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## Workshop “Technology and Services in the Wake of Demographic Change”

Policy Workshop, March 30, 2011, Maritim Hotel proArte Berlin

in co-operation with the iso-Institut Saarbrücken

Institut für Sozialforschung  
und Sozialwirtschaft e.V.  
Saarbrücken



### Policy Brief

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#### **European Foresight Platform**

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# Workshop “Technology and Services in the Wake of Demographic Change”

*Policy Brief – by Susanne Giesecke, Miriam Leis, Vicente Carabias of the European Foresight Platform*

The Berlin Policy Workshop was part of the German Education and Research Ministry’s funding program on “Technology and Services in the Wake of Demographic Change”.<sup>1</sup> The representatives of 16 funded research clusters, of the funding management organisation and some stakeholders from the context of Ambient Assisted Living (AAL) participated in this workshop on March 30, 2011 to discuss the challenges that demographic change is posing to new service innovation. The workshop was organized and moderated by the ISO Institute Saarbrücken, Germany in cooperation with the core team of the European Foresight Platform (EFP).<sup>2</sup> The Berlin workshop was the national equivalent to the European level policy EFP workshop on active and healthy aging that took place on January 31, 2011 in Brussels.<sup>3</sup>

The participants of the Berlin Policy Workshop discussed questions of the future of service innovation in the context of aging and assistive technologies. Against the background of rapid economic and technological change several participating experts raised the questions what kind of services will be necessary in the future in order to support healthy aging and how these services should be shaped to realize high quality of life of elderly people. In this respect, the workshop aimed at contributing to the accentuation of questions for *research* on services and thus provided valuable support to the German Ministry of Education and Research.

## Status quo

Germany as most other European countries is facing severe changes and challenges caused by demographic change and in particular ageing. While the number of people living in the country is decreasing, the share of older people is rising disproportionately. Wild cards as the financial crisis are putting the social security system under even more stress. Less growth, fewer contributions to the social security and pension system are making the financing of the elderly and at the same time the financing of care more and more precarious. However, there may also be positive effects of demographic change. Rise in life expectancy, and for many staying healthy until old age are precious contributions to our civilization. The contributions that older people can make to our society, e.g. to the economy are experiencing too little attention and acknowledgement from our society at present. The German economy might benefit from exporting innovative assistive technologies.

***Accentuation of questions for research on service innovation related to aging and assistance technologies***

<sup>1</sup> <http://www.dienstleistungundtechnik.de/dite-index2.html>

<sup>2</sup> <http://www.foresight-platform.eu/>

<sup>3</sup> [http://www.foresight-platform.eu/wp-content/uploads/2011/03/Paper\\_Active\\_Healthy\\_Ageing\\_ML\\_FIN.pdf](http://www.foresight-platform.eu/wp-content/uploads/2011/03/Paper_Active_Healthy_Ageing_ML_FIN.pdf)

***Aging society brings serious challenges but also opportunities***

**Challenges posted by demographic change**

Recent studies and research in preparing this workshop are indicating that not demographic change itself is posing the actual challenge but the attitude towards the changes that will occur in the wake of demographic change. By acknowledging the positive sides of demographic change, society as a whole is challenged to change structures accordingly and not to see sickness, decay and death in the first place. Instead, we have to understand that the increase in life expectancy is something society can profit from as a whole.

Against this background, the question how to age and at the same time stay healthy becomes increasingly important not only at individual but also at societal level. In order to benefit from the gain in life expectancy, health risks that come along with age need to be minimized. Healthy aging is only possible with an improvement of handling the process of aging. Getting old in a healthy way starts at early age. Societal institutions such as health insurance and the social security system need to be structured accordingly. The best solution will be to create or transform social structures in such a way as to make a healthy life possible for everyone – independent from age. At the same time we have to be aware that with rising life expectancy the share of people with age related diseases, such as dementia, will rise as well requiring special care.

**Coping strategies**

***The question is how to age and at the same time stay healthy***

As the workshop and previous studies have already stated, we will need strategies from various perspectives to cope with the challenges posed by a “society of healthy aging”. This is a challenge that touches the political, scientific, economic and societal level at the same time.

It is a fact that health and sickness are not only the outcome of individual decision-making but instead the result from structural arrangements as well. Thus, these arrangements have to be considered action points for the near and mid-term future. These actions points were discussed in the Berlin workshop and are introduced in this short policy brief.

