

Use of Internet Banking by the Elderly – Time to Rise to the Challenge



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Introduction

Many now take for granted the Information Age and the rapid changes it has brought to our lives. When was the last time we left the comfort of our armchair to book flights or rent a car? While, some of us will struggle for an answer, the Internet and the advances it has brought mean little to the majority of the Elderly. To them the Internet is little more than a word of vague meaning.

Yet if we consider the issues associated with ageing we would see that the Internet should be the instrument of choice for the Elderly. It plays down physical and mental deficiencies while promoting independence. It overcomes mobility issues and increases accessibility. The Internet brings product and service providers to the finger tips of the user. Transactions can be executed from the relative safety of one's home. The Internet should be the friend of the Elderly but instead they're not on first name terms.

Western companies and world governments are currently pumping millions of Euros into tackling the digital division among the young of the developing world. The OLPC initiative (www.olpc.org), through its blue chip sponsors such as Intel, AMD, eBay and Google are aiming to make \$100 laptops available to children across the globe. But have we forgotten the Elderly?

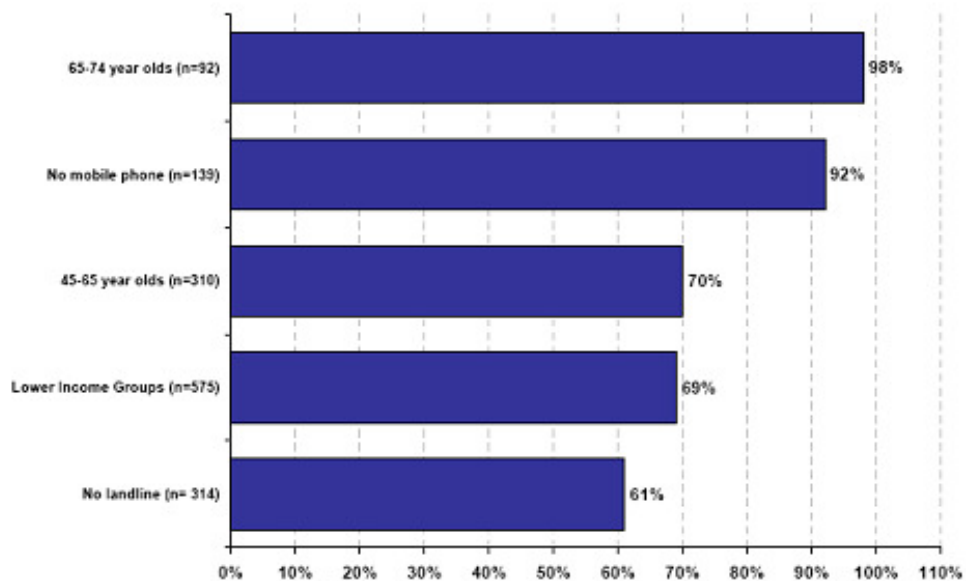
The Internet is the proverbial double edged sword. It has the power to be a social leveler or just as easily an instigator of social divide. It is high time we tackle the digital divide afflicting *all* elements of our society. Instead we play political lip service to the need for an inclusive society. It is imperative we act now.

In this paper we focus on one particular service, Internet banking and we attempt to explain why a divide exists between the young and old and outline a simple solution. While it is the obligation of world governments to address this divide, it also raises some interesting commercial opportunities.

Have the Elderly been forgotten?

Every so often we're fed sound bites about the Elderly rushing in their droves to the Internet. We hear about a ninety year old in the US emailing her great grandchildren living on the opposite side of the Atlantic Ocean. While these stories make interesting reading they are misleading and betray the facts. While it is true that the Elderly appear to be taking to the Internet in greater numbers than before, the statistics tell the real story.

