The Magical Cure for a Never-Ending Story

Paper presented at the 4th Frakfurt Scientific Symposium ICICOM, Germany, 5 October 2004

Prof. Dr. Wolfgang Ratzek

University of Applied Sciences – Hochschule der Medien, Stuttgart Ratzek@iuk.hdm-stuttgart.de www.iuk.hdm-stuttgart.de

Abstract

The key hypothesis is that the IT industry lure us into the IT world with a promise to solve our information problems. Do we sign the contract, we will recognise that the IT industry can't keep the promise. One reason: they themselves lost sight over there own game. Therefore they have to invent new tools continiously. LIS professionals should not leave the field IT professionals. LIS professional should rather put stress on to reveal the difference in the value chain between data – information – knowledge. Information and knowledge is brainware and not produced by hard and software in the sense of IT philosophy.

Against the background of the language game of Jean-François Lyotard, the author explains the information and knowledge society as language game invented by the IT industry. Furthermore his beliefs of postmodernen LIS professionals and the consequences involved for LIS traning will be presented.

Introduction

The title might sound a little strange. My intention is to swim against the stream. To start with I want to pose two hypotheses which I am going to answer in the following chapters.

- 1. Information and knowledge is brainwork and not depending