Understanding younger older consumers' needs in a changing healthcare market—supporting and developing the consumer market for electronic assisted living technologies

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Understanding younger older consumers' needs in a changing healthcare market – supporting and developing the consumer market for electronic Assisted Living Technologies.

Abstract

The ageing population is presenting an economic challenge in the United Kingdom (UK). Electronic Assisted Living Technology (eALT) is purported to be one potential solution to this problem, as it offers an opportunity to help people remain independent and age in place. The provision of eALT within the UK has traditionally been dominated by statutory provision, leading to a lack of choice of commercial products and services for those whom it might benefit. With increased need for support for the ageing population, and rationalisation of statutory service provision, older people will increasingly be looking towards privately purchased eALT to support their health and independence. However, previous work has identified that there are numerous barriers to the development of a consumer eALT market. This paper describes a series of co-creation workshops which were held to explore solutions to these barriers with younger older people, aged 50 to 70 years old, which sought to explore the development of a consumer eALT market. A number of solutions were found for all stages of the eALT consumer journey, including how to help people recognise they have a need, how to find eALT information, how to help consumers make the decision to purchase, where to place eALT for consumer access and purchase, and how to encourage continued use of the product or service and repeat sales. The results of this study will be of interest to the UK, European and worldwide consumer eALT markets, to encourage older consumers to maintain their independence and lifestyle and offers insights for the eALT industry in how to reach these consumers.

Keywords

Older consumers, baby boomers, consumer information, assistive technology, assisted living technology, ageing population, aging in place

Introduction

In the United Kingdom (UK), health spending as a percentage of Gross Domestic Product (GDP) is expected to fall from 8.2% to 6.7%, by 2019. At the same time the number of older people is rising (Cracknell, 2010; Digital Policy Alliance, 2013). By 2030 the number of people aged 55 – 64 in England is due to increase by 18%, and the number of people aged over 65 is due to rise by 39% (Office of National Statistics, 2014a; Office of National Statistics 2014b). With increased age, comes increased likelihood of disability and illness. 41% of those aged over 65 living in England have an illness or disability that limits their life (Office for National Statistics, 2013). This figure increases to 69% of those aged over 85 (Department for Work and Pensions, 2009), and it is these people who are likely to require support when carrying out their day to day activities as they age, or as their level of disability increases.

Assisted Living Technology (ALT) offers a potential solution to this challenge of an ageing population. ALT is defined as: "any device or system that allows an individual to perform a task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed." (de Leonibus et al, 2013, p.5). This definition encompasses a

wide variety of products including, but not limited to mobility aids such as walking sticks, building modifications such as grab rails and ramps, and devices to help people with activities such as cooking and dressing. Electronic ALT (eALT) specifically includes electronically powered and digital devices which can be used to help people to live independently (telecare), to monitor medical conditions (telehealth), or to help support their health and wellbeing via Smartphone and tablet based 'apps' (mHealth – see Table 1 for full definitions).

Table 1 here

Not only does astute use of eALT offer the potential to save money, for example, supporting an older person at home can cost one quarter of the price of nursing home support (Fisk, 2003), but the Whole System Demonstrator project (the largest randomised control trial exploring benefits of eALT) suggested it may also reduce hospital admissions (by 20%), bed days (by 14%) and mortality rates (by 45%) (Department of Health, 2011).

However, eALT supply within the UK has traditionally been dominated by statutory provision, leading to lack of choice of commercial products and services for those whom it might benefit. This lack of choice has been driven by commissioners negotiating block contracts for health services and local authorities, rather than focusing on bespoke solutions for individuals (SCIE, 2009). Further, the numbers of adults able to access eALT via statutory supply is reducing, due to reductions in funding and tightening of eligibility criteria for accessing adult social care (CSCI, 2008). Following this, it is estimated there are 1.5 million people in England alone who have care needs unmet by the state, and could benefit from eALT (CSCI, 2008). With further reductions in statutory services, and improved awareness of eALT, consumers will be increasingly looking towards privately purchased technology to support health and independence (Brownsell et al, 2008). The self-supporting consumer market has potential to be large. In 2008, local authorities spent £177 million on technology for support needs, compared to £244 million spent by consumers (Which? 2009; Ward and Ray, 2011). Indeed, commentators have argued there is an untapped market of older people with disposable incomes who are willing to pay to maintain their health and independence (Ross and Lloyd, 2012).

