated into a persons life it needs to be both useable and meaningful. It is important to realize that seniors are as diverse, if not even more diverse, as any other group within the community. An example of the diversity of experience among senior technology users comes from the age differences in a study of the GreyPath community, conducted by Burmeister (Burmeister, 2008). The ages of participants in that study ranged from people in their late 50s through to people in their mid 80s. This meant that some senior members of GreyPath were born prior to the Great Depression, and were adults during World War II, while other seniors within GreyPath were not born until after World War II. Some of these people retired when the World Wide Web had not yet come into existence. Younger seniors, especially those who have only recently retired, may have used computers extensively in their work places and in their homes. In reflecting on her journey as an older technology adopter June Hazzlewood, describes the experience as follows:

My journey along the Super Highway, which could have been a lonely one, was directed and enriched in the company of peer interest cyber travelers. Both ongoing membership of email lists and short-term discrete participation in online learning courses have been important post-retirement virtual highlights. Peer interest online communities such as NEAT and the National Institute of Continuing Educations Older and Bolder group have acted as pebbles in the third age retirement pond as links mentioned to wider interest portals such as GreyPath are followed up and u3aonline discrete learning courses are accessed.

The online environment does not always take into consideration the diversity in the capacities of the potential users. Research has highlighted that the barriers in the uptake and use of technology, is far more complex than the duality of users and non-users implied through terms such as the digital divide (Foskey, 2001; Gaved & Anderson, 2006; Hawthorn, 2007)(Haythornthwaite, 2006; Wyatt, Henwood, Hart, & Smith, 2005). There is also an important distinction between synchronous and asynchronous online interaction. As a listserv NEAT is an example of a basic form of asynchronous interaction, whereas GreyPath offers opportunities for both synchronous and asynchronous participation.

Chat rooms and real-time online workshops require different skills from discussion boards, email lists and online courses. Basic literacy combined with computer literacy, physical mobility and mental agility can tend to be pre-requisites for interaction in chat rooms and online workshops. Apart from keyboard and mouse skills, hand-eye co-ordination is essential in synchronous online participation to be able to keep up with the conversation and the need for speedy replies while keeping up with the flow of contributions. Those older late ICT adopters with less than adequate skills must also learn to use emoticons and abbreviations to save time when commenting and may find the pace of the chat room experience stressful.

Asynchronous online interaction via discussion boards, as for example the GreyPath forums, email lists such as NEAT and online courses can take place at any time of day or night and may or may not result in immediate replies, depending on whether other members are online at the same time. However, there is always the risk that a small number of dominant and/or loquacious participants may derail discussion with the less confident members. There is a

concern that as technology becomes more complex, and hardware and software more expensive, older later adopters of computer technology can find it more and more difficult to maintain their online interaction.

This diversity of social engagement amongst seniors requires an effort on the part of the designer to understand their distinctive requirements. Hawthorn (2007), for example, actively engaged older people in the design of a senior friendly interface after observing how older participants within a training course tended to blame themselves for their failure to learn, rather than either the design and delivery of the course, or the design of the user interface. Until Hawthorn provided the opportunity the older users were not proactive in requesting design changes that would have made their use of the interface easier. It is important that those managing seniors online communities provide their users with an ongoing role in the sites design and development process if these communities are to continue to be vital, meaningful and sustainable.

COMMUNITY

Perspectives on what constitutes a community have changed dramatically over time. In the 19th century communities tended to be equated with neighbourhoods (Wellman & Leighton, 1979), in the mid 20th century communities were understood as social networks of people personally known to one another, and by the end of the 20th century there was the dawning of electronic communities (Wellman, 2004; Wellman & Hiltz, 2004), more recently we have seen the emergence of virtual communities, online communities and communities of individualized networks (Arnold, 2007; Preece, 2000; Preece & Ghozati, 1998; Wellman & Hogan, 2004). A preoccupation with ideologically constructed imagery of community can obscure the emergent, unexpected, unimagined yet empowering variations of online practice (Bakardjieva, 2003). An online community, as Arnold (2007) argued, is not simply instrumental, technical, social, hierarchical or heterarchical, but also a hybrid creation.

