Full Case Report

Tyoelake -- Finnish Centre for Pensions (Finland)

Online advice and information on earnings-related pensions in Finland

Executive summary of the case:

Abstract
The pension portal Tyoelake.fi
At the beginning of 2001, the Finnish Centre for Pensions together with all the authorised pension providers of the decentralised Finnish statutory earnings-related pension scheme, agreed to create a common service portal for the insured.
To this end the web service Tyoelake.fi was opened in December 2002. It comprises an extensive and informative website in three languages, which is open to everyone.
The website contains information about the earnings-related pension scheme and is accessible only to identified users.
The objective of developing the service is to create, within the decentralised earnings-related pension scheme, a uniform interface for the electronic communication with the insured. The following services are available at the current time:
- General information relating to pensions.
- Age-profiled advice service for all stages in life.
- A service whereby a client can check his or her contract of employment and own employment details included in the registers and make any corrections.
- A one to one advice service.
Innovative features of the service include the possibilities for authentication: The insured can use a card with PKI technology or the authentication technology of their own Internet bank to confirm identity.
The service already reaches approximately 80 per cent of the working population, i.e. the target group. The success of the first stage of the project has enabled the planning of the next stage, which has already started.

Case description:

Background
The reasons for developing the web service Tyoelake.fi can be found in the development of the population trend in Finland. The large numbers of citizens born after the Second World War are starting to approach the age when the personal interest in pension matters increases. There is therefore a wish to direct part of the increasing demand towards electronic self-service. At the same time, there was also a wish to give those, other than those approaching retirement age, a chance to receive information about their pension accrued in the course of their work and to follow matters relating to their own pension benefits.
More than 50 authorised pension providers administer the Finnish statutory earnings-related pension scheme. It is important for them to develop the service provided to their own insured, however the service interface for the insured to gain access to the integrated earnings-related pension scheme should not be
too diverse. When building the new website, the insured’s point of view was put first. The cooperation in creating the service could be channelled via the Finnish Centre for Pensions responsibility.

The most difficult issue in planning the service was the means of authentication. The electronic identification card, which was introduced in Finland in 1999, had not become popular and does not thus guarantee a sufficient number of potential clients. For this reason the authentication procedures of the largest Finnish banks were adopted as authentication solutions, in which case the number of potential clients would automatically increase to millions.

Objectives

In the short term the need for information brought about by the increasing numbers of retirees in the immediate future, could be better satisfied by making use of electronic services. In Finland, the use of information networks and the utilisation rates of the web services provided by banks are first rate when compared with international statistics.

The long-term objective of developing the service was to create, within the decentralised earnings-related pension scheme, a uniform interface for the electronic communication with and access to information for the insured.

The following services were provided for the insured:
- distribution of general information,
- age-profiled advisory service for different stages of life,
- checking one’s own contracts of employment and self-employment included in the registers and where necessary making corrections,
- individual advisory service,
- receiving a pension estimate,
- filing a pension application electronically,
- following the processing stages of the application online.

The four first service objectives in the list above have been implemented in the first version of the system. The course of action of the uniform portal is however not centralised, but it is based on directing the insured to the services provided by their own authorised pension providers. Matters are then handled in a competent, accurate and fast way, because this is a key business activity for the pension provider.

Different pension providers may shape the service they provide according to their own website content and decide themselves how they deal with information that is freely available and that requiring authentication to gain access.

Resources

The use of information technology (ICT) resources.

The service Tyoelake.fi is composed of three different technical components:

1. The open service is based on DynaGen content management and publishing platform, which is a product based on Microsoft architecture implemented by the Finnish Quartal Oy. By means of this product, the information officers and other employees can easily maintain the contents without the help of the technical personnel.

2. A common authentication service for the earnings-related pension scheme has been built for the submission of personal data. The authentication service is based on PKI technology as well as on standardised codes for online banking offered by the largest banks in Finland.