The majority of research exploring the adoption of ALT and eALT focuses on older, frailer users with high levels of need, who are most likely to be supported by statutory services. Those aged over 50 may be starting to notice signs of ageing, yet not eligible for statutory support, therefore eALT could be used in a preventative manner (Beech and Roberts, 2008). However, for successful adoption, eALT must be seen as relevant to people's lives and currently many authors are reporting barriers to use, including practical, psychological, educational and economic barriers (Udo et al, 2014). A literature review to explore barriers found they included: lack of perceived need, lack of information and awareness, differences in cultural views of acceptability, concerns about affordability, limited knowledge regarding technology, complexity of devices and ease of use, lack of confidence, lack of regulatory standards, concerns about privacy, lack of awareness amongst health and social care staff, and poor aesthetics (Ward and Ray, 2011; COMODAL 2014). Other authors also recognise that a consumer's perceived need for eALT is vital for uptake and use (McCreadie and Tinker, 2005; Huang and Lin, 2009), including both a felt need for assistance, and the recognition of product quality – that eALT is efficient, reliable, safe, simple, available and affordable, and bridges the gap between disability and the tasks which people wish to

perform to maintain independence (McCreadie and Tinker, 2005). Huang and Lin's (2009) quantitative survey of 369 Taiwanese people used structural equation modelling techniques to demonstrate that perceived benefit of eALT was key to predicting use. Interestingly, decline in physical ability is not always a trigger for a consumer to perceive a need for eALT. McInnes, Seers and Tutton (2011) found via a meta-ethnography that threats to a person's identity and wishing to remain at home were triggers to seek solutions. Similarly, Milhailidis et al (2008) found that use of eALT (such as fall detectors, personal alarm systems and monitoring devices) was acceptable to younger older people aged between 40 and 59, if the products allowed the person to remain living independently at home. The researchers also found differences in perceived need and acceptability of devices based upon age, with younger participants preferring physiological health monitoring devices, and older participants preferring personal emergency response systems.

However, the purchase of eALT does not mean that the person continues to use the product post-purchase. A narrative review of studies conducted across Europe found that lack of consumer involvement in the product development process, poor accessibility and usability, poor learnability, lack of perceived usefulness, lack of awareness and poor interaction of the product with the user's social environment were all factors which influenced the abandonment of eALT following purchase (Udo et al, 2014). Martin et al (2011) concluded following a survey of 145 Americans that those who felt most informed, and had exercised most control at time of purchase, were more likely to be satisfied with, and continue to use their device beyond initial purchase. Other authors have discovered similar results demonstrating a lack of information regarding eALT, and the associated consequences (McCreadie and Tinker, 2007; deJonge et al, 2008; Everingham et al, 2009; Robinson et al, 2013). This suggests lack of information could be a barrier to purchase, and continued use thereafter. A Which? survey of 2,388 consumers found that 45% of people did not know where they could access or purchase eALT (Which? 2009). Indeed, the Foundation for Assistive Technology (FAST) argue that as statutory services are able to support fewer people with eALT solutions, those who become private consumers are left to glean their own information. This however, will change in England, following implementation of the Care Act, where it will be a legal requirement to signpost those who are not eligible for statutory services to relevant voluntary and private services (FAST 2009; Care Act, 2014).