Percentage of Demographic Groups Not Using the Internet

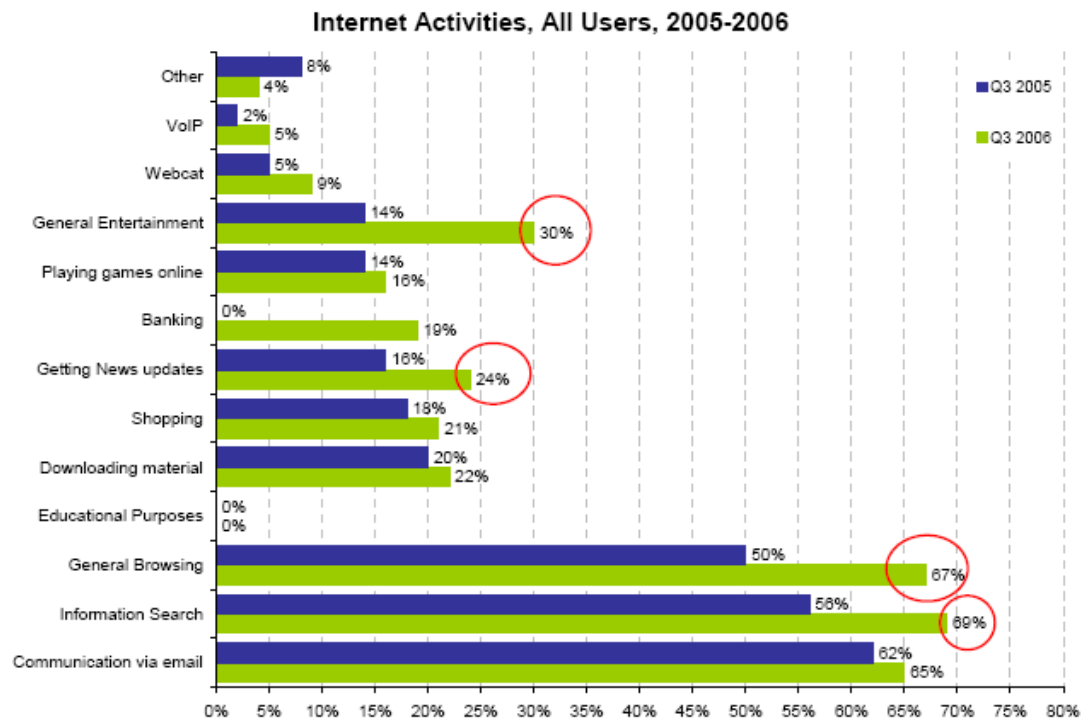


Source: Comreg (2007 P7)

Comreg (2007) reported in March 2007 that 98% of Irish people aged between 65 and 74 years of age do *not* use the Internet. Although the figures emanating from many other Western societies are not as severe they paint a similar and troubling picture. The UK's National Audit Office (2007) has reported that the overwhelming majority of over 65s have never logged on. A recent survey by Pew Internet & American Life Project (2006) found that just 34% of Americans aged 65 or older go online. This compares with near universal use by those under the age of 60.

We may be tempted to play down the significance of these figures by suggesting that things will improve as existing Internet users move from one age bracket to another. But this is a defeatist attitude and suggests we're willing to ignore the Lisbon Strategy and do little to include the current Elderly in an inclusive e-society. As things stand there is little or no evidence to suggest that significant numbers of elderly non-users are becoming silver-surfers. Secondly, while the statistics from the US do suggest that the percentage of Internet users in the upper age brackets will increase, it remains to be seen how significant this trend will be. The Pew Internet & American Life Project (2006) showed no increase from January 2005 to January 2006 in the numbers of Americans aged 70 or older using the Internet. Thirdly, factors other than a person's prior use of the Internet are influencing the Elderly in deciding not to use it. The computer, Internet and websites have developed with young technophiles in mind. They require a degree of mental and physical dexterity not found in many Elderly people. There is little basis for assuming that significant numbers of those using the Internet now will continue to do so into their senior years.

Should banking organizations care?



Source: Comreg (2007 P13)

This figure suggests that Internet Banking when compared with other online activities such as browsing, information gathering and emailing is not a regular Internet activity. If banking and technology organizations have yet to encourage the average Internet user to avail of their online services then this doesn't augur well for their chances with the Elderly who are known to be more resistant to new technologies.

