

**Experiences in and around e-Learning**

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**Topics**

- Changes
- Trends
- What is e-Learning?
- Definitions
- Experiences
- Events

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**Changes**

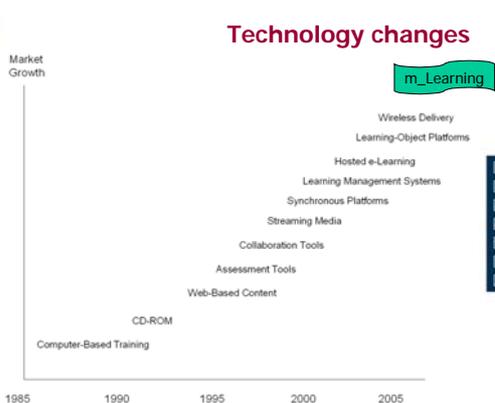
IT revolution changes the way of

- working,
- teaching,
- managing,
- developing,
- sharing education materials.



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**Technology changes**



Source: SRI Consulting Business Intelligence

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**What is e-Learning?**

...shift from traditional education to IT-supported flexible, individual, self-organized, collaborative learning based on a community of learners, teachers, facilitators, experts etc.

e-Learning develops skills needed in knowledge-based societies

Blended learning is an integrated approach that applies a mixture of e-Learning and traditional education.

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**Change your mind**



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**The role of educators is changing**

- We will become more and more facilitators, providing dynamic update of knowledge bases, transparent and clear syllabi, reading recommendations etc., and offering guidance and motivation strategies for students who will use self-organized study approaches.

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**Wearable**

See-through display  
Microphone and earphone  
Wireless communication link  
Wearable computer

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**Kurzweil (99): The Age of Spiritual Machines**

2014

„Fifteen years in the future computers will enable the memory capacity and computational ability of the human brain, and interaction with computers will involve gestures and two way spoken communications. Most learning will be conducted through software-based teachers.“

„Twenty five years from now computers will have the capacity of 1.000 human brains, and the majority of communication does not involve a human. Computers will have read all available human- and machine-generated literature and will be learning on their own. Machines will claim to be conscious.“

conscious

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**He is at our disposal**

YES, MASTER?

GARY HALL

**Web & Internet**

The Web has become a new platform for the presentation and communication of ideas worldwide.

The Internet is a new tool for learning.

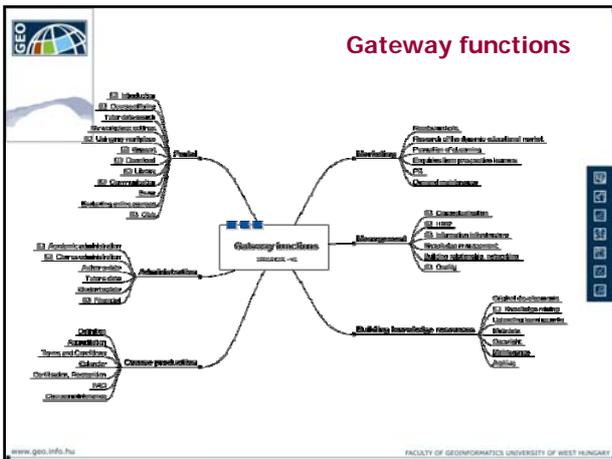
- Internet is doubling in size every year
- Web is doubling in size every 90 days.

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**Jack Dangermond**

- ESRI's software development strategy supports a shared environment with the goal of making GIS for everybody.
- "I see a GIS wherein users can get data, drag and drop data, and serve data."

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### Standards

- The use of Open-Source software is rapidly growing. This can make a vital contribution to the improvement of technologies to support learning and knowledge-development.
- When open-source combined with open software standards, it becomes even more powerful.