3. Personal data and individual services supplied to users are based on the central registers in the mainframe environment of the Finnish Centre for Pensions and have been implemented by a uniform
architecture together with other web applications of the Finnish Centre for Pensions. Integrating these three components into a uniform and functional entity has been the greatest challenge of the project implementation. In the authentication service the person can use, as an authentication tool, an identification card provided with the Population Register Centre’s certificate or codes for online banking offered by a Finnish bank. The authentication includes finding a person’s personal identification code either from the Population Register Centre’s service or from the Internet bank. An agreement has been concluded with the banks according to which they are not entitled to store the service user's data. The earnings-related pension scheme pays the banks the price agreed on for this service.

Some of the individual services offered by the portal Tyoelake.fi are also available to the web services of the authorised pension providers. The web services of the pension providers can ask their own pension provider to submit a person’s data to the service by means of an XML message from the Finnish Centre for Pensions Tyoelake.fi server. The authorised pension providers can also use the corresponding data in their other advisory service.

The main user interface for the service is the web site www.tyoelake.fi. The feedback and the questions that the users have asked about pension benefits are transmitted by electronic mail. For the administration of the feedback and the questions, a course of action utilising the current decentralised service network has been created. By means of this course of action the service is directed to the party who is able to clarify the matter in the best possible way.

Data security

Personal data are only given to an identified user. The exchange of personal data has been protected by SSL encryption. The eMail messages between the organisations offering the service are sent through the VPN network. The replies to the questions asked by the users are sent through open eMail, but the eMail messages only include general information as personal data is sent by letter to the address stored in the population information system. In the data transfer between the portal Tyoelake.fi and the authorised pension providers, the parties are identified by means of certificates. Every search for personal data leaves a record in the log database.

Tools

The structure of the service is based on Microsoft DNA architecture. The environment in use is the duplex IIS servers. The database servers and the file servers have been differentiated. The authentication service is based on Java technology.

Knowledge and skills

Knowledge of the pension industry, web technology skills as well as an ability to integrate business needs and the possibilities offered by technology have been required of those who participated in building the service. Carrying out the project has also been challenging in respect of the management and coordination. In the planning stage, approximately 50 representatives of the pension providers as well as from the Finnish Centre for Pensions participated in several different working groups. At the Finnish Centre for Pensions, the reported work contribution has been approximately 1,200 man days, out of which the content production for the open service amounts to approximately 500 man days. The implementation was divided into approximately 10 smaller projects, in which five different IT suppliers participated.

Activities

The authentication solution in the portal is quite new to the eGovernment service Tyoelake.fi. The introduction of the authentication service of financial institutions is a unique solution both in Finland and internationally. In an open service which uses national registers this has never been done anywhere before. The employment registers of the Finnish Centre for Pensions contain, among other things, data on all the contracts of employment in Finland over a period of 40 years needed for the calculation of pension accrual.

This cooperative project is managed by a committee, which approves the development policies of the service, the contents and the costs of the implementation. The members of the committee represent parties responsible for earnings-related pensions. The costs are shared between the participants in proportion to the insured's wage bills, because they best approximate the number of potential users of the service.
party approves its own share of the budget within its administrative bodies. The practical implementer of the project was the Finnish Centre for Pensions where two development managers were the full-time leaders of the project. Moreover, approximately 20 employees at the Finnish Centre for Pensions worked on the smaller projects of the enterprise. External consultants were used for planning the contents of the service, the different stages of the project, the layout of the web pages and for testing the usability as well as for building the advisory service and for implementing the training this required. All together, about 30 external workers participated in the project. The technical implementation was also purchased from several different suppliers.

The input for building the portal amounted to €2m during 2001-2002. The pages were written and the content of the services were planned at the Finnish Centre for Pensions, in cooperation with the authorised pension providers. The building costs of the service amounted to approximately €1 per insured person, i.e. per potential client. The costs incurred during the use of the service requiring authentication are less than 50 cents per visitor.

The opening of the service on 9 December 2002 was not widely advertised, because the feedback from the users was needed in case of technical problems and subsequent log jams in the advisory services. The main focus of the information in 2001-2002 was on the internal information within the industry. Up to now the service has received little publicity and it has not been advertised at all in the commercial media.

