



European SeniorWatch Observatory and Inventory -
*A market study about the specific IST needs of older and disabled people
to guide industry, RTD and policy*

www.seniorwatch.de

IST-1999-29086

IWell

***A Finish Well-being and health technology programme
targeting the international markets Europe, USA and
Japan.***

Report Version:	1.0 by STAKES
Report Preparation Date:	December 28, 2001
Classification:	<i>public</i>
Contract Start Date:	1 st of October 2000
Duration:	18 Month
Project Co-ordinator:	<i>empirica</i>
Partners:	WRC, STAKES, EURAG, NPOE



Project funded by the European Community under the
"Information Society Technology" Programme (1998-2002)

Short Title

Project Co-ordinator: empirica

Communication and Technology Research
Oxfordstrasse 2
D-53111 Bonn
Phone: +49 (228) 985300
Fax: +49 (228) 98530-12
e-mail: seniorwatch@empirica.com
URL: <http://www.empirica.com/>

Partners:

WRC - Work Research Centre
1 Greenlea Drive
Dublin 6W
Ireland
Phone: +353 1 4927 042
Fax: +353 1 4927 046
e-mail: wrc@wrc-research.ie
URL: <http://www.wrc-research.ie/>

STAKES - National Research and Development Centre
for Welfare and Health
Siltasaarekatu 18 A
Fin-00531 Helsinki
Phone: +358 9 39 671
Fax: +358 9 761 307
e-mail: asiakaspalvelu@stakes.fi
URL: <http://www.stakes.fi/>

EURAG - European Federation of the Elderly
Wielandgasse 9
A-8010 Graz
Phone: +43 316 81 46 08
Fax: +43 316 81 47 67
e-mail: eurag.europe@aon.at
URL: <http://www.eurag.ch/>

NPOE - The Netherlands Platform Older people and Europe
Christiaan Krammlaan 2-10
3500 AE Utrecht
The Netherlands
Phone: +31 (0)30 273 23 93
Fax: +31 (0)30 271 36 49
e-mail: npoe@seniorweb.nl
URL: <http://www.seniorweb.nl/>

Contents

1	Introduction	4
2	IWELL. The Finnish Well-being and health technology programme, targeting the international markets Europe, USA and Japan.	6
2.1	Description	6
2.2	Analysis	9
2.3	Acknowledgements and links	10