Traditional reliance on statutory provision of eALT has meant that products have conventionally been designed to keep cost low, at expense of personalisation and aesthetics. Thus, some eALT products are associated with "being old", and carry an associated stigma (Which? 2009 Ripat and Woodgate, 2010; Day and Hitchings, 2011; Greenhalgh et al, 2013; Ziefle and Schaar, 2014). Complexity of devices and fear of technology amongst older people has also been reported as discouraging people from eALT products and services such as telecare and telehealth (DeJonge and Rodger, 2006 Day and Hitchings, 2011).

Much of the research regarding older people's perceptions of eALT focused on the 'oldest old', and few studies have explored the views of younger older people, who may be experiencing health related difficulties for which eALT might be a solution, but are also likely to have disposable income which they are willing to spend (AgeUK, 2010). The Consumer MODels of Assisted Living (COMODAL – see www.comodal.co.uk) research specifically sought to explore the views of younger older people and their propensity to engage with a private eALT market, with a view to supporting the development of a consumer market. A

series of focus groups conducted as part of the COMODAL study (COMODAL, 2014) supported the findings described above, that barriers to eALT purchase include cost, stigma, lack of information, lack of perceived need, and not knowing where to buy a product. Enablers, those factors that encourage the purchase of eALT included; better awareness, increased information, normalisation, positive images of eALT in use, TV and media campaigns, improved design, value for money, positive perceptions of eALT amongst peers, and a belief that eALT will make a difference. Importantly, the majority of participants in these focus groups were supportive of a consumer market for eALT, and stated they would be willing to purchase eALT privately (Ward and Ray, 2011; Woodcock et al, 2013; COMODAL, 2014). To explore ways of overcoming these barriers and of facilitating the enablers for information needs, decision making and purchase that younger older people desired, the research sought to enable younger older people and industry participants to shape a new approach to the eALT market. This paper describes the work carried out and discusses the shared vision developed. The work was carried out by the Health Design & Technology Institute (HDTI) at Coventry University, together with project partners AgeUK and GrandparentsPlus, and funded by the Technology Strategy Board (now InnovateUK).

Aim

The aim of this research was to explore ways of overcoming the identified barriers and facilitating the enablers to eALT uptake with younger older consumers and industry stakeholders. The specific objectives of the research were to:

- Develop a deep understanding of the needs of younger older consumers with regards to eALT
- Explore barriers and enablers to eALT adoption for this group
- Explore development of solutions to previously identified barriers to eALT adoption

Method

A co-creation methodology was chosen to explore the barriers and enablers with people aged 50 to 70 years old and industry representatives together, to begin to create a shared vision of a consumer led eALT market. Co-creation is defined as "any act of collective creativity, i.e. creativity that is shared by two or more people", and the ideas and concepts developed during the process have a shared ownership between all the participants or co-creators (Sanders and Stappers, 2008:6; Stickdorn and Schneider, 2011). The co-creation method typically gathers qualitative data in a variety of different media such as notes, artefacts, drawings, mindmaps, photographs (Sanders and Stappers, 2012). This methodology can be used to both examine and innovate service experiences whilst gathering a wide range of perspectives, in this case the perspectives of both consumer and industry representatives (Stickdorn and Schneider, 2011). Further, it is of use when enhancing innovation, value, and business performance (Gibbert et al, 2002; Prahalad and Ramaswamy, 2004), which is certainly needed in the developing eALT market.

Six co-creation workshops were conducted in three locations in England (Gateshead, Leeds and Coventry), two focused on information needs when purchasing eALT, two on the consumer decision making process when purchasing eALT, and two on the act of purchasing itself. Previous studies have found that the involvement of consumers can lead to significantly more original and valuable ideas than professional stakeholders alone, yet the

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professional stakeholders yield significantly more reliable ideas (Kristensson et al, 2004; Rowley at al, 2007). Therefore, both younger older people and industry representatives were invited to take part together to stimulate debate and co-create solutions to overcome barriers to the eALT consumer market, producing original ideas which would also be reliable and actionable.