There was a wish to minimise changes to the current service processes and the effects of change on the personnel. This could be done by decentralising the advisory service related to the portal to existing organisations. All the parties were trained to adopt coherent procedures. The development of procedures is regulated and maintained through regular meetings.

Output and Results

The authentication solution of the portal Tyoelake.fi is cost saving. Multiple building costs were avoided through cooperation. At the same time, the basis for implementing a single log in for the web services of the earnings related pension scheme was created, which means that the insured can move easily from one web site to another after identifying himself or herself. The insured does not incur any costs for the service, but on the contrary he or she saves time and trouble, which has a positive effect on his or her well-being.

Security is also a contributory factor to well-being. The knowledge of one’s own social rights and how they are realised is important in this respect.

The service has met with a very positive reception. The same familiar codes used for online banking make the general public or at least a large percentage of the total population, potential users of the open web service in minutes. The number of visitors to the Tyoelake.fi service amounts to approximately 1,000 a day and most of them use the services that require authentication.

During the first four months approximately 50,000 people have checked their earnings record. The employment record contains the private sector contracts of employment including data on the pensionable wage as well as the public sector contracts of employment. In their feedback, the users have commended the versatility and the comprehensibility of the contents. This, the implementer tried to ensure at the building stage by investing money in usability tests. Basic information about all the earnings related pension benefits, i.e. private sector employee's pensions as well as state employees and other employees pensions, have been compiled in the Tyoelake.fi web service. The pension glossary provides to the point explanations of difficult pension terms.

The building costs of the service amounted to approximately €1 per insured person, i.e. per potential client. The costs incurred during the use of the service requiring authentication are less than 50 cents per visitor. Delivering similar information in the traditional way by post costs several euros per contact made. The use of the web service has not increased the number of questions delivered via traditional channels. Thus, the service has also reached its financial objectives.

The success of the first stage of the collaborative project has created good opportunities for further development. The planning for the next stage has already started. The objective is an online pension application service and its connection to the processes of the investigating institution. By virtue of the authentication solution put in place through the first stage of the project the opportunity arose for creating a controlled electronic process for pension applications enabling the insured's to communicate with the
authorised pension provider’s pension adjudicator and further, in the case of a grant, to enable the payment of the pension into the insured’s bank account.

**Lessons and conclusions**

The implementation of the project was enabled by making it a primary strategic objective at the Finnish Centre for Pensions. The management was strongly engaged in the project. The development, the objectives and the timetable were given visibility within the entire pensions industry. This increased the commitment of the personnel and various suppliers to reach the objectives set. The first large scale open service intended for identified persons has aroused extensive interest.

The functionality of the service has encouraged the development of an electronic administration in other industries. The use of the codes used for online banking, which has been successfully implemented in the Tyoelake.fi service, is being planned for the services for the general public provided by other producers of large open web services can be attributed to the positive consequences of the Tyoelake.fi project. In February 2003, the National Board of Taxes, the Social Insurance Institution and the Ministry of Labour concluded an agreement to proceed in partnership.

The Tyoelake.fi project was a new field for its backers in many ways. Combining the traditional mainframe environment based on batch runs with the network environment introduced among other things new skill requirements and required coordination of the procedures of a number of different network operation centres. The complexity of the new projects increased the workloads. Even though the human resources and the skill resources were barely sufficient, the increase in the amount of work did not, however, extend the timetable for completion. The experiences have improved the possibility to make more realistic estimates of the required workloads for future extensions of the service.

The other lesson is related to the management of a project with multiple suppliers. If we at the Finnish Centre for Pension had been able to centralise the coordination responsibility more clearly, the project would have been carried out more efficiently. The cooperation between the suppliers functioned well in this project, this can be seen from the fact that the timetable and the cost estimate were adhered to. However, a clear coordination responsibility given to one person would have increased the efficiency.

**References and links**

[www.tyoelake.fi](http://www.tyoelake.fi)

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