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Supporting e-Business in European SMEs by e-Competence and e-Learning

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Introductory aspects

- It is expected that e-Business increases every year because many corporations will rethink their businesses in terms of the Internet and the Web and use their capabilities.
- Many SMEs particularly from new EU members find difficult to digitally integrate their business processes from technical reasons, economic ones, the lack of e-Competence, etc.
- The availability of e-Competence is a key condition for successful innovation and for the competitiveness of European enterprises.
- e-Learning through its flexibility and facility of access is considered as a major enabler also of the development of e-Competence.
- There is little activity going on in SMEs related to e-Learning and suitable e-Learning programmes for supporting e-Business in SMEs are missing.

e-Business

- e-Business refers to not only conducting buying and selling by the Internet but also servicing customers and collaborating with business partners.
- Driving forces of “e-Transformations” like e-Business are increasingly robust and sophisticated technology innovation at a cost, alternatives at a much reduced cost (Open Source Software / Linux Platform), liberalisation of regulatory frameworks, increasing Productivity, Efficiencies & Effectiveness of organisations, Competitiveness and Growth beyond Borders – e-Trade.

Web Presence (brick&mortar)	Web Interaction (brick, click & mortar)	Web Transaction (process dependant)	Web Transformation (technology dependant)
Static	*Dynamic*	*Internal Automation*	*External Automation*
• Online marketing • Brochures • Web-enabled enterprise	• Manual order • Tracking • Basic search • Discussion boards • Chats • Linked sites • Interoperable enterprise	• Web integration through EAI • Communities • Data mining • Web/e-mail customer service • Personalization • Application-driven • Process interoperability	• High optimization • Niche customization • Transparent processes • ´Self-service` • Any-to-any multi-channel integration • Advanced personalization • VOIP, VC customer service • e-Process-driven • Architectural interoperability
1 G	2 G	3 G	4 G

e-Business generations
(Source: www.intracen.org/e-trade/network)

e-Competence to support e-Business

- The implementation of ICT applications like e-Business in organisations put corresponding e-Skills and competencies shortages at the top of the list.
- e-Skills include
  - Basic digital literacy (on how to operate a computer and use the Internet),
  - Information skills to deal with large quantities of information and create useful work and business related knowledge,
  - Skills to communicate with colleagues and clients,
  - Skills to use the right ICT tools for a certain job and/or task.

e-Competence encompasses both the ICT developer and ICT user as well as e-Skills for e-Business.

The European e-Skills Conference in September 2004 provided a very useful list of recommendations and actions in this context:

- **Descriptors for levels of skills and competences for ICT practitioners and professionals, based on descriptors for outcomes of education and training on the one hand and linked to the lines of the European Qualifications Framework as proposed by the European Commission on the other, should be established and agreed.**
- **The European level effort to come to a common profiling and to define further (horizontal) specifications of competences and skills should be intensified.**
- **A European e-Competence Reference Framework which will support human resources activities in resource planning and career/ competence development, help individuals to develop and to maintain employability, promote e-Business will be developed.**

SMEs and e-Business

- SMEs do a lot of business in Europe and they are important to employment in the EU.
- They adopt increasingly ICT and their applications for example for word processing, databases, accounting and presentations.
- “e-Transformations” in SMEs are for example Installing PCs and office software, Replacing fax by e-Mail, Using the Internet to access information, Developing an own Web site, Developing an Intranet. Allowing on-line transactions with customers, Embracing B2B and EDI, Integration of front-end with back-end processes.
- According to a recent e-Business watch (The Best eEurope Practices BEEP Project www.beep-eu.org/) only 10.4% of the surveyed enterprises indicated that e-Business is a significant part of their operations.
- SMEs have taken the first step in going digital but they find much more difficult to digitally integrate their business processes as most of the larger firms have done.

ARIEL
ANALYSING AND REPORTING ON THE IMPLEMENTATION OF ELECTRONIC LEARNING IN EUROPE

SMEs in new member states (project ARIEL:www.ariel-eu.net):

- **In Hungary the SMEs are less supported to use new technologies in comparison with big companies. The integration of Hungarian companies in the European market also by using e-Business and development of e-Competence is hindered by the lack of new technologies and corresponding training (e.g. offered by IT consulting companies) which are too expensive for them. They would like to use e-Learning for achieve this qualification.**
- **In Romania the situation of SMEs is very precarious because most of them do not know European business rules and have no experience and financial possibilities to qualify in this field and to achieve e-Competence. e-Learning could help them in this context.**

e-Learning to support e-Competence and e-Business

- e-Learning is generally seen as a means to improve the educational system e.g. schools, rather than a tool to enhance the competencies that keep organisations going.
- Very little information could be found about the development and use of e-Learning in European SMEs; there is little activity going on in SMEs related to e-Learning.

