

Institution: BRUNEL UNIVERSITY (H0113)

Unit of Assessment: 19 - Business and Management Studies

Title of case study: Improving the lives of ageing consumers through products and service innovation

1. Summary of the impact (indicative maximum 100 words)

This research addresses unprecedented demographic challenges caused by an ageing population through the development of *socially inclusive products and services* that enhance the quality of living of older consumers (aged 50 and over).

Welfare & inclusion

The Brunel University research team, led by Dr Spinelli, has helped the evaluation and development of products and services that enable older people to live more independently – through enhanced mobility, assisted communication and an improved range of choice to suit individual needs.

Commercial Impacts

The research has formed a knowledge base that the charity 'Age UK' has exploited to 1) develop the AGE UK business network "Engage" (including Handicare, BSkyB, Atoc, British Telecom, Virgin and Homebase) which, through company engagement, seeks to improve products and services for older consumers and to enable the application of inclusive design processes to product and service development, marketing and training and 2) underpin the principles of AGE UK Products and Service Accreditation schemes launched in 2012 to enhance quality and choice for older consumers.

2. Underpinning research (indicative maximum 500 words)

The lead academic on the research team, Dr Spinelli has collaborated with AGE UK since 2007 helping to inform the application of her research to ageing issues and social inclusion. In 2010 this led to a £520,000 research grant award from the Technology Strategy Board (TSB) and the Economic and Social Research Council (ESRC). In the same year she was joined by Dr Josko Brakus (Brunel staff until March 2011, then external collaborator) an expert in marketing. Three Research Assistants joined the team: Dr Mona Shekarriz (2010); Ms Seema Jain and Ms Anna McConnell (2011). Dr Spinelli's interest in ageing has also led an international research project with Tokyo University and a Japanese consultancy (Happy Elders Ltd) which attracted £9,000 in funds from the Daiwa Foundation in 2011.

Drawing on Dr Spinelli's international expertise in user centred innovation, the team established a research agenda located at the junction between design, marketing and gerontology. This focused on a better understanding of the ageing market and its changing consumers through innovative user-centred methodologies based on *self-perception of age and life-style* (rather than on more traditional marketing segmentation approaches based on psycho-demographics). This transcended consumer profiling that could be ageist and/or lead to impractical results (e.g. products that lack aesthetic appeal). The segmentation methodology developed from the research brought together quantitative and qualitative techniques that have had two specific outcomes:

- the identification of five specific ageing market segments based on more detailed and in-depth knowledge of the ageing consumers' profile. This centres on self-perception of age (accounting for the attitudes, behaviour, values and needs) and lifestyle.
- 2) the development of more precise tools to describe and predict the factors that influence or hinder decision making of older consumers in the three highest spending domains of technology and communication; personal and household retail; leisure and travelling

This has led to defined consumer profiles that illustrate decision-making factors, the adoption process and the barriers ageing consumers encounter when selecting and using products and services.



The findings are based on a national data collection exercise that has included:

- a qualitative study with over 100 ageing consumers in England, Wales, Scotland and Northern Ireland. The qualitative study informed the design of the survey;
- a quantitative study including a national stratified sample of 1505 participants aged 50-94;
- a survey of 75 SMEs and large corporations in UK that identified the challenges encountered when targeting ageing consumers and the priority areas of intervention to promote inclusive design practice.

The significance and timeliness of the research led to successful research funding awards including the Technology and Strategy Board (KTP) and the Daiwa foundation.

3. References to the research (indicative maximum of six references)

Spinelli G. and Basharat A. (2011) Multi-Agent Collaboration based on Enhanced Cognitive Awareness: An Architecture for Agents' Profiling on the Semantic Web. *Expert Systems: The Journal of Knowledge Engineering, Wiley-Blackwell:* 28 (5): 461-487 http://dx.doi.org/10.1111/j.1468-0394.2011.00593.x

Spinelli G. (2011) Strategic design: Innovation in the Silver Market through Inclusivity. *INCLUDE international conference*, RCA, 18-20 April, Royal College of Art, London. Available online at http://include11.kinetixevents.co.uk/4dcgi/prog?operation=author&id=1401

Jain S., Spinelli G. Garaj V. (2012) The Use of the Internet by Older People: A Behavioural Study Universal Design Conference 2012, Fukuoka, Japan

Jain S., Spinelli G. Garaj V. (2012) The success story of Wiltshire Farm Foods: Website design to strengthen Business Strategy Design Conference 2012, Fukuoka, Japan.

McConnell A. and Spinelli G. (2012) Ready to Use, Easy to Evolve. 12th International Design Conference - DESIGN 2012, May 21st-24th, 2012, Dubrovnik - Cavtat - Croatia

Media

Spinelli, Gabriella (2013) "Why older people are not a case apart" Guardian, 11 March 2013. www.guardian.co.uk/higher-education-network/blog/2013/mar/11/older-people-research-service-design

Grants

Dr Gabriella Spinelli. Technology adoption among Japanese and British ageing users. 2011 Daiwa Research Foundation Award, November 2011-January 2013. £9,000

Dr Gabriella Spinelli. Strategic design: Business Innovation through Inclusivity. Technology and Strategy board (Knowledge Transfer Partnership with Age UK) October 2010- April 2014 £520,000.

