Latvian IT Cluster – ICT NGO role in IT education – increased competitiveness

Juris Vilders
Latvian IT Cluster, Board Member

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Content

• Where is Latvia?
• About Latvian IT Cluster
  – IT Cluster values, priorities
  – Companies, R&D and Scientific Partners
• IT Cluster role in IT education and training
• Highly qualified education and IT training partners/Case studies
• Profit from Education&Training/Case studies
• Summary
Where is Latvia?

Latvia:

• Bridge between East and West for centuries
• An advanced, “green-minded” European country
• Latvia is the central country of the three Baltic States

Interesting facts:

• 1930 first portable radio device created by industry leader VEF
• 1938 the spy photo camera Minox
• 1991 - Latvia declared its de facto independence, and joined the United Nations
• 2004 - Latvia became a member of the European Union and NATO
Latvian IT Cluster

Latvian IT Cluster is innovative, trustworthy and with strong international expertise

**Values** – Innovation, Quality and Reliability

*We offer a “full basket”, not a “single berry”*

Latvian IT Cluster unites:

- 21 major Latvian IT companies
- 12 universities, R&D institutions and other scientific partners

**Major Sectors:**

E-government, Industry, X-cutting, Special solutions
IT Cluster PRIORITIES

- Development of innovative products – collaboration with scientists (R&D) – **resource consolidation**
- **Cooperation** with HE establishments
- Recognition of common needs and priorities – **training**
- Export oriented **marketing**
- International exhibitions, seminars, conferences
- Networking
- Socializing activities
Latvian IT Cluster Companies

2010

• Turnover ~ 118 MM. Euro
• 38% - export
• ~ 2,100 employees
R&D and Scientific Partners

Belarusian High Technologies Park
Why Collaborate with IT Cluster Members?

Competitive advantages:

• High quality solutions
• Knowledgeable and experienced workforce
• Fast, yet accurate, project turnaround
• Very good English and other language skills
• Proximity to US, Nordic and other EU countries
• Eastern European prices

“Came for cost, stayed for quality!”

Quality certificates: ISO 9001; ISO 14001; CMMI level5, ISTQB, PMI etc.

Industry certificates: Microsoft, Cisco, Oracle, LINUX, HP, IBM
Who are our Customers?

International customer:

• Bank card management in Southern Africa
• Software solutions for banks from New York to Australia
• Insurance solutions for insurers in Scandinavia and Azerbaijan
• Maritime monitoring systems for NATO
• Language technologies for small languages
IT Cluster role in IT education and training
IT Cluster is a TOOL to improve international competitiveness

- building critical mass for joint education projects of common interest
- lobbying development of IT education curriculum
- better use of knowledge resources
IT Cluster input in development of IT education in Latvia

> **1,000** high qualified **IT specialists** every year graduate from HE establishments

- Participation of **IT Cluster** in curriculum quality assurance
- Acquiring of practical **IT skills** in Latvian software houses
- **Targeted support from local firms** (research prizes, scholarships, donations etc.)
- **Joint activities to promote the interest of youth in this sector**
- **Mentor** for students
- **Link** between enterprises and academia
- **R&D partner** in international projects
- **Specialized training facilitator**
IT post-graduated training

Latvian IT Cluster – a platform for education & training

- 430 trained professionals and 618 course attendance during 1 year

N.B.!

Project was recognized as the best ESF-funded ICT training platform (according to the Latvian Investment & Development Agency and the Ministry of Economics)
ISTQB certification – Care for Quality

In April, 2007 IT Cluster established **LSTQB – Latvian Software Testing Quality Board** (a branch of International Software Testing Quality Board)

- More than 250 Foundation Level software testing specialists certified during 3 years
- 12 Advanced Level certificates received during 1 year
- International conference **TAPOST – Theory and Practice of Software Testing** - organised and supported by IT Cluster (May, 2012 – 13th TAPOST will take place in Riga)
IT Cluster role in Curriculum Quality Assurance

IT Cluster together with Riga Technical university has established a new curriculum for academic full and part-time master studies «Master Degree of Engineering Sciences in Business Informatics» (http://stpk.cs.rtu.lv/bi/eng)

- Admission started in 2010
- First graduates in 2012

IT Cluster in cooperation with universities reviews IT education curriculums on regular basis (according to the accreditation schedule)
Career Opportunity Days

Representatives of IT Cluster and member companies - regular guests at universities and other HE establishments

At the fairs & seminars students can:
- meet their would-be employers
- find out about companies’ expectations and job requirements
- submit CV and apply for a placement or job
Highly qualified education and IT training
Partners

Case Studies
IT Cluster member «BDA» - Baltic Computer Academy

The biggest computer training center in Baltic countries!