Many problems are based on:

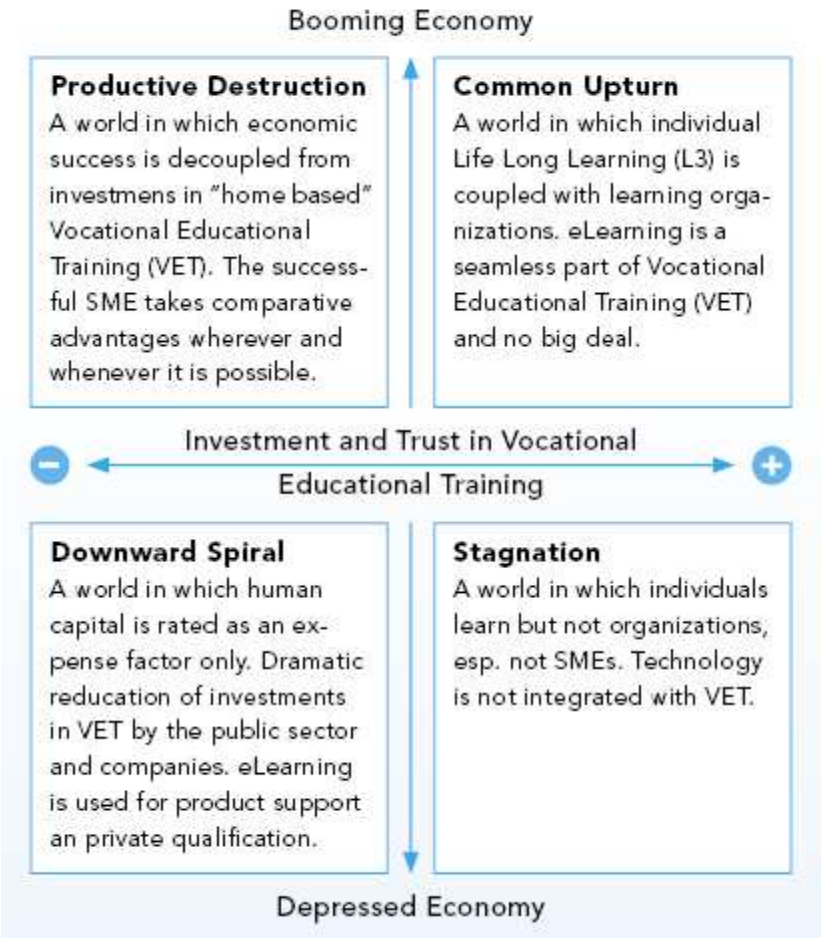
- **misconception or prejudices concerning the educational process in such companies where not only conventional methods are used,**
- **being afraid of high costs and overhead for the development and maintenance of e-Learning modules,**
- **lack of promoting learning conditions and support by the company management,**
- **staff lack of time off for study,**
- **no funds in the company to support further training for staff,**
- **availability only of standard products which do not support SMEs business.**

SMEs need e-Learning approaches:

- **combined with conventional, face to face methods – Blended Learning**
- **with a content defined to correspond to the existing and needed staff competencies to perform their work tasks ‘ and to the learning culture of the company,**
- **combined with informal learning methods to support knowledge sharing and creation of new one.**

Examples of European Projects dealing the problem

- **VIP (Visually Interacting e-Learning Platform http://www.elearningeuropa.info/doc.php which aims at offering training for developing competence of SME's managers.**
- **ARIEL – Analysing and Reporting the Implementation of Electronic Learning in Europe (www.ariel-eu.net), which investigated e-Learning supply for developing competencies of SMEs, particularly e-Competence aiming to improve their work and to support their integration into the European market.**



e-Learning scenarios have been developed to help companies to build their e-Competences

SIMPEL
SMEs: Improving E-Learning Practices

Education and Training
Comenius – Grundtvig – Lingua – Minerva – e-Learning

The results and scenarios developed in ARIEL will be used within the valorization project SIMPEL (2007) to provide in cooperation with SMEs and SMEs consultants sustainable models for development of e-Competence supporting e-Business and using of e-Learning and corresponding guidelines for implementing these models.

www.simpel-net.eu