



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

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IST Wrist Care System

A Finish security device.

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Short Title

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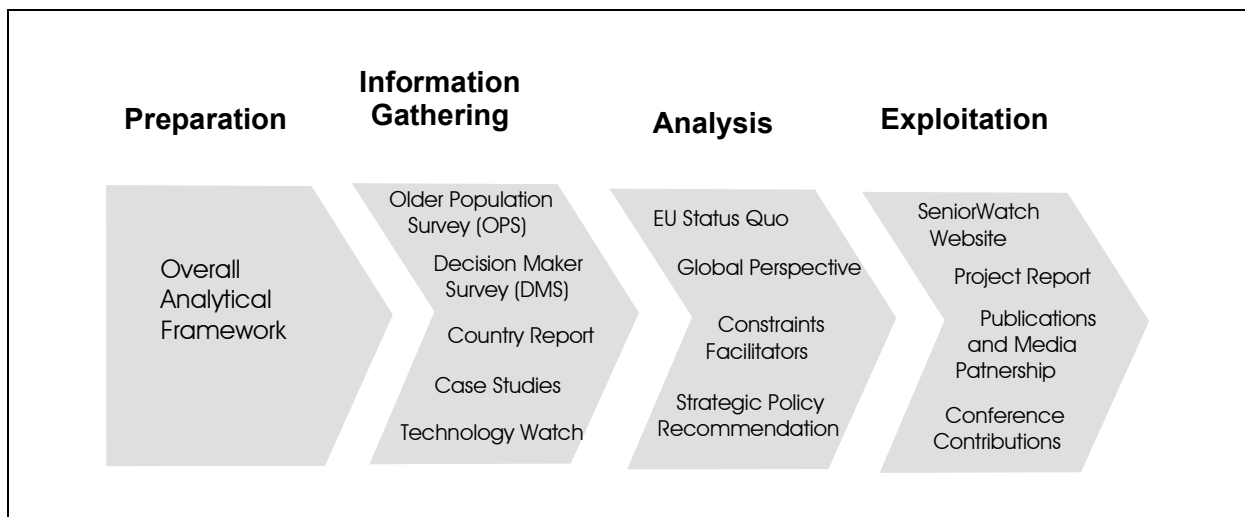
1 Introduction

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.12 is described.

2 IST Wrist Care System, A Finnish product



<http://www.istsec.fi/>

2.1 Description

WristCare increases the security of the older users living alone at home. It helps them to live more independently and longer at home. The system also makes home care more efficient. In institutions the WristCare increases the security of the elderly patients and helps the care personnel to work more efficiently. It improves the activities of hospitals and sheltered accommodations and reduces the nursing costs.

There is clearly an interest and need for the product. The attitudes toward the WristCare are positive. Anyhow the WristCare represents a new kind of security device and it takes time to penetrate the markets. It takes a lot of effort to inform target groups with various needs from the new product. The product is more expensive than a usual personal safety alarm and possible clients want to know, what is the additional value. E.g. the budgets of the municipalities are very tight.

The actual sale of the product has started more slowly than expected. Penetrating the market internationally is a long and bureaucratic process. Situations in different countries vary a lot and bureaucracy has caused problems. Also technical conditions e.g. frequencies vary from country to country. In the near future this problems will be solved, when there will be a pan European product accepted in all European countries.

WristCare system developed by the Finnish company IST International Security Technology is the world's first security device, which monitors the user's well being 24 hours a day. The wrist continuously measures physiological signals: movement, body temperature, pulses and skins conductivity. If the WristCare system notices a significant change in the user's activity level or well being, it automatically sends an alarm. During the first four days of use, it studies the user's normal activity level and well being and adapts its function to these.

There are various models of WristCare to satisfy the needs of home and institutional users. The system consists of wrist unit/s and a base unit. Smoke detectors and door controls can be included in the system. When the WristCare system detects significant changes compared to the normal profile of an individual, it first monitors the situation and its development. If the abnormal state continues, it will automatically send an alarm. The quickest automatic alarms occur after about 30 minutes. The WristCare system can also transmit manual alarms, as well as maintenance alarms. When in need of help, the alarm can be signalled immediately by pressing the manual alarm. If a person is unable to send an alarm, this will be done automatically after 30 minutes. The alarm recipient is able to open a voice connection with the user through the base unit. The alarm can be directed to any phone or call/alarm centre. The message can be directed to several receivers. If a primary receiver does not respond, the alarm is transferred to the next receiver and then, for example, to a round-the-clock call centre.

The WristCare system also increases the security of institutional users. Their wellbeing can be continuously monitored and the triggered alarms are quickly transmitted to care personnel. During the night, the alarms can be programmed to alert the on call personnel or an external alarm centre. It can also monitor wandering patients, and if necessary, control their access in and out of doors. The system can cover all the rooms in sheltered accommodation so that persons wearing a wrist unit can move freely.

