The Internet, Social Media & The Elderly:
http://www.huffingtonpost.com/anita-kamiel-rn-mps/older-people-social-media_b_9191178.html
Many might think that social media is the exclusive domain of the younger generation. However, many of our older adults have enthusiastically adopted it to keep up with the times as well as their old acquaintances and younger family members.
According to the Pew Research Center, Internet use among those 65 and older grew 150 percent between 2009 and 2011, the largest growth in a demographic group. Furthermore, their 2012 study showed that of those that go online, 71 percent do so daily and 34 percent use social media. The elderly use these tools to bridge the geographic gap between them and their loved ones far away and as a way to reconnect with friends from a far off time. Studies show that the internet has become an important portal for reducing isolation, loneliness and other depressive symptoms.

Base on the information and research reported above, we knew that the percentage of elderly people to use internet & technology product had be increased year by year, also we know that 71 % of people are using their computer daily and 34 % are using social media, the data from above showed that the elderly group is be a high benefit group of the internet and high technology, mostly they are using the social platform to reconnect with their friends. So the product that we are developing for the elderly people got the high benefit and advantage for them. Such as the online chat room function that can let them to talk with their friend, people who have the same interest. Also the Event function can let them to met face to face outside after the work time to reconnect with their friend.

Kamiel, A. (2016). *The Real Reason So Many Older People Are Using Social Media*. [online] HuffPost. Available at: http://www.huffingtonpost.com/anita-kamiel-rn-mps/older-people-social-media_b_9191178.html [Accessed 4 Oct. 2017].

Problem for elderly people to face during internet:
https://myageingparent.com/technology/communication/internet-security-elderly/

1. A large element of Internet security risks for older people is their personal information.
2. The biggest single risk is money. Internet banking and shopping have a huge range of advantages – you can browse through as many products as you could ask for without having to drive to a supermarket or wade through crowds of enthusiastic shoppers.

But by the research we know that elderly people facing a main problem during go online, personal information, because elderly people are not comfortable for using their internet technology compare with us, so they must facing more problem them us are facing, don't know how to secure their personal information, not sure how to protect them selve during online. So we need to make sure we can protect them in a

way and sure they are using our website safe. We had think of few function and way to increase our secure level of the website to project this group of people. Such as notification, store their password in database with hashing algorithm, and post some notice and suggestion for them when they are creating their account. Such as the password need to have upper and lower case. need to be long enough and also not similar with their birthday those kinds of personal information.

Reference:

Ingram, A. and Stone, D. (2014). Internet security for the elderly|My Ageing Parent. [online] Myageingparent.com. Available at: https://myageingparent.com/technology/communication/internet-security-elderly/ [Accessed 4 Oct. 2017].

Secure our website:
http://www.creativebloq.com/web-design/website-security-tips-protect-your-site-7122853
The majority of website security breaches are not to steal your data or deface your website, but instead attempts to use your server as an email relay for spam, or to setup a temporary web server, normally to serve files of an illegal nature. Other very common ways to abuse compromised machines include using your servers as part of a botnet, or to mine for Bitcoins. You could even be hit by ransomware.

1. Password Setting
- Passwords should always be stored as encrypted values, preferably using a one way hashing algorithm such as SHA.

2. SQL Injection
- You can easily prevent this by always using parameterised queries, most web languages have this feature and it is easy to implement.

3. HTTPS
- HTTPS is a protocol used to provide security over the Internet. HTTPS guarantees to users that they're talking to the server they expect, and that nobody else can intercept or change the content they're seeing in transit.

Because we are develop our product in web base, so I had research and find how to make our website more safe for people to use, We need our website to be HTTPS during login and other action that may cause the security problem. SQL Injection, because we are storing our customer information in our database, so it is better to avoid people are hacking our database system by attacking our database, so It is better to use SQL Injection to protect those important information in our database. Lastly I think the password setting is the thing that we can help elderly to protect their personal information by changing the password to be hashing algorithm before we store in our database.

Reference:

Gerber, R. and Perry, T. (2017). 9 security tips to protect your website from hackers. [online] Creative Bloq. Available at: http://www.creativebloq.com/web-design/website-security-tips-protect-your-site-7122853 [Accessed 4 Oct. 2017].

