

Adult digital media literacy needs

Qualitative research report

AUGUST 2009

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Executive summary

Background to research

The Australian Communications and Media Authority (ACMA) is responsible for the regulation of broadcasting, the internet, telecommunications and radiocommunications in Australia. The ACMA's activities include the provision of information and advice to the community about communications matters, and the administration of a range of consumer protection measures.

Skills and confidence in using new communications and media services are becoming increasingly important for participation in all aspects of Australian society. In recognition of this, the ACMA has initiated a digital media literacy research program to inform the provision of consumer advice and protection measures by the ACMA and by organisations active in the promotion of media literacy across Australia. Digital media literacy can broadly be understood as the possession of the skills, knowledge and understanding which will enable a person to confidently engage with a wide variety of digital media, applications and services.

The research presented in this report was commissioned as part of the ACMA's digital media literacy research program.

Objectives of the research

The main aim of the research was to understand the attitudes and experiences of adult Australians who are non-users or limited users of digital media and communications, including the factors that influence and explain non-use or limited use of digital media (specifically internet and mobile phone).

Understanding these attitudes and behaviours will assist the ACMA and other government agencies to identify which digital media literacy gaps might best be addressed, and to develop appropriate policy initiatives.

Research methodology

The research was conducted by way of 10 group discussions and six telephone in-depth interviews amongst adult non- and limited users of digital media. The sample took into consideration people's usage levels of digital media, comfort with digital media and their life stage. The qualitative research was conducted in metropolitan, regional and remote areas in New South Wales, Victoria and Queensland.

Key findings

Attitudes towards different digital media

Findings from this study involving non- and limited users of digital media indicated that their unmet digital media needs are largely associated with the internet. This is because they believe that in terms of enabling them to participate more effectively in society, learning how to use the internet is more important than learning how to use new features on their mobile phone. The internet is regarded as being unique and offering something they cannot get elsewhere. It provides a range of different opportunities to assist people in everyday social, cultural and economic situations. In contrast, the additional features that they do not use on mobile phones can be accessed in other ways, such as using a standalone GPS or accessing the internet on a computer. There is therefore less

incentive for non- and limited users of digital media to learn how to use this type of application on their phone.

People did not necessarily have the same attitude towards different technologies. It became apparent that there was some association between the usage of different digital media among research participants, in that non- users or low users who were uncomfortable with one technology were sometimes uncomfortable with another. However this was not a strong association. Instead, the research found that usage patterns of different types of digital media tended to be highly individual depending on people's own needs, motivations and the usage context.

Overarching reasons for limited usage

There were **two main reasons** for the research participants limited use of digital media.

- > Firstly, they claimed that it was not a priority for them to purchase, understand and use new technology. They claimed they were happy to carry on with old habits, using 'traditional methods'. In addition, some believed that they would have to give up these traditional methods altogether if they became more engaged with digital media, rather than using them alongside their traditional ways as a means of enriching their lives.
- > Secondly, most of the research participants held the view that it was too difficult to change their habits. For many, using new digital media was regarded as a real stretch that would involve a complete overhaul and change of lifestyle. Findings indicate that as long as people have an alternative, easy option to using digital media they are likely to use that method either out of habit, convenience and/ or fear.

Awareness of the benefits of using digital media

Despite the cynicism about using digital media, there was relatively widespread awareness of the benefits of using digital media, in particular the internet. This is because people recognised that the internet is playing an increasingly significant role in society. Many people were aware of the benefits of the internet for their own family and friends. They were also increasingly hearing positive stories about new technologies in the media.

The main benefits that people cited were the convenience and time saving factors that come with using digital media, such as paying bills online or sending an email with news to a friend abroad, as well as the wealth of information sources available at their fingertips. However, it was apparent that the majority of our sample did not appreciate the full extent of the benefits that are on offer through using digital media, which makes them less curious to learn about it. Thus, there is scope to communicate the full benefits of using digital media to encourage take up.

Overarching attitudes among non- and limited users

There are **two key factors** that affect people's attitudes and behaviour in relation to increasing their digital media literacy. These are their *existing competencies* with using digital media and their *level of motivation to become more digital media literate*.

Their comparatively low level of competencies can be explained by the fact that many of these people have not been required to use technology on a day-to-day basis. As a result, they have not had the chance to familiarise themselves, and experiment, with the internet and/or mobile phones. Findings suggest that having the ability to experiment is a useful, informal means of learning which can often increase a person's confidence.

People's perceived motivation to become more engaged with digital media also affects their attitudes and behaviours. It is an individual's own motivation to want to use the

technology that is the key driver to increasing their digital media literacy. For a limited user to start using the technology there had to be a compelling reason for them to want to access the internet or a particular feature on their mobile phone. People had to be able to see that the benefit would outweigh the effort.

Barriers relating to the low usage patterns of digital media

Because of their limited and/ or irregular use of digital media, participants in the research had not been able to develop an understanding of the underlying assumptions about how digital media work, or the associated commonplace language that has developed among regular users of this type of technology. This means that low level users tend not to have a broad vision of how the internet works and do not pick up transferable skills. Instead, they learn and memorise individual steps, in a method that is similar to rote learning. In effect, they do not have the ability to apply their learning to new situations.

The research indicated that these transferable skills included the ability to use a search engine, navigate around a website, purchase goods on the internet and use features, such as a camera, on a mobile phone. It was also clear that many people did not have a clear understanding of the security measures in place for internet banking as they were extremely hesitant about making these and other transactions online. They were concerned about the security and protection of the personal details and information they would need to provide to make these transactions.

In addition, the lack of comprehension of the basic commonplace language and terminology associated with digital media made it more difficult for them to understand something or remember it.

Attitudinal segmentation

Five attitudinal segments in relation to digital media were identified: 'Resistors', 'Defensive', 'Thirsty', 'Potential Transitioners' and 'Economisers'.

'Resistors'

The 'Resistors' had no desire to use digital media and as a result they showed no interest in changing this situation by either purchasing technology or by increasing their interest and confidence in using digital media. They were the most likely to be non-users or extremely limited users of the internet or mobile phones. These individuals strongly rejected the idea of learning and would have actively avoided any situations to learn about digital media. 'Resistors' claimed they were making an active choice not to use technology. They believed that 'old fashioned' ways work well, so questioned the relevance of beginning to use digital media.

There were very few 'Resistors' within the sample. They were more likely to be at the older-family, post-family and recent retirees life stages. With regard to geographical locations, they were more likely to live in regional areas, perhaps because they have less exposure to new technologies. They came from predominantly blue collar backgrounds and were not using technology in their jobs at all.

'Defensive'

It became clear in the course of the group discussions, as some respondents let their guard down, that there is a group of people who are afraid to admit they would like to learn more about digital media. This group has been termed 'Defensive' in our model. Essentially they recognised that there is a range of benefits to using technologies, however, they lacked the confidence to admit they did not have the skills to take advantage of these benefits. This group had a limited understanding of the underlying assumptions about how digital media works and the associated commonplace language.

They would only use specific websites which they had been shown how to use, and basic calling and texting functions on their mobile phones.

Being surrounded by more digitally competent friends and family appeared to make this segment even more defensive. They claimed it often became too stressful for them to ask for help with technology from their family. Thus, despite having easy access to the internet and mobile phones, their pride, some reluctance to acknowledge their unmet needs, and fear prevent this segment from using these technologies.

This segment comprised a range of ages including individuals who sat within the pre-family, younger-family, older-family and post-family life stages. It tended to include men as opposed to women, and they appeared less prepared to admit to their lack of skills. This segment was more likely to include blue collar workers.

'Thirsty'

The 'Thirsty' had the strongest motivation to learn about digital media. They had begun conducting some activities online but were still being held back to some degree by a lack of understanding of the underlying assumptions about how digital media work, and knowledge of the associated language. They ranged in terms of their current competencies from very low through to medium. They were willing to admit they wanted to overcome their fears, such as disrupting other family members' work, and 'breaking' or causing problems on the computer, as well as their fears about internet security, including internet banking and cybersafety for their children.

The 'Thirsty' were more interested in learning about the internet than mobile phones. They were open to learning about a broad range of activities, from using transactional and information websites through to using emails and Skype. However, this segment was more open to learning about advanced mobile phone functions than other segments.

These people may have taken some steps to participate in courses. Several of them had attended training courses within the community such as those at their community college, TAFE, local library or senior citizens group. The majority of people who had attended these had found them helpful, clear and inexpensive. Yet for others, these courses sounded intimidating and they had learnt the basics from friends and family. Some had taught themselves by experimenting with the internet in their spare time. This segment comprised people from the older-families, post-families and retirees life stages. It included males and females, as well as white and blue collar workers.

'Potential Transitioners'

'Potential Transitioners' were people who had taken the first step in using digital media, but only used it when they could see there were clear benefits. They regarded technology as a 'means to an end', as opposed to something they use for entertainment or enjoyment, and were reluctant to experiment further. They were only happy to use services they felt comfortable with, such as websites they were familiar with, sending emails or using Skype. They were reluctant to experiment further as they claimed they preferred the traditional methods. This segment also lacked the conceptual understanding of, and knowledge of the commonplace language associated with, digital media.

'Potential Transitioners' drew the line at conducting transactions, banking and paying bills online, claiming that they thought it may be unsafe and that they preferred to retain some face-to-face contacts. However, these may be post-rationalisations that illustrate their lack of confidence in using these websites.

This segment included people with younger families who claimed that in the future they would like to learn more about cybersafety for the sake of their children, post-family individuals, retirees who have the time to take advantage of the benefits that come from using the technology, and people in rural areas who can see that the benefits of using digital media outweigh the difficulties. People in this segment included white and blue collar workers, and were more likely to be women.

'Economisers'

'Economisers' were people who had a positive relationship with technology. The costs of acquiring and maintaining digital media were the key factors influencing why this segment was not currently using digital technology. For some people the actual costs were off-putting and they could not afford to purchase particular technologies. For others, purchasing the technology was not a high enough priority for them to justify the costs. It is likely that most 'Economisers' will choose to re-engage with digital media when they believe the benefits outweigh the costs or when they have greater disposable income.

Some 'Economisers' had access to the internet at work or at their friends' or families' houses. However, they did not regard access to the internet as a necessity. This segment tended to purchase a cheap, basic mobile phone which they only used for essential calls and in emergencies. Some explained that they preferred text messaging to calling because it was cheaper. They perceived the newer mobile functions, such as sending picture messages and using the internet, as being extremely costly and therefore avoided using these features.

The 'Economisers' were more likely to be from younger life stages and included those at the pre-family and younger-family life stages. They included a range of people including students, those who had recently moved out of home, single parent families and one-income families. They were more likely to come from blue collar backgrounds.

None of the members of the segments in this study appeared to be making an active choice not to use digital media. The 'Resistors' and 'Defensive', and to some degree the 'Potential Transitioners', claimed to be making an active choice. However, in reality they seemed to be making excuses to cover up their lack of competence. The 'Thirsty' were open to admitting they face barriers to further usage, which included their lack of competence, fears and insecurities. The 'Economisers' identified costs as the major barrier to digital media usage.

Summary of the attitudes of the segments

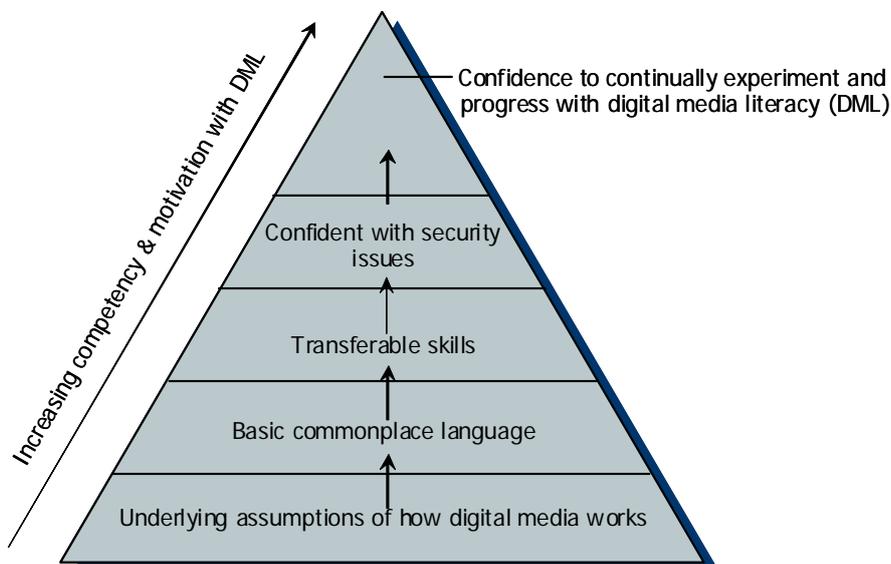
Figure 1 Summary of attitudes

| | Resistors | Defensive | Thirsty | Potential Transitioners | Economisers |
|-------------------|---|--|---|---|---|
| Defining attitude | No interest in technology – see it as worthless | Afraid to admit would like to learn more | Genuine desire to want to learn more | See technology as a means to an end but can see the advantages | Positive attitude but usage not a big priority to them |
| Behaviour | Non or little use of technology | Little usage – will only use applications they feel comfortable with | Begun using technology and can see the benefits | Use technology up to a point where can see it adds real value | Little usage because prohibited by costs |
| Skills Need | Sitting on the lower rungs of the skill hierarchy, they need to know the underlying assumptions of how digital media works and the language in order to develop transferable skills | | | Sitting on the middle rung of the hierarchy, should focus on building confidence with transferable skills and internet security | Sitting at the top of the hierarchy, need to encourage ongoing practice to prevent them losing skills |
| Demographics | Older family Post family Recent retirees | Pre / Younger / Older Post Family | Older family Post family Retirees | Younger / older / post Family Retirees | Pre-Family Younger-Family |
| | Male and Female | More likely to be male | Male and Female | More likely to be female | Male and Female |
| | Blue and white collar | More likely to be blue collar | Blue and white collar | Blue and white collar | More likely to be blue collar |

Hierarchy of skills, knowledge and understanding

An analysis of findings from the research enabled us to identify a hierarchy of desirable skills, knowledge and understanding for non- and limited users of digital media (see Figure 2). Each layer of the pyramid is built on the one below. Acquiring skills in each of these areas will enable users to build the confidence to experiment with digital media, and thereby develop their digital media literacy.