Product/service description

• Learning management systems implementation, integration, support
• Training and certification in vendor authorized programs (Adobe, Cisco, IBM Lotus, Microsoft, Novell Linux Suse, Oracle) for ICT professionals
• Security training courses and certification service
• PMI ® project management courses and certification service
• ITIL service management courses and certification service
• User training
• Customer care training
• Development of instructor-led training materials
• e-Course development
• Design and implementation of blended learning solutions

www.bda.lv
e-Learning system outputs
– Easy to Export

• Concept, implementation procedure and methodology development
• Teacher training and tutoring
• e-Course/e-Module methodological lead within the development process
• Consultative support in developing e-courses and training materials
• Training methodology preparation, development of student kits
IT Cluster member «DZC» (Datorzinību centrs)

Product/service description

- **Computer training**: for standard software, Microsoft Dynamics products (Axapta, Navision, CRM) and custom-developed applications
- **e-Learning**: implementation of applications, production of e-learning content
- **Certification testing**
School Management System by «DZC»

Objectives:
• To help schools in carrying out administrative tasks: student records and finance management
• To provide teachers with new tools for simplification of routine everyday tasks
• To promote the use of e-learning resources in education processes

Activities:
• Educational institution teacher and student registers, linked to state Citizens Register for data verification
• Individual profiles (dashboards) for students, teachers and parents
• Communication and collaboration tools (discussion forums, surveys, Wikis)
• Electronic examination delivery (included in Microsoft Global Case Study database)
e-klase: 21\textsuperscript{st} century school management system by «DEAC»

School management system e-klase
- **For teachers** – pupil marks, attendance and reports
- **For parents** – information about marks, attendance and homework
- **For pupils** – social environment, exchange ideas, opinions, and check out the latest information on marks and homework
- e-klase is officially approved by the Latvian Ministry of Science and Education
- e-klase satisfies 21\textsuperscript{st} century education standards and is a significant contribution to education systems’ enhancement

*Schools using e-klase eliminate paper flow!*
**e-klase today**

*e-klase* is the most popular school information system in Latvia

- 630 (out of 930) schools are registered (including technical schools and colleges)
- Approximately 1.1 MM marks are entered in the system daily
- About 100,000 parents visit the system daily

**The future for e-klase**

- Forums
- Idea exchange
- Interactive environment
- Developing and maintaining school web pages
- On-line tests
- On-line libraries

**e-klase**

- is developed according to school needs and considering school limitations
- can be adapted according to state institution needs
- can be adapted according to other country’s needs
All achievements will be available at Riga IT Demo Center

Co-financed by EU: LV-EE project «ICT DCNet»
Case Studies

Profit from Education & Training
Case Study

Language Technologies

Tilde is the Baltic leader in language technologies with innovative products and technologies:

- machine translation
- translation tools and dictionaries
- proofing tools
- speech technologies
- multilingual fonts
- terminological data bases

New generation “smart language-enabled” services

- Mobile speech-to-speech translation
- Cross-lingual search and machine translation
- “intelligent” applications for business and government
- Tilde translator Android App

Tilde is driving innovation in machine translation technologies with a particular focus on smaller languages!
Case Study

Banking & Finance

Card Suite users worldwide – 369 institutions on 4 continents*

Acknowledged by industry analysts as one of the world’s leading multinational card management systems

• issuing and accepting payment cards
• processing card transactions
• experience with e-commerce and fraud prevention

*directly or through multi-institution processors
Case Study

State Electronic Procurement System

Benefits:

• Frees financial resources
• Reduces expenditures on preparation of tender proposals
• Does not discriminate against small and medium enterprises
• Saves time and money by using standardised processes in business performance

Overview of transaction amounts in 2010 (% by e-catalogues)
Case Study

E-POLICE: Integrated Solution (+GIS)
Case Study
Mobilly

Convenient processing of parking fees and other micro-payments

- **Municipalities** – collect parking fees automatically; no damaged coin-operated ticket machines; no theft from ticket machines
- **Drivers** – pay via SMS, no need to carry coins for parking meters or ticket machines

Other micro-payments: public transit fares, taxi, take-away food deliveries, etc.
Summary

NGO can play major role in IT sector development providing

• A partnership of industry, government and academia
• Strong platform for ICT education development
• Innovation, quality and reliability
• Strong international expertise
• Focused e-government, industry, cross-cutting and specialized solutions
• Profitable price/value combination
Thank you for attention!

Juris Vilders
Board Member

ITCluster@itbaltic.com

www.itbaltic.com

Ph: +371 67089815