

INFORMED ANECDOTES 2:

## DESIGN FOR AN AGEING SOCIETY

*Acknowledging the significance of aging society and the related challenges to world wide welfare TrygFonden, INDEX: and CIID set out to investigate the lives of elderly people to provide a new understanding of old age as inspiration for new designs solutions.*

Our research broke some notions we hold about old people and shifted the focus of design thinking from being a facilitator of special aids and appliances to seeking opportunities in the socio-economic and macro perspective. Our findings reveal distinct trends in the areas of secondary occupations, connectivity, dignity and the way time and space is perceived amongst the elderly.

Drawing from user observation methodologies, design thinking and synthesis we observed and filmed old people in their homes in UK, US, Denmark, India, Taiwan, Italy, Israel, South Africa and Columbia.

The findings are described in two connected articles; This article puts the research and findings into perspective of societies and solutions that address the bigger picture. The other article puts the findings in context with the people and possible solutions that apply to the individuals.



## **THE CONTEXT**

*We live in an era of rapid structural changes, big global issues and many new found opportunities. One that has not received so much global attention is the issue of an aging population, which is a growing problem and a fascinating opportunity.*

It is an obvious fact that the proportion of elderly is steadily increasing worldwide. An estimated 10.3 % of the world population is currently over the age of 60 and this will increase to 15.0 % by 2025. This is even more prominent in countries like Japan, Italy and Germany which are going to have a very large greying population. Already alarm bells are ringing in certain corners of socio-political and economic organizations regarding the ever increasing pension and healthcare costs. In some societies elderly are looked upon as a burden, some have mechanisms to take care of old people but very few look at them as assets. Ever increasing life expectancy and lower fertility rates means that the ratio between the aged and young is going to be unbalanced. This will lead to economic shifts and big changes in social fabric. Percentage wise, in developed economies this will mean a smaller working force, fewer tax-payers and an increasing number entitled to social benefits. For example the total expenditure on healthcare in Italy was 8.4 % of the GDP in 2003. In less developed economies the ratio might not shift considerably due to higher birth rates but the sheer quantum of older people is expected to go up sharply thus putting a huge strain on the al-ready overwhelmed public systems and limited resources. To illustrate the scale of this issue, by 2030 the number of old people in China is going to be larger than the entire population of the United States today.

### **WORLD POPULATION OVER THE AGE OF 60.**

**In 2000 : 420 million**  
**By 2010 : 550 million**  
**By 2030 : 1.38 billion**

Source: Population Division of the Department of Economic and Social Affairs of the United Nations

## METHOD OF STUDY

*It was acutely clear that an in-depth investigation into the lives of old people was needed. Methods like surveys, focus groups and user inquiries can maybe elicit personal opinions, but do not provide detailed insights or help to visualize and understand people's lives.*

The study was conducted using a combination of user-centred methodologies, ethnographic and contextual enquiry techniques applied in a strategic manner across spectrum of people in various countries. The design process skills of the research group were relied upon to synthesis and articulate the findings. An outline of the process is described in the complimentary article '*Informed Anecdotes 1: Insights into an ageing society*'. The main drivers and supporting concepts detected in the study are shortly described below.

### FOUR MAIN DRIVERS – IMPORTANT FINDINGS

- 1. SECONDARY OCCUPATIONS :** Old people find a secondary occupation to have a purpose in life, create rhyme and maintain self-esteem.
- 2. CONNECTIVITY :** Communication, feeling of inclusiveness and information management is equally important to old people.
- 3. DIGNITY :** Independence and self esteem change the perception of the self in old age.
- 4. PERCEPTION OF TIME & SPACE :** How the use of time and space changes in various stages of old age.

### FIVE SUPPORTING CONCEPTS – ALSO DETECTED IN THE RESEARCH

#### **SUPPORTING CONCEPT 1: THE IMPORTANCE OF RITUALS**

Trivial activities are often ritualized by old people. The objective of this seems to be the need to stretch time. Rituals are important to create patterns, tempo and rhythm in daily life.

#### **SUPPORTING CONCEPT 2: DENIAL OF AGING**

Old people seem to develop a friction between acceptance and denial of aging especially in the context of physiological limitations. This leads to a clear tendency to constantly test ones personal physical limits.

#### **SUPPORTING CONCEPT 3: NEED FOR SENSE OF RHYTHM**

There is deep desire between old people to have a rhythm and sense of normalcy in life. Sometimes this need for structure is even created by invention of new activities or even attaching greater importance to existing core activities.

#### **SUPPORTING CONCEPT 4: GROCERY SHOPPING IS SIGNIFICANT**

In growing old, shopping for groceries seems to go beyond a mere functional activity to an elaborate activity that has social value, providing a core activity to focus on and giving a sense of achievement.

#### **SUPPORTING CONCEPT 5. THE PARADOX OF WISDOM**

The knowledge component of wisdom is out of context for many old people due to rapidly evolving practices and technologies. This impacts on an old person's self esteem and their perception of new products and service.

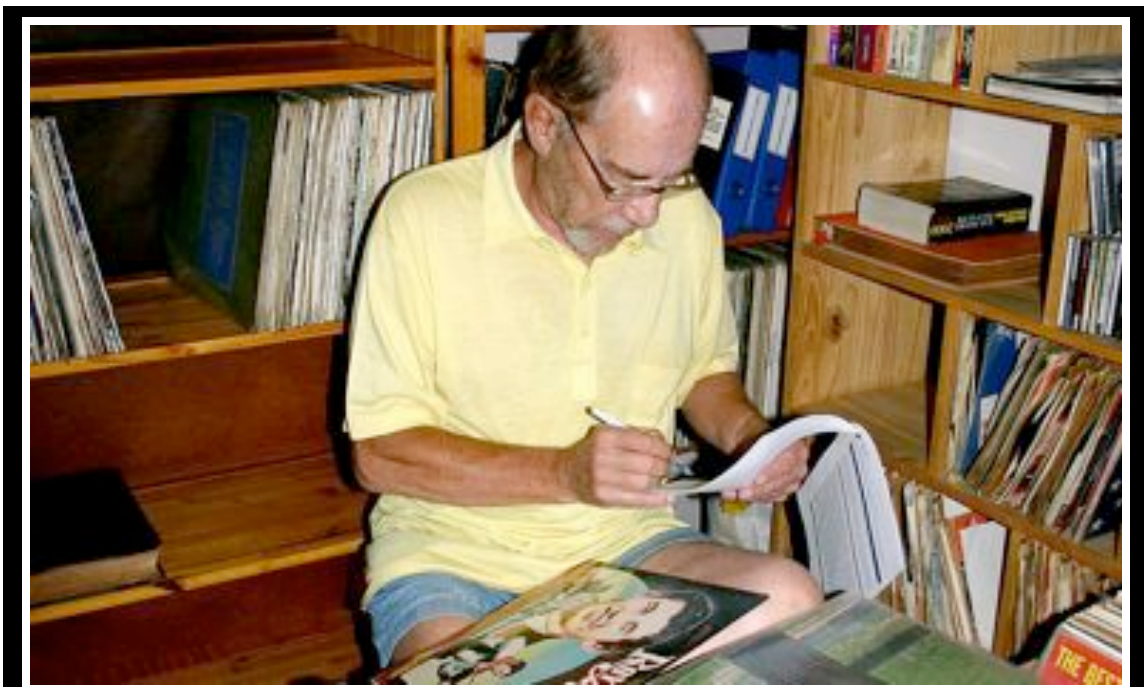
## **THE ROLE OF SECONDARY OCCUPATIONS**

*Secondary occupation was found to be one of the most important drivers for old people. Most people simply continue working informally after formal retirement. This secondary occupation gives old people a purpose in life, creates rhythm and contributes to social capital.*

We choose the phrase 'Secondary Occupation' as we observed that elderly people were filling their time with tasks for the same reason as in a real primary occupation but without the direct economic benefit. It is quite amazing to observe our respondents from this point of view as it become significantly more obvious that they were aspiring to work on small but passionate things to keep themselves occupied. It gave a sense of fulfilment and filled the voids in long days.

Some secondary occupations sound trivial at the first glance but have a much deeper significance to society. The sheer economic value it creates is of a great value that is not incorporated appropriately into current policy thinking. It lies at the intersection of a genuine need and a clear opportunity but is still surprising as to why such a system has not been harnessed for empowering and engaging the elderly in our society.

What is most striking is the level of passion and knowledge acquired in respective secondary occupations. This is a valuable opportunity to introduce a semi-formal framework to capitalize old people's contribution. Currently the contribution to society is not acknowledged as mainstream work, but do fill a void which the formal workforce cannot easily fulfil.



**RECORD COLLECTOR.** Mr Cor Leijenaar, aged 65 lives in Pretoria, South Africa. A retired sports journalist he now collects and trades LP records to keep himself occupied and supplement his meager pension. It occupies most of his day and his social life revolves around it.



**AVID GARDENER** – Mr Robert Shed, 87 lives in Stokenchurch, UK. A retired soldier, he is passionate about gardening and even administers the allotments for the local council.

## **THE DESIGN APPROACH**

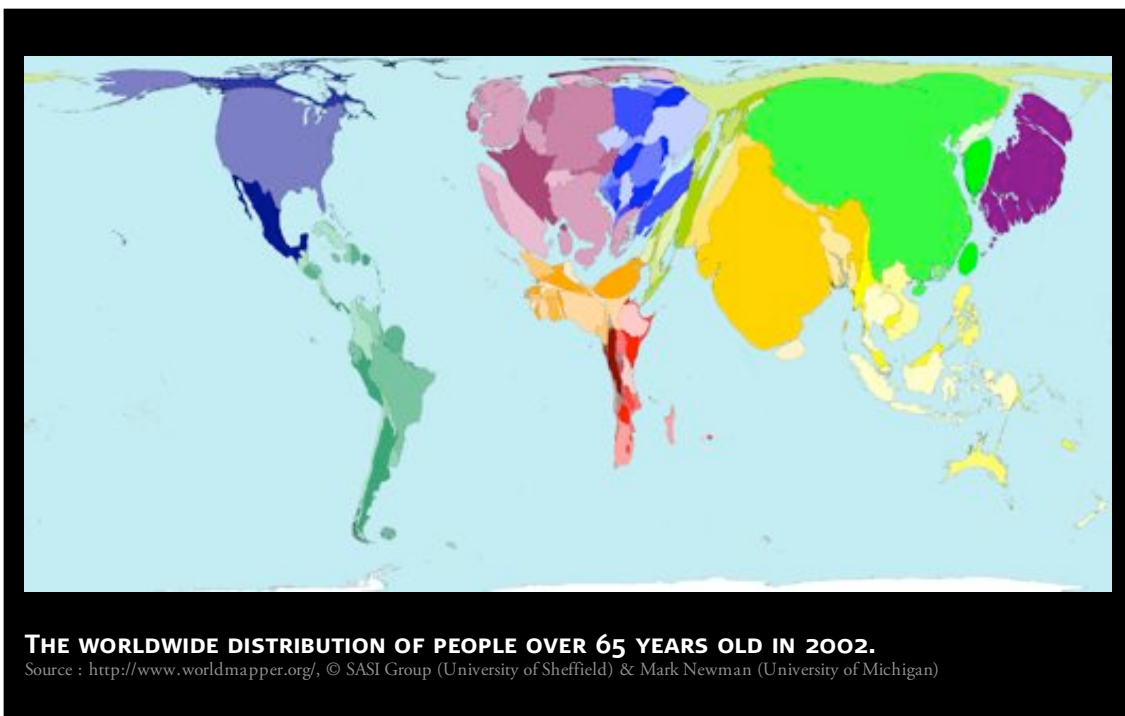
*The Demographic transitions on the horizon will provide a huge opportunity for design intervention. A user centric approach of looking at the needs of the elderly can inform actions that are both at a policy level and a product or service level.*

Globally the elderly are cared for by both formal and informal systems in varying ratios in different countries. Design thinking at a strategic level has to consider this duality of old age concerns and find appropriate solutions.

Informal systems with no governmental intervention or little market involvement are still the primary mechanism of care in most developing countries. It is deeply ingrained in extended family systems, investment in property etc. which acts an unofficial pension system and mitigates risk. An estimated 70 percent of the world's old people rely on this. Understanding nuances of the ageing process and incorporating social elements like kinship and informal socio-political structures is vital to the design process. Design thinking at this level needs to be sensitive to cultural influences and legacy systems while still adopting elements of a formal system to bring appropriate benefits.

On the other hand formal systems practiced in developed countries offer more homogeneous and reliable support for the elderly. Legislation and policies create frameworks for the formal system but design intervention requires careful thought. Formal systems evolve on urbanisation, nuclear families, change in the social fabric and breakdown of traditional social norms. But such practice also alienates the elderly, offers lesser control to an individual and does not accommodate exceptions easily. Systematic user research and consideration of the longevity of ideas is crucial as changes have sweeping impact on masses. Design for such a system has to

work towards improvement within the existing frameworks but could draw inspiration from informal systems to make it more elegant and enriching.



## **MASSIVE OPPORTUNITY**

*Ageing society brings with it a set of challenges, but it also brings huge opportunities. On the horizon is not just a market of almost one-sixth of the world population, but also at the potential to make welfare costs sustainable.*

Tapping into the idea of a secondary occupation can reverse the economic trend of welfare models from being a burden on the state to supplementing it. Interestingly the measure of the burden is often talked about in terms of the dependency ratio<sup>1</sup>. This is based on the assumption that people stop working abruptly at a certain age. In reality, the elderly only stop working formally upon retirement but will continue to contribute to an informal economy. The dependency ratio is deeply connected to the notion of retirement, therefore rethinking retirement not as an abrupt ending to a career but more of a gradual transition, could help foster a new professional stage in people's life. A range of interesting and needed secondary occupations could be imagined. From caring for grandchildren, to mentor-consultancy and neighbourhood maintenance etc. Such tasks might lie at the border between a formal and informal system which could actually become a socio-economic engine for old age.

Old age is, to a large extent, a social construct. Societies at large tend to under-utilise old people's potential to contribute both socially and financially to society by compartmentalising them as a generic group. Finding new roles for old people to continue working could answer some, if not all, of the issues the global society face today. There are numerous opportunities emerging when we consider such a scenario.

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<sup>1</sup> THE DEPENDENCY RATIO IS THE RATIO OF THE ECONOMICALLY DEPENDENT PART OF THE POPULATION, TO THE PRODUCTIVE PART. THE ECONOMICALLY DEPENDENT PART IS RECOGNISED TO BE CHILDREN WHO ARE TOO YOUNG TO WORK, AND INDIVIDUALS THAT ARE TOO OLD, THAT IS, GENERALLY, INDIVIDUALS UNDER THE AGE OF 16 AND OVER THE AGE OF 64.

## **THE DANISH CONTEXT**

*Currently in Denmark the welfare and tax system does not encourage work beyond retirement. Many people look forward to retirement as it offers a less stressful lifestyle. But many retirees also want a secondary occupation that has less responsibility and offers greater flexibility in its scope and timing.*

It would therefore be interesting to investigate how retirement might become a gradual transition, rather than an abrupt end to a primary occupation. The initiatives in the Danish government's recent welfare reform (Velfærdsreform), which raises the formal age of retirement, encourages prolonging the working age of the primary occupation to combat spiralling welfare costs. However, the real answer might be to find new ways to harness secondary occupations after retirement from the primary occupation. It would mean a reform at a policy level that encourages the blurring of the boundary between a formal and an informal economy at old age. We therefore believe it is a worthwhile challenge to find new ways to help bridge the current gap between the primary and secondary occupations. This would demand collaborative thinking at the level of tax, welfare and labour policies combined with clever implementation of new service models that operate at the local level to support the shift in thinking.

## **THOUGHTS FROM OUR OBSERVATIONS**

*During the study several distinct lines of thought were detected, which all has to be taken into consideration, explored and addressed when designing solutions for the aging society.*

## **THE GRANULARITY OF OLD AGE**

*Most of the myths and notions about aging arise due to a lack of understanding of the variations amongst the elderly.*

Old people are not just old people, but series of different groups. There is a vast difference between a recently retired elderly around the age of 60 and a person in their 70's. Old people over 80 are quite uniquely different due to their diminished physical capacity. For most statistical purposes the UN and many countries defines an old person as being over the age of 60. The exact taxonomy of this is not what matters but to be able to understand the abilities and aspirations of the various post retirement groups is crucial. For example several of our respondents over the age of 70 had been spending the last decade working indirectly for their local community. Better understanding of the various age groups beyond the current bracket of 'beyond 60' is vital to the future directions of business, policy makers, public bodies and service industry.

## **THE NOTION OF RETIREMENT**

*The current structure of retirement is heavily drawn from the industrial era where workers were worn out from decades of hard labour and had a lower life expectancy.*

With the emergence of the knowledge driven economies, the elderly populations in the near future are going to be armed with skills more tacit in nature. For them retirement will not be an abrupt stop of professional life but a more gradual transformation. At the other extreme there are countries where retirement is not an option for many elderly. For a farmer or craftsman in an underdeveloped economy, livelihood is deeply linked to his capacity to work. There are no safety nets apart from his family's support and more often than not old age is a path to poverty. In both scenarios it is imperative that people can and will work longer. The concept of retirement will undergo major changes and thus impact the economic planning and old age welfare mechanisms, whether it is state supported or family based.

## **CULTURAL VARIATIONS**

*Cultural and social variations in the aging process is detected in different countries.*

In Taiwan and India the value of an extended family system creates inclusiveness and helps retain self esteem, but the lack of public care systems takes its toll on mobility and healthcare. The benefits of a state run welfare system in Denmark and UK are obvious in creating a formal support system but this also has a tendency to alienate the individual elder socially. The difference between family support and institutional care is quite vast. The various cultural constructs surrounding family relationships in the context of the elderly care and the contemporary suggestions towards institutional care is a fascinating area that needs study.

## **THE DESIGN CHALLENGE**

*United Nations Principles for Older Persons seeks to provide: Independence, Participation, Care, Self-Fulfilment & Dignity. Addressing these challenges amongst the elderly requires a multi-faceted approach and multi-disciplinary action. Design thinking when used at a strategic level could transform these key insights into affirmative action.*

The concept of secondary occupations could be harnessed to bring about both economic support and social capital for the elderly. Design strategy along with informed policy making could introduce a new layer of work force - a new form of informal economic engine with a high social value. It also might reduce the need for dependency on welfare schemes or lower the burden on families depending on the context of application.

For economies that are struggling to find the resources to support the elderly, this could provide a big boost since it would promote self-sufficiency and would allow old people manage their own resources. A dual approach of both broad policy level support and micro action at the local level is required to harness this opportunity. At the policy level new tax structures, savings,

contribution and welfare models would need to be rethought to provide an incentive to continue working. At the micro level enterprises need to provide mechanisms to be more elderly friendly by identifying roles and creating new job profiles that engage their skills

## **VISION OF AGE INTEGRATION**

*A big aspect of caring for the elderly involves integration with the rest of society. Providing a network of care that transcends age is a powerful tool in this process.*

Reducing policy barriers and even physiological barriers to mainstream opportunities would go a long way in making them participate instead of isolating them to create specialized centres. We could draw inspiration from the Danish government report on the aging society that recommends : " *There should be greater focus on the preconditions for creating an age-integrated society: the determinants for an active and healthy life, functional ability in its broadest sense, the technological opportunities for maintaining functional ability for as long as possible, the organisation of the labour market and of companies, and social cohesion in terms of culture, society, gender and ethnicity and across the generations. "*

### **STANDARDS**

Guide 71:2001 - The International Organization for Standardization and the International Electrotechnical Commission have developed guidelines that address the needs of older persons and persons with disabilities. This Guide applies to products, services and environments encountered in all aspects of daily life and intended for the consumer market and the workplace.

## **THE UNIVERSAL APPROACH**

*Adopting the principles of universal design is already a big step closer to creating a more elderly friendly design. Universal design defines the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.*

A combination of these universal design guidelines, parametric recommendations from standards and due consideration to cultural context of application has significant potential in improving many of the minor details, reducing the pain points and thus eventually improving the quality of life. Universally designed products that meet most of the needs of the elderly would always be applicable to other age segments too. But when it comes to information products or technology intensive applications it becomes imperative that the design is not just universal in it's attributes but is thoughtful about the mental models and metaphors that are contextual to time. For example in our study we noticed a lot of elderly people using cellular phones. However some of them prefer to maintain a physical address book instead of storing the numbers on the phone itself.

## **SERVICE OPPORTUNITIES**

*The aging society offers new opportunities in the service economy. Many services have the unique quality of being able to plug the gaps in the social structure. Services can act as agents of support by introducing new patterns of behaviours, bridging accessibility gaps and inducing motivations.*

Services for the elderly are not just about convenience alone. They should aim to create a sense of inclusiveness and security. Old people want to live in inclusive societies and not remain excluded.

Being looked upon merely as old or being presented to tangible or intangible designs specially made for the old creates a mental barrier. Finding mechanisms to camouflage the offer to the elderly reduces this barrier. For example a volunteer driven community van for the elderly was described as a "meat-wagon" by one of our respondents as the van made it obvious that it was for old people who are less able. Just like the younger age groups, the elderly have their aspirations. Many of these aspirations revolve around family, prestige and self-sufficiency. Catering to the aspirations through community oriented service models is a clear opportunity.

Last but not the least the elderly are also avid consumers. A store manager in a local super market said "*the old lady who visits us thrice a week spends over € 4700 a year here*". Designing experiences that are supportive to the elderly has clear benefits to customer loyalty.

**SERVICE DESIGN.** Activmobs is a preventative health service that supports people to form 'mobs' to get active and stay active. Activmobs was designed and developed with the people of Park Wood, Maidstone, with Kent County Council, UK and design group RED. It tries to combat obesity and chronic disease, especially amongst older people.

## **CONCLUSION**

*Quality of life in old age moves beyond mere creature comforts to having a healthy, secure and meaningful life. Healthcare and housing is just one facet of their needs. Building a sense of inclusiveness and dignity should be a public initiative as much as a social responsibility.*

In addressing the aging society by design, it seems obvious that public sector innovation in the area of aging would probably have the maximum impact in improving the quality of life for the elderly. If this was done as a collaborative effort within and between societies, the result would not only mean a better quality of life for old people but would also hold the potential to reduce welfare costs, improve service quality and create a more age integrated society.

A McKinsey report titled 'The Demographic of Deficit: How Aging will Reduce Global Wealth', talks about the macro economic issues of aging and the suggestion it makes is "*The only meaningful way to counteract the impending demographic pressure on global financial wealth is for governments and households to increase their savings rate*". This could be perceived as being a bit narrow in approach as it is not the "only meaningful way" and addresses only one facet of the challenge. Myriads of creative solutions can be created if an effort is made to understand the many diverse individuals who make up what is often considered the "Elderly Burden" but are actually hidden assets and a power in society.

### **Ask yourself !**

What can be done to prepare people just about to retire to adopt new forms of occupations and continue to contribute to society in an active way ?

How can you create a more age inclusive society by reducing barriers and creating new opportunities in your organizations and enterprises?

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