Figure 2 Hierarchy of skills, knowledge and understanding



The fast pace at which technology is progressing makes it extremely important for non- and limited users to develop an understanding of digital media. If people choose to stand still, they will inevitably slip behind the rest of society in their understanding and capabilities, become more dependent on others, and will be unable to take up the benefits of digital media for themselves.

Suggested ways of encouraging take-up of digital media by non- and limited users

On the basis of the findings of this research, the researchers propose the following suggestions about possible ways of increasing the engagement of non- and limited users of digital media and communications.

Communicating the possible benefits of using digital media is likely to be a useful way to help encourage non- and limited-users to become more engaged with digital media, and to help motivate them to learn more about digital media. For example, it could be helpful to highlight that becoming more digital media literate would allow people to be less reliant on other people to use the media for them, and that they would no longer feel left behind, or less capable than others around them.

For some audiences, it is also likely to be helpful to highlight that digital media increases people's options rather than requiring them to give up their traditional ways of doing things.

Because many non- and low users of the internet were defensive or embarrassed about their skill levels, it is likely to be important to express this message in a positive tone. Using real people with stories that illustrate the benefits of using digital media is likely to be engaging. Findings suggest that creating a memorable image in people's minds of the benefits of keeping up to speed with digital media and not getting left behind could also help to achieve this.

Essential to improving people's digital media literacy is recognising that there appears to be a hierarchy of skills, knowledge and understanding that they need to acquire. Before they can develop transferable skills, people need to understand the underlying assumptions about how digital media work and the associated commonplace language of digital media. Once they have these skills, they will become more confident about dealing with issues such as security, and are then likely to be encouraged to build on their skills and experiment and progress with digital media.

Businesses, service providers, government organisations and the general public should be made more aware of the low level competencies of non- and limited users, and should take this into consideration in the provision of online services and other digital media offerings. Moreover, people could generally be made aware that they need to help non- and limited users to learn more about digital media, rather than simply doing tasks for them.

Specific communication needs of each segment

'Resistors' and 'Defensive'

The 'Resistors' and 'Defensive' are likely to be extremely difficult to influence, but they need to be persuaded of the importance of understanding and using technology so as to be able to fully participate in society in the future. These two segments sit on the bottom rung of the hierarchy of skills and consequently they need to gain an understanding of the underlying assumptions about how digital media work and the commonplace digital media language so that they can acquire transferable skills.

Ideally, communications directed at these people would promote the benefits they would gain by using digital media technology. The message may also need to highlight why they should not be left behind. Strategies used to address the needs of this segment should make them feel confident enough to try using digital media and should not make them feel embarrassed in any way. The ideal would be to shift the mindsets of the 'Resistors' and the 'Defensive' to become 'Thirsty', although it is recognised that this would take the most time and resources. If this is not possible, it may be more efficient and effective to focus on the 'Thirsty' and the 'Potential Transitioners'.

'Thirsty'

The 'Thirsty' will inevitably be the easiest segment to influence as they are keen to develop their skills, knowledge and understanding. As they sit at the lower to middle rungs of the hierarchy of skills, reinforcing their knowledge of the underlying assumptions about how digital media work and the commonplace digital media language will help them to develop their digital media literacy.

'Potential Transitioners'

The 'Potential Transitioners' must not allow their existing knowledge to diminish. There is a danger that they may slip into the 'Defensive' and 'Resistors' segments if they remain reliant on the 'old' way of doing things. Although this segment has a better understanding of digital media than the 'Thirsty', this familiarity with technology needs to be maintained in the face of rapid and continuous technological change. The 'Potential Transitioners' currently sit in the middle rung of the hierarchy of skills, and one of their specific needs would be to build confidence with security issues so as to encourage them to start using transactional websites. This segment already recognises some of the benefits associated with using digital media, but further advantages should be promoted.

'Economisers'

'Economisers' need to be kept up-to-date about the benefits of technology, so that, when they choose to engage once more (for example, when their circumstances change), they can easily do so. They need to be told of the benefits of investing in digital media and having access to the technologies at home, particularly those who have children. Although they currently have the skills outlined in the hierarchy of skills, there is some danger that as technology develops they will lose touch quickly, making it more difficult for them to re-engage later.

People for whom costs are a real barrier to engagement with digital media might be persuaded to use digital media if they are provided with advice or information on strategies to minimise costs. This could include information on the most appropriate internet or mobile plans for specific personal circumstances or information on costs of equipment. Others from low income households might need to be encouraged to take up any existing government subsidies, such as the Education Tax Refund that is available to families.

Background to the research

Overview

The ACMA is responsible for the regulation of broadcasting, the internet, telecommunications and radiocommunications in Australia. The ACMA's activities include the provision of information and advice to the community about communications matters, and the administration of a range of consumer protection measures.

Skills and confidence in using new communications and media services are becoming increasingly important for participation in all aspects of Australian society. In recognition of this, the ACMA has initiated a digital media literacy research program to inform the provision of consumer advice and protection measures by the ACMA and by organisations active in the promotion of media literacy across Australia.

Digital media literacy can broadly be understood as the possession of the skills, knowledge and understanding which will enable a person to confidently engage with a wide variety of digital media, applications and services.

The digital media of interest to this project are the internet and mobile phones.

The ACMA is focused on helping the community to confidently use, participate in and understand digital media and services, as this is becoming crucial for effective participation in society. Without these skills, individuals have the potential to be excluded from benefits that could assist them with everyday social, cultural and economic situations. Individuals may also lack the ability to protect themselves from unwanted, inappropriate or unsafe content on the internet.

Whilst the gap is closing in terms of access to information and digital media technologies, there is still a visible usage divide associated with particular segments of the community. As we move towards an increasingly digital economy, it is becoming more important to understand why people are not using digital media or are using it only in a limited way. This is a key area for exploration in this research.

The research presented in this report was commissioned as part of the ACMA's digital media literacy research program.

The need for research

The ACMA identified a need to understand the attitudes and experiences of adult Australians who are non-users or limited users of digital media and communications, including the factors that influence and explain non-use or limited use of digital media.

In particular, there was a need to establish a profile of these people in order to better understand factors for low or non-participation, and determine whether there is a need to develop programs and strategies to encourage the take-up and effective use of digital media. Understanding these attitudes and behaviours will assist the ACMA and other government agencies to identify which gaps in digital media literacy might best be addressed, and to develop appropriate policy initiatives.

Research objectives

Research objectives

The overall aims of the research were to assist the ACMA in understanding the attitudes and behaviours of adult Australians who are non-users or limited users of digital media and communications, in order to fully understand the factors that influence and explain non- or limited use of digital media, specifically the internet and mobile phones.

The specific research objectives were to:

- > establish the strategies adopted to access and participate in digital media, such as accessing the internet at libraries or help from friends/family;
- > identify whether non- and limited users are aware of the content and services available to internet/mobile phone users, such as accessing Government services, social networking, information seeking and content generation;
- > build on previous quantitative research findings in which people reporting low levels of digital media usage gave reasons such as 'no interest/no need' and 'lack of skills' for their low usage;
- > identify whether non- and limited users have different or similar attitudes towards the different technologies, in particular the internet, mobile phones and digital TV;
- > understand the benefits of current uses of the internet and mobile phones for limited users;
- > understand the frustrations that limited users have with using the internet/mobile phones;
- > establish whether non- and limited users feel that not using digital media is a limitation;
- > identify the main barriers to digital media engagement and those which are more peripheral; and
- > identify any activities which would potentially encourage greater use of digital media.

Methodology

Overview

GfK Blue Moon conducted a program of qualitative research that consisted of 10 group discussions and six in-depth telephone interviews involving non- and limited users of digital media. Each group discussion comprised 6 to 8 respondents and was approximately one hour and forty-five minutes in duration. The group sample was designed to include metropolitan and regional areas of three states.

Group discussions were used as the primary methodology for this project as these provide an environment in which ideas and experiences can be exchanged, which is essential in exploratory research. However, individual telephone interviews were also conducted with people in rural areas across three states as these people are difficult to gather together in group discussions.

Sample

Our sample design for this study is shown in the table below. Please note that the rationale for the sample characteristics is detailed in section 4.3.

Table 1 Sample of focus groups

| Gp | Comfort Level | Life stage / Age | Seg | Location | State |
|----|---------------------------------------|------------------------|--------------|-------------------------|-------|
| 1 | 'Less comfortable' with digital media | Pre-family (18–30) | Blue collar | Metro - Sydney | NSW |
| 2 | | Younger family (22–40) | Mix | Regional—Sunshine Coast | Qld |
| 3 | 'More comfortable' with digital media | Older family (35–60) | White collar | Metro—Brisbane | Qld |
| 4 | | Post-family (45–65) | Mix | Metro—Melbourne | Vic. |
| 5 | | Retired (65+) | White collar | Regional—Wagga Wagga | NSW |
| 6 | 'Less comfortable' with digital media | Pre-family (18–30) | Mix | Regional—Sunshine Coast | Qld |
| 7 | | Younger family (22–40) | Blue collar | Metro—Brisbane | Qld |
| 8 | | Older family (35–60) | Blue collar | Metro—Sydney | NSW |
| 9 | | Post-family (45–65) | White collar | Metro—Melbourne | Vic. |
| 10 | | Retired (65+) | Mix | Regional—Wagga | NSW |

Table 2 Sample of in-depth telephone interviews

| Depth | Comfort Level | Life stage / Age | Seg | State |
|-------|---------------------------------------|------------------------|--------------|-------|
| 1 | 'More comfortable' with digital media | Pre-family (18-30) | Blue collar | Vic. |
| 2 | | Younger family (22-40) | White collar | NSW |
| 3 | | Post-family (45-65) | Blue collar | Qld |
| 4 | 'Less comfortable' with | Pre-family (18-30) | White collar | NSW |
| 5 | | Older family (35-60) | White collar | Vic. |

Rationale for sample

Our rationale for the variables used to segment the sample is described below.

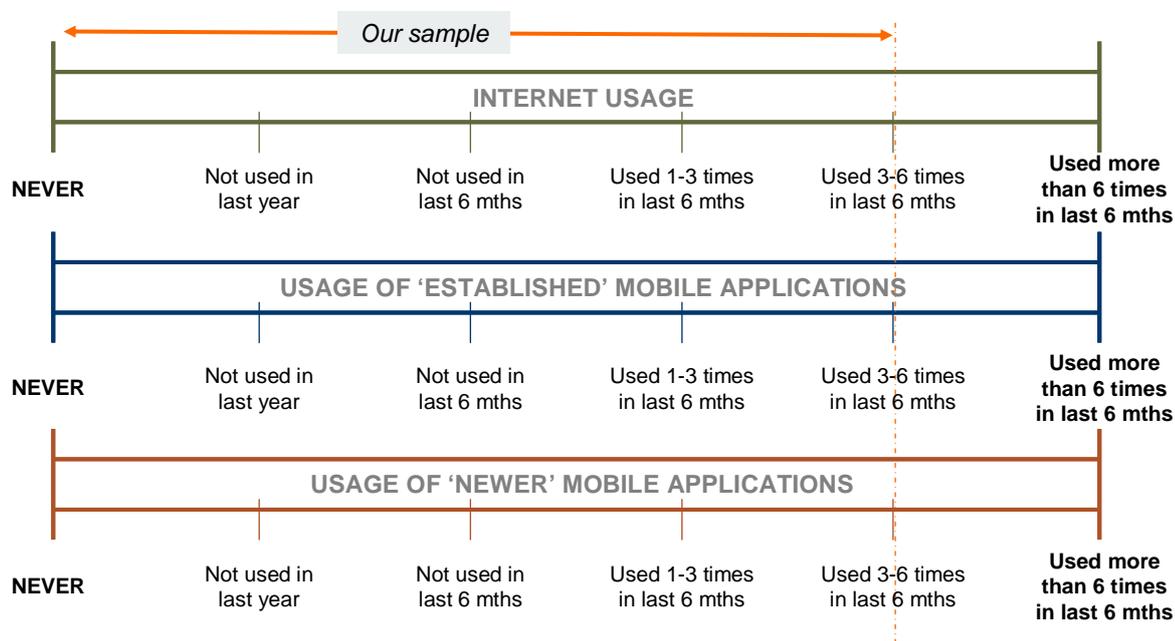
Digital media usage

The sample comprised non- and limited users of digital media. In this report digital media means the internet and mobile phones. We defined non- or limited use of the internet in terms of the types of services used and the type of access the respondent has. The recruitment screener largely ruled out those who used the internet more than six times in the last six months for any of the following reasons: transactional purposes, such as banking, shopping and using Government services; information gathering; and/ or social connectivity. Across the groups we included a mix of those with no home access to the internet; access to the internet at home via a dial-up connection; and access to the internet at home via a broadband connection.