Henderson (1998) predicts that by the year 2030 the number of Americans over 65 years of age will triple so that one-fifth of the total population will belong in this mature consumer segment. Europe is experiencing a similar trend. With the Elderly making up an increasing proportion of our population, marketers are increasingly eyeing up the grey market as a growth area. Doubt must be cast over the survival of many business models that fail to take account of our ageing society. Banking organisations are particularly sensitive to changes in the age profile of their customer bases. Older age groups are more likely to save and purchase financial products than other demographic groups. Products and sales channels must be increasingly targeted at the grey market.

Many banks have been actively pursuing a policy of closing high street branches. If the Elderly do not have access to their preferred channel of face to face interactions and at the same time are not Internet users then how does the banking industry intend communicating with them? What impact will these changes have on the financial well being of a typical bank? Unless the issue is successfully addressed then this conundrum will pose a threat to the future viability of many banking organisations.

Why do the Elderly not use the Internet?

Websites are largely created by the young for the young and take little account of users with diminished abilities. Fortunately this is now changing. W3Cs 'Web Accessibility Initiative' is

increasing the awareness of disability and ageing issues among the web community. The success of these efforts is obvious with websites increasingly taking account of users, such as the Elderly, with poor vision, motor control and memory. While all such advances are to be lauded their impact on the number of Elderly using the Internet may be limited.

In order to understand why the Elderly are not using Internet banking we need to ask their opinions and listen to their answers! This is exactly what a Finnish bank did recently when it surveyed its customers to measure their resistance to Internet banking (Mattila et al, 2003). Resistance was measured using nine variables, which previous research had shown affected adoption of the service. The beliefs and perceptions of mature customers toward Internet banking are stronger than younger customers. The lack of personal service was found to be the biggest barrier to adoption. Mature customers also listed difficulties with computers and Internet as impediments as well as security issues.

The mature customers have positive perceptions of long-established services such as personal contact, teletext and credit and debit cards but dislike practically all of the new services, especially e-mail and the Internet (Mattila et al, 2003). Younger respondents have positive perceptions of personal service and the cards, but they also like the new services, especially mobile and Internet services (Mattila et al, 2003).

According to Seniorwatch, a European Union programme for monitoring the needs and markets for older citizens, 48% of the European citizens older than 50 years agree or strongly agree with the statement "I am too old to familiarise myself with computers". The number increases to 62% amongst the non-PC-users.

The main reason, why Internet use amongst the Elderly is so low is due to the computer – it is far too complicated and the willingness of the Elderly to use it is low. They do not wish to have to climb a considerable learning curve in order to perform a simple task such as enquiring about their bank balance. In any case it places physical and mental demands on the user than many Elderly feel they can't meet.

The necessity to use a computer in order to avail of Internet banking is a failed model. No matter how successfully we increase website accessibility, improve computer usability or educate users we still require the Elderly to use a computer, which obviously they resist. The computer is a scientific machine that can be programmed to perform a range of tasks. By nature it is designed with an eye to flexibility and hence it loses out in simplicity and usability. Donald Norman noted "The major problem with today's PC is its complexity. The complexity of the PC is pretty fundamental; it is built into its foundation. There are three major reasons for complexity: the attempt to make a single device do too many things, the need to have a single machine suffice for every person in the world and the business model of the computer industry" (Paul & Stegbauer, 2005). Mark Weiser (1991) of Xerox PARC once said that 'most profound technologies are those that disappear' as they are increasingly taken for granted. After more than half a century the computer has failed to disappear from our sight or consciousness.

So how do we solve this problem?

If banking organisations persevere with their policy of closing local branches then they must develop new electronic delivery channels tailored to the needs of the Elderly. The existing delivery channels will need to be broadened and extended and should not assume the customer has access to a computer or indeed wishes to use one.

The solution we propose here involves no new technology but instead re-arranges existing technologies in a very simple configuration and restricts the functionality exposed to the user. We combine the strengths of both computer and television technologies by embedding one in the other. Research shows that the Elderly are already accepting of television and teletext services

but not so the computer and Internet (Mattila et al, 2003). The user interface will provide limited options and will replicate the simplicity of teletext with its menu-driven look and feel. The user will have the option of calling on human assistance through voice and video access. Finally the service will be secure.