Specific activities used in the workshops to encourage discussion included:

- Use of a metaphorical bus journey to take workshop participants through a customer journey, with each bus stop representing a stage in the process
- Discussion of what factors would trigger a person's decision to look for eALT
- Examination of existing eALT advertisements and videos, to explore feelings engendered
- Creative activities using collage, drawing, and sketching to enable workshop participants to produce a representation of how, in an ideal world, they would like to see information regarding eALT presented to them
- Discussion to explore what makes a shopping experience good or bad, and how this might apply to the eALT shopping experience

Recruitment and Participants

Ethical approval to conduct this study was obtained through the Coventry University Ethics Approval Procedure.

Younger older people were recruited through local branches of AgeUK independent older people's forums, local charities, and employee networks of a university. Industry representatives were recruited through relationships between companies in the eALT market and project partners. The younger older people were theoretically sampled to include a mix of consumers who represented 3 groups, identified as having distinct differences in their approach to the consumer market through previous research within the COMODAL study (Ward and Ray, 2011). The numbers representing each group are displayed in Table 2:

- *Consumers:* Those that already purchase eALT (either for themselves or someone else)

- *Non-Purchasing User:* Those that use eALT but do not purchase it themselves (they receive eALT predominantly through statutory services or others have purchased it for them)

- *Prospective consumers:* People that neither use or purchase eALT, nor considered the use of eALT, however may in the future.

Table 2 here

In total, 84 participants were younger older people, and 12 were industry representatives. Of those who reported their gender, 50 were female and 26 were male. The age of participants is shown in Table 3, with the majority being aged 65-70 years old. Some of the industry representatives were less than 50 years old. Thirty-three of the younger older people identified themselves as having a long term illness, disability or health problem that limits their daily activity.

Recording and analysis of data

Photographs of materials created and outputs produced (but not participants themselves for anonymity purposes) were taken during the event to capture work in action. All materials generated from the workshops were carefully preserved. Full annotations and notes were made in situ so that the information about the genesis of all artefacts and outputs was preserved. Materials and annotations produced in the workshops were summarised by the workshop leads, and combined with notes, comments and observations. Materials collected were then analysed using thematic content analysis to identify recurring themes within the data and to describe the ideal eALT customer journey as co-created by the participants (Sandelowski, 2000; Green and Thorogood, 2004).

Results and Discussion

The results from the co-creation sessions found that there is a clear journey through which a consumer must go through to purchase an eALT product to support their day to day living, and that barriers and enablers are present at each stage of this journey. Each stage described below represents a distinct 'bus stop' in the metaphorical bus journey exploring the ideal eALT customer experience

Stage 1: Recognising that a need exists
Stage 2: Finding product or service information
Stage 3: Making a decision to purchase
Stage 4: Where to purchase the product or service
Stage 5: Using the product or service

Each of these stages will be discussed below. The findings are illustrated with quotes and visual records of the data and artefacts collected during the co-creation sessions.

1. Recognising that a need exists

The impetus to begin the consumer journey to purchase eALT is most likely to be triggered by the recognition of a reduction in ability, or an increase in disability (see Figure 1 for data output). However, it does not have to be the person themselves who recognises the need – family, friends, carers or GPs may bring up the subject first. Other triggers (in order of importance) include: awareness of products which may provide a solution, carers or family members noticing changes in behaviour, isolation, suggestion of need by a doctor, discharge from hospital, current solutions or products becoming ineffective, and wanting to sustain independence. Further, 50-70 year olds must also recognise that eALT could be the solution to their recognised need, and indeed the second most cited trigger to begin the consumer journey was awareness of products or services which may help. Conversely, awareness of eALT may also hinder the consumers' journey, where they perceived the products to be stigmatising, due to poor design or marketing, and as preventing them from beginning stage 2 – finding further information. It was felt amongst the participants that improved design and improved awareness of eALT amongst health and social care professionals and members of

the public could make people more likely to recognise changes in ability in a more positive manner, and to begin to consider eALT as a potential solution to maintaining their independence. There was congruence between the views of both the consumers and the industry representatives with regards triggers to recognising that a need exists, and the agents involved in this process.

