

DEVELOPMENT OF CUSTOMER ORIENTED LEARNING ENVIRONMENT AT STATISTICS FINLAND

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The strategic objective of several statistical agencies is to advance people's statistical literacy and use. The demand and need for statistics is constantly increasing. Statistics and the ability to read them are needed extensively in society as a whole. Statistical literacy can be promoted in various ways, for example, by developing various information distribution channels and by training customers. This paper describes how the use of statistical information is continuously developing at Statistics Finland by means of training and gives an example of Statistics Finland's web-based-learning project.

CUSTOMER TRAINING STRATEGY AT STATISTICS FINLAND

Educating users is a basic method in promoting statistical literacy. Statistics Finland's progressive training strategy is to offer its customers alternative training services. Efficient use of information technology has also been a strategic solution in response to changing customer demands, and in order to retain one's competitive position.

Commercial training organisations and personnel training units, of various organisations, are already using information technology widely to support their training. Network services are developed to enhance the organisation's present products and services as well as marketing. Customers are offered alternative, multi-communication service modes. Different training channels are not mutually exclusive, but complement one another. Information technology is not valuable as such for the development of teaching and learning. Even at Statistics Finland the main aim in customer training is to advance people's statistical literacy and use.

STATISTICS FINLAND'S TRAINING SERVICES

At the moment Statistics Finland's training service comprises:

1. In-house training
2. Tailor made training
3. Web-based training
4. Learning material production.

At Statistics Finland in-house training is mainly associated to services subject to charge. Each year approximately 40 training events are arranged on statistics methodology, contents and information sources and about 1000 customers participate in the courses. Main customer groups consist of central government, industry, local government and various other groups, for example, teachers and information specialists. These specialists are very important to us for the dissemination of statistical knowledge in a strategic way. Tailor made courses are targeted towards specific organisations (eg. research institutions and other statistical organisations). Now, these activities are expanded by web-based training. In addition to chargeable customer training, free training services will be developed on the Internet "for all citizens". Statistics Finland's personnel can also utilise this same web-based learning environment. Almost 100 of our personnel take part in the training programmes to support visiting lecturers and teachers from the universities. Our involved personnel also run, plan, write and teach on the courses.

One of the main strategic aims is to expand Statistics Finland's support to the education sector, by developing and offering easy access to statistical products and services. These have been specially designed for students and teachers. In the future, further learning materials will be published. Current publications include statistical knowledge and statistical graphs.

THE BASIC ELEMENTS OF THE WEB-BASED LEARNING ENVIRONMENT

New methods need to be developed for presenting essential information in the midst of the growth supply in the information society. Through the network, different learning materials can be offered, either for self-study or to support other training/information activities. Digital

learning materials can be made livelier with animation, moving images and exercises on which instant feedback is given. Network learning materials should thus activate students to learn by doing, to apply and process actively the information received. The network also makes it possible to understand the subject under study more extensively, for example using link-lists to related information producers.

The basic idea of web-based studying is to support collaboration between students and open distribution of information. The teacher's role in the network is to direct learning and arrange the information in a pedagogically functional manner.

STATISTICS FINLAND'S WEB-BASED LEARNING PROJECT

Statistics Finland's web-based learning project began in early 2001. There are currently three content areas in the web-based learning environment: demographics, basics of statistical science and labour market statistics. From the beginning of the year 2002 Statistics Finland will also start to produce learning materials on statistical graphs and maps, economic statistics, international statistics and how to read and use statistics.

Two people work full time in order to take care of the educational and technical aspects of the project. In 2001, five statisticians wrote the learning materials on a part-time basis. In 2002 this number will increase to 15. The task of the project and the required expertise is multi-disciplinary and includes pedagogic, technical and statistical know-how in order to be successful.

The overall objectives of Statistics Finland's web-based project are sixfold:

1. Develop new training services for our customers and Statistics Finland's personnel.
2. Give customers (and personnel) information support in the use of statistics (concepts, statistics compilation principles and limitations).
3. Activate customers to use statistics by means of exercises and examples.
4. Transfer the know-how of experienced statistical experts to the web-based learning environment for the benefit of younger generations.
5. Form multi-statistical product development teams.
6. Teach a customer-oriented and team-based working system for personnel by utilising new technology.

The learning environment consists of three parts, the citizen's school of statistics, the web-based learning centre for experts and personnel training. The citizen's school of statistics is aimed at all Statistics Finland's web customers. It includes basic information on statistics, definitions of statistical concepts and examples on how to use statistics. The expert's web-based learning centre is aimed at our course clients. It consists of more specific information on statistics, exercises and statistical data. A fee is charged for these services.

DISCUSSION

To succeed in improving people's statistical literacy and use of statistics we have to actively develop various information distribution channels to inform and train our customers. Here information technology such as web-based training can be one effective solution.

Recognising customer needs and satisfying them is not, however, all that simple. We understand that we still have plenty of work to do to determine customer needs and then to adapt to these needs and apply them to product development.

But even statistical professionals need to be trained and updated constantly so that they are sufficiently prepared for customer-oriented product development. We don't suggest that we are experts yet, we are still in the learning process ourselves, but we do understand that our customers need alternative training services. Our training services, as well as in-house training and web-based training, must be simple and effective, as well as user-friendly in adoption.