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### Metadata

Educational materials - Meta Data - ARIADNE 2000

<b>1. GENERAL INFORMATION</b>	
1.1 Identifier:	PRONET GEOMAN
1.2 Title:	Geoinformatics for managers
1.3 Author:	Bela Markos
1.4 Published:	1998
1.5 Last Modified:	January 1999
1.6 Language:	Hungarian / English
1.7 Publisher:	CSLM
1.8 Sources:	Bela Markos: Introduction to GIS, NCGIA adaptation, CSLM, 1994, p. 234. Casetari, S.: Introduction to Integrated Geo-Information Management, Chapman & Hall, 1993, p. 252. Oberneyer, N. J., - Pinto, J. K.: Managing Geographic Information Systems, The Guilford Press, 1994, p. 226.
<b>2. CONCEPTS</b>	
2.1 Subjects:	GIS, management
2.2 Keywords:	Geoinformatics, GIS, spatial information, GIS project, information strategy
2.3 Learning Objectives:	After reading this learning material the learner will be able <ul style="list-style-type: none"> <li>to present it concisely why is the geoinformatics important</li> <li>to analyse the advantages of the use of the GIS</li> <li>to give information about, how and for what purpose the GIS can be used</li> <li>to evaluate clearly the role of geoinformatics in the informatics strategy</li> <li>to sum up and apply the fundamental principle of the building up a system</li> <li>to present the principles, problems of establishing a data base</li> <li>to forward proposal for practical solutions</li> <li>to compare the more wide-spread GIS software.</li> </ul>
2.4 Content:	Chapters: <ol style="list-style-type: none"> <li>Why to use it?</li> <li>What can it be used for?</li> <li>How does it work?</li> <li>GIS and information society?</li> <li>GIS impact</li> <li>Conclusions</li> <li>GIS in action</li> </ol>

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### Example continued

<b>3. PEDAGOGICAL</b>	
3.1 Learning level:	Introductory
3.2 Prerequisites:	No
3.3 Recognize Type:	Web
3.4 Relations:	Introductory course for GIS/Management, Web/ing for Geomatics
3.5 Format:	HTML
3.6 Length:	6 hours learning time
3.7 Lic. Rights:	Password protected
<b>4. TECHNICAL</b>	
4.1 Contact details:	Department of Geoinformatics, The University of West Hungary, College of Surveying and Land Management H-8002 Szekesfehervar P.O.Box 52. Phone: +36 22 3481 271 Fax: +36 22 327 697
4.2 Format:	Word, HTML
4.3 Size of File:	14,8 MB
4.4 Op. system:	Windows 3x, 9x, NT
4.5 Use:	
4.6 Rights:	Copyright, Bela Markos 1998-99
<b>5. META-META</b>	
5.1 Author:	Bela Markos
5.2 Last modified:	21 May 2000
5.3 Language:	English
5.4 Version:	Mihaly Agbaji, director of CSLM, 22 May 2000
<b>6. COMMENTS</b>	

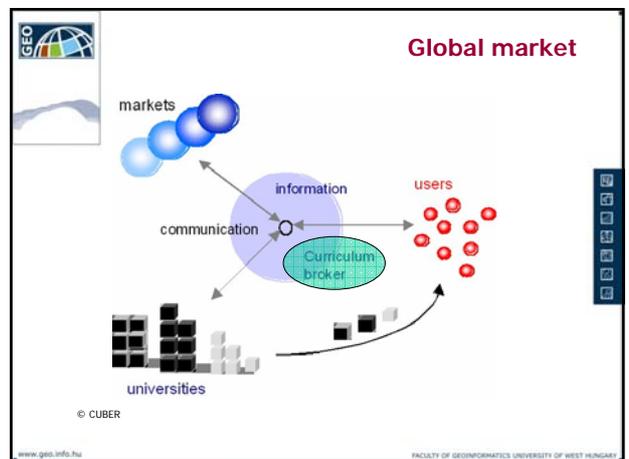
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### Target

**STAFF**

**USERS**

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## Business model

- an architecture for the product, service and information flows, including a description of the various business actors and their roles,
- a description of the potential benefits for the various business actors, and
- a description of the sources of revenues.

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## Business model

**eduGI**

- The consortium agrees on an exchange of e-learning courses on a non-fee basis.
- Each partner provides a single e-learning course, in return getting access to free courses from the partnership.
- Partners choose a course topic in which they have special expertise, which reduces development time and increases quality.
- Each course is based on an existing course and available teaching materials.
- Partners deliver a complete course including tutoring.
- The consortium uses an existing e-learning platform of one of the partners.

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## FIG Commission 2 - Workshop

**WG1 – Curriculum development**  
**Scientia Est Potentia**



**Knowledge Is Power**

7-9 June, 2007  
 Czech Technical University  
 Prague, Czech Republic

Ales Cepek



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