Online communities for seniors

Some social theorists, amongst them Dreyfus (1999), expressed the view that the Internet risks decreasing community, through drawing people away from face-to-face relationships. There has been concern that in encouraging global connections that local kinship and friendship ties may become somehow less important. However, research into online social networks has dispelled these fears and presented a more complex picture of engagement (Iribarri & Leroy, 2009). Even with an increase in the use of online technology people still visit their neighbours, relatives and friends, people still help each other.

Latent tie theory as articulated by Haythornthwaite (2005) suggested that technology had the potential to connect disparate others, who may otherwise have remained unconnected. Where technology-based interaction is the only link which exists between people it can tend, Haythornthwaite suggested, to remain a tenuous or weak connection that is readily severed. This is why researchers have sought to distinguish mere activity on the Internet, from activities that promote a sense of belonging and identity, more in keeping with the concept of community understood in terms of participatory activities (Crystal, 2001).

Seniors increasingly belong to multiple virtual communities, for example, in Burmeisters study, he found that many members of GreyPath also belonged to other online communities. In the main these were either communities to do with their profession prior to retirement, or other seniors sites. Specific references to memberships of other seniors sites included: aboutseniors; a chat group; a mixed age forum; seniorsite; seniorshelpingseniors; three service groups (for retired veterans); seniorsonline; neighboursreunite; soc (forums not chat); australiangoldengirls; over50goldengroup; friendlyfaces; babyboomerbistro; idf50 (I don't feel 50); SA Seniors (SA for South Australia); and, silverpeers. Several GreyPath members also belonged to the Australian Seniors Computer Clubs Association (ASCCA). ASCCA is not an online community in the sense being explored within this paper, but rather a coalition of peer-based and volunteer-run local clubs that have provided the opportunity for seniors across many areas of Australia to learn about computers and how to get the most out of them.

As Crystal (2001, p. 171) pointed out, with few exceptions, the social interaction that takes place online is about real things in the real world. Crystal argued that good social interaction online does not just happen but that the system has to be designed to facilitate interaction. In order for a sense of community to emerge there will need to be just enough order within social interaction so that people can come to know each other, yet not so much order that these social interactions move towards a frozen highly ordered network (Kogut, 2007, p. 68).

The qualities of the relationships made possible through online socialization is illustrated in the following quote from one of Burmeisters interviews with GreyPath members:

I remember one message that came in, that was really wonderful. This woman wrote, and I can't remember it exactly, and it's a pity I can't, because it was wonderful. She said, it's 10.30 pm and I have just had a wonderful experience and I need to share it with someone, and I'm sorry my friends, it's you that's going to cop it. I don't think she used cop it. She said, I've just been to a school concert put on by, I think it was Scott's College in Brisbane, I don't know, but that doesn't matter, she said, these little children sitting with feet dangling from a piano stool, too short to

reach the floor, and sort of expressed it all, the concert was absolutely magic, and I have no one except you my friends to share it with. And that I thought was just so wonderful, yeah. [Female, 70-74]

The creation and sustaining of the NEAT community

NEAT is an interesting example of an early online community. It emerged through the *Making the Connections* project during 1999 that brought together through three events people interested in the implications of emerging information and communications technologies for older Australians living in non-metropolitan areas (Foskey 2000). The participants included both people who were already actively involved in seniors technology initiatives in Australia, and new users of ICT.

The first of the events held as part of the *Making the Connections* was an online conference event launched on National Seniors Online day on 7th September 1999 by the Australian Minister for Ageing. The online conference attracted 289 registrations from across Australia. Over a seven-week period the participants logged in from private homes, libraries, online access centres, community organisations, workplaces and universities (Foskey 2000).