The solution will be an electronic 'set top box' (STB) appliance, which will link the home to businesses, such as banks, through the public Internet or a VPN. Similar to modern satellite receivers, digital TV receivers and PVRs, the STB will contain the brainpower of an embedded computer. The computer will carry relatively little processing power or storage capabilities. Cost will be reduced through choice of components while maintaining a minimum operating standard. The software will be open source. The device will be 'locked down' meaning the user will not be required and will be unable to install additional software or hardware. All upgrades will be performed remotely by the technical provider. Unlike a PC which is a general utilitarian device the STB has a single purpose, which is to link the home to external service providers using intuitive user interfaces and input devices. Its focus will be on service provision rather than hedonistic value.

Some might claim the STB sounds remarkably like AMD's failed Personal Internet Communicator (PIC). There are many notable differences between the PIC and the STB. While the STB will use Internet technologies, it aims to create an alternative user experience to that offered by existing websites through traditional web browsers. The user while having access to a wireless keyboard will mainly use a 'zapper' (i.e. remote control hand device) in order to interact with the STB. The services will be arranged as channels and the user will select the required service through keying in numbers or using colour coded buttons similar to what they do using teletext. Visual and sound output from the STB will be directed to their television. Conceptually the user interacts with the television as opposed to a computer.

Others might argue that the concept is very similar to WebTV whose day many believe has come and gone. However, the two differ greatly. The STB is not an Internet terminal whose main aim is to render web pages on one's television. The user interface will not contain the complex and rich functionality found in computer browsers. Instead the interface will be extremely simple with very limited functionality. It will have the look and feel of teletext while at the same time supporting innovative personal service elements using voice and video over IP. Also, the home owner would not be expected to pay a monthly subscription for use of the device. Instead all costs would be borne by the technical and service providers.

Conclusions

The PIC was sold on the open market for \$185. The OLPC initiative is currently looking to build dummied down laptops for \$100. Satellite receivers, digital receivers and PVRs are available for under \$100. These figures suggest that the STBs can be produced for around \$100.

Even though world governments have an obligation to address the digital divide and the solution offers significant personal and societal gains, I feel they would not have the appetite and expediency that such an innovation would demand. The device would be no more than another headstone in the graveyard of slow policy making.

Instead the initiative should be furthered by commercial organizations who would offer the solution free of charge to the homes of the Elderly. Revenue would be generated through two streams; advertising and subscription-based or transaction-based fees payable by the service provider. Advertisers would have a captive and focused market. For example, an advertisement about Home Equity Release could be shown only in homes in a certain geographic area and to people fitting a certain age profile. Service providers such as banks could subscribe to the network and in doing so create a new electronic channel direct to the homes of their customers. Alternatively, they could pay a fee for each completed transaction.

Such a solution would be of interest to many service provision organizations e.g. government services, insurance, utilities, etc. and not just banks.

References

Comreg (2007) "The Internet and Broadband Experience for Residential users – A Communications Survey Report based on the Trends Survey Series". Available from www.comreg.ie/_fileupload/publications/ComReg0712.pdf

Henderson, C. (1998), "Today's affluent oldsters: marketers see gold in gray", *The Futurist*, Vol. 32 No.8, pp.19-23.

Mattila, M., Karjaluoto, H., Penttinen, T. (2003) "Internet banking adoption among mature customers: early majority or laggards?", *Journal of Services Marketing*, Vol 17, No 5.

National Audit Office (NAO) (2007) "Government on the internet: progress in delivering information and services online". Available from www.nao.org.uk/publications/nao_reports/06-07/0607529.pdf

Paul, G. & Stegbauer, C. (2005) "Is the digital divide between young and elderly people increasing?" *First Monday*, volume 10, number 10 (October 2005). Available from firstmonday.org/issues/issue10_10/paul/index.html

Pew/Internet (2006) "Online Health Search 2006" Available from www.pewinternet.org/pdfs/PIP_Online_Health_2006.pdf

Weiser, M. (1991) "The Computer for the 21st Century," *Scientific American*, vol. 265, no. 9, pp. 66-75.