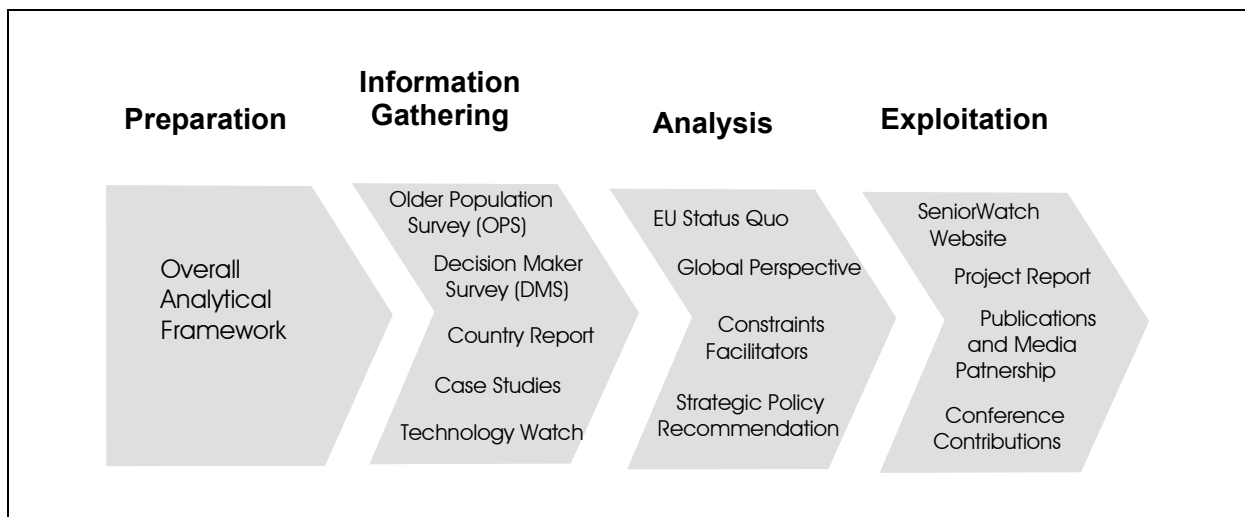
1 Introduction

The SeniorWatch project addresses the need to understand better and to monitor the market dynamics of Information Society Technologies (IST) applications and services targeted at older (and older disabled) citizens. Currently, there is insufficient empirical data about the needs of older citizens which could be met by IST-based applications and services, and a lack of awareness on the part of industry, users and politicians that hampers the rapid exploitation of new market opportunities arising from IST developments. In order to redress this state of affairs SeniorWatch will provide a European single source of empirical information on the market potential of IST-based products and services targeted at older people. The main objectives can be summarised as follows:

- to help and encourage European industry to address the market opportunities, and particularly challenge current competitive advantages of the US industries,
- to enable policy to really influence the current situation and to benchmark achievements between different European regions and countries and to make comparisons with competing world economies (Japan, US) most relevant to the field,
- to inform citizens about what is now possible with the support of IST and, thus, encourage them to demand IST products and services which meet their requirements.

As illustrated by Figure 1-1, these objectives require a comprehensive methodological approach to be applied. On the basis of an overall analytical framework, it integrates a set of complementary research methods such as European-wide surveys of older people and of decision makers in care services, best practice case studies, technology watch work shops and country reports. Synthesising the various types of empirical information gathered with help of these methods will finally enable the project to arrive at an holistic overview, to establish a technology and market observatory, and to derive policy recommendations to accelerate market development. Research results will be exploited by means of different measures.

Figure 1-1: The Project Phases of SeniorWatch



Source: © SeniorWatch, 2001

As part of the project's overall methodological approach the SeniorWatch case studies aim at providing a useful source of information on how the IST-related needs of the target groups in question can adequately be served. They are also intended to help to understand - in a qualitative manner - more deeply specific aspects of the market situation related to IST

products and services relevant for older citizens. To allow a comparative analysis of real-life examples, a common approach for selecting and describing suitable cases was developed. The main selection criteria applied in this context include:

- suitability of the case to provide input to the overall understanding and analysis of the market for IST among older people;
- suitability of the case to serve as an example of a success story (or failure) that can guide and motivate others to take actions that will support the diffusion and take-up of IST by or for older people.

In the following the SeniorWatch case study no.4 is described.

2 IWELL. The Finnish Well-being and health technology programme, targeting the international markets Europe, USA and Japan.



2.1 Description

Technology programme focusing on the development of competitive well-being technology to domestic and international markets

iWELL is a technology programme by the National Technology Agency of Finland (Tekes), which focuses on the development of competitive well-being technology to domestic and international markets. The aim is to produce well-being, health services and technology to citizens at home, work and leisure. Primary goal is to create new technology and services in the well-being sector by financing projects. Final aim is to support independent living of the citizens and to reduce institutional care. Therefore the program concentrates especially on developing solutions to help the ageing population, disabled people and those suffering from long-term illnesses.

The program was launched in the spring 2000 and it will continue until the end of 2002. It continues the work of the technology program 'Digital Media in Health Care' (1996-1999), in which the emphasis was on health care sector and hospitals. The focus of the iWELL is wider, covering the area of well-being and health, emphasising individuals and supporting their independent living. Services are brought into people's own living environment.

The approach is in concordance with the general trends in the care sector towards a wider variety of services and non-institutional care. A pre-study showed these trends and brought out the need for the program. It also stated that in Finnish welfare and health sector there were promising activities and innovations of enterprises, which were proposed to have positive market outlooks.

In 1999 there were more than 350 Finnish enterprises producing health care and wellbeing products. In total they had 12 000 employees. In 70 % of the enterprises the turnover was less than 2 MEURO. 10 enterprises had the turnover of 100 MEURO. In summary, the most of the enterprises were rather small and the business area was quite diffuse.

The iWELL was launched to help enterprises, research institutes and universities generate business products and services from technical innovations and ideas. The program focuses on the following business areas, which utilise Finish strengths in technology and have positive market outlooks internationally:

1. Home services and eHealth. Home services focus area concentrates on developing home care services and eHealth services. In Finland the home care sector is traditionally public sector dominated, the municipalities are the main service providers. Anyhow, during the recent years many small private home care enterprises have been established. There is a need for new home care enterprises, because municipalities outsource a part of their home care services and buy them from private enterprises. In addition, with the growing number of the elderly, more older people or their families buy home care services from private sector. Because of the new law with right for tax allowances, private households have better possibilities to buy home care services from private enterprises and non-profit organisations. Anyhow, private home care enterprises need tools to make their business, logistics etc. more effective.