The second *Making the Connections* event was a video-conference based workshop held on 13th October 1999 which attracted 80 senior participants from six non-metropolitan sites in Australia: the University of New England in Armidale New South Wales, Cherbourg TAFE and Charleville Community Centre in Queensland, Longerenong College in Horsham Victoria, Tumby Bay Telecentre in South Australia and the Multipurpose Health Centre on Flinders Island. In addition during the day three guest speakers Nan Bosler from the Australian Seniors Computer Club Association, Theresa Corbin from the Australian Consumers Telecommunications Network, and David Mason from the Australian Human Rights and Equal Opportunity Commission were linked in through Sydney University. Bronwyn Bishop, then Australian Minister for Ageing, also joined in the workshop from Parliament House in Canberra for the final link-up of the day.

The third and final event held as part of the *Making the Connections* project was a more traditional conference held at the University of New England on the 19th and 20th November 1999. This conference was attended by 50 people actively involved in seniors technology initiatives from across Australia. The keynote speakers were Dr Don King, then Director of the Seniors Education Centre at the University of Saskatchewan in Canada, and Professor Andrew Downing, then Dean of Engineering at Flinders University in South Australia.

NEAT emerged out of the networks established through these three events. The list began in December 1999 as an informal online network, managed by Foskey through The University of New England, New South Wales, Australia. The goal was to continue the sharing of ideas, resources and information that *Making the Connections* had initiated. By the end of 2001 the NEAT list had around 100 members, with the majority of the membership being from Australia.

In the early years NEAT members came from a diverse range of backgrounds and from different adult generations. Members included seniors, people involved in peer learning initiatives, those employed in government and non-government agencies working with older people, information technology professionals, adult educators along with academics from a range of disciplines. There was also free flowing interaction between members on the NEAT list if a request was made for information, ideas or contacts there would be an almost immediate response, which was shared with all the members of the list.

Changing Levels of Engagement

At the beginning of October 2008 NEAT had 62 members but only a small core of the membership were actively contributing to the list, and these contributions were largely centred on the sharing of information. Active interaction between members is now more likely to occur off-list either as a one-on-one interchange, or restricted to a small group online interchange centred around a particular issue. That is, a division between the public sharing of information and a private conversation between peers sharing a common interest has emerged. It is interesting to consider the factors that have led to this pattern. Ros Foskey, NEATs founder, suggested:

NEAT emerged in 1999 to fill a specific need for connection between people who shared a common interest. At that time there were no other options available in Australia which worked across geographic, organizational, sectoral and disciplinary boundaries. This is no longer the case for other options are now available and therefore the diversity in the backgrounds of the membership of the list has decreased. Although a core of long term members remain, membership is increasingly dominated by those who, like me, have some connection with academia. This combined with the now more formal style of interaction on the list has meant it no longer serves the needs of some of the early grassroots senior members who since have left.

One of the reasons that there is now less free-flow in the sharing of ideas and experiences on the listserv itself is, I suspect, because over the years some subscribers (most notably some members employed in government bodies)

exploited the openness of the list members. They took ideas and concepts from the list into their work often without the permission of the contributor, nor adequate attribution of the source. Yet when, as list manager, I had sought government funding, on several occasions, to allow NEAT to fulfill its potential as a boundary-crossing grassroots initiative, none was forthcoming.

One of the ways I can explain the shift in engagement over the past decade, is that NEAT emerged initially as a community of interest in which most members were engaged in an iterative process of way finding. We were intimately involved in finding our way into and navigating our way around an environment which combined the fields of technology, ageing and learning. Over time the sense of excitement associated with an active engagement in exploring this new environment began to dissipate. More and more of the membership began to participate only as spectators, rather than engaging in the action on the listserve. There was a shift away from communalities, towards the compartmentalization of interaction into private and public spheres and on the list the membership focused more on information diffusion and knowledge transfer, rather than in generating discussions or conversations between social peers.

Since its establishment in 1999 the list has had two moderators. Foskey was the moderator until mid 2007, when she was no longer able to continue when she moved employers, which also meant a new host had to be found. This led to a surge of support for the continuation of the list among the membership. Russell Hardidge stepped forward to take over the role of moderation and the list was moved to a new host. During this process only a few subscribers chose to withdraw from the list as it was no longer meeting their needs. In mid 2010 there was a similar surge of interest in the continuation of the list when Hardidge was no longer able to continue as moderator and Foskey again took on that role.