Limited mobile phone usage was defined in terms of usage of applications and functions, including text messaging, static and video cameras, internet access, email access, mp3/mp4 functions and gaming. Within this research 'established mobile phone features' were defined as text messages and static camera, and 'newer advanced mobile phone applications' referred to video cameras, mp3/mp4 players, GPS and internet connectivity.

The sample was not split by non- and limited usage of digital media. This is due to the fact that we anticipated that there would be a continuum, rather than a clear dichotomy in relation to these factors, with potential respondents' usage falling at different points on the continuum for different categories of media. This hypothesis was confirmed by the research findings. This is illustrated in Figure 3 below.

Figure 3 Digital media usage scales



In some groups there were one to two non-users of either the internet or mobile phones. The rest of the sample consisted of limited users who fell at different points on the continuum for the three different categories of media: internet, established mobile phone applications and newer mobile phone applications.

Comfort levels with digital media

To promote positive group dynamics, our sample was segmented by 'comfort levels' with using digital media technologies. We wanted to avoid a situation in which respondents who are not confident about using digital media found themselves in a group discussion with people who are relatively confident and have other reasons for low usage, such as lack of time. Some respondents may have been reluctant to admit to their lack of confidence or may have deferred to the more confident respondents in the discussions in the group context.

During recruitment it became apparent that participants in younger groups all appeared to be 'less comfortable' than their peers when it comes to digital media as opposed to 'more comfortable'. Therefore, the criteria were altered to reflect this finding.

A sensitively worded set of statements was devised in the recruitment screener that asked people to think about how confident they felt compared with their peers with regard to using digital media. The recruitment screener can be found in Appendix B.

Life stage

Previous studies clearly indicate that digital media usage declines with age. However, there was a need to include adults of all ages in the study to ensure that the needs of all adult Australians were explored. Our sample therefore included adults of all ages from 18 to over 65 but was slightly skewed towards older age groups, with two groups at the pre-family life stage, four at the family life stage and four at the post-family/retired life stage.

Someone from a 'younger family' was defined as a parent with at least one child of primary school age or younger. 'Older family' was defined as parents with at least one child of secondary school age.

Reasons for non- or limited usage of digital media

We ensured that a variety of barriers and reasons for non- or limited use were represented by participants in each group. These barriers and reasons included: limited access, technology being too costly, not interested in using digital media and not that confident in using it.

Socio-economic background

The sample included a representative mix of those classified as blue and white collar. 'White collar' refers to people in professional occupations and 'blue collar' refers to those with occupations that do not require specific tertiary qualifications, such as a trade.

Location

Groups were conducted in three states, New South Wales, Victoria and Queensland, as this reflects the views and behaviours of the vast majority of Australians. The metropolitan groups were held in Sydney, Melbourne and Brisbane. The regional groups were held in Wagga Wagga in NSW and on the Sunshine Coast in Queensland. We also conducted six in-depth telephone interviews in regional areas of the three states.

Gender

The sample included a roughly equal mix of men and women.

People from non-English speaking backgrounds

People from non-English speaking backgrounds (NESB) were recruited as they naturally fell in the population.

Disability

A representative number of people with disabilities were included in the post-family and retired groups since the proportion of people with a disability is highest among these age groups. People with disabilities such as arthritis and visual impairments were included in the groups because it was thought that these types of disabilities could have an impact on people's digital media literacy.

Recruitment of respondents

Respondents were recruited by specialist recruitment companies that regularly partner with GfK Blue Moon. A recruitment screening questionnaire structured around the attitudinal and demographic variables outlined in the sample was used for recruitment (Appendix B).

Discussion guides

A semi-structured discussion guide was developed and was approved by the ACMA prior to use. The discussion guide is at Appendix C.

Research timing

The research was conducted between 30 March and 3 April 2009.

Detailed findings

Current attitudes towards digital media

The importance of the internet and mobile phones

Non- and limited users of digital media in our sample felt that learning about the internet was more important than learning about the mobile phone features they are not currently using. The internet is regarded as unique and offering something they cannot get elsewhere. It provides a range of opportunities to assist people in everyday social, cultural and economic situations. Examples include using Skype to contact with family abroad, checking health information, purchasing goods, internet banking and email as a cheap and timely way to contact people or businesses.

Most respondents were using their mobile phone as much as they felt they needed to. The majority use the landline as their main method of calling someone as this is thought to be more cost effective. Most people explained they have a mobile phone as a safety net in case of an emergency. Those who use their mobile more frequently were mainly using it for calling and texting. They had little interest in using the advanced features such as video cameras, mp3 players, GPS and the internet on a mobile phone. This is due to the fact that if they want to use these functions they will use a separate GPS or a roadmap, an mp3 player or the radio, and/ or a digital camera or a video camera. These features on mobiles are regarded as 'nice to have' but they are not something which they feel helps them to participate more easily in society. Consequently, they do not see a need to learn how to use these functions.

People's unmet needs were largely associated with the internet. Many recognised that the internet is becoming increasingly important in society. However, the extent to which people wanted to use it themselves was distinctly different. In contrast, attitudes towards using established and newer features on mobile phones were very similar. Most have little interest in learning how to use newer features as they do not feel they are being socially excluded by not knowing how to use them. Even with an increase in the number of mobile phones that offer internet access, it does not appear that this will increase usage among non- and limited users for some time, as they do not appear to be interested in using these advanced features.

Usage patterns of different digital media

One of the research objectives was to identify whether people have similar attitudes towards using different types of digital media. Respondents were asked how comfortable they felt using the internet, mobile phones and digital TV, as well as traditional media such as newspapers.

It became apparent that there was some association between the usage of different digital media by research participants, with non-users or low users who were uncomfortable with one technology sometimes being uncomfortable with another. However, this was not a strong association. Rather, the research found that usage patterns of different types of digital media tended to be highly individual depending on people's own needs, motivations and the usage context.

Non- users' usage patterns

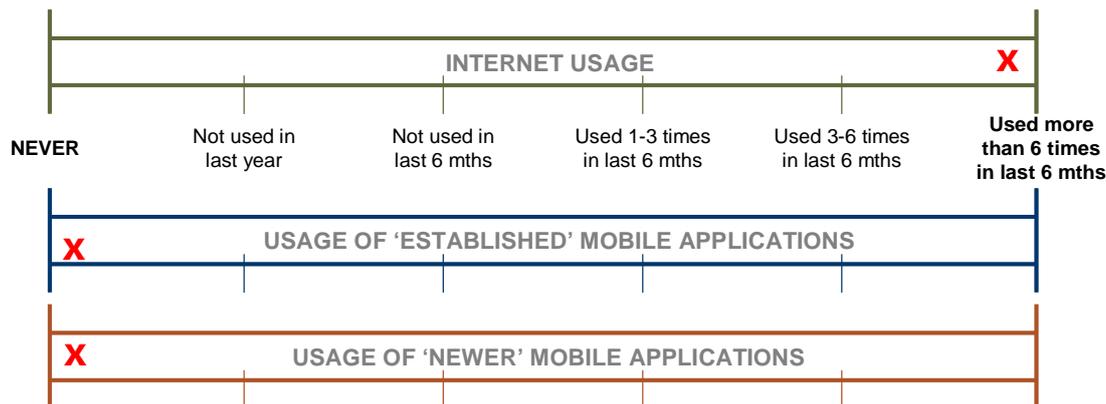
Non-users tended not to be rejecters of all types of digital media. Respondents were often comfortable using one technology but not another. Others claimed there were benefits associated with using a particular type of digital media, hence they used this one and not the others. No-one in our sample was a rejecter of both the internet and a mobile

phone. The case study of David, below, illustrates this. Figure 4 depicts David's usage patterns of different technologies, as marked by the crosses.

Case study: David

David is an accountant with three teenage children who uses the internet for work and at home. However, he does not own a mobile phone as he genuinely does not see a need. He uses the landline at home or work.

Figure 4 David's usage patterns of digital media



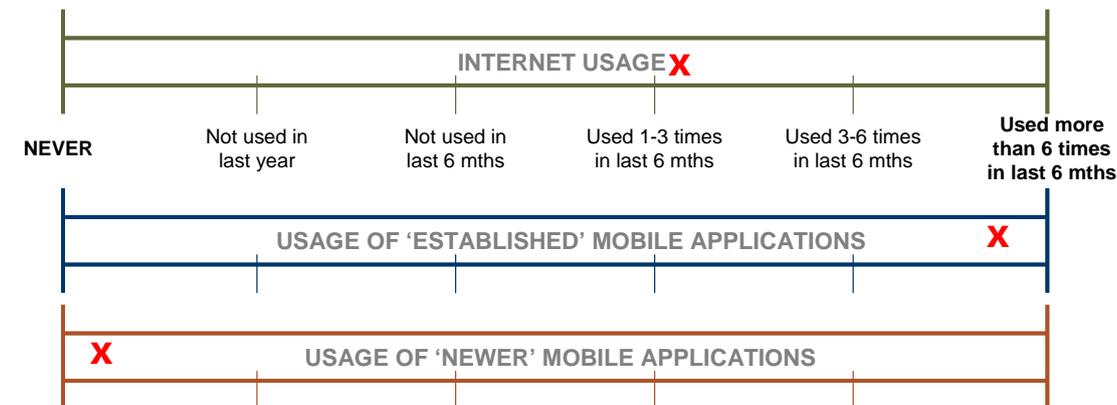
Limited users' usage patterns

The research findings supported our hypothesis that there would be a continuum in terms of people's usages of different digital media rather than a clear dichotomy. Due to the fact that usage is highly dependant on people's individual circumstances, limited users appeared on different points of the usage scale. This is illustrated by the following case study:

Case study: Leanne's usage patterns of digital media

Leanne has two children and has become confident using the camera on her mobile phone for her work as an interior designer. However, she is more fearful of the internet and uses it only on occasion for a specific purpose. Figure 5 depicts her usage patterns, as marked by the crosses.

Figure 5 Leanne's usage patterns of digital media



Overarching attitudes towards developing digital media literacy

Descriptions of people who are heavy and light users of digital media

Respondents in the research were asked to complete a projective exercise to elicit underlying beliefs that might act as barriers to increasing their digital media literacy. At the beginning of each group, respondents were asked to describe a 'day in the life of someone who is a heavy digital media user'. People were asked to imagine the types of activities they would undertake throughout the day. They were then asked to discuss the type of person who would lead this lifestyle and asked to name the stereotype. Subsequently, respondents were asked to repeat the process for a 'day in the life of someone who rarely uses digital media'.

There was a high level of consistency in descriptions of the timetables of the 'heavy' and 'light' users of digital media. Figure 6 depicts the findings by amalgamating the most commonly occurring responses.