2. Finding product or service information

Once it is recognised that a need exists, there is a vacuum regarding the information consumers require to inform them about potential solutions to their need. In particular, participants lacked information regarding: whether products and services exist that can help; where to find products and services, and how to gain advice on the appropriateness of different solutions. Generally, participants in the workshops did not know where they would go to get such information. The participants wished to see information located in and sourced from a variety of places to reflect the diverse range of needs within the 50 to 70 year old age bracket. Figure 2 depicts some of the thoughts participants had regarding where they wished to find consumer information regarding ALT. Table 4 summarises the data and demonstrates the multi-channels where participants wished to source information regarding eALT (in order of preference).

Figure 2 here: Finding information

Participants also felt that to keep someone on the consumer journey to purchasing eALT, specific information regarding products or services must be conveyed through more informational material, whether it be leaflets or advertising. The information would need to allow a younger older person to trust the product, and convey the message that the product or service "does what it says on the tin", clearly demonstrating the link between need and product. Participants were keen that advertisements whilst being aspirational should also have an element of realism, and not use overly "glamorous" models. Younger older people in the study were also keen to stress that disabled and older people are part of society, and should thus be represented in advertisements in an inclusive manner.

Beyond advertising, participants wanted clear, visual demonstrations of how a product would work, so they would be able to assess a product's ease of use, reliability, and safety. Information regarding product guarantees and warranties were also of value. There was a feeling that information provided regarding eALT should position the product as

"mainstream" and "normal", thus avoiding the problems with traditional statutory supplied eALT products that are seen stigmatising and only for "old" people.

The ability to ask a knowledgeable, honest salesperson who can communicate information in a jargon-free manner was an important aspect of the information seeking phase. The younger older participants were keen to see ethical selling practices, and were cautious regarding telesales, and high-pressurised home sales. Participants also stressed how they would like to be able to find comparison products and services to inform their decision making journey easily, and to ensure value for money. There were concerns that younger older consumers could be overwhelmed with information and jargon. It was highlighted that, particularly for those with higher levels of need, a neutral expert (i.e. a health or social care professional, not a salesperson) providing an advice service would be of use, to ensure the eALT purchased correctly matched the person's needs.

Although the industry representatives tended to agree with consumer views on information provision (where information should be provided and in what format), many of the representatives worked for companies who generally employed a business to business model, or were used to selling directly to health services and local authorities, rather than the individual consumer. Although the industry representatives had been chosen to allow a broad spectrum of the eALT market to be represented, few had experience of marketing and selling directly to consumers. This focus on business to business, (or business to local authority selling) highlighted clear differences to the industry participants with regards to what younger older consumers required and could explain the lack of appropriate information as perceived by the consumers.

3. Making a decision to purchase

At this stage of the consumer journey, a distinct difference between the three younger older participant groups in this study was found. Prospective consumers (those who had not used or purchased eALT at all yet) were more likely to "struggle on" with day to day tasks without seeking help, and therefore would not necessarily reach the stage of making a decision to purchase.

When the consumer was also the user of the product (in comparison to a consumer who may be purchasing on behalf of a family member), aesthetics and how the product or service fits within their lifestyle was an important influence upon their decision to make a purchase or not. Benefits and product and service features that could "excite or delight" the consumer were seen to be important at this stage. Participants spoke of products which were once seen as stigmatising (such as glasses and wet-rooms) but are now aspirational and stylish because of the way in which they have been marketed, and suggested that perhaps this could happen for eALT too. Industry participants were keen to quote examples of where the eALT industry had responded to feedback regarding poor design and stigma, however this did not allay the consumer participants' criticisms regarding design – it was felt that there was still some way to go find eALT that would excite or delight the younger older consumer, and that this part of the market was sadly lacking unless the "smart homes – luxury market" was considered. Figure 3 demonstrates a collage produced by some of the particpants, which depicts the positive and luxury messages they felt could be used to sell eALT in a non-stigmatising manner.