Succession, in any community organization involves a critical moment in the continued existence of the organization. Yet, as Comini, Fisher and de So Paulo (2009, p. 10) suggest in a discussion on leadership succession within NGOs, the capacity to survive a change in leadership does not guarantee that an organization will continue in perpetuity. Although NEAT survived the transition between moderators the active involvement of those subscribed to the list has continued to decline. Most messages that are being placed on the NEAT list are now purely informational.

In a review of the research literature on online communities Iriberry and Leroy (2009) identified five stages in the life of an online community inception, creation, growth, maturity and death. The inception of NEAT occurred at the Making the Connections event in 1999. This was followed by the creation of the list with the support of the Information Technology Directorate at the University of New England. The creation of the list was then followed by a period of rapid growth as the list membership expanded through word of mouth and virtual connections. As it matured the effectiveness of NEAT began to stall, as barriers emerged in attracting the funding resources required to formalize the network.

Although relationships, some of which have been sustained now for a decade, were established on NEAT, the formation of the subgroups and community action has tended to take place within venues other than NEAT. It is when online communities begin to lose active participation, and to lack valued content that, as Iriberry and Leroy (2009, p. 24) noted, the online community's termination may be eminent. One of the symbols of the stalling of development of NEAT as an online community is that it has also remained in the same configuration an asynchronous email list rather than adapting the wider range of options which have become available over recent years. NEAT will only survive whilst members continue to identify a need for an informal, unaligned network which links those involved in leadership roles, facilitation and research. The unanswered question in relation to the future of NEAT is, will it remain as it now is a venue for the distribution of information, will it simply fade into obscurity as an online community, or is it simply in a period of hibernation before springing back into life in another form?

The GreyPath community

In an interpretivist/constructivist study of GreyPath, Burmeister systematically observed the GreyPath community for eleven months. Then, after analysing the observation data, conducting pilot interviews and analysing that data, he conducted in-depth interviews with thirty of its members. The thirty participants were selected using criterion sampling, a particular form of purposive sampling (Patton, 2002). One of the questions he asked these members about was whether they saw GreyPath as a community? Exemplary quotations of GreyPath viewed as a community were:

They have become my neighbors, really because neighbors don't talk to you anymore. They have become my GreyPath family. I can write anything on the forum, it might be a problem that I have, and sure enough someone will answer it, and I find that that's great, and we all have the same age group the GreyPath community understands our age problems, and that's what I find is good. [Female, 75-79]

Often I find something interesting, I'll cut and paste it and send it to mates and say, look into this I'd recommend it, because some of the items mentioned are so topical and relevant to the requirements of senior people. [Male, 75-79]

I reckon it's a community a couple of times a year I meet up with 2 of them and we have lunch together we often send emails back and forth. [Male, 65-69]

You do get to know them through their writing well maybe soften your responses, or change what you first thought, you know, as you would do in a community, as you

would do talking face to face in a community. [Female, 70-74]

Oh yeah, without any hesitation, oh yeah, yeah, I mean, I have correspondence from people I talk to, we swap DVD discs, and even novels, books, or anything, and I keep them up to date with any programmes it's just like talking to my next door neighbor. I am, I would say 95% housebound, I can't get out much, and I just log on, the times I know somebodys there, and we just sit and talk like I'm talking to you now, and it's as simple as that. [Male, 75-79]

Twenty-eight of the thirty participants viewed GreyPath as a community. One viewed community as requiring face-to-face physical meetings, and the other only used GreyPath as a means to an end, in her case finding house sitting opportunities. The former expressed the belief that she felt very much a part of GreyPath, but that for her, community had to do with face-to-face contact. The latter, did not view GreyPath as a community in the way that another online community was. The 28 who viewed GreyPath as a community expressed those views with terms such as: neighbours, friends, family, belonging, a community of peers, information sharing, and making a contribution.