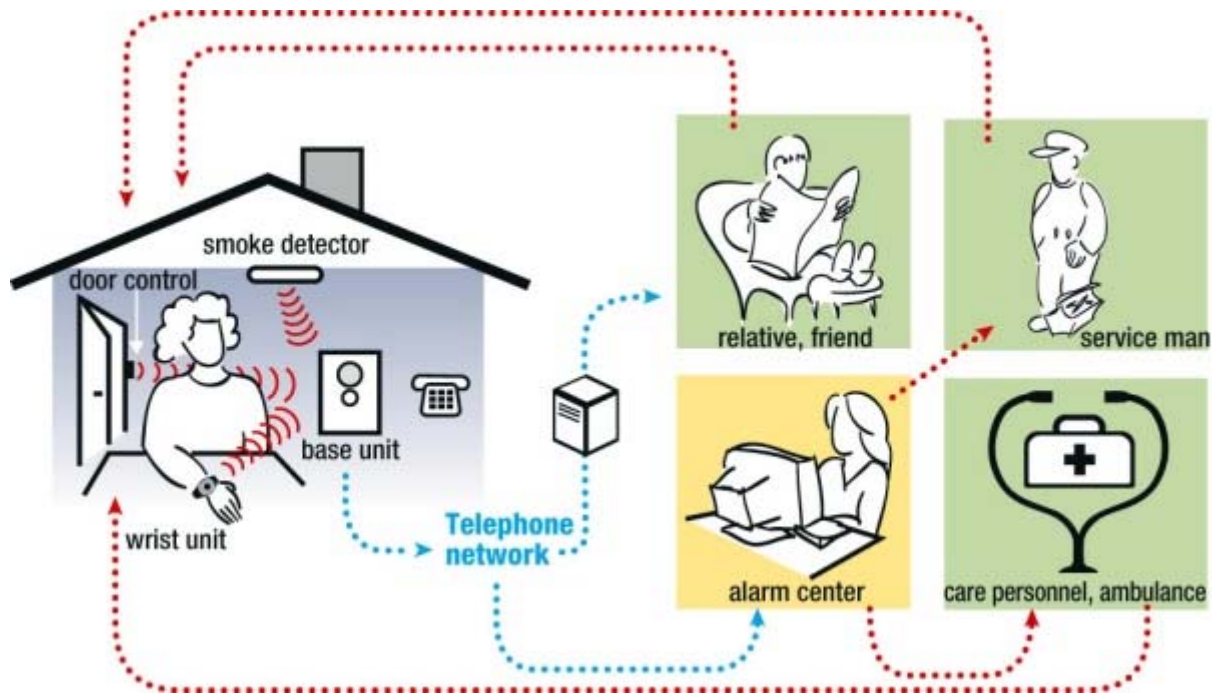
Marketing issues

The prices vary from country to country. In Finland a home care system costs 5419 FM (918 EUR), whereas e.g. in Germany it is more expensive and costs about 3000 DM. Renting a WristCare costs 160 FM (32 EUR) in a month, and a contract with an alarm centre 130-160 FM (22-27 EUR) in a month. For the institutions the prices are 3500-5000 FM (593-847 EUR) per customer depending from the total number of customers.

Pr-work, general communication and direct marketing has been done by the IST-company. There have been advertisement in general nation-wide newspapers as well as in professional magazines. A brochure for the families has been produced. Direct marketing to professional and institutions as well as seminars and fairs have turned out to be efficient. Distributors in each country and area are responsible for the marketing to the users and their families in their area.

The first target group is elderly persons living at home. They often suffer from chronically illnesses, especially dementia. The second target group are institutional users. The third target group are disabled persons and persons suffering from long-term illnesses generally living at home. A product targeted at persons suffering from epilepsy and diabetic is under construction.

In general, the users of personal safety alarms are approximately 80 years old and the devices are used approximately ten months. This also applies to care wrist, but the aim is, that a little bit younger persons (e.g. approximately 75 years old) would use WristCare and they would start using it earlier. Nowadays, usually an accident has already happened or the persons have become demented, before they start using the WristCare.



IST home system



Context

The company was founded in 1993.

The founder of IST and Care Wrist products is Mr Matti Myllymäki. The idea was based in the experiences of his family member with a usual personal safety alarm. He thought these devices should be more intelligent and able to react in changes in person's wellbeing.

The system is a result of long term development and testing. The technical Research Institute of Finland (VTT) has participated in clinical testing.

1998 the first generation of the product

1999 the second generation of the product

Milestones:

- First prize of "Best Innovation of the Health Care Sector 1993"
- Honourable mention at "Entrepreneur /Inventor Competition 1993"
- Top listing among 1500 small and medium-sized high technology companies in 1996-97 (Sponsorship of the Academy of Technical Sciences)
- Chosen in 1997 as one among the 30 best European information technology companies (EU/Infinity).
- Presented as the most progressive technology in its field by British Telecom in 1997

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- The gold medal at the world's largest INPEX Innovation Exhibition in the US in 1999
- "Innosuomi" award presented by the President of Finland in 1999.
- Golden Key-award presented by the Finnish Association of Domestic Work.

The total number of staff was 18 in May 2001. Until March 2000 there were only 5 employees working in the company. Mr Myllymäki is company's technical director and one of the shareholders. Other owners include the Financial Services Group FIM and the Finnish National Fund for Research and Development (SITRA). The technical Research Institute of Finland was involved.

