1. Introduction to TietoEnator as a builder of the information society and experiences of using ICT in building strategic competence

This presentation will focus mainly on e-learning as the ICT means of building strategic competence. The case is about TietoEnator Corporation, and the issue of e-learning will be handled both from an internal company perspective, but cover also TietoEnator as an IT services provider in delivering among others digital learning solutions for its customers. A few customer references are mentioned at the end of the presentation.

TietoEnator is a Nordic IT services firm created through the merger between Finnish Tieto and Swedish Enator in year 1999. The annual net sales of the company exceeds EUR 1.1 billion. The company is with almost 13,000 employees in 21 countries one of the leading European high-value added IT services providers. TietoEnator specialises in developing and managing its customers’ business operations in the emerging network and information society. TietoEnator provides consulting, systems development and integration, operation and support, product development and software services.

At TietoEnator we strongly believe that the digital revolution moves production and distribution of products and services to digital networks. TietoEnator is playing an active role in building the global information society. The media might have given you the impression in recent times that the digital revolution has ground to a halt and that the Internet is dead. But, do not be misled: bankruptcies among “dotcoms” and Internet consulting companies do not mean that the digital revolution is over, but that in fact it is making good progress. Every revolution will have its victims. The victims of the digital revolution have been those companies that were founded on unrealistic growth expectations and unable to adapt to extremely rapid changes in the business environment, as well as those investors who believed that the New Economy had somehow once and for all eliminated business cycle fluctuations from the world. The New Economy, in fact, does not exist. What we do have is new technology. The technological transformation we are witnessing at the moment means the reallocation of economic resources along the oldest basic principles set out be economic theory.

But what is the digital revolution actually all about? It is about uniting all the world’s computers so that in just a couple of years we will be surrounded by more than one billion computers all communicating together. The production and distribution of digitalizable products and services, will be transferred to information networks because in
this way customers will receive their products and services faster, more economically and with less impact on the environment than via earlier production and distribution channels.

In the Information Society major part of all products and services are produced and distributed in digital for over data networks.

Some sectors, such as banking for example, have already advanced to the point where information networks are already the most important means of production and distribution. Other business sectors are following closely in their wake up and, if earlier technological revolutions are anything to go by, it is possible that in about twenty years the majority of all products and services will be produced, distributed and consumed in digital form via data networks.

Information society progress by sector:

% of digitalized workload handled via networks

- Data-intensive sectors
- Sectors in which materials will continue to play significant role
- Sectors in which materials will remain dominant

Sectors in which materials will remain dominant:
- banks
- travel agencies
- energy
- book shops
- industry
- public services
- media/entertainment
- insurance

Sectors in which materials will continue to play significant role:
- food retail
- energy
- book shops
- industry
- public services
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Sectors in which materials will remain dominant:
- banks
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The digital revolution will also create great opportunities for competence building through services provided through a digital learning environment. At TietoEnator we strongly believe in the use of eLearning as the means of building strategic competence and superior expertise.

We define e-learning to be learning and competence building that takes place over the net, with the help of digital media. There are however several dimensions and aspects of e-learning. We have collected a few of them into the following list:

- self-study elearning = courses on the net, provided without virtual tutor
- mobile learning = learning solutions distributed over digital networks to mobile phones, laptops etc.
- just-in-time learning = learning available just when you need it
- learning on demand = ordered elearning courses based on defined demand
- collaboration = interactive use of virtual discussion groups
- embedded e-learning = on line support, supporting on-the-job learning
- class room replication = a virtual class room with real-time discussions, virtual on-line teachers etc
- blended learning = combination of traditional class room led learning and digital learning solutions
- virtual pre- and post-test, on-line reporting and follow up of results.

Why is e-learning an issue right now? What benefits can be expected?

The digital revolution and the information society for sure is a key driver. The new technological development creates great opportunities to be used also for learning and competence building. The opportunities provided by the technology development in combination with higher demand for individual decisions has created an arena for e-learning.

In this society time is money. Companies that are able to learn faster than its competitors are the winners of tomorrow. At the same time companies are growing and globalization is continuing at a high speed. Along with this trend comes the geographical distances. Still there are a lot of competence development needs that are similar and competencies that need to be developed crossing the boundaries of geographical, time-zone and business borders.

There is a growing need for flexible learning. The individual demands to be able to take individual responsibility for learning and do that independent of place, time and method. The trend goes from stand-alone learning events to continuous development and life-long learning.

There is a trend of fast turnover of knowledge to be seen. What was spearhead competence yesterday becomes old knowledge today. There is a need to continuously be able to update and maintain knowledge repositories and content.
All in all the latest information and communication technology provides the opportunity to package more and more knowledge, into less and less space, to be distributed faster and more tailor made to more people than ever before.

2. Case TietoEnator Academy – from business driven competence planning to digital competence development

TietoEnator Corporation has in year 2001 launched a common digital learning portal open to all its 12,500 employees. It is based in the intranet as a Learning Management System. It covers more than 900 e-learning courses, an increased amount of blended learning, as well as information on all ongoing non-elearning competence development offerings in the company.

Today it is used by more than 60% of all employees and the implementation works continues on high speed. The concept of the TE Academy is that you can find all relevant information on learning and competence building, starting from competence planning to external and internal competence building offerings, evaluation, test and follow-up tools, all in the same place. The idea is that the Academy will give you personalized information on your learning achievements and plans, as well as an opportunity for networking virtually and by other means, thus enabling transferring of knowledge and competence faster.
The content is structured around a competence wheel, addressing the most strategic competence areas and levels of TietoEnator. The more basic the competence need is the bigger share of e-learning content is to be found. The more advanced competence levels will be achieved through a variety of learning solutions, and using blended learning as the main elearning means.

The main benefits:

- TE Academy plays a central role in creating a competitive edge for TietoEnator, through providing a platform for developing superior expertise. It also works as an attraction and retention driver of highly skilled professionals.
- TE Academy provides extended learning within decided budget. Break-even is reached if 3 hours of traditional training is spent on e-learning/ employee.
- TE Academy brings flexibility to choose learning solutions and competence building offerings to support individual learning style, objectives and professional career paths.
- Limitless learning for limitless amount of people, in different geographical locations.
- Maintenance of learning material, easy, fast and at decreased costs.
- On-line follow up and reporting on progress.

3. Challenges and concerns

The elearning business is still an emerging business in its “baby shoes”. There are many external e-learning providers on the market with low quality of content and level of interactivity. There is a shortage of skilled content developers, multimedia...
production capabilities and perspectives, as well as people that are skilled at virtual pedagogy and digital expression.

On the buyers’ side there is still a fairly low level of awareness of the opportunities that e-learning can bring. There is a lack of perspectives and views of how to link e-learning to existing traditional learning and how to integrate it into HR strategy and systems. There is still even in quite data-intensive companies a lack of understanding of the potential benefits for employees and line managers.

The learning culture for e-learning is not always in place. What is demanded from the individual is many times unlearning old habits and behaviour. As change on behaviour level is not always easy, resistance becomes an obstacle to reach the benefits of digital learning. Digital competence development requires strong self-discipline and responsibility taking of the individuals. This is the downside of flexibility. The skills required to take part in digital competence development is in itself not the biggest obstacle, as basic computer skills are enough, but attitude problems can be.

One of the most common mistakes that we have seen companies do when introducing e-learning is to forget the need for strong implementation plans and efforts. You are not able to create a digital learning environment just by putting a big volume of e-learning courses on the web and hope that the employees of an organisation will start using the content available. Over-reliance of the technical platform and system is an other risk of not reaching the intended benefits.

4. TietoEnator´s references of successful e-learning implementations