The Influence of Technological Changes on the Definition of Information Literacy

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About us

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Information society

- Economically (Machlup, Porat, Drucker) - from material to intelectual property
- Technologically (Shannon, Mansuda) - impact of IT on society, incl. increasing importance of IL/IT literacy
- Sociologically (Castells, Bauman, Bell) - incl. Digital Divide
- Historically (McLuhan, Toffler) - changing role of information in history

Can we speak about information society today?

- The Czech republic is atheistic country, but…

IL and IT in information society

- "To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use EFFECTIVELY the needed information" (American Library Association, 1989)
- IT simplify many activities with information
- Information is key, but using it is changed by IT => IL closely connected with IT
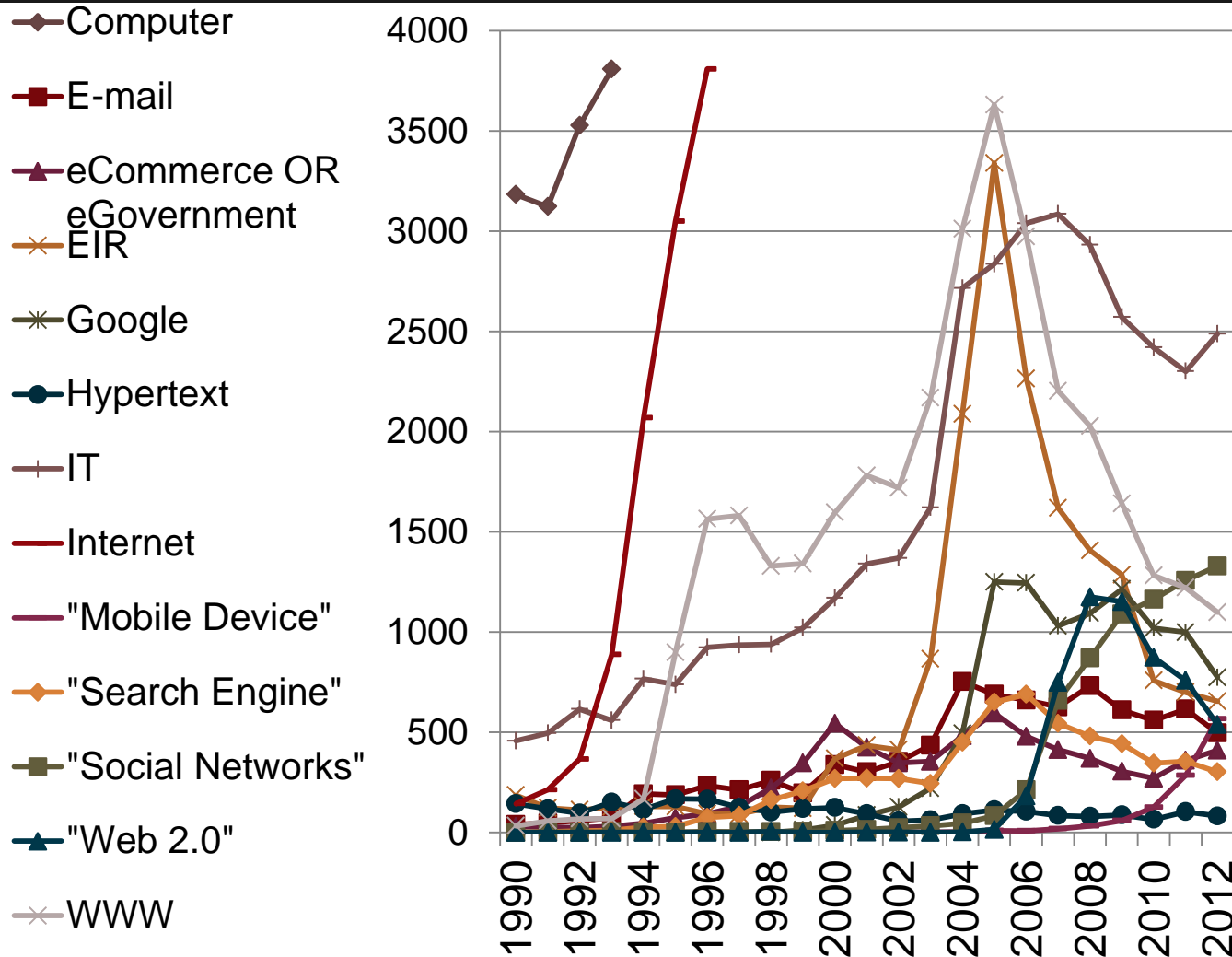
Simplifying