Advantage for elderly people to use technology:
http://www.captel.com/news/senior-living-and-independence/benefits-technology-usage-seniors/
The American Association of Retired Persons has reported that seniors who keep up to date with the internet can produce a positive impact on key areas of life, including:

- Personal Fulfillment:

- According to the United States Census Bureau, there are more than 6.7 million seniors aged 65 or older who are currently working, a number that is expected to increase to 11.1 million by the year 2018
- Current technology allows working from home to be a common practice in today's society, allowing seniors to continue to independently support themselves while avoiding the drag of commuting to and from the office.

- Health Preservation

- Researchers from Michigan State University have reported that elderly individuals who spend occasional time online can drastically reduce symptoms of depression, just another example of the vast benefits of new-age technology.

- Social Connectedness

- Using email and social networking platforms are a great way to easily stay in touch with those who are the closest to you, and all it takes to speak with someone face to face is a computer, camera and internet access.

Reference:

CapTel. (2014). The benefits of technology usage for seniors. [online] Available at: http://www.captel.com/news/senior-living-and-independence/benefits-technology-usage-seniors/ [Accessed 4 Oct. 2017].

What elderly feel when using technology in their life:
https://enerexxo.wordpress.com/
Why elderly don’t want to use technology:

- Different people have widely different views on the definition of this term, which is one of the main reasons technological improvement often misses the mark when it comes to a certain demographic.

Three main reasons for this refusal can be discerned:

- First of all, elderly most often like to retain some measure of independence. By using a walking cane, they appear old and crippled while a mobile phone makes it easy to check up on them, making some feel restricted. (How to make sure our product to be free for them will be one of the point)
- The senior citizens don't "get it". They do not see the value of the technology presented. Why should they learn to type an email if they can just as well write a letter? Why should they take a mobile phone with them when they go out, since they're perfectly capable of finding their way back home on their own?
- Some elderly want to make use of technology, but fail when it comes down to it. This is most often the case with high-tech applications as the learning curve is regrettably a lot higher in these cases. Contrary to popular belief, this seems to be less of an issue if enough motivation is present. (Make sure the product we develop are easy for them to use and we need to teach them and let them to learn in a way to sure they are understand how to use our product and not getting any trouble)

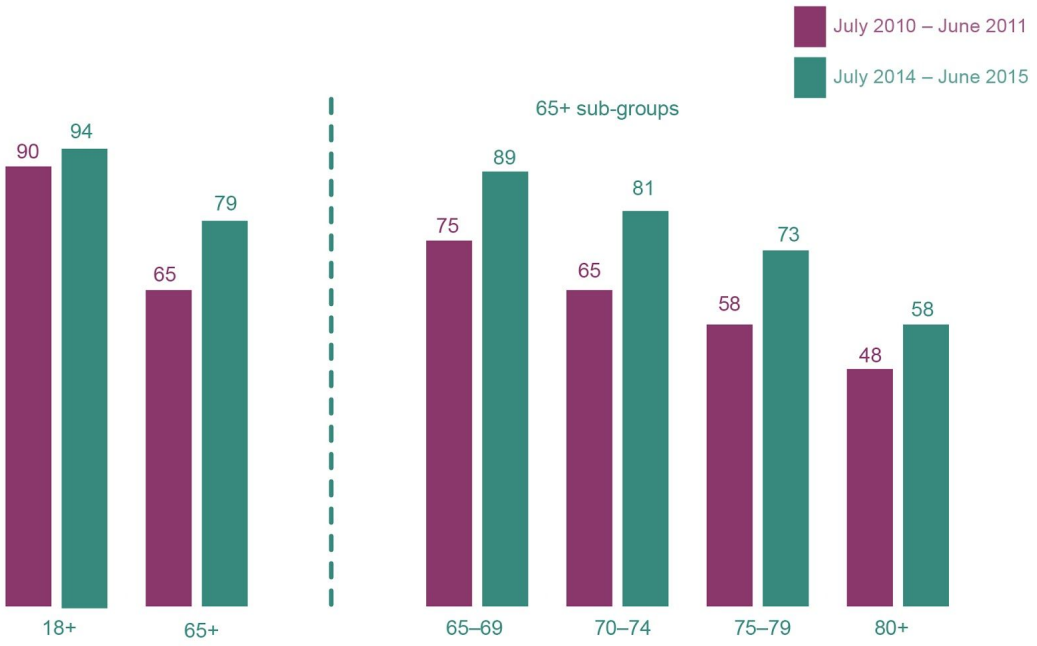
Reference:

L'Vanderelst, K. (2011). The elderly are eager to use technology that will facilitate their lives. [online] The elderly are eager to use technology that will facilitate their lives. Available at: https://enerexxo.wordpress.com/ [Accessed 4 Oct. 2017].

