# Technology Use By Senior Citizens 

 search Center titled "Older adults and Internet use" [1], adults in their midsixties are increasingly becoming Internet users. Once older users experience the Web, they eagerly become frequent users. The information for this article was obtained from a Continuing Care Retirement Community (CCRC) in northeast Florida, U.S.A.

## Problem Statement

As new residents move to CCRCs, they are asking for better technology to be provided as part of the available amenities. The administration of the studied CCRC is moving to electronic locks and keys and is considering expanding the availability of a wireless network (WiFi). As those who are in their mid-60s join the community, more are requesting the ability to have cellular phones only, whereas the CCRC currently requires a land line for emergency response.

The over-70 population is increasing in size and technological sophistication, but new technologies are primarily designed for a younger market. Older users have different needs.

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To address these issues, in October 2012, the CCRC in which I reside distributed a survey to query the current technology use of its residents.

## Demographics

The CCRC consists of three unit types: independent living, assisted living, and nursing care. The survey was distributed to only the independent and assisted living residents. Where two people resided in the same unit, both were asked to complete a survey. The total number of surveys returned was 344 ; at the time of the survey there were 444 independent living residents and 52 assisted living residents. This produced a total $77.5 \%$ return. The high response rate may be accounted for by the high educational and professional attainment of many of the residents. Not all questions were answered on each returned survey. Table I shows the distribution of respondents by age and gender.

## Survey Methodology

The survey was distributed in hard copy format using community "social mailboxes." These are internal to

Table I
Distribution of Survey Respondents by Age and Gender

| Age | Female | Male | Total | $\%$ |
| :--- | :--- | :--- | :--- | :--- |
| $62-69$ | 7 | 3 | 10 | 2.9 |
| $70-79$ | 62 | 27 | 89 | 25.9 |
| $80-89$ | 99 | 89 | 188 | 54.7 |
| $90+$ | 32 | 25 | 57 | 16.6 |
| Total | 200 | 144 | 344 | 100.0 |
| Percent | 58.1 | 41.9 |  |  |

the facility thereby requiring no postal service. Additionally, the surveys were completely anonymous and contained no identifying questions.

## Results

The survey asked respondents to select every type of technology device they own from a list provided (cell phone, computer, electronic book, tablet computer, portable music player, and personal digital assistant.). The survey listed examples of each device for clarification.

A total $85.88 \%$ indicated they have some form of cell phone, and $75.79 \%$ that they have a computer, either Mac or PC. The numbers decrease for the remainder of the choices; $29.39 \%$ have some sort of e-book reader such as Kindle, Nook or something else. Portable music players and personal digital assistants ranked at $8.07 \%$ and $4.32 \%$, respectively.

## Cell Phones

The question of cell phones and their use seemed to indicate insufficient description in the question. The question asked, "If you have a cell phone, is it a "smart" phone? In other words, can it access the Internet, take pictures, play music, or anything in addition to making telephone calls?" Only $28.5 \%$ indicated having a smart phone. However, it is possible that they may have a phone that does more than simply making calls but have never utilized the capability. Interestingly, only one-third of those with cell phones said they have a land line solely because it is required. Almost onefourth of respondents use Skype or some type of video calling. Table II shows the breakdown by age and gender of cell phone ownership. Speaking with some residents, I learned some have only prepaid cell phones for use when traveling in case of emergency. None of the survey questions asked about this.

## Computers and Internet Providers

The CCRC has Internet-accessible computers available so a resident need not own a computer to access

Table II
Cell Phone Ownership By Age and Gender

| Age | Female | Male |
| :--- | :--- | :--- |
| $62-69$ | 85.7 | 100.0 |
| $70-79$ | 98.4 | 88.9 |
| $80-89$ | 86.9 | 87.6 |
| $90+$ | 56.3 | 80.0 |

the Internet. Twenty-two percent of respondents indicated they use the public computers. Two-thirds of respondents have at least one computer and almost half of those have more than one computer. Nearly three-quarters of the respondents indicated they subscribe to an Internet provider, while $85 \%$ reported using the Internet to do research. Paying bills online was reported by only $42 \%$ of those who subscribe to an Internet provider, likely reflecting skepticism about the security of online banking and bill payment. Almost half said they have WiFi in their residence, but some comments seemed to indicate they did not understand that a router creates a WiFi.

## Miscellaneous

The last two questions dealt less with other forms of technology. This CCRC has cable TV service as an amenity but it provides only extended basic channels. A total $37.5 \%$ of respondents reported purchasing additional cable channels and $26.7 \%$ of the respondents reported utilizing an emergency pendant from the CCRC. It is possible that other non-facility pendants may be used but this was not questioned.

## Additional Technology <br> Services Desirable for CCRCs

With regard to technological amenities, the survey seems to indicate CCRCs need to consider adding technology services. As the population of senior citizens increases so will the ability to utilize "newfangled" devices. However, developers need to take care to make innovative products that have a minimal learning curve associated with their acceptance.

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## References

[1] K. Zickuhr and M. Madde, "Older adults and Internet use" Pew Internet, Jun. 6, 2012; http://www.pewinternet.org/Reports/2012/ Older-adults-and-internet-use.aspx


[^0]:    $\overline{\text { Digital Object Identifier 10.1109/MTS.2013.2249357 }}$
    Date of publication: 14 March 2013