Managing the GreyPath community

In this section we examine issues to do with the successful management of GreyPath as an online community for seniors. We begin with a detailed examination of how the GreyPath portal was created and then examine some issues associated with site management. In keeping with the conversational style of this paper, this section is largely written in first person. It is based on the personal reflections of the founder and Chief Executive Officer of GreyPath, Ray Lewis:

GreyPath began as a post retirement activity/idea for me. In late 2001, a Venn diagram of my skills, experience, enthusiasms, interests, age, mentality, disadvantages, work ethic, available funds, technical resources, personality, market needs and more, was compiled. The common area was a privately funded, slow start up, one-man band, seniors interest website.

I then tested this idea on various people and the consensus was generally that it was already done and would have limited interest, as seniors had no money and very few were online. I ignored this advice, as I saw it as an opportunity to get established, before seniors did come online.

I then had a deliberately very brief look at some existing seniors sites, and found them to be sorely lacking when measured against the vision I had. The brief look was deliberate, as I wanted to do an intellectually independent, bottom up design and not be mentally trapped by any existing approaches.

Before I began building I established some social and commercial objectives. The primary social objective is to "Empower seniors and enrich the quality of our lives." The commercial objectives include technical leadership and innovation, an international reach, and profitability.

I had been previously impressed with Jimmy Carter's Zero Budget approach. It's a powerful notion, because it gives you a chance to take a fresh look at a task or problem where standard solutions otherwise seemed locked in. By mentally not taking in what little I had seen in the work of others, I thought that I could be freer to design my own approach, based upon what I thought any normal senior would want from such a site.

I threw out existing notions on font types, sizes and colors and much more. The end result was a simple site, based around Arial 11 and 12 font and three patriotic colors of red, white and blue. It was designed to be user friendly, warm, encourage visitors input regarding any future content they might like and designed so as not to design out future unknown needs. I was conscious that for seniors at that early time, even the simplest computer terms were confusing and had to be re-learned. Accessories, programs, mouse, applications and much more were technobabble to them, and could bedevil the new person and put them off computers before they could get to enjoy them. The learning curve is very steep if you do not have a peer group to grow and learn with, as children did at that time.

Another major problem was that the new to computing seniors had little natural comprehension of the endless bifurcations and dead end trails they had to follow, to get anywhere in a standard web sites hierarchical model. They easily fell prey to the death of a thousand clicks and gave up. Hence I ignored all current (pyramid) site designs and sought to have very broad spread of section tabs located at the top centre on the home page. This led to a greater width and less depth site. Seniors could get a grip on the whole coverage of the site, via the main page, and then quickly drill down to specifics under a mental master plan.

To click an icon is not at all intuitive, and so we always said click here. From the point of view at that time Who in their right mind looks under a start button at the bottom of the desktop screen, to find the shut down button? Many simply turned the computer off at the wall, and put up with slow restarts.

The matter of a site name was most difficult. I did not wish to be lost among the existing generics, like All About Seniors, Seniorweb, Seniortech, Elderweb, Aged this, that and the other, and similar. I sought a name (a future brand) that did not carry overt ageing pejoratives and could make sense internationally as well. Cross referencing a few columns of as many relevant and passable words that I could string together, led to Grey and Path (Path as in pathway to knowledge, friendship, entertainment, etc).

With previous industrial marketing experience, (and with attendant prejudices), I decided that any advertising I could afford, would have no residual impact in the grand clamoring for attention in the various media that we all face these days. It would be money simply wasted. Seniors are slow to react to once only advertising, and react better to advertisements that are repeated over months (an expensive option).

My strategy was to create online offerings and/or ideas that would justify editorials and that way gain indirect national exposure. I also became an events junkie, attending and talking to everyone I could. Word of mouth and seniors community organizations newsletters and similar were what I sought as well.

Once we had some traffic, I began to seek [customer] feedback as to content sought, and tried many things to create a site that reflected what the customer wanted. Unfortunately this was ever evolving as seniors became increasingly familiar with computers and the internet. We often had to lead the way instead a case of the dim sighted leading the blind.