Figure 6 Descriptions of the 'day in the life' of a 'heavy' user of digital media and a 'light' user of digital media

| Typical Day in the Life of a Heavy Technology User | Typical Day in the Life of a Light Technology User |
|---|---|
| <ul style="list-style-type: none"> • Wake up, turn off alarm on phone, check for text messages / missed calls. • Ignore others over breakfast by checking their phone / emails. • Drive to work, texting / talking on phone. Use GPS system. • On computer at work all day, checking emails, Facebook, constantly distracted from their work. • In leisure time, surf the Internet, use SNS sites, Skype to talk to family overseas, play online computer games. • Use the Internet for practical tasks e.g. pay bills, book holidays, purchase on eBay, check for news and weather. • Use their camera / video camera / Internet on their mobiles. • Late to bed as on Internet. Before bed, last check of emails, mobiles, turn alarm on phone. Keep mobiles switched on. | <ul style="list-style-type: none"> • Wake up, collect paper from outside. • Eat breakfast with family – converse with one another. Read the paper. TV or radio on in background. • Drive to work – listen to radio and concentrating on driving. • Work outdoors, or away from computers. Concentrating on their job. Time to talk face to face with colleagues. • In leisure time, socialising with friends and family. Exercising. • Outdoors hobbies such as fishing or gardening. • Running errands – going to the shops, visiting post office to pay bills. • Use landline or hand write letters to communicate. • Early to bed. Relax in front of TV. Talk to family. Set alarm clock radio. |

Descriptions of the 'heavy' user of digital media

Most felt that the lifestyle of the 'heavy' user of digital media was not desirable. This person was assumed to be an unsociable, boring 'geek' who is self-absorbed and displays compulsive behaviour. S/he is also thought to be unhealthy as s/he spends all their time at a computer. Names used to describe them included 'slob', 'the bore', 'tech savvy' and 'technohead'. These findings suggest that heavy digital media use is not something to be aspired to for this audience because this way of life is too interfering and the stereotype is too dependent on technology.

Descriptions of the 'light' user of digital media

A 'light' user of technology was described as someone who is more sociable, well mannered and self-reliant. S/he is regarded to be more 'down-to-earth', relaxed and happy. S/he is expected to be healthier as a result of not being indoors all the time in front of a computer. The names for this stereotype included 'technophobe' and 'contented', but also 'old-fashioned-normals' and 'the lost generation'.

The naming of this stereotype showed that although this way of life was regarded as 'normal' and was the one they most relate to, there were some signs to suggest that they recognised that this type of person is being left behind by the rest of the society. There was also a sense that people felt somewhat embarrassed when labelled as 'old fashioned'.

Overarching attitudes and reasons for limited usage

The 'day in the life' exercise revealed that low users of digital media gave two broad reasons for their limited usage:

- > they did not understand why it is a priority;
- > they thought that it was too difficult to change their ways.

This qualitative research revealed that the reasons people gave in previous quantitative research for low usage of digital media, such as 'no interest/no need' or 'lack of skills', might be somewhat simplistic, and the real reasons behind those responses is much more complex.

Difficulty in understanding why usage should be a priority

People claimed that it was not a priority for them to purchase, understand and use new technology. They were happy to carry on with old habits, using 'traditional methods', such as writing and posting letters, paying for bills at the post office and talking to a neighbour face-to-face. These methods had always worked well for them in the past, and there was a sense that they felt they could continue to get by with them perfectly well. In addition, they thought that they would have to give up these traditional methods altogether if they engaged more with digital media, rather than being able to use digital media alongside their traditional ways as a means of enriching their lives.

Perception that it is too difficult to change their ways

Most people also held the view that it was too difficult to change established habits. For many this was regarded as a real stretch that would involve a complete overhaul and change of lifestyle. For those starting from scratch it would involve a great deal of learning. It might make some people feel stupid and this was regarded to be extremely daunting by some. Findings indicate that as long as people have an alternative, easy option to using digital media they are likely to use that method either out of habit, convenience and/or fear.

Awareness of the benefits of using digital media

Despite the cynicism about using digital media, there was relatively widespread awareness of the benefits of using digital media, in particular the internet. This is because people recognised that the internet is playing an increasingly significant role in society. Many people were aware of the benefits of the internet for their own family and friends. They were also increasingly hearing positive stories about new technologies in the media.

The main benefits that people recalled were the convenience and time saving factors that come with using digital media, such as paying bills online or sending an email with news

to a friend abroad, as well as the wealth of information sources available at their fingertips.

Another major benefit that people recalled is that digital media is a useful means of communicating and socialising, such as using Skype and social networking sites, and having mobile phones available for use in emergencies. Some respondents talked about the benefits of saving money by knowing how to search for last minute deals and cheap tickets, as well as buying goods on eBay. Finally, when respondents were prompted, some were aware of the benefits of using services online such as searching for job vacancies or using Government services such as completing tax returns online.

However, it was apparent that the majority of our sample did not appreciate the full extent of the benefits that are on offer through using digital media, and this made them less curious to learn more about them. For example, one respondent recalled 'Twitter' as a site everyone, including her own children, was talking about. Although she knew the name, she had no idea about the purpose of the website. Similarly, another respondent with an older family knew she had GPS on her phone but had no idea how to use it. All she knew was that it would probably be useful for getting her from A to B.

Key driver affecting digital media usage

The research found that the key driver to usage of digital media appeared to be an individual's own motivation to want to use the technology. For a limited user to start using the technology there had to be a compelling reason for them to want to access the internet or a particular feature on their mobile phone. Overall, people had to be able to see that the benefit would outweigh the effort.

Motivations were extremely varied and depended on individual circumstances. For example, one respondent knew how to use 'Skype' to communicate with her family abroad but had very little knowledge of how to use the internet for other activities. Another respondent only knew how to check sites about fishing and the weather and one woman, whose children had shown her how to access Google Earth, was extremely motivated to see her and her family's street views.

Barriers relating to the low usage patterns of digital media

There were two key factors, common to the sample of non- and limited users of digital media, which appeared to be the main barriers to increased usage of digital media:

- > most people had never been required to use technology on a day-to-day basis;
- > they had therefore not been able to develop an understanding of either the underlying assumptions about how digital media work, or the associated commonplace language that has developed among regular users of these types of technologies.

These barriers are discussed in detail below.

Low usage of digital media on a day-to-day basis

Low level users of digital media tended not to use them on a day-to-day basis. Those who were working tended to work outdoors or 'on the go', and included people such as tradesmen or sales people. In addition, some were working in roles that did not use computers and/ or mobile phones, such as a shop assistants or childminders. Some stay-at-home mums and retirees in our sample had never worked anywhere involving technology. Indeed for most of these individuals, digital media technology was not around when they were working.

As a result, these people have never had the opportunity to use technology regularly and have not had the chance to familiarise themselves and experiment with the internet and/or mobile phones. Findings suggest that having the ability to 'experiment' is a useful informal means of learning which can often increase a person's confidence.

Lack of understanding of the underlying assumptions about how digital media work

Because of their limited and/or irregular usage of digital media, participants in the research had not developed an understanding of the underlying assumptions about how digital media work. Thus, instead of low users having a broader vision of how the internet works and the ability to learn transferable skills, they tend to learn and memorise individual steps, in a method that is similar to rote learning. In effect, they do not have the ability to apply their learning to new situations.

The research indicated that these transferable skills included the ability to use a search engine, navigate around a website, purchase goods on the internet and use advanced features, such as a camera, on a mobile phone. For example, one lady knew how to bid and purchase goods on eBay but did not know how to pay for the goods and left this to her children. She would not have known how to search and pay for something on a different website. Another respondent knew how to text and use the camera on her current mobile phone, but thought that if she were to upgrade to another model she would have to learn these steps all over again, rather than being able to apply the knowledge she already had to the new phone.

Although issues regarding set-up of computer equipment and modems and connecting with the internet were not explicitly stated as a barrier, it was clear that most people relied on their friends and family to do this for them. Thus, having some knowledge of how to set up equipment, as well as how to solve problems when they arise, is likely to make users feel more competent with digital media.

In addition, many low users of the internet did not understand the basics of how it works. As a result many realised that they were failing to see its potential. For example, the majority of respondents were unaware of the most effective methods of using a search engine. In one case, a retiree wanted to search for information on 'how to rejuvenate a pot plant'. Without knowing the best method for refining her search she only managed to obtain information on how to grow cannabis.

I think there's a lot more than we realise, you've just got to find it.

It was also clear that many people did not have a clear understanding of the security measures in place for internet banking as they were extremely hesitant about making these and other transactions online. They were concerned about the security and protection of their personal details and information they would need to provide to make these transactions.

However, in some cases, respondents seemed to use security concerns as a post-rationalisation for not using the internet for transactions, when in fact the reason for their low usage seemed to be more a lack of confidence and skills.

Lack of understanding of the commonplace language and terminology associated with digital media

Many people in our sample were also unable to comprehend the basic commonplace language and terminology associated with digital media. As a result, this made it more difficult for them to understand something or remember it. For example, one respondent with an older family was getting advice from a friend about the internet over the phone.

When asked to 'right click', he misinterpreted the instruction and thought he was being told to 'write "click"' somewhere on the screen.

My friend was telling me to 'right click' on a particular link, but I just didn't get it and thought he was telling me to 'write "click"' on the screen!

Because they lack a broad vision of the system, an understanding of the assumptions about how digital media work, the ability to grasp transferable skills, and an understanding of commonplace digital media language, using digital media is more difficult for low users. These are the basic skills that confident users take for granted and it is essential that non- and limited users acquire them if they are to become more digital media literate.

The findings imply that businesses, service providers, government organisations and the general public could be made aware of the low level competencies of non- and limited users and take this into consideration in the provision of online services and other digital media offerings. Moreover, people could generally be made aware that they need to help non- and limited users to learn about digital media, rather than simply doing tasks for them.

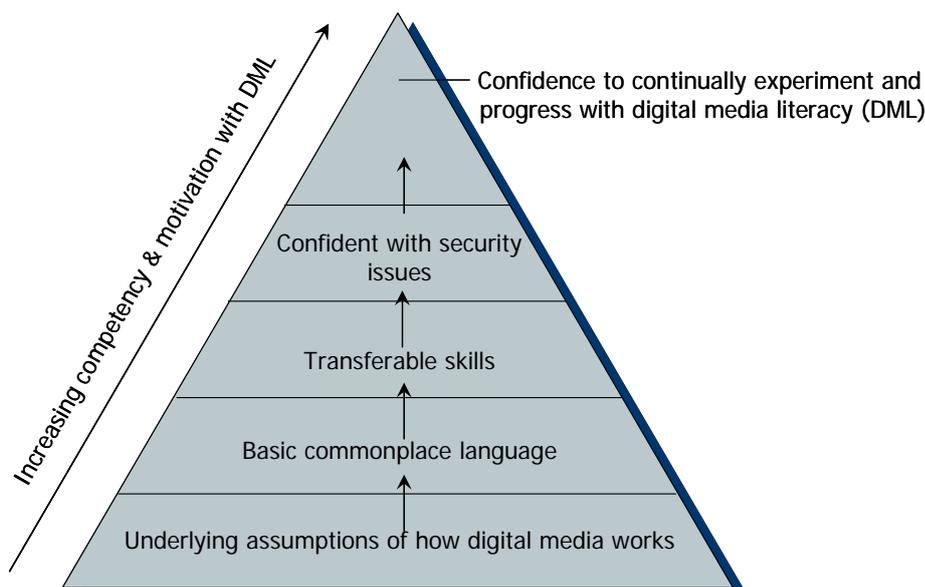
Hierarchy of skills, knowledge and understanding

An analysis of findings enabled us to identify a hierarchy of desirable skills, knowledge and understanding for non- and limited users of digital media. The pyramid shows that:

- users need to have an awareness of how digital media work
- they need to have a basic understanding of the commonplace digital media language
- they need to gain a range of transferable skills, such as being able to use a search engine, navigate around a website and buy goods online, as well as the skills to be able to feel confident with security issues.

Each layer on the pyramid is built on the one below. Acquiring skills in each of these areas will enable users to build the confidence to experiment, and thereby develop their digital media literacy.

Figure 7 Hierarchy of skills, knowledge and understanding



Importance of developing an understanding of digital media

Low users' lack of understanding of the underlying assumptions about how digital media work clearly affects their behaviour in one of two ways. Firstly, there are some people who are not willing to try using digital media, or who are worried about admitting to a lack of knowledge. These people avoid technology altogether, and they become very reliant on others using it for them.

Secondly, there are those limited users who are willing to try using digital media, but only focus on the one or two activities they have been shown. To carry out the activities they memorise the steps involved or refer to a written step-by-step guide. This means that they are only exposed to limited opportunities as they are either unwilling or incapable of experimenting with, for example, different websites or other functions on mobile phones. Their lack of transferable skills and knowledge of the associated language makes everything very difficult for them. This is made worse when something goes wrong. They are unwilling to try to fix mistakes, and are fearful that they may be criticised by other people, for example if they accidentally delete someone else's files. These users also become dependent on friends and family using digital media for them.

The fast pace at which technology is progressing makes it extremely important for people to develop an understanding of digital media. If people choose to stand still, they will inevitably slip behind the rest of society in their understanding and capabilities, become more dependent on others, and will be unable to take up the benefits of digital media for themselves.