Figure 3 here: selling eALT to younger older people

Because the eALT market is new to many consumers, having previously been dominated by health and social care provision where an "expert" assesses and recommends a product or service, some of the participants were concerned about being able to choose the right product for them and buy something that would actually meet their need. It was argued that they would be more inclined to make a decision to purchase if they had the opportunity to 'try before you buy', and that this would not be any different to how consumers currently purchase mainstream technologies, for example, by testing a laptop or television in a showroom to test out the features, and get a feel for the product. It was also felt that it would be important to purchase eALT from sales staff who were knowledgeable, patient, honest, helpful, and who did not use jargon when speaking. This was not an area of expertise for the industry representatives, as they were used to working on a business to business basis (or business to local authority basis), and would not necessarily be responsible for providing information directly to the end-user of the product.

There was also concern that some people would be put off purchasing eALT products, either due to stigma (e.g. associating pendant alarms with disability and vulnerability), or fear. Some participants argued that electronic memory reminders could evoke a negative response as it could cause people to worry that they were developing dementia. Similarly, automatic fall detectors were seen negatively with one participant stating that requiring such a device would make them feel like they were "on my way out". However, mainstream technology which could help with day to day life such as mobile phones and Smartphones were viewed positively by most participants (although some preferred the simpler style mobile as opposed to Smartphones), with one participant joking that she would rather go without food than her mobile phone. Table 5 provides a summary of the feedback on purchasing particular types of eALT.

Table 5 here: Feelings regarding purchasing particular types of eALT

4. Where to purchase the product or service

Once a consumer has made the decision to purchase eALT to address a need, the key barrier at this stage was cost. However, many of the participants were less concerned about price, particularly if they felt that the product was of benefit to them and thus provided "value for money". Indeed, price may be less of a concern for people in the 50 to 70 age bracket who may still be working, compared to retired people living on a fixed income.

Younger older participants wished to purchase eALT at a variety of locations, including (in order of popularity): mobility stores, local shops, online shops, department stores, pharmacies, catalogues and supermarkets. They liked the idea of online shopping because it enables people with limited time or mobility to access goods and services at competitive prices. However, it was noted that not everyone between the ages of 50 – 70 has internet access. Further, they felt unsure about their consumer rights when returning goods purchased online and were concerned about the logistics of returns. Online shopping may also remove the option to 'try before you buy'. Supermarkets were favoured with regards to their accessibility and ability to purchase stock at high volume, and thus low prices. Department stores were also considered as a potential purchasing route, with participants citing high levels of customer service and ability to return goods "hassle free" as advantages.

The younger older participants also stated how some people would like to purchase eALT from local shops, removing the need to travel, however it was recognised that eALT would be expensive from such outlets, as the ability to bulk purchase would be removed. Some suggested local pharmacy chains could be a happy medium between a local provider with access to bulk purchasing, otherwise neither the younger older participants or the industry representatives could offer a solution to providing eALT in local stores at low cost. The data summarising participants thoughts regarding where to purchase eALT is summarised in Table 6.

Table 6 here: Where younger older consumers wish to purchase eALT

5. Using the product or service

The consumer journey doesn't end with the purchase of the product or service – after sales experience is as important as the information seeking and decision making journey. Participants in the co-creation workshops placed high value on customer support, product service support, product longevity and the potential for trade in and product upgrades as technology advances. Consumers and industry representatives also felt that excellent customer service after product purchase would lead to repeat sales, particularly where a person may require further eALT as their level of need changes or increases.