2. Occupational health and corporate wellness. Employers are prepared to invest in occupational health and proactive health care, so there is demand for products and services in this area. Furthermore proactive health care and corporate wellness can increase older people's ability to work. New service concepts like a so called health coach, which support the health management of the employees have been developed. A self controlled stress monitoring system, which is based on the heart rate monitoring as well as measuring and auditing the quality of treatment for neck and shoulder therapy are other examples of new concepts.

3. Home automation and intelligent environment. The crucial question for the participating projects is, how technological services and products can be utilised in home environment and how intelligent environment and smart home technology can support independent living of older and disabled people. The MMHacs project co-ordinated by University of Oulu has developed multimedia home aid communication systems for older and disabled people as well as service providers. The system consists of applications from videoconferencing, robotics and mobile technology. With the help of videoconferencing services are brought directly to the user's home. The mobile system help especially social and health care professionals, but also the end user. In the project there is a strong emphasis on user and usability. User and usability studies have been conducted through all the phases of the project.

4. Fitness. Fitness and rehabilitation are important for well-being and health. In this business area there are a lot of enterprises in Finland. Enterprises develop smart fitness and rehabilitation devices as well as concepts for fitness-training and top-sport. For older people special gym devices with pressure air technique are developed. Heart rate monitoring can be combined with these devices. The participating projects exploit various technologies and applications like for example wireless solutions, networks, multimedia, WAP, Bluetooth, digiTV, biotechnology, biosignals and nanotechnology.

In practice the program supports enterprises, research institutes and universities for example by activating new initiatives and projects, by disseminating knowledge and by providing funding. In practise the employees of the iWELL evaluate an idea of a project from the very beginning on. They help out concretely in planning a project and applying for funding. Projects are also supported during their life cycle, for example by taking part in their management teams and steering groups.

The programme promotes networking of the projects and offers an arena for co-operation of the enterprises, research institutes and universities. Seminars, conferences and meetings for experts working in the well-being and health sector have been organised. It is crucial for the success, that the projects have the possibility to meet each other. Enterprises build up thematic clusters, which are led by big companies. Clusters work independently and plan themselves, how participating enterprises co-operate with each other. There are not very many enterprises working in this sector in Finland and most of them are quite small, which makes entrepreneurship more difficult. In this situation the networking of the enterprises is absolutely necessary. Together they are stronger than alone.

The programme has also organised international activities. Because information on international market perspectives was lacking, market studies were conducted in Japan and in the USA. The markets studies of USA concentrate on corporate wellness and fitness. Study tours to Japan have been organised as well as the Japan 'school' for entrepreneurs.

Dissemination is an important part of the activities. The program has it's own web site and an e-mail group. In the web site information and news on technology programs and results of the participating projects are published.

Policy context



Tekes – the National Technology Agency – is the main financing organisation for applied and industrial research and development in Finland. It provides funding for enterprises, research institutes and universities. The funds are provided from state budget via the Ministry of Trade and Industry. Technology programmes are used to promote development in specific sectors of technology or industry and to pass the results of research work into business. The aim is to create new enterprises and business and to increase the growth and competitiveness of existing enterprises. The final aims are to broaden Finland's industrial base, to increase exports, to generate new jobs and to expand welfare (see figure in the appendix, Impact of Tekes activities). Programs have proved to be an effective form of co-operation and networking for enterprises and research sector. During 2001, a total of about 50 extensive national technology programmes are under way.

The technology programmes are planned in co-operation with enterprises, research institutes and Tekes in open preparatory seminars and workgroups. Each program has a steering group, a co-ordinator and a responsible person at Tekes. Navicre Ltd co-ordinates the iWELL program. The members of the steering group are Ministry of Social Affairs and Health, Tekes, STAKES, Sitra, VTT information technology and the enterprises Engel, IST (International Security Technology Ltd), Navicre Ltd, Polar Electro, Well Being Solutions Ltd.