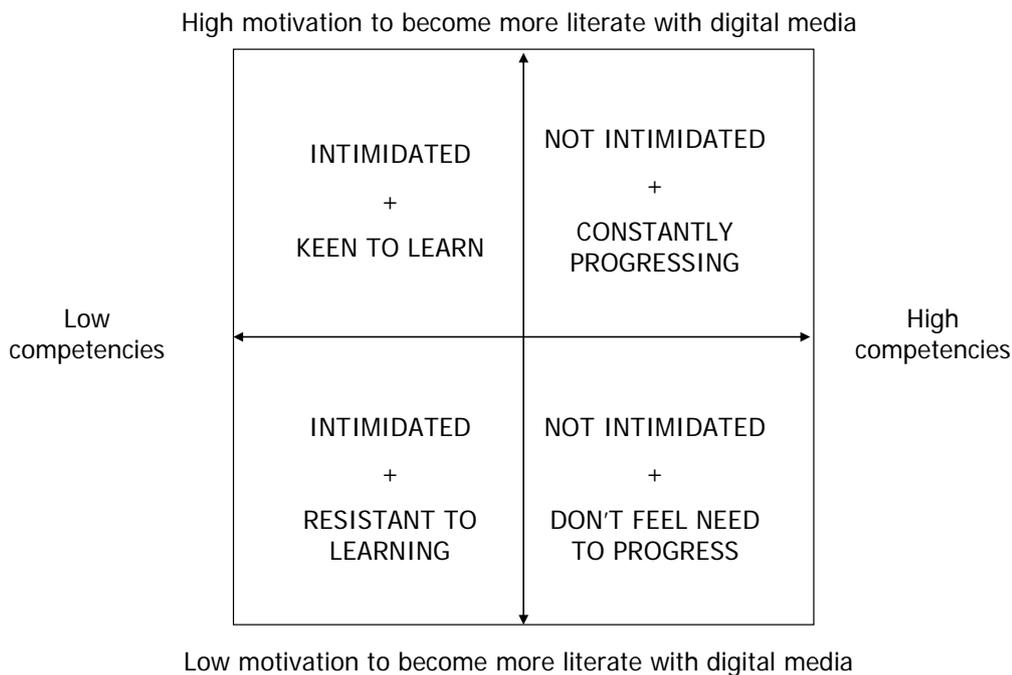
Findings from the research suggest there is a need to communicate the benefits of keeping up with the latest technologies and that this should be approached in a tone that is positive and inspiring (see section on Overall needs of the segments for further details).

Attitudinal segmentation

Attitudes towards becoming more digital media literate

Two key factors affect people's attitudes about, and behaviour in relation to, increasing their digital media literacy. These are their existing competencies with using digital media and their level of motivation for engaging with digital media. When these two dimensions are mapped, four sectors emerge as illustrated in Figure 8.

Figure 8 Mapping attitudes about, and behaviour in relation to, increasing digital media literacy

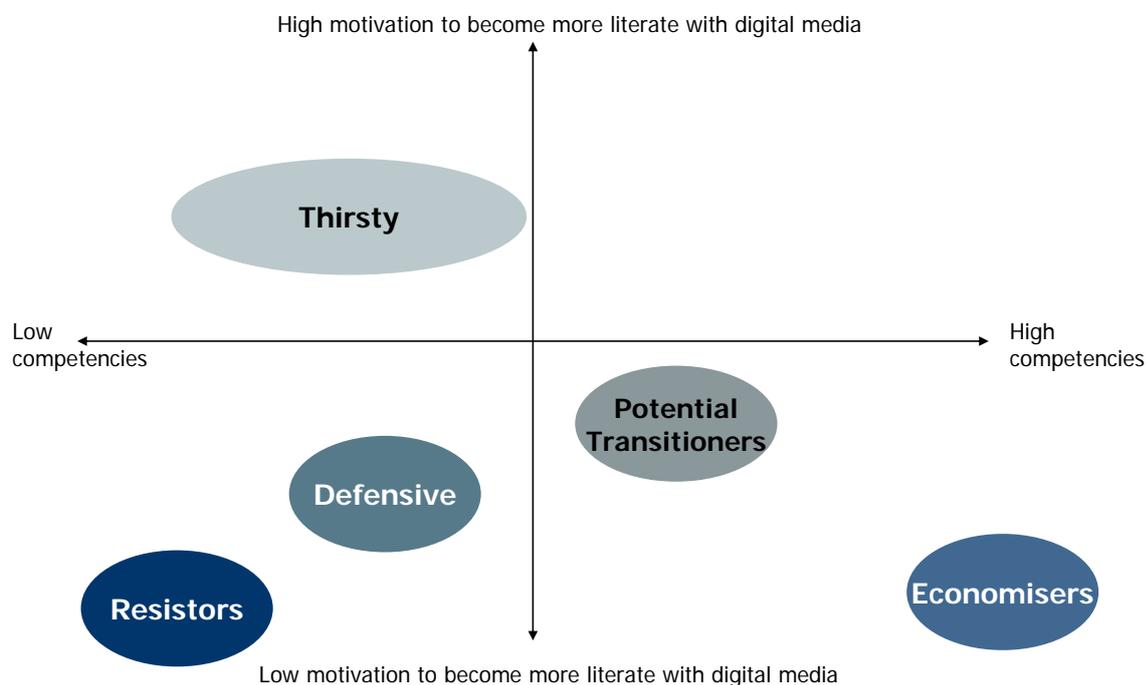


One of the main objectives of the research was to explore the attitudinal commonalities across the groups in order to develop an attitudinal segmentation of non- and limited users with regard to their thoughts on digital media literacy.

This allows for a rich profile of users to be developed, as well as the identification of attitudinal target audiences when communicating the benefits of using digital media. This segmentation has been used later in this report to help to suggest which messages and styles of communication have the most potential to shift attitudes in the different segments.

Five key segments were identified and these are illustrated in Figure 9. Each of the segments represents people's typical over-arching beliefs about their own competencies and motivations to becoming more digital media literate.

Figure 9 Attitudes to becoming more digital media literate



Our five segments fell within three of the sectors on the map. The top right hand corner is where individuals who are already competent and highly motivated to continue progressing with digital media sit. Ideally, this is where everyone would ultimately be found.

In the first segment are the ‘Resistors’ who had extremely low motivation to become more literate as well as very low level competencies.

The ‘Defensive’ include people who also had relatively low motivation to become more literate, but were slightly more willing to learn than the ‘Resistors’. The ‘Defensive’ also had low level digital media competencies.

The ‘Thirsty’ were those who had the highest motivation to increase their skills. They had a broad range of competencies, as depicted by the elongated shape on the diagram.

The ‘Potential Transitioners’ were more competent than the above three segments, but they also had low motivation to improve their digital media literacy.

The ‘Economisers’ had a low (self-) perceived need to progress because they are already competent, but they are not using digital media very much because they think the cost is too high.

Descriptions of the attitudinal segments

‘Resistors’

The ‘Resistors’ had the weakest relationship with technology. They were the least likely to use the internet or mobile phones and they showed no interest in changing this situation by either purchasing technology or by increasing their engagement with digital media.

These individuals strongly rejected the idea of learning and would have actively avoided any situation to learn about digital media. The main reasons digital media appears so difficult for 'Resistors' to use are that they have no understanding of the underlying assumptions about how digital media work and they are not familiar with the associated commonplace language of digital media.

'Resistors' claimed they were making an active choice not to use technology. They believed that 'old fashioned' ways work well, and so questioned the relevance of beginning to use digital media. These people preferred to visit banks or travel agents, speak with friends and family face-to-face or read the newspaper for daily information.

Although they may have the internet at home, it only tends to be used by their children and/ or their partner. Most 'Resistors' will own a mobile, but only for emergency use, although many admitted that it is not often charged up.

There were very few 'Resistors' within the sample. They were more likely to be at the older-family, post-family and recent retirees life stages. With regard to geographical locations, they were more likely to live in regional areas, perhaps because they have less exposure to new technologies. They came from predominantly blue collar backgrounds and were not using technology in their jobs at all.

Case study: 'Resistor'

Barbara is in her early 60s and has only recently retired. She is divorced and lives on her own, as her children have grown up and left home. She spends her leisure time visiting friends, going to the movies, attending church and reading. She is a self-proclaimed 'social butterfly' and says she prefers face-to-face communication wherever possible. She has never used a computer or the internet and only has a mobile phone for emergencies. Her working life did not require the use of a computer or the internet and her mobile phone only has basic calling and text functions. This limited exposure has resulted in a complete lack of digital media literacy, which she readily admits.

Barbara maintains that she is '100% happy' with the traditional way she has always done things and is adamant she would not change her ways. She is happy to continue using a public library to borrow books or research topics of interest, handwriting letters to people living interstate or abroad and conducting all business in person, such as visiting the branch of her bank and paying bills at the post office. She is unconvinced about the benefits of heavier digital media usage and insists she does not want to know how to use technology such as the internet or features on her mobile phone:

I just don't want it [the internet] in my life.

It may seem old fashioned but I don't care. I like things the way they are.

'Defensive'

The 'Defensive' appeared to be afraid to admit they would like to learn more about digital media. They initially seemed similar to 'Resistors', but during the discussions the differences between the two segments became clear. Essentially, they could see (through others' usage) that there are benefits to using digital media technologies but they seemed to lack the confidence to admit that they did not have the necessary skills to take advantage of them. They appeared defensive and were less inclined to admit they wanted to change. This group had a limited understanding of the underlying assumptions about how digital media work and the associated commonplace language of digital media. They would only use specific websites they had been shown how to use, and basic calling and texting functions on their mobile phones.

Being surrounded by competent friends and family appeared to make this segment even more defensive. They said that it often became too stressful for them to ask for help with technology, and that was not conducive to successful learning. Their main concern was that they believed that friends and family did not have the patience to teach them new skills for any useful length of time. Thus, despite having easy access to the internet and mobile phones, their reluctance to acknowledge their unmet needs and their fears prevent this segment from using these technologies.

They also claimed that there are downsides to using digital media. Firstly, they said that it is too boring, that it is not something that they aspired to, or that they had better things to do. For example, one young man said he had a friend who was very good with this kind of technology but the friend does not have a girlfriend. Secondly, they said that there is just too much information on the internet to sift through. Lastly, they said that the technology never works due to factors beyond their control.

In this area you can never get mobile reception.

The computer just has a tendency to stop working when I'm around.

These, however, appeared to be rationalisations designed to avoid having to admit to their lack of skills and confidence.

This segment included a range of ages including individuals who sat within the pre-family, younger-family, older-family and post-family life stages. It tended to include men rather than women, and they appeared less prepared to admit to their lack of skills. This segment was also more likely to include blue collar workers.

Case study: 'Defensive'

James is a manual worker in his late 20s who lives with his partner in a rented place in a regional area. He spends his leisure time outdoors watching sport and attending concerts. He also appreciates travel and adventure. They have broadband at home which his partner uses daily. He uses the internet approximately twice a week but often becomes extremely frustrated with the technology. He seemed to be afraid to admit that this was due to a lack of skills, and instead 'blamed' the technology.

I tried to use Facebook the other day but it wasn't easy to see how to log on.

My banking website changed their home page – I felt like smashing my computer up – it's just easier to visit the bank.

He appreciates that there are benefits to using the internet, such as buying concert tickets and obtaining travel information. He owns a mobile phone with several advanced features but doesn't use them. He once tried to use GPS on his phone but found that it did not work. He tried to rationalise his not being able to use it by explaining that he has heard it is often unreliable and he does not need to use it anyway. Overall, he was very defensive in admitting he would like to learn more. He explained that asking for help from his girlfriend is rarely successful:

I just can't be bothered to be shown, as I won't remember it and she moves on so quickly

'Thirsty'

The 'Thirsty' were people who were more open than any other segment and had a genuine desire to want to learn how to become more digital media literate. They had

begun conducting some activities online but were still being held back to some degree by a lack of understanding of the underlying assumptions about how digital media works and knowledge of the associated language. They ranged in terms of their current competencies from very low through to medium.

They were the most passionate segment and had the strongest motivation to learn about digital media. There were several respondents, many of whom had been stay-at-home mums, who were motivated to re-enter the workplace. They realised that many professions require people to be competent with computers and the internet, and knew that they needed to be up to speed with these technologies.

They were willing to admit they wanted to overcome their fears which were often associated with issues such as disrupting other family members' work, 'breaking' or causing problems on the computer and internet security, including online banking and cybersafety for their children.

I once lost my son's HSC work so I'm afraid to use the computer now.

As soon as I touch it, it seems to stop working.

There's so many predators out there, I've got no idea about the settings on my computer.

The 'Thirsty' were more interested in learning about the internet than mobile phones. They were open to learning about a broad range of activities from using transactional and information websites through to using email and Skype.

This segment was also most likely to say they would like to see a basic mobile phone which is simple and easy to use. The retirees who fell into this segment explained they would welcome a product with large buttons and a well-lit, good-sized screen, designed to take account of some of their physical limitations.

I don't think there's a mobile phone out there that is designed for someone over the age of 45...loads of them are tricky and the buttons are so small.