Digital lives of older Australians:

https://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Digital-lives-of-older-Australians

Figure 1: Accessing the internet, by age, 12 months to June (2011 and 2015)



Older Australians use the internet less frequently than their younger counterparts do—with the frequency of internet use diminishing with age (Figure 2).

However, the majority of older internet users go online at least once a day (85 per cent), with half accessing the internet three or more times a day (50 per cent).

Figure 2: Frequency of internet use, by age, January–June 2015

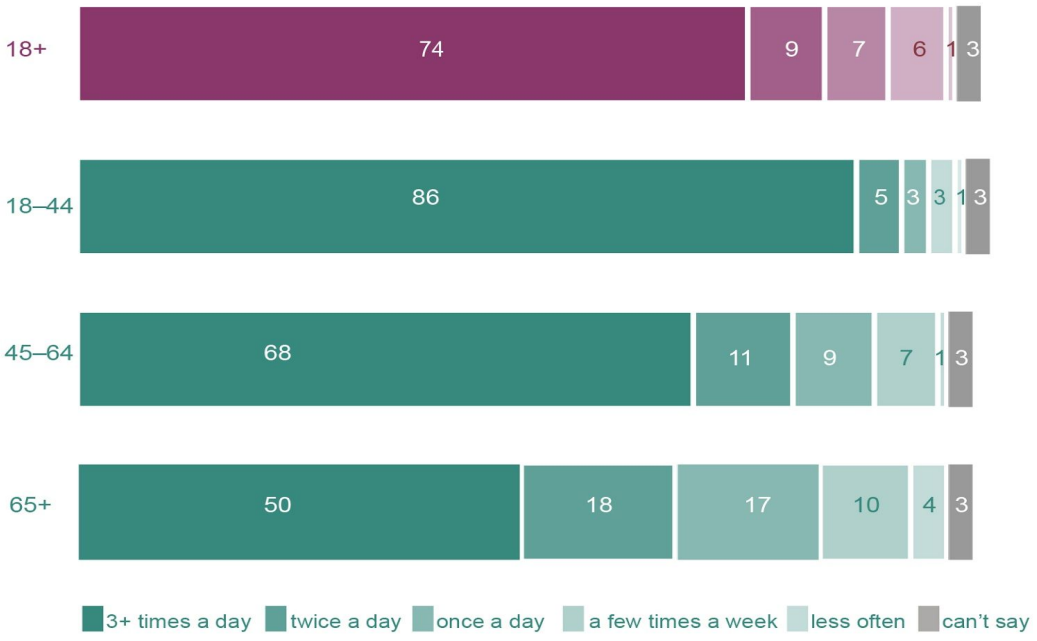
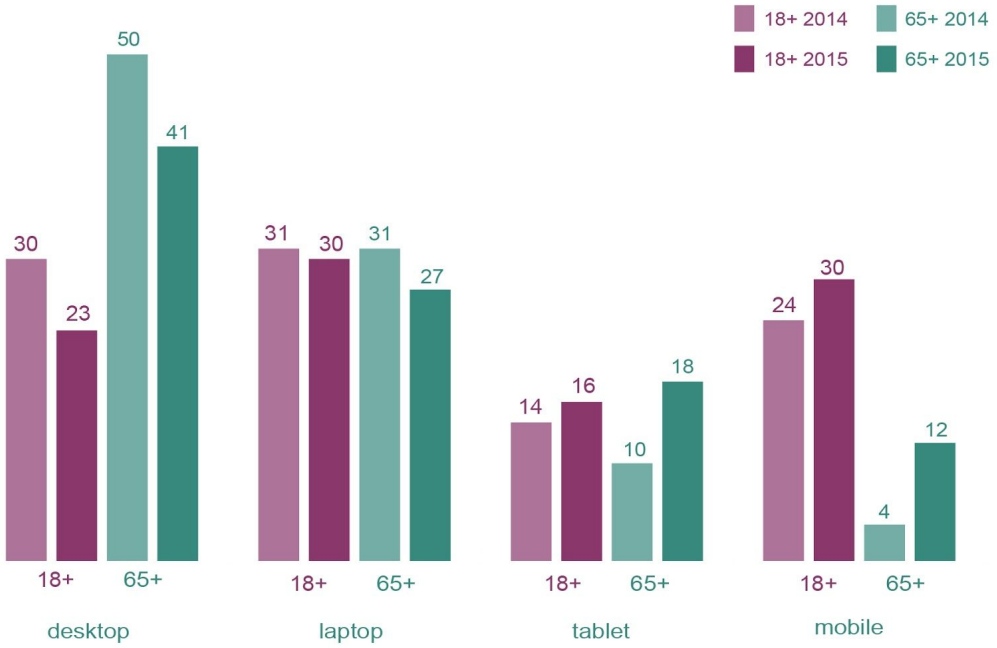