$$J(\boldsymbol{\alpha}) = \sum_{i=p+1}^{k_0-1} \left\{ y(t_i) - \left(\sum_{j=1}^{p} a_j y(t_{i-j}) \sum_{j=0}^{q} b_j u(t_{i-j}) \right) \right\}^2$$

$$+ \left\{ \tilde{y}(t_{k_0}) - \lambda(t_{k_0}) - \left(\sum_{j=1}^{p} a_j y(t_{i-j}) + \sum_{j=0}^{q} b_j u(t_{i-j}) \right) \right\}^2 \qquad (7)$$

$$+ \sum_{i=k_0+1}^{n} \left\{ \tilde{y}(t_i) - \Delta_y(t_i) - \left(\sum_{j=1}^{p} a_j \left(\tilde{y}(t_{i-j}) - \Delta_y(t_i) \right) + \sum_{j=0}^{q} b_j u(t_{i-j}) \right) \right\}^2$$

You still need to understand how and why, but using IT you can restrict occurrence of mistake

Changes of IT

Legend:
- Computer
- E-mail
- eCommerce OR eGovernment
- EIR
- Google
- Hypertext
- IT
- Internet
- "Mobile Device"
- "Search Engine"
- "Social Networks"
- "Web 2.0"
- WWW

- Confront document analysis with changes of IL definitions => minimal

- Concrete influences described in full text

Crucial changes of IT related to IL (Helvoort)

- "content integration (federated search engines)
- amateur publishing (user generated content)
- use of social networks to find information
- personalization and push technology
- loss of context / fragmentation of information"
- => should be reflected in IL (use of this = condition to effectively cooperate with information in information society)

Using IT without IL

- Research of using IT (especially children) - often limited and not effective
- But users are convinced about their knowledge - do not want to learn more
- Hard to show that it can be better with IL - everyday work with user

IT

IL

Concepts of Literacies

- IL still as a umbrella term for other kinds of literacies?
- All contemporary concepts of literacies include visual, electronic and digital form of communication and expression
- All concepts are closely related to technologies

Literacies linked to Technologies

- Digital Literacy
- Computer Literacy
- Media Literacy
- Network Literacy

- Developing content of these literacies
- It is not possible to provide the definiton of IL regardless to the context
- The lane changes direction from passive to active

New Literacies

- Almost all types of literacies emerged with the introduction of new technologies in last 15 years
- "NEW LITERACIES"
- Each new technology weakens or changes existing definitions

Compare characteristic key

IL definition:
- Select
- Evaluate
- and Organize the found information

Digital literacy:
- Understand and use information in multiple formats from a range of sources via **computers**

Computer literacy:
- Ability to manipulate documents and data via **software**

Can you imagine teaching digital literacy using a chalkboard like this?

Future

- Information Society can´t be "Information" without IT
- Countless and unpredictable changes of IT in last 10 years
- We can not predict what the future of technologies will be
- Develop the established definitions (to avoid "reinvent the wheel")

We said our WHY
and now is the time to ask HOW...

DETERMINE OR UPDATE?

Thank You for Your attention.

Used sources

- American Library Association. Presidential Committee on Information Literacy. Final Report. Chicago: American Library Association. (1989). Retrieved September 24, 2013, from http://www.ala.org/ala/mgrps/divs/acrl/publications/whitepapers/presidential.cfm

- Helvoort, J.v.: Impact of Recent Trends in Information and Communication Technology on the Validity of the Construct Information Literacy in Higher Education. Communications in Computer and Information Science 96, 61--73 (2010)

- Photo by fruity monkey (Flickr)