The 'Thirsty' could not see any major advantages of using newer mobile phone applications. However, this segment was more open to learning about these functions than others were. A minority of the 'Thirsty' who had some of these established functions on their phones would like to learn how to use Bluetooth, GPS and the video camera.

These people may have taken some steps to participate in courses. Several of them had attended training courses in the community, such as those at their community college, TAFE, local library or senior citizens group. The majority of people who had attended these had found them helpful, clear and inexpensive. Yet for others, these courses sounded intimidating and they had learnt the basics from friends and family. Some had taught themselves by experimenting with the internet in their spare time.

This segment comprised people from the older-families, post-families and retirees life stages. These individuals had the most time to learn about the technologies. They had already made time to take those first steps and could recognise the major benefits. It included both males and females, and white and blue collar respondents.

Case study: ‘Thirsty’

Joyce is retired and is in her late 60s. She lives with her husband in an outer metro suburb. She travels extensively, is learning French and enjoys gardening, scrap-booking and walking, and is passionate about learning new activities. She has broadband at home which she uses at least every second day. She indicated that she is really ‘starting to get the hang of’ the internet and is keen to learn more about what she can do online and how to do things more quickly. She is still trying to grasp the language associated with the internet and she thinks that her lack of knowledge is currently limiting her ability to do more.

She is excited by the internet and the benefits of going online such as researching and booking travel, finding cheap deals, sourcing ‘hard to find’ products or gifts and sending and receiving photos of her grandchildren. She is extremely keen to learn more:

I think the internet is fantastic. I just need some help to do a few more things. At the moment I have to get my son to write down the steps for how to do it all.

She owns a mobile phone with advanced features, but currently she does not use them as she does not know how. She sees the benefit of features such as a camera and is not opposed to using them, but she needs someone to teach her in a patient and simple manner.

Sometimes the young kids working at a phone shop can make you feel like a real raspberry— they whiz through things and old people like us don’t pick it up that quickly.

‘Potential Transitioners’

‘Potential Transitioners’ tended to be people who had taken the first step in using digital media, but only used it when they could see there were clear benefits, such as saving time or costs. They regarded technology as a ‘means to an end’ rather than something they use for entertainment or enjoyment. Some people in this segment claimed they had limited time to spend on the internet.

They were only happy to use services they felt comfortable with, such as websites familiar to them, sending emails or using Skype. They were reluctant to experiment further as they claimed they preferred the traditional methods. This segment also lacked the conceptual understanding of digital media and the commonplace language associated with it.

‘Potential Transitioners’ drew the line at conducting transactions, banking and paying bills online, which they said they believed might be unsafe. They also said they preferred to retain some face-to-face contacts. However, these may be post-rationalisations which illustrate their lack of confidence in using these websites.

This segment had no interest in newer mobile functions as they could not see the real benefit of them. Most used their mobile phones simply for calling, although some also used them for texting. They had no real desire to learn more about the advanced functions on a mobile phone as they were comfortable using the old methods, such as using the radio or playing CDs to listen to music, using a digital camera for taking photos and using an alarm clock radio or a paper diary.

This audience was represented by a range of life stages. It included people with younger families who claimed that in the future they would like to learn more to ensure cybersafety for their children; post-family individuals and retirees who feel that as they get more time

they will be able to take greater advantage of the benefits that come from using the technology; and people in rural areas who are recognising that the benefits of using digital media outweigh the barriers. With regard to the latter group, one lady recognised the benefits of using the internet, as she had found her partner through an online dating website, following the death of her husband. People in this segment included white and blue collar workers and were more likely to be women.

Case study: ‘Potential Transitioner’

Tina is a stay-at-home mum to four girls ranging in age from 2 to 11. She lives in a regional area and spends all her time with her family, and consequently had very little free time to herself. Most of her family leisure time is spent outdoors.

She has broadband at home but as she has limited time to herself she feels she has a very basic understanding of the internet. She only uses it for activities that seem useful to her, such as emails to keep in contact with family and visiting websites on which she could buy and sell horses. She is happy to still visit the bank and post office to pay bills and carry out transactions, as she claims she does not trust the internet. Tina only has a mobile phone for emergencies and has no desire to own one with newer functions. In fact, she rarely uses her mobile phone; she is often at home during the day and relies on her landline. However, there is potential that Tina will use digital media more as her personal circumstances change and her children become older.

‘Economisers’

‘Economisers’ had a positive relationship with technology but were limited by costs. They knew how to use digital media and displayed no negative attitudes towards it. The cost of acquiring and maintaining the internet and a mobile phone was the key factor influencing why this segment was not using technology.

For some people the actual costs were off-putting and they could not afford to purchase particular technologies. For others, purchasing the technology was not a big enough priority for them to justify the costs. It is likely that most ‘Economisers’ will choose to re-engage with this type of technology when they believe the benefits outweigh the costs or when they have greater disposable income. However, the danger is that if they do not re-engage within a few years, they may be left behind and their digital media literacy will decline.

Some ‘Economisers’ had access to the internet at work or at their friends’ or families’ houses. However, they did not regard access to the internet as a necessity. For example, there was no indication that this audience used free internet access at libraries, with the exception of students using it at their university library for their course and assignments. ‘Economisers’ were also not visiting internet cafes because they thought they were too inconvenient and not private enough.

This segment tended to purchase a cheap, basic mobile phone which they only used for essential calls and in emergencies. Some explained that they preferred text messaging to calling because it was cheaper. They perceived the newer mobile functions, such as sending picture messages and using the internet, as being extremely costly and, therefore, avoided using these features.

I think there are hidden charges for using the internet on your phone.

Don't you get charged if you use up a certain amount of data?

The ‘Economisers’ were more likely to be from younger life stages and included those at the pre-family and younger-family life stages. They included a range of people including

students, those who have recently moved out of home, single parent families and one-income families. They were more likely to come from blue collar backgrounds.

Case study: ‘Economiser’

Emily is in her 20s and has recently moved into a rented apartment with her boyfriend. She works in retail and enjoys spending her free time socialising with friends and undertaking free or inexpensive activities such as dancing. She chooses to spend her limited disposable income on socialising rather than on technology.

Up until recently she has had access to the internet at her parents’ house. She felt extremely confident using the internet as she had used it regularly at home and at school. Now that she lives in her own rented apartment, she feels she could not afford to have the internet at home. She has looked into renting a computer but is wary of the costs associated with this. Ultimately, she is not bothered by a lack of access; however, she recognises that she may be missing out on the conveniences such as buying tickets or goods on eBay and having access to beauty advice. Emily owns a mobile phone with several advanced features, but she is wary of the costs involved, and consequently does not use features such as the internet.

If it was cheaper I would use my phone more for picture messages and the internet.

She said she would look into getting a computer and the internet if it was more affordable.

I don’t have a computer or the internet at the moment, but if it was cheaper I would get it.

‘Active’ versus ‘passive’ decision making

One of the research objectives was to establish whether those who claim they have no interest in using digital media technologies are making fully informed, or active, choices, or whether their behaviour is really driven by a lack of skills or confidence. Findings of the current study suggest that previous quantitative findings might need to be handled with caution, to the extent that they suggest that people are making active choices not to use digital media.

The findings of the current research suggest that none of the segments appear to be making an active choice not to use digital media. Although the ‘Resistors’ claimed to be making an active choice, the underlying reason for their choice in fact appeared to be a lack of confidence, knowledge and skills. The ‘Defensive’ were using excuses for not using technology, while claiming it was an active choice. These excuses ranged from having no interest to risks with security and technology failures. However, these two segments appeared to be trying to cover up their insecurities about using the internet.

The other three segments also appeared not to be making an active choice to not use digital media. The ‘Thirsty’ were openly willing to admit that there was a range of barriers preventing them from adopting a higher level of usage, including a lack of knowledge of both the underlying assumptions about how digital media works and the associated commonplace language. The ‘Thirsty’ were in fact proactive in wanting to change their attitudes towards digital media.

The ‘Potential Transitioners’ appeared to be making an active choice to use technology to a certain extent, but often it seemed to be a lack of understanding that made them reluctant to experiment further. The major barrier ‘Economisers’ faced was the costs of

using digital media, with many explaining that they would be likely to use digital media more if it was cheaper. The attitudes and demographics of the five segments are summarised in Figure 10.

Figure 10 Summary of the attitudes of the segments

| | Resistors | Defensive | Thirsty | Potential Transitioners | Economisers |
|--------------------------|---|--|---|--|--|
| Defining attitude | No interest in technology – see it as worthless | Afraid to admit would like to learn more | Genuine desire to want to learn more | See technology as a means to an end but can see the advantages | Positive attitude but usage not a big priority to them |
| Behaviour | Non or little use of technology | Little usage – will only use technology they feel comfortable with | Begun using technology and can see the benefits | Use technology up to a point where can see it adds real value | Little usage because prohibited by costs |
| Demographics | Older family Post family Recent retirees | Pre / Younger / Older Post Family | Older family Post family Retirees | Younger / older / post Family Retirees | Pre-Family Younger-Family |
| | Male and Female | More likely to be male | Male and Female | More likely to be female | Male and Female |
| | Blue and white collar | More likely to be blue collar | Blue and white collar | Blue and white collar | More likely to be blue collar |

Suggested ways of encouraging each segment to engage with digital media

Overview

On the basis of the findings of this research, the researchers propose the following suggestions about possible ways of increasing the engagement of non- and limited users of digital media with digital media.

Communicating the possible benefits of using digital media is likely to be a useful way to help encourage non- and limited-users to become more engaged with digital media. For example, it could be helpful to highlight that becoming more digital media literate would allow people to be less reliant on other people to use the media for them, and that they would no longer feel left behind, or less capable than others around them.

For some audiences, it is also likely to be helpful to highlight that digital media increases people's options rather than requiring them to give up their 'traditional' ways of doing things.

Because many non- and low users of the internet were defensive or embarrassed about their skill levels, it is likely to be important to express this message in a positive tone. Using real people with stories that illustrate the benefits of using digital media, such as the story about the lady living in a rural area who found her partner over the internet, is likely to be engaging. Findings suggest creating a memorable image in people's minds of the benefits of keeping up to speed with digital media and not getting left behind could also help to achieve this.

As we know from previous research, informal learning is often how people learn about using computers and the internet. One possible strategy to motivate people to be more engaged with digital media therefore could be to encourage family and friends to help people to become more confident with the technology. Other people might benefit from working through information on an interactive DVD or CD ROM, and more confident users might appreciate working through material on a website. Finally, some individuals are likely to benefit from attending a continuous learning course. These strategies and resources are discussed in the following section, in the context of each segment's specific needs.

Specific communication needs of each segment

'Resistors' and 'Defensive'

'The Resistors' and the 'Defensive' are likely to be extremely difficult to influence, but they need to be persuaded of the importance of understanding and using technology so as to be able to fully participate in society in the future. These two segments sit on the bottom rung of the hierarchy of skills and consequently they need to gain an understanding of the underlying assumptions about how digital media works and commonplace digital media language so that they can acquire transferable skills.

Ideally, communications directed at these people would help to promote the benefits that they would gain by using digital media technology. The message may also need to highlight why they should not be left behind. Several participants spontaneously mentioned that they believed that these users would benefit from a communications campaign portraying a positive message about using digital media. Strategies should

make them feel confident enough to try using digital media, and should not make them feel embarrassed in any way. The ideal would be to shift the mindsets of the 'Resistors' and the 'Defensive' to become 'Thirsty', although it is recognised that this would be time and resource intensive. If time and resources are limited, it may be more efficient and effective to target the 'Thirsty' and the 'Potential Transitioners'.

'Thirsty'

The 'Thirsty' will inevitably be the easiest segment to influence and they will be keen to develop their skills, knowledge and understanding of digital media. As they sit at the lower to middle rungs of the hierarchy of skills, reinforcing their knowledge of the underlying assumptions about how digital media works and the commonplace digital media language will help them to develop their digital media literacy.

Given their motivation to learn more about digital media, a number of strategies are likely to be successful for the 'Thirsty' segment.

Firstly, some would benefit from learning from their friends or family. One possible suggestion is that online tutorials and information are produced for people to work through together. However, this is only likely to be effective where there are adult children, as several respondents explained that their teenage children are too impatient to help them learn. Some less confident individuals would appreciate learning from an interactive DVD or CD ROM which they could work through at home, with or without family. This would allow them to participate in this activity at a time which is convenient to them. This type of resource would be less daunting for some people than working through information on a specific website which they might not be competent or confident enough to access by themselves.

Although the content of a DVD or CD ROM was not explored thoroughly in this research, it is likely that people would benefit from information on topics such as how to navigate websites and avoid simple mistakes (for example, not sending emails to everyone by pressing the 'reply all' button). The DVD or CD ROM resource might be more attractive to men because the research findings suggest that some men were reluctant to admit to wanting help.