I was equally aware of some aspects of the nature of mind, and the potential of GreyPath, if it was done right, to create a tangible alternative community in which one could be a personally recognised and valued member perhaps, rather than maybe a remote and lonely senior somewhere. That idea led to the commissioning of our first 3D community, GreyPath Village, which confirmed those ideas. This 3D community was opened for testing while still under construction. The village was working OK but the sea beyond the village that stood between the village and an island, was not as yet defined. During this time, an elderly lady sent me a most irate email, telling me that if You must have a damned swamp in the Village, then for Gods sake Mr. Lewis, put a sign up! I went in by mistake and got stuck and could not get out! The real point for us was that, the village experience was so immersive for her, that she blurred it with reality.

All the more telling, as our village was contained, at that time, in a small window of about 7cms by 6cms. When I asked others, when they were away from the computer, what size the village was, most people did not recall that it was so small. The first movement down the village track with the mouse and peoples consciousness of their screen and other surrounds went out the window, and they were inside the village in their minds.

Unfortunately, despite its great success, the 3D village software (Blaxxun Interactive) was too complex for me to maintain, and when the developer left to go overseas, I sadly, had to close it down. Seven years later we still travel in the hope of being able to create, [with a local University], a sustainable by volunteers, much more advanced and unique GreyPath Village.

In a historical sense it was, and still is, a battle all the way to get tangible support. We are [theoretically] not a Not For Profit, so do not qualify for any known grants, so until we began to get the first trickle of advertising money, nearly all operational resources have had to be funded personally. It is only through the contributions of some 35 very decent and generous online volunteers, who enable us keep so many areas of the site functioning at its current level.

GreyPath grew to some 8,000 visits per day and with visitors from 50 or more countries by 2006. At that time we were in the top 2 -5% of world web sites by traffic. In 2006 we closed the original site down for re-build. We had to close down and rebuild, as it was becoming increasingly obvious that the original platform was becoming unmanageable, and simply would not be able to cope with the emerging Web 2.0 demands of an increasingly computer savvy seniors demographic. This was a painful decision as many of our visitors had bookmarked the areas of interest for them and went direct to them. The new site, while having the old base URL, had the 500+ internal page URLs all fundamentally changed, and hence no longer findable.

Also, we felt we had a possible legal requirement to have some form of control of members comments, etc and needed to now require membership to interact with the site. Seniors did not like the site changes initially and were also concerned about the internet security of inputting the limited membership details we needed. Traffic fell to a few hundred visits a day, but grew steadily, and is now again in the top 5% of world websites, by traffic. I am sure that not a single senior, now they are used to the new GreyPath and all of its bells and whistles, would go back to the old site. We are introducing seniors to much greater site interaction in many areas of the site: forums, chat rooms, think tank, surveys, book reviews, photo galleries, progressive stories, and much more. Any significant new product development primarily comes

through our relationship with final year IT and media students at a local university.

The management of GreyPath

As with the previous section, this one continues largely in first person. It is based on the personal reflections of the founder and Chief Executive Officer of GreyPath, Ray Lewis:

The site relies a lot on many kind volunteers who run various sections from their home machines. They include course editors, special interest group managers, forum moderators, various free advisors, course writers, reviewers, and crucially these days, a most valued technical developer.

My personal management requirement is from 8.00 am till 4.00 pm, usually very busy daily activity base, plus some after hours requirements. Because of GreyPath and my other activities, especially in general seniors advocacy and marine environment areas, I stay out of the office on Wednesdays to attend to speaking requirements and other volunteer and semi-personal demands.

Daily management requirements include new product conceptualisation and specification, daily content management, site promotion and marketing, editorial writing, daily help to enquirers, arbitrating the occasional dispute between members and moderating sexist or racist comments in forums, some new course writing, creating regular polls, surveys and ThinkTank [a GreyPath forum devoted to deeper issues] matters, day to day financial management and recording, writing the members mailer, monthly competition creation and management, university project liaison, recruiting volunteers, video creation, daily limited level technical work, seniors book publishing and more.