The total budget of the iWELL program is 42 MEURO, from which the funding of the Tekes is 20 MEURO. Enterprises, research institutes and universities can apply for the funding. Enterprises must bring about 50 % self-financing with them. From research institutes and universities about 20-30 % of self-financing is required. If a research-institute applies a project, at least one partner participating in the project has to be an enterprise.

Tekes works with various actors in the health and welfare sector. Enterprises, research institutes and universities and public sector organisations are important partners. Tekes is

also involved in the work of the Finnish welfare cluster. The mission of the cluster is to improve the collaboration between health and social service providers and industry. The cluster is built up by service providers, enterprises, authorities and public sector agencies (Ministry of Trade and Industry, Ministry of Social Affairs and Health, Academy of Finland, Tekes and STAKES).

Results

There is a need for this kind of program. Until 12/2001 about 80 projects have been financed by the iWELL. About a half of these projects are led by enterprises and an another half by research institutes and universities. There are about 500 members in the e-mailing list.

When the program started, the assumption was that not much research would be needed any more in the area. However, it turned out that there is still a need for research and development in a greater extent than expected. Thus the original aim of the program to mainly concentrate on financing undertakings of enterprises did not come true.

In general, the participating projects are of a high quality. Especially, there are good research undertakings going on. Product development projects of enterprises have been launched, but there could have been more of them. Thematically the undertakings cover very well the wellbeing and health business area. Especially, a lot of projects focus on fitness and intelligent home environment.

2.2 Analysis

Impact

The program is still going on and it is too early to evaluate it's impact. There will be an external evaluation during 2002. Anyhow, general impression so far is, that the iWELL has been successful. Especially, the program has succeeded very well in bringing enterprises together. Thematic clusters led by big companies have created new synergies between the enterprises and between the private and public sector stakeholders. The program has acted as an initiator for the networking, but in order to have sustainable results, it is crucial that the clusters are organised by the enterprises themselves.

Already now there are about 15 enterprises with so well developed services, that they can aim into an international market. Some enterprises have been successful in entering the markets especially in Japan and in the USA. Finnish enterprises have been involved in building a service centre in Japan. Services of corporate wellness and fitness are expected to be able to penetrate the markets in the USA.

In Finland technologies are of a high standard, but integrating the technologies into service concepts is a big challenge. The technologies tend to be apart from the services. The service business based on the technologies is not very well developed yet.

Lessons to learn

The basic model of a technology program like the iWELL focusing on a specific theme can be generalised and it could be established in other EU-countries as well. The specific themes differ from country to country and therefore a prestudy, which analyses the national strengths

and areas to be developed is essential. A technology program should be based on national strengths. A crucial question is, why a technology program is needed in the specific environment of each country. Aims of the program should be clearly defined. Also the organisation of networking should be considered in national and international level, among the participants of the program as well as with other stakeholders.

Perspectives

The program will continue until the end of 2002. After that Tekes will continue working in this area, because the financiers and organisations involved in the activities consider it important. Anyhow, it is still too early to speak about concrete plans.

2.3 Acknowledgements and links

Person to contact

Sari Valjakka, STAKES. sari.valjakka@stakes.fi , telephone +358 9 3967 2094

Vesa Tornberg, Tekes National Technology Agency, Finland. vesa.tornberg@navicre.com
telephone +358 8 5515 624

Literature

- Aalto-Wahlstedt O, Puurunen H (ed) (2000) Kohti saumatonta palveluketjua terveydenhuollon murroksessa. Terveydenhuollon digitaalinen media 1996-1999. Teknologiaohjelmaraaportti 10/2000. Tekes, Helsinki.
- Saranummi N (2001) Hyvinvointi- ja terveysalan teknologia- ja palvelutuotteet. Teknologiakatsaus 103/2001. Tekes, Helsinki.
- Tekes (2000) iWELL Finnish knowhow produces wellbeing.

WWW links

<http://www.tekes.fi/eng/default.asp>

Main page of Tekes in English.

http://akseli.tekes.fi/Resource.phx/community/mainpage/mainpage_en.htx

Akseli is the portal for technology programmes of Tekes, the National Technology Agency. Akseli provides information on all technology programmes and related research and development projects.

<http://akseli.tekes.fi/Resource.phx/tivi/iwell/en/index.htx>

Home page of iWELL in English.