4. Details of the impact (indicative maximum 750 words)

The research responds to challenges raised by unprecedented demographic changes caused by an ageing population and by longevity. In collaboration with AgeUK, the research has led to the development of knowledge on inclusive design and the marketing of socially inclusive products and services for older consumers. It is predicted that those aged 65 and over will account for 23 per cent of the total population by 2035 (ONS¹) so it is essential that the needs of this group (e.g.

¹ By 2035 it is projected that those aged 65 and over will account for 23 per cent of the total population. The number of people aged 85 and over will be almost 2.5 times larger than in 2010, reaching 3.5 million and accounting for 5 per cent of the total UK population. "Population Ageing in the United Kingdom, its Constituent Countries and the European Union" March 2012.



mobility, communications, assisted living) are addressed by bespoke products and services. Further, this group owns 80% of the UK's wealth and has the highest disposable income (ONS, 2011). The benefits of this timely research therefore extend to a large and growing segment of the population whose needs have hitherto been neglected, as well as to Age UK (the largest charity for older people) and the companies that are key players in servicing this market.

The research has had significant *welfare* and *commercial* impacts, including benefits relating to greater *social inclusion*.

(1) Welfare & inclusion

- (i) Welfare: The research has led to health and welfare impact by improving the lives of *ageing* consumers in the UK. This has been achieved by the development and commercialisation of technology products e.g. assistive living products by Handicare (the largest provider of stairlifts in the UK) and British Telecom. Such products are tailored to meet the *needs and lifestyle* of older people and have been designed with a user-centred approach that incorporates, through the segmentation methodology developed by the research, aspirations, appearance and 'fit' with older people's self-perceptions enhancing both effectiveness and appeal. Benefits include greater mobility and independent living; assisted communication, improved product quality and greater product and service choice that better fits different lifestyles and needs.
- (ii) Inclusion: The research has contributed to the landscape of products and services that satisfy the increasingly sophisticated aspirations of older consumers, helping to challenge the myth that older consumers are passive and simplistic in their needs. This has enhanced cultural understanding of issues relating to older people, shaping or informing public attitudes and values.

(2) Commercial Impacts

The insights generated by the research have fed into *AGE UK* with the following commercial impacts:

- (i) Age UK's business network, Engage, has seen a 500% increase in membership from 7 companies in 2010 to approximately 40 in 2012. The Engage member companies, interested in the ageing market or major players in such market, have improved the application of inclusive design processes to their product development and marketing processes through the principles underpinning the accreditation schemes and the training opportunities organised by Dr Spinelli and AGE UK. This training (e.g. through seminars; workshops) has created a knowledge base as evidenced by the following feedback:
 - "I now understand that usability testing is essential" (Head of Marketing, Pearson; member of Engage)
 - "(I valued) the whole process [of the seminar]; talking to real users through to designing with (ageing consumers) in mind" (Partnership Director, *E-ON*, *member of Engage*)
- (ii) The research has created a knowledge base that Age UK has exploited to underpin and frame the principles of the AGE UK Products and Service Accreditation schemes launched in March 2012. This enhances brand product and service inclusivity as well as quality and consumer choice.
- (iii) Informed by the research, Age UK has established a consultancy service to companies which has increased and differentiated its revenue stream. Consultancy services in 2010-2012 have totalled £100,000 compared to nil in previous years.

The research outputs have been disseminated by Age UK in two reports, one published in February 2013 and the second in press, and through public seminars and conferences.

5. Sources to corroborate the impact (indicative maximum of 10 references)



The saliency of the knowledge partnership between Brunel University and Age UK is described in the Engage Business network **website** at:

http://www.ageuk.org.uk/professional-resources-home/engage-network/research-and-business-insight/

Parts of the research and of the case studies conducted have been published in the forms of **blogs**:

'The Older Internet User':

http://blogs.fasthosts.co.uk/2012/02/user-centred-web-design-and-the-older-person/

Passengers with Limited Mobility':

http://www.silvertraveladvisor.com/index.cfm?v=LIMITED_MOBILITY_TRAVEL_Feature dArticle&fkArticleID=101&fuseaction=pubDsp.dspFeaturedArticle

'Internet Usability and Older People':

http://ageukblog.org.uk/2012/01/06/internet-usability-and-older-people/

'Making airports more user friendly':

http://ageukblog.org.uk/2012/09/15/guest-blog-making-airports-more-user-friendly/

"Home accidents amongst older adults":

http://ageukblog.org.uk/2012/01/03/home-accidents-amongst-older-adults/

"A changing approach: inclusive design":

http://ageukblog.org.uk/2012/04/11/a-changing-approach-inclusive-design/

"Aspirational products for older people: What are we waiting for?":

http://ageukblog.org.uk/2012/07/16/guest-blog-aspirational-products-for-older-people-what-are-we-waiting-for/

Reports and Publications

Engage Business network. February 2013. Ageing Consumers: Lifestyles and Preferences in the current marketplace

Engage Business network. (in press). *Ageing Market:* An actionable segmentation approach segments: Behaviours, Needs and Aspirations

People

A letter from the Senior Manager of the Engage Business Network confirms the growth of the Engage business network and the impact of the research on consultancy services and the accreditation scheme.