Other people in the 'Thirsty' segment would appreciate the opportunity to attend a continuous learning course. There may be a gap in the market for a course which teaches basic transferable digital media skills and the commonplace language associated with digital media. Some of the courses that the respondents had attended had been step-by-step tuition on particular activities, such as how to use eBay, while others focused on computer use and Microsoft applications.

Although people can be motivated by learning about a specific task, it is essential that they have a broader understanding of how digital media work before they focus on a specific topic. If they do not have the basic knowledge, they are less likely to remember the information in a course about a specific topic.

Respondents often found short or one-off courses to be too short, resulting in knowledge being quite easily forgotten. They were also not able to build on the skills they learnt in courses because they could not get enough practice at home. For people to be able to build understanding and confidence, they must be able to both engage in a process of ongoing learning about digital media and regularly using the media.

There is also a need to promote the existence of learning opportunities. Although some people had attended courses within the community, several were unaware that courses aimed at people like them were available. There was a perception that current courses are largely offered to retirees or those on family benefits, as opposed to stay-at-home

mums or middle-aged working people. A better promotion of existing courses to the Thirsty would improve their potential to attract a broader audience.

People were asked to explain what they thought would be the most appropriate learning environment to allow them to become more digital media literate. Their responses indicated that the first priority is that the course should involve a hands-on experience, as this is regarded as the best way to learn and understand. People explained they do not want to simply observe someone else working through the processes on the computer.

Don't show me, let me do it —it's the only way you learn.

An informal learning environment where individuals would feel safe and relaxed was also regarded as essential for effective learning. Ideally people would be taught one-on-one or in small groups. The course leader would need to be very patient and not patronising in any way. They would need to be considerate and recognise that people only have a basic level of understanding and skills. The attendees must not be made to feel humiliated:

They have to realise we aren't stupid but we need time to let it sink in.

The course leaders would need to use language that people understand and not feel intimidated by. However, it is crucial that some of the commonplace digital media language is introduced, such as instructions for usage and specific terminology such as 'search engine' or 'hard drive'. It may also help to equate computer terminology with real-life objects, for example explaining that the hard drive is like the computer's brain where information is stored.

The 'Thirsty' felt there were also opportunities for mobile phone providers to help encourage usage. They felt they may benefit if mobile phone providers offered to spend more time with the customer at the point of sale to show them how to use various features and how the menu system works.

You want them to take you through the menu to figure out how to use it.

Finally, a few people believed a DVD would be more helpful than the mobile phone manuals currently provided, which many saw as being too long and containing too much 'tech-heavy' language, which they found extremely off-putting.

'Potential Transitioners'

The 'Potential Transitioners' must not allow their existing knowledge to diminish. There is a danger that they may slip into the 'Defensive' and 'Resistors' segments if they remain reliant on the 'old' way of doing things. Although this segment has a better understanding of the digital media basics than the 'Thirsty' segment, this familiarity with technology needs to be maintained in the face of rapid and continuous technological change.

The 'Potential Transitioners' currently sit in the middle rung of the hierarchy of skills, and one of their specific needs would be to build confidence with security issues so as to encourage them to start using transactional websites.

This segment already recognises some of the benefits associated with using digital media, but further advantages should be promoted. This segment is also likely to respond positively to learning from family and friends; as they already have a certain level of competency, seeking help from others is likely to be less stressful. Some 'Potential

Transitioners' may also welcome working through a CD ROM or DVD at their own pace, and the more confident users may feel comfortable following information on a website.

'Economisers'

'Economisers' need to be kept up-to-date with the benefits of technology so that when they choose to engage once more (for example, when their circumstances change), they can easily do so. They need to be told of the benefits of investing in digital media and having access to the technologies at home, particularly when they have children. Although they currently have the skills outlined in the hierarchy of skills, there is some danger that as technology develops they will lose touch quickly, making it more difficult for them to re-engage later.

People for whom costs are a real barrier to engagement with digital media might be persuaded to use digital media if they are provided with advice or information on strategies to minimise costs. This could include information on the most appropriate internet or mobile plans for specific personal circumstances or information on costs of equipment.

Being told where my money is going and what it covers would be extremely helpful.

Others from low income households might need to be encouraged to take up any existing government subsidies, such as the Education Tax Refund that is available to families.

Summary of communication needs of each segment

Figure 11 summarises the different strategies required for each segment to encourage them to engage with digital media and communications.

Figure 11 Summary of communication needs of each segment

| | Resistors | Defensive | Thirsty | Potential Transitioners | Economisers |
|---|---|-----------|---|---|---|
| Skill needs | Sitting on the lower rungs of the skill hierarchy, they need to know the underlying assumptions of how digital media works and the language in order to develop transferable skills | | | Sitting on the middle rung of the hierarchy, should focus on building confidence with transferable skills and internet security | Sitting at the top of the hierarchy, need to encourage ongoing practice to prevent them losing skills |
| Objective for communications program | Raising appreciation of importance of getting up to speed with digital media Need to know the underlying assumptions of how digital media works and language | | Reinforcing those assumptions and benefits of using digital media | Keeping people up to date with latest advancements and benefits | |
| Strategies to encourage them to keep up | Communications (ideally) | | | Advice on ways to minimise costs | |
| | Encouraging friends and family to help people day to day in understanding how digital media works, not just specific tasks | | | | |
| | | | | Continual learning courses | |
| Resources | Not likely to use – need to become 'Thirsty' first | | CD ROM/DVD to work through at home | | More affordable technology |

Businesses, service providers, government organisations and the general public should also have a part to play in improving digital media literacy among non- and limited users. If they were made more aware of the low level competencies of non- and limited users, this could be considered in the provision of online services and other digital media

offerings. Moreover, confident users could be made aware that they need to help non- and limited users to become more competent users of digital media, rather than simply using digital media for them.

Findings and recommendations

Summary of findings

Findings from this study of adult non- and limited users of digital media indicate that their unmet digital media needs are largely associated with the internet. They consider that in terms of enabling them to participate more effectively in society, learning how to use the internet is more important than learning how to use new features on their mobile phone. However, people did not necessarily have the same attitude towards different technologies; usage patterns of different types of digital media appeared to be highly individualised due to people's own motivations.

There were two main reasons for people's limited use of digital media. Firstly, people claimed that *it was not a priority* for them to purchase, understand and use new technology. They claimed they were happy to carry on with old habits, using 'traditional methods'. Secondly, most people held the view that it *was too difficult for them to change their habits*. Many regarded using new digital media as a real stretch that would involve a complete change of lifestyle. The research findings indicate that as long as people have an easy alternative option to using digital media they are likely to take that option, out of habit, convenience and/ or fear.

There are two key factors that affect people's attitudes about, and behaviour in relation to, increasing their level of digital media literacy. These are their existing competencies with using digital media and their level of motivation to become more engaged with digital media. Their comparatively low competencies can be explained by the fact that many people have not been required to use digital media technology on a day-to-day basis. As a consequence they do not understand the underlying assumptions about how digital media work or the associated commonplace language that is used by those who are comfortable with digital media. Most importantly, they have not developed the transferable skills to allow them to become more literate. The research indicated that these transferable skills include the ability to use a search engine, navigate around a website, purchase goods on the internet and use features on a mobile phone, such as a camera.

The motivation that people have to become more engaged with digital media also affects their attitudes and behaviours. It is an individual's own motivation to want to use the technology that is the key driver to increasing their digital media literacy. With low competency and motivation, non- and limited users of digital media are in danger of being left behind if they are not able to keep up with rapidly changing technology.

Five attitudinal segments in relation to digital media have been identified: 'Resistors', 'Defensive', 'Thirsty', 'Potential Transitioners' and 'Economisers'. In the view of the researchers, none of the segments appeared to be making a fully informed, or active, choice not to use digital media.

While the 'Resistors' and 'Defensive', and to some degree the 'Potential Transitioners', claimed to be making an active choice, in reality they seemed to be making excuses to cover up their lack of confidence and/or competence.

The 'Thirsty', on the other hand, were open to admitting they face barriers, which included their lack of competence, fears and insecurities, which prevent them from engaging more with digital media. The 'Economisers' identified costs as the major barrier to increasing their digital media usage.

Communicating the potential benefits of using digital media to all of these segments is likely to be a useful method for encouraging them to take up a higher level of engagement with digital media, particularly as many individuals in each of the segments are not fully informed of the benefits.

Researchers' recommendations

The researchers' recommendations based on these findings are as follows:

- 1/ Individuals who are currently non- or limited users of digital media could be motivated to use it by being encouraged to appreciate both its benefits and the importance of using digital media so they do not fall behind the rest of society.
- 2/ Essential to improving digital media literacy is recognising that there appears to be a hierarchy of skills, knowledge and understanding that needs to be acquired. Fundamentally, in order to develop transferable skills people need to understand the underlying assumptions about how digital media work and the associated commonplace digital media language. Once they have these skills they are likely to become more confident with security issues. Building on all these skills will allow them to become more confident in experimenting online, thereby increasing their level of digital media literacy.
- 3/ Consider developing a communication strategy to help promote the benefits of using digital media, with the intention of shifting the mindsets of 'Resistors' and the 'Defensive', as well as using it as a tool to reinforce and promote the benefits of digital media to the other segments. The aim would be to motivate individuals to want to learn more about digital media and to use it more often.
- 4/ It will be important to express these messages in a positive manner, and to explain that using digital media will enhance their life options, rather than replacing 'traditional' methods.
- 5/ Using real life examples which illustrate the benefits of using digital media is likely to be engaging.
- 6/ Creating a memorable image in people's minds of the benefits of keeping up to speed with digital media, and not getting left behind, could also help to achieve this.
- 7/ If developing a broader communications strategy is not possible, consideration could be given to focusing on the 'Thirsty' and 'Potential Transitioners' who would be the most receptive to change.
- 8/ Consider providing continuous learning courses for the 'Thirsty'. These would be best run as hands-on practical activities within an informal learning environment.
- 9/ The 'Economisers' would benefit from being kept up to speed with the advantages of technology. Some may also benefit from receiving information about minimising equipment costs and advice on the most cost effective internet and/or mobile phone plan for them. Other 'Economisers', particularly those in low income households, might be persuaded to use digital media if it were more affordable or perceived as being of greater benefit.

Appendix A— References

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Appendix B— Recruitment screeners

SCREENER

ACMA RECRUITMENT SCREENER

Hello. My name is _____. I work for _____, a market research company.

I am looking for people to take part in a market research study for the Government which looks at people's attitudes and usage of the internet and mobile phones. There are no right or wrong answers, and all points of view are welcome.

We need people to take part in a group discussion / in-depth interview on _____ at _____.

We will be talking to people within three states in Australia and will focus on individuals with particular characteristics in each area. We therefore need to ask some questions to ascertain whether you are eligible to take part in a discussion in this area.

1. Do you or any of your close relations, work in any of the following industries?

| | | |
|---|---|------------------|
| Market research | 1 | TERMINATE |
| Advertising, marketing, public relations | 2 | |
| Media and journalism | 3 | |
| Australian Communications and Media Authority | 4 | |

2. When was the last time you took part in a group discussion or depth interview?
(Write in)

TERMINATE IF LESS THAN 6 MONTHS AGO

3. How old are you?

Record age:

SEE QUOTAS

4. If you have any children, which category do they fall into?

| | | |
|-----------------------|---|-------------------|
| No children | 1 | SEE QUOTAS |
| Pre-school age | 2 | SEE QUOTAS |
| Primary school aged | 3 | SEE QUOTAS |
| Secondary school aged | 4 | SEE QUOTAS |
| Left school | 5 | SEE QUOTAS |

5. For each of the following technologies, which of the following best applies to you in terms of describing how often you use them:

- a) the internet, using it mainly for emailing but occasionally for websites for banking/shopping and/or social networking
- b) mobile phones for text messaging and cameras (as well as making/receiving calls) i.e. established applications
- c) mobile phones for applications including video cameras, mp3/mp4 capabilities and internet capability (as well as making/receiving calls) i.e. newer applications

| | | Internet | Established applications | Newer applications | |
|--|---|-----------------|---------------------------------|---------------------------|-------------------|
| You've used them/it more than six times in the last six months | 1 | | | | SEE QUOTAS |
| You've used them/it three to six times in the last six months | 2 | | | | |
| You've used them/it one to three times in the last six months | 3 | | | | |
| You've not used/it | 4 | | | | |

| | | | | | |
|--|---|--|--|--|--|
| them in the last six months | | | | | |
| You've not used them/it in the last year | 5 | | | | |
| You've not used them/it for over a year | 6 | | | | |
| You've never used them/it | 7 | | | | |

6. With regard to internet access, do you have:

| | | |
|---|---|---------------|
| no home internet access, but I access it elsewhere | 1 | AIM FOR A MIX |
| access to the internet at home via a dial-up connection | 2 | |
| access to the internet at home via a broadband connection | 3 | |