Perspectives

In total there are about 2500 users by now. The demand for the product is raising – especially in institutions. The product is very current now, when there has been a lot of discussion in the media on the quality of care services for the elderly. At the same time there is also a pressure to save costs in health care and work more efficiently. The WristCare can help to achieve these aims.

The product has been based on technical innovations and the development of the products has been the main domain of the company during the first 5-6 years. Just during the last year the activities of the company have been more commercialised. There has been and still is a growth in sales. The company has now pilot projects in England, France, Ireland, Germany, Holland and Japan with distributors in European countries. A larger 5-year general agreement has been made with Japan that is very promising. A lot of contacts have been opened and big companies like Ericsson, Siemens etc. are interested in co-operation.

2.2 Analysis

Impact

The company has been based on technical innovations, which have been awarded by many prizes. Technically the product is very innovative and the first one of its kind. The commercial targets came later and the commercialisation has strongly moved forward during the last year, but all in all it is a slow process.

There is an arising interest for the product, but because WristCare is a new kind of product, a lot of pr-work is needed. Penetrating the markets is a slow process. Internationally there are good market perspectives for the product and doors have been opened to European market and Japan. Interesting contacts have been established.

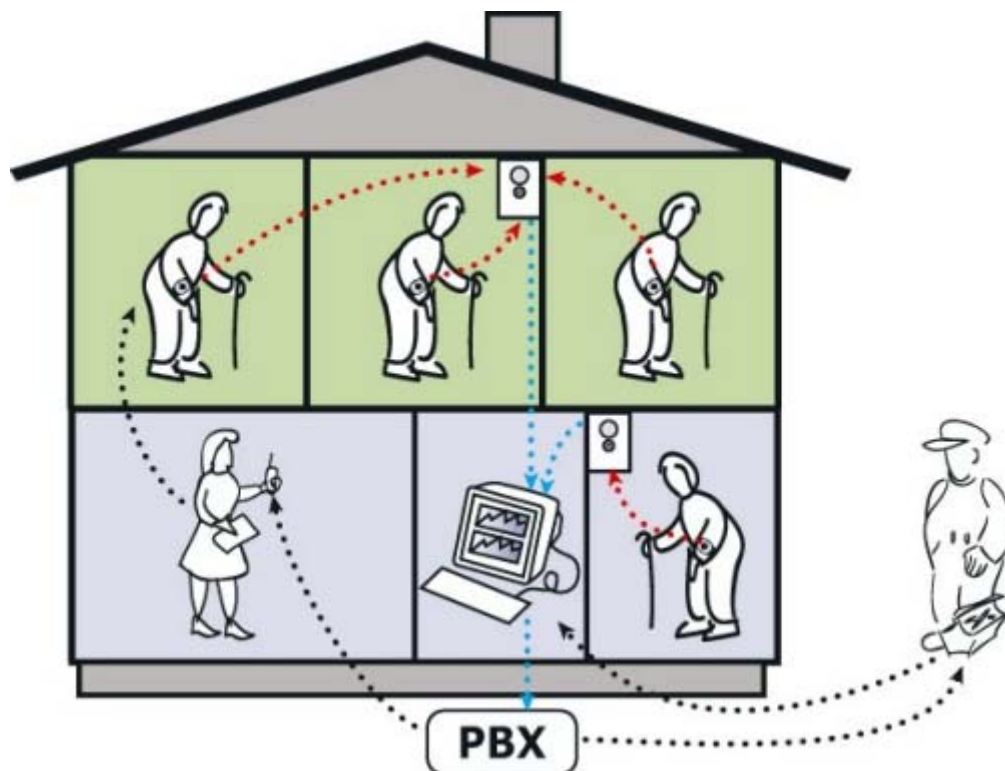
There have not been any big, fundamental problems. The actual sell of the product has turned out to be more slowly than expected, because of the two reasons: 1. in the first 5-6 years the focus was on the technical development of the product 2. it is a slow process to bring a new kind of product into the market.

Lessons to learn

The central challenge has been how to make from a technical innovation a marketable product. The process has its origins in inspiration and creativeness. Anyhow, it could have been considered earlier, how the innovation applies as a commercial product. Involving a marketing strategy and marketing research into an earlier stage of the process could have been useful.

An important aim is to invest in marketing and to increase the sale. The aim of the marketing is to turn the image of the product based on possibilities. Nowadays, it is more a problem-based product that is bought to solve certain problems. The aim is to enlarge the target group into younger age groups.

At the same time, it is important to continue the development of the new generation of the product. The product should be developed into more mobile direction. There are two general trends in future product development: 1. Mainstreaming products 2. care related specified products. 1. A target is to develop an easy consumer good, which relatives or elderly persons themselves can buy. The product should be easy to use and clear in design. It should stand alone not being independent from a special infrastructure. 2. care related products, that can measure more parameters are developed for specified target groups e.g. people suffering from epilepsy or diabetes.



IST institutional system

2.3 Acknowledgements and links

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WWW links

<http://www.istsec.fi.fi/>