Figure 4 illustrates the popularity of portable smart devices in Australia. While desktop and laptop computers are still the most often used internet access devices for older Australians, there was a decline in the use of these devices and an increase in the use of tablets and mobile phones between May 2014 and May 2015).

In the six months to May 2014, tablets were the most often used internet access device for 10 per cent of older internet users. A year later, this number had increased to 18 per cent. Similarly, the mobile phone is the most often used device to go online for 12 per cent of older users—up eight percentage points from 2014.

Figure 4: Devices used most often to go online, six months to May (2014 and 2015)



Reference:

Acma.gov.au. (2016). Digital lives of older Australians | ACMA. [online] Available at: https://www.acma.gov.au/theACMA/engage-blogs/engage-blogs/Research-snapshots/Digital-lives-of-older-Australians [Accessed 4 Oct. 2017].

People say that there are some reasons why elderly people are not familiar with technology such as mobile. Jane Mussared, council on the Ageing SA chief executive, said that the percentage of elderly people who use technology is still lower than other age groups because the cost of technology and lack of access to training programs are barriers. In addition, Chen Robert (2017) said they no longer need to learn new things to survive because they just occasionally update their knowledge and still be ok.

References

- Waldhuter, L. (2017, February 4). Elderly use of social media and technology on the rise. Retrieved October 01, 2017, from http://www.abc.net.au/news/2017-02-04/elderly-use-of-social-media-and-technology-on-the-rise/8240508
- Chen, R. (n.d.). Why Old People Have a Hard Time Learning New Things. Retrieved October 2, 2017, from http://www.embracepossibility.com/blog/why-old-people-have-a-hard-time-learning-new-things/

Many people say that it's a good idea to involve target audiences in the early stage of the project to get clear and specific requirements from users. Czaja, S. (2012) stated that there are guidelines and examples of the design process but the elderly group has various aspects of users. He said elderly people have to be involved in whole process of systems and applications.

* Interface design guidelines for computer systems for older adults
    - Minimise visual clutter (e.g., too much information on a webpage) and irrelevant screen information
    - Present screen information in consistent locations (e.g., error messages) and where possible provide a standardised format across applications
    - Adhere to principles of perceptual organisation (e.g., natural grouping of information)
    - Highlight important screen information and ensure that options that are most important or used most frequently are visible and easily located
    - Provide navigational tools such as a site map or a search history tool
    - Use icons that are easily discriminated and meaningful
    - Provide location information indicating where the user currently is within an application
    - Avoid technical jargon and the use of complex command languages
    - Minimize demands on working memory (e.g., minimize the need to recall complex operating procedures or provide aids)
    - Avoid automatically scrolling text
    - Provide feedback about actions such as task completion or text selection
    - Avoid complex command languages and use simple and familiar language
    - Minimise opportunities for error by providing action confirmation prompts (e.g., "are you sure you want to delete this text?")
    - Provide adaptability and system flexibility for different user levels

- Ensure there is adequate time to respond to prompts and queries
- Use operating procedures that are consistent within and across applications
- Provide easy to use on-line aiding and support documentation

References

- Czaja, S., & Sharit, J. (2012). Designing Training and Instructional Programs for Older Adults. CRC Press.
- Czaja, S. J., & Lee, C. C. (2007). The impact of aging on access to technology. Universal Access in the Information Society, 5(4), 341.