Very many seniors take the site for granted, and most have no idea of its personal funding base, volunteer support, and running and development costs. Sometimes aggressive complaints about a perceived minor problem here and there (usually the complainants fault), can require some patience in responding to gracefully. Such complaints are more than made up for by the many hundreds of grateful thank you emails.

A personal and friendly email reply to someone struggling with a problem (especially from the top man), is of great value to an emerging computer/internet user, and leads to less fear of the computer and more self confidence in using it, to enhance the quality of their lives. GreyPath volunteers are communicated with via a personal mailer (very open and with private information in it) every 6-8 weeks, plus special one on one contact on an opportunity basis.

Aggressive spam protection is required to stop what would now be in excess of 1,000+ emails a day. This is because the various GreyPath email addresses are very public. However, many seniors do not know how to send an email that is obviously OK (such as appropriate subject headings), and so to not miss a reply to them (the less able and more needy), we need to scan the spam lists daily and recover the odd mistreated email.

The web site (as distinct from the business), is managed via a content management system called Drupal. This enables us to easily allocate volunteers various site privileges (editing various sections and more), for them to work on the site from home, to create a consistent looking site (one basic page module), and to add material to many pages in the site at the same time. Its disadvantage is that it is not at all user friendly, can be complex to use, and I require weekly support and/or advice to keep on top of it.

I also do the accounts and more, as the only director. Sales of banner and mailer ads, books, DVDs, Google Adsense click throughs and more, are beginning to provide working cash flow. While GreyPath is externally debt free, it is undercapitalized, and this is greatly to the detriment of what it could do for seniors, given adequate funding.

Site changes and their effects on senior participation

As stated above, in October 2006 GreyPath dramatically changed their site. The fact that the change was going to happen had been advertised to members in the months prior to the change. Also, in September, the month prior the change-over, members were able to access a beta version of the new site. Similarly, the old site continued to be available until November, one month after the change-over. When the change-over occurred, there were some initial difficulties, but those difficulties do not account for the significant drop in membership that followed the change-over. In the main, the restructure appears to have resulted in the loss of many of the most active members of the site up to that point in time. Until that time the active membership, that is, those members actively contributing to and participating in site activities, consisted of people in their late 70s and early 80s. After the site changes, the majority of active members were in their late 60s.

The drop in membership can be explained in part, by drawing on understandings from the psycho-social theory of ageing, selective optimization with compensation (SOC) (M. M. Baltes & Carstensen, 1996; P. B. Baltes & Baltes, 1990; P. B. Baltes & Smith, 2002; Marsiske, Lang, &

Baltes, 1995). An evolutionary perspective shows that selection pressures have operated in the first half of an individual's lifespan, to ensure reproductive fitness, as well as effective parenting behaviours. According to SOC, progression to successful ageing means one has to go beyond reliance on evolutionary biology, to cultural influences. Successful ageing is less a function of biology and more one of increasing the culturally-based resources available to people to help them find supportive compensations for biological losses. Baltes and Smith (2002) said that the process of optimization is more difficult for the very old, than it is for the young old. They argued that in developed countries people maintain mental achievement levels until about age 70. After that new learning can be severely impaired. To illustrate SOC, Baltes and Smith cite an example of an 80 year old pianist, whom they interviewed in the course of their research:

When Rubinstein was asked how he continued to be such an excellent concert pianist, he named three reasons. He played fewer pieces, but practiced them more often, and he used contrasts in tempo to simulate faster playing than he in the meantime could muster. Rubinstein reduced his repertoire (i.e., selection). This allowed him the opportunity to practice each piece more (i.e., optimization). And finally, he used contrasts in speed to hide his loss in mechanical finger speed, a case of compensation. (P. B. Baltes & Smith, 2002, p. 21)

For designers SOC thus offers a possible explanation as to why many GreyPath members were unable to cope with the significant changes that took place with the implementation of the site upgrade. The implication for changes to websites for seniors is that particularly older seniors will experience a significant cognitive load, that needs to be managed. Older seniors will need help in managing the cognitive challenges involved in coping with learning to navigate and use the new structures and tools. Designers need to create some form of scaffolding or bridging between the old and the new. GreyPath attempted to have the old and new running in parallel for three months, from September (old site running with beta of new available), through to October and November (for both these months the new site was running and old site was still available). However, three months proved to be insufficient time. Perhaps the more significant the changes, the longer should be the allowed period of adjustment?