7. Thinking about using technologies like the internet and mobile phones, which of the following statements do you agree with most strongly? (Choose one answer only)

| | | |
|--|---|--|
| I am probably a lot more comfortable than most people of my age | 1 | CHECK ANSWER TO USAGE QUESTIONS AND CHECK WITH GFK BLUEMOON* |
| I am probably a little more comfortable than most people of my age | 2 | CONSIDER FOR 'MORE COMFORTABLE' GROUPS |
| I am probably about as comfortable as most people of my age | 3 | |
| I am probably a bit less comfortable than most people of my age | 4 | CONSIDER FOR 'LESS COMFORTABLE' GROUPS |
| I am probably a lot less comfortable than most people of my age | 5 | |

8. What is the main reason you do not use the internet and/or a mobile phone that frequently?

| | | |
|---|---|---------------|
| No readily available computer/internet access | 1 | AIM FOR A MIX |
| Not interested in using them | 2 | |
| They're too costly and I can't afford them | 3 | |
| I'm not that confident about using them | 4 | |

9. Record Gender:

| | | |
|--------|---|---|
| Male | 1 | AIM FOR APPROXIMATELY 50:50 IN EACH GROUP |
| Female | 2 | |

10. What is (or was) your occupation? (Record job and SES)

.....

| |
|--|
| |
|--|

| | | |
|--------------------|---|------------|
| White collar | 1 | Higher SES |
| Upper white collar | 2 | |

| | | |
|-------------|---|-----------|
| Blue collar | 3 | Lower SES |
| Unemployed | 4 | |

SEE QUOTAS

11. What was your highest level of education you attained?

| | | |
|---|---|---------------|
| Primary school | 1 | AIM FOR A MIX |
| Secondary school | 2 | |
| Tertiary education (i.e. university degree) | 3 | |
| Post graduate qualification | 4 | |

12. We need to ensure we include a representative sample of the population in our study. How would you describe your family's ethnic background? READ LIST AND CODE ANY THAT APPLY

| | |
|--------------------------------------|----|
| Aboriginal or Torres Strait Islander | 1 |
| African | 2 |
| Asian | 3 |
| Australian | 4 |
| Eastern European | 5 |
| Latin American | 6 |
| Middle Eastern | 7 |
| North American | 8 |
| Northern European | 9 |
| Southern European | 10 |
| Other (please specify) | 11 |

SEE QUOTAS

13. Do you ever speak a language other than English at home?

| | |
|-----|---|
| Yes | 1 |
| No | 2 |

SEE QUOTAS

14. We also need to ensure we include a representative sample of the population, with regard to disabilities. Do any of the following apply to you?

| | | |
|---|---|--------------------------|
| You have sight problems not fully corrected by glasses or contact lenses | 1 | SEE QUOTAS |
| You have a mobility related disability e.g. arthritis, walking with a stick | 2 | SEE QUOTAS |
| You have hearing problems | 3 | THANK & CLOSE |
| You have speech problems | 4 | THANK & CLOSE |
| You have difficulty learning or understanding things (e.g. learning disability) | 5 | THANK & CLOSE |
| You have another type of disability – please specify | 6 | CHECK WITH GfK BLUE MOON |

QUOTAS

Each group should include 7-8 respondents and will last for 1 ¼ hours.

Each telephone depth will last between 45 minutes and an hour.

Exclude:

- Those who work in the usual industries as well as government departments
- Anyone who has taken part in a group discussion in the last 6 months
- Exclude anyone who used the internet or mobile phone applications at least 3-6 times in the last 6 months
- Exclude those 17 yrs and under

Within each group:

- Ensure approximately 50:50 men and women in each group.
- See sample table for which ages fit into which life stages.
- With regard to life stages 'younger family' respondents are defined as a parent with at least one child of primary school age or younger. 'Older family' is defined as a parent with at least one child of secondary school age. Aim for a mix of ages of children within each group.
- With regard to disabilities, aim for 2 in total (0-1 per group) with some disability within the pre-family and family (older and younger groups). Aim for 3-6 in total (1 per group) with a disability across the post family and retired groups.
- Ensure a representative mix of ethnic backgrounds and those who speak a language other than English at home for the area that each group is being conducted in.

Across all groups:

- Ensure an approximately equal mix of those with no home access to the internet, access to the internet at home via a dial-up connection and access to the internet at home via a broadband connection.
- Ensure an approximately equal mix of reasons of low usage of the internet and mobile phones.

QUOTAS FOR ATTITUDES TO COMFORT LEVELS

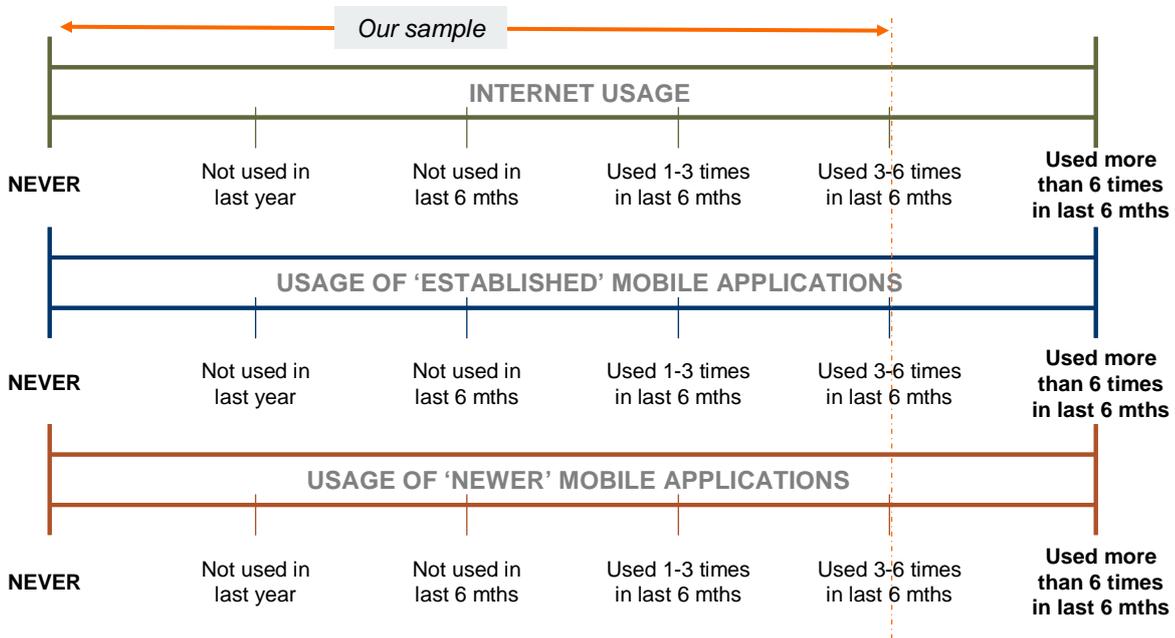
If answered, 1 i.e. 'I am probably a lot more comfortable than most people of my age' check the answer because a respondent is unlikely to be highly confident and a non- or limited user, so there will need to be a plausible reason given for this answer.

QUOTAS FOR USAGE (Q4). We are looking for non- or limited users of the internet and mobile phones:

Respondents must answer 3–7 for at least one of the three technologies (i.e. A, B or C). We must have for a spread of usages along the scale (see Figure 1). We must exclude those who answer 1 or 2 to two or three technologies (i.e. A, B and C). See quotas below for specific requirements.

As a guide—see quotas below:

Figure 1



Appendix C— Discussion guide

ACMA: Research into Adult Digital Media Literacy Needs

FINAL DISCUSSION GUIDE

1. Introduction (5 minutes)

Moderator will introduce the topic of discussion and explain the process. Going to be talking about your attitudes to and usage of the internet and mobile phones. There are no right or wrong answers and all points of view, opinions are welcome

- Name, age, occupation, who live with, ages of children if applicable, interests and hobbies

2. 'Day in the Life' of different technology users (50 minutes)

- Ask participants to think about and describe, as a group, the 'typical day in the life' of someone who is heavily into digital media and communications devices (by using this term we mean the internet and mobile phones)? A heavy user would be someone who conducts all their activities online and uses all the applications and functions their mobile phone has to offer. *[Moderator to record answers on butcher's paper]*

Probe:

- How they start their day—first thing they do when they get up?
- What are they doing while eating breakfast?
- What do they do for a job/work?
- How do they travel to/from work?
- How do they use digital media while at work (if at all)?
- How do they use digital media at home? How do the people they live with use digital media at home (if at all)?
- How do they do their banking, pay bills, claim health benefits, check bank account balances, shop?
- Organize travel/trips, look up/find out movie or event times, purchase tickets to entertainment events, find out information on topics of interest / study as well as news/weather/current affairs.
- How they spend their leisure time after work hours? What do they do, where do they go, who with?
- How do their friends or colleagues use digital media?
- How do they use digital media to communicate with friends, family (if at all)?
- Last thing they do before they go to bed?
- How would you describe the 'typical day in the life' of someone who is uncomfortable or not into digital media technologies? (use same probes as above)

Ask participants to individually record (written responses on a self complete—PART A) the advantages and disadvantages of each approach to life and digital media. Then discuss as a group:

- What are the advantages in terms of how each person would:
 - access government services
 - participate in social networking sites and other social activities (e.g. playing computer games online; watching TV online)
 - shop/exchange information/manage finances/organise leisure activities.
- What are the disadvantages of these activities?
- Ask participants to now individually record (written responses on self complete 2—PART B Q1), the barriers or reasons *why* someone may choose not to benefit from advantages associated with heavier digital media use. Discuss and probe:
 - Costs, dangers and risks, lack of confidence, lack of skills, no interest, too busy
{Moderator to ensure move beyond superficial reasons such as ‘no need’ or ‘no interest’ by using laddering questioning—consistently questioning ‘why’}
E.g. So why may someone feel they simply do not need to use these technologies? How else do they obtain this information or go about activities? Why do they choose other methods instead? Is it from habit, genuinely no need or some other reason?
- Ask participants to record (written responses – Part B, Q2) which of the two stereotypes they identify with more or less, then discuss:
 - Which stereotype do they identify most with and why? How do you compare to the stereotype when going about your daily activities?
 - How do you use traditional (i.e. newspapers, books, magazines, TV, radio) media? How frequently?
 - What do you use digital media for (i.e. internet and mobile phones)? How frequently?
 - If using emailing, who do you email and why?
 - How often do you visit other websites? Which ones and what for?
 - How often are you using text messaging/cameras/mp3 players/internet/email/internet/GPS?
 - Which forms or applications of digital media are you more or less likely to use and why? {Moderator to understand whether non-low use of one technology e.g. internet is linked to usage of mobile phones/digital TV}
 - What are the key advantages for you personally in using digital media? [Probe the advantages if not fully explored above].
 - Where do you access the internet from? Probe: home, public library/family/friends.
 - Why do you choose to use these channels?
 - What help do they get from friends, family or others on using digital media?
 - How confident would you say you are with using digital media and communications devices (i.e. internet, mobile phones, digital TV) compared to other people your age? Are you more/less confident with some forms of technology (i.e. internet/mobile phones/digital TV)?
 - What are the main barriers to using digital media for you personally? Probe the barriers if not fully explored above.

3. Identifying 'un-met' needs of non or limited digital technology users (40 minutes)

- Ask participants to take out their collages and to discuss the 'best things' and 'biggest frustrations/irritations' in their lives?

(For telephone depths, ask participants to refer to their lists)

- Then, ask participants to split into pairs and to think about how the internet and various mobile phone applications (i.e. texting, camera, video, internet capability and making/receiving calls) which could be used to contribute or enhance the 'best things' in their life. How could digital media help them with or even overcome the frustrations/irritations?
- If participants don't feel they need to use digital media: explain why you don't feel you need to use digital media? i.e. why you are happy not using the internet/mobile phones?
- Discuss and record answers in pairs (written responses – self complete Part C) then ask each pair to report their answers back to the group

[Moderator to identify whether people are even aware of the content and services available to internet/mobile phone users: i.e. accessing government services, Social Networking Sites, information seeking sources]

- What would someone who is not into using digital technologies, for whatever reason, need to overcome the barriers to participating more heavily in digital media use? Would different people have different needs? Would they need anything at all? Probe:
 - What would be the most useful type of assistance, e.g. training, skills development, hard copy information, easier internet access, subsidies (on costs)?
 - What would be the most appropriate sources of assistance, i.e. government, commercial, other?
 - If training/skills development is felt to be appropriate – who would deliver this best? Government agency/libraries/ commercial/ mobile phone providers/computer manufacturers?
 - What would be the most appropriate tone and style of assistance?
 - Formal vs. informal channels:
 - Are these more formal ways of learning available to the community currently? If so, how accessible do you think they are? Does more need to be done to improve formal learning channels (or are people happy to learn through informal channels)?
 - Does more relevant content or applications need to be created? In what form?

4. Final thoughts and summary (10 minutes)

- Is there anything that you personally would like to help you access the internet or applications on a mobile phone more easily?

Thank and close.