With regard to after sales, younger older participants wanted to be able to return to the person or company who sold them the eALT to have consistency of service. The accountability of having one person or company to return to was important. No-quibble returns services, courtesy follow-ups, and the ability to resource instructions if lost were also important. Images 4 and 5 demonstrate the requirements younger older people have regarding customer service and after sales care.

Image 4 here – bad customer service experience

Image 5 here – good customer service experience

Discussion

Overall, younger older participants and industry representatives discussed a number of solutions to the perceived barriers to the development of the eALT consumer market. It was argued that a reduction in ability would be a key trigger to begin the consumer journey to purchasing eALT as a solution. However, it was also acknowledged that a number of people would find it difficult to accept that they had such a need, and this was currently compounded by the perceived stigmatisation of current eALT designs. A variety of stakeholders important throughout the eALT consumer journey were identified, including consumers, carers, family, friends, professionals and salespeople. Different stakeholders had different levels of importance throughout the process, for example, family and friends may be more visible at the point of identifying a need and perhaps purchase, but it will be the end user themselves who ultimately makes the decision to use the product or service. However, this may not be the case where the main user has dementia. In this consumer journey, friends, family, and health and social care professionals may have a much greater influence on the eALT is purchased.

Younger older participants felt that all of the factors which contribute to a good customer service experience for any purchase would also apply to the purchase of eALT. However, it was stressed that when purchasing eALT in particular, there would be greater need for information that provides a clear link between need and how the product would help, and is also representative of older people whilst feeling aspirational and positive about lifestyle, rather than focussing on disability and ill health.

The use of co-creation allowed the researchers to engage with those who are the "experts of their experience" and co-create the ideal eALT customer journey with the very people who would be ultimately benefiting – younger older people (Sanders and Stappers, 2012, p.24). Although there are limitations to the use of co-creation as a methodology (in the case of this project, relatively low participant numbers), the project has put forward a starting point for the ideal customer eALT journey, which eALT businesses can begin to use a starting point to co-create with their own customers and stakeholders (Ramaswamy and Gouillart, 2010).

Conclusion

The findings from this study will be of use to eALT companies new and established, to help them understand the barriers they may face moving from block contracts with statutory health and social care providers towards a consumer market. The solutions co-created are based on the ideas generated by younger older people aged 50 to 70 years old and industry representatives with many of these solutions focused on the particular needs, aspirations and desires of the younger older consumer that are not currently being met in this market. Included in this, is their desire to remain independent at home for as long as possible with a focus on wellness and active lifestyle rather than illness and disability. Few companies in this space are taking this approach. Previously there has been reliance on statutory health and social care services to provide support to live at home. However with pressure on health and social care budgets, responsibility for health and social care needs will increasingly lie with the person themselves. One potential solution is to develop the eALT consumer market to allow people to independently purchase products and services to help support themselves in maintaining their independence and lifestyle. Currently, despite the drivers towards a consumer eALT market, the market remains underdeveloped due to the barriers described herein. To help the industry develop the consumer market to its full potential, the COMODAL project utilised the insights from the co-creation workshops in the development of a range of exemplar consumer led business models – this work is described in detail elsewhere and offers businesses an opportunity to think differently about their approach to the younger older consumer eALT market and begin to bring eALT to the mainstream, thus normalising the use of technology to support independence and build the consumer market (Urwin, 2013; Fielden, 2014).

These findings also have relevance beyond the UK. Countries across Europe and the wider international community are also facing the challenge of an increasingly aged population, coinciding with reductions in government funded support. Encouragement of the eALT consumer market may therefore form part of the solution to the question of how to address an ageing global population. It is also considered that encouragement of the eALT market has the potential to benefit consumer populations beyond younger older people, including

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disabled people, and people with no current health or social care needs who may wish to use technology to support a healthy and active lifestyle.

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Acknowledgements on title page

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Tables submitted in a separate document