CONCLUSION

In the last decade many online communities for seniors have come into existence. Some, such as SA Seniors, have not survived. Others, such as NEAT, have dwindled to a fraction of the membership size they once enjoyed. There are numerous reasons for success and failure in the creation, management and maintenance of online communities for seniors, as illustrated in these two case studies of NEAT and GreyPath. Both communities have a loyal base of members. In the case of NEAT it has diminished in membership, but existing members continue to use it and value that community for the connections it has enabled. In the case of GreyPath, a major restructure in late 2006 cost it dearly in terms of membership, but it has recovered and has slowly rebuilt its membership. GreyPath is now back to a rating within the top two percent of all websites, not just those for seniors, worldwide, by traffic (Burmeister, 2010b).

The success of GreyPath involves numerous factors. Some seniors are drawn to the opportunities for online involvement with their peers, and it is this peer interaction which GreyPath provides. This preference for peer-based interaction is not unique to online communities. For example, in a study of electronic banking, it was found that many seniors preferred to learn about internet banking from retired bank staff (peers), more than any other source (Scott, Roberts, & Burmeister, 2002).

In GreyPath, the sense of community that has built up since the site's establishment, has been through a process of seniors interacting with each other. The 35 volunteers are seniors, the site management is undertaken by seniors, and the membership is restricted to seniors. The importance of volunteerism from among the membership to the success of online communities has also been emphasized by Iribarri and Leroy (2009). In interviews, members of GreyPath frequently expressed feeling like they belonged to this community of people who shared their life experiences and with whom they could discuss things relevant to their age group.

The large variety of activities, hybridity, available at the GreyPath portal, is another of its success factors. People wanting jobs for seniors, travel tips, ePals, and much more, will find what they want at this site. If it is not specifically available on the site, then by asking their peers in forums and chat groups, they may readily get access to the help they need. For example, one lady said in an interview that she had a particular problem in her home one day and had no idea how to get the help she needed. She posted the details on the GreyPath Coffee Shop forum and got several immediate suggestions. However, the one that solved it for her, came through a man saying that his grandson worked in a related field and he would ask his grandson. He came back onto the forum later that day, having leaned on his grandson to get the specific help this lady needed to solve her problem. This variety of activities and information sharing, which to a lesser extent is also seen in the NEAT community, is another reason for the success of the GreyPath community. Related to this, is that these communities give their members the chance to contribute to the lives of others. Making a contribution, giving back to society, enriching the lives of others, are the types of activities that many seniors want to be able to do.

Of all the factors necessary to the successful sustenance of online communities involving seniors discussed above, the two that have stood out within these two case studies are the valuing of members in peer-based interaction through a flat structure, and hybridity. After

reviewing early HCI research involving seniors, Preece (2000, p. 129) stated that simpler command sequences are important, which partially supports this study's findings about the importance of a flat site structure.

This paper has explored how creating and sustaining a successful online community for seniors requires active and engaged site management. This is a form of online community management which involves risk-taking and a willingness to undertake a process of continual development and innovation whilst always remaining aware that older users can be slower to adapt to changes in an online community's configuration, and in particular dramatic change, than younger generations. The factors that have been identified through these case studies as vital for continued vibrant and active online participation are the opportunity for recognition, for contributions to be valued by peers, and mutual engagement, factors also identified by Iribarri and Leroy (2009) as essential to the success of online communities in general.

The case studies also highlight the importance of external factors to the success of seniors' online communities including the timely access to external funding and support to allow for an online community to continue to evolve and develop. When these opportunities are made available, as the GreyPath experience demonstrates, the Internet can play a vital role in sustaining community engagement among older participants. Where these resources are not available, as the NEAT case study has indicated, while an online community continues to operate it retracts to a small number of committed participants.

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