Actors at many levels including health, science, political, economy, insurance, construction and city planning, as well as society as a whole can contribute to the perception of healthy from different angles. Conditions for this are supportive structures (e.g. social security system, provision of appropriate living environments) and the cooperation of these actors towards a common goal. This includes the role of services as a starting point, some services do already exist, and others still need to be developed.

The workshop comprised short input statement from three experts on demographic change and the service sector as well as AAL, a time voyage to inspire the debate on services needed when the participants themselves would be 85, and three world café rounds on

1. innovation methods for more services
2. age as a frontier?
3. professionalization of care

4. financing of age
5. gender in the context of technology and care

The results of the interactive workshop discussion can be summarized as 1. options for research and innovation policy and 2. options for their policy areas:

#### **Options for research and innovation policy**

##### ***Innovation in services needed to assist the elderly***

- The increasing number of elderly people is expected to bring about a rise in age-related diseases as well as in new diseases and requirements for assistance. Not only science and medical research should focus on solutions but also policy-making related to (social and technological) innovation and technology.
- R&D as well as social and technological innovations should especially focus on *services* for supporting the elderly; technology should assist the services.
- The user should be the focus of the innovation process and efforts, not only in the field of AAL or active and healthy aging, but for technological applications in general
- The communication between the user and technical innovations should be optimized, e.g. by figuring out how respective new services and technologies can best be integrated into every-day routines and provide a seamless integration into familiar patterns.
- A service-technology-platform should be installed which:
  - o is open to all actors, professionals as well as users; primarily serving the distribution of information about the technological innovations to (potential) patients, health care providers, relatives of patients, doctors, insurance companies, other technology providers and retailers;
  - o includes a forum for exchanging experience on and ideas for technologies and services as well as on the demands that the various actors (patients, health care providers, etc.) have;
  - o enables information exchange on regular and alternative finance options;
  - o initiates innovation partnerships, e.g. by integrating insurance companies and the housing industry

##### ***The user should be the focus of the innovation process***

##### ***Improving the quality of life by customizing services for the elderly***

- The major objective for technologies/AAL should be the improvement of the quality of life of elderly (as well as younger people) by means of personalized/customized services that are supported by technological innovations.
- The development of new products should be done by integrating potential users through the application of participatory approaches.
- The development of new products should be done under the premises of system innovation and by applying modular designs.
- Especially for AAL and related innovations the management of interfaces is crucial.
- Products, technologies and services should ideally follow the principle of 'design for all', i.e. being independent of the user's age (focusing on the "quality of life" and "life style" not "age")
- The heterogeneity of users should be taken into account when developing products (not only for the elderly but for primary and secondary users)
- The education and qualification of care givers should be conducted according to demand as well as by integrating technical knowhow and interactive competencies and avoiding unnecessary "academisation".
- The profession of care-giver should get a better reputation, e.g. by offering better primary and secondary employment conditions, offering better education opportunities, by improving the health care organization.
- The spectrum of care needs to be broadened, e.g. aside from further profes-

sionalization volunteer work should be taken into account to an extended degree

- AAL and health care development can profit from other service sectors such as hospitality services

#### **General policy options**

##### ***Adaptive employment patterns***

***and***

##### ***alternative care arrangements in civil society***

- Adaptation of employment according to present and future demographic developments
- More flexibility at the workplace, designing workplaces according to the capabilities of the elderly workers
- More effective use of personnel in the area of (health)care
- Innovation: New forms of health care, e.g. informal care, new types of living environments/apartments/houses, remote care, opportunity structures for informal exchange relations, civil society engagement in the living quarters, responsibilities of city planning

As these suggestions show there are quite a number of action points for policy makers, research and industry. One significant outcome is that the traditional education, social security and pension systems are not sufficiently taking into account the changes occurring in our society. The division of the life model into three phases (education, work, retirement) has to be overcome and the three phases need to be structurally interwoven. This conclusion results from the understanding that in Western Europe people are aging at better health than 30 years ago. Thus many healthy years are gained, notwithstanding the fact that the need of care will increase by the end of life. The interaction of humans, technology and the market might be one coping strategy for this challenge. But this can only work if users are integrated more and if information on the usage of new technologies is communicated on open and easy access platforms or alternative modes. Services provide for the nexus between users and technologies. In the care sector however, services that are mainly executed by women and underpaid. Finally, more research is needed that brings together the different knowledge carriers of all ages, improves the exchange of information and provides different perspectives and solutions. More research is needed also to find patterns how to put aspects of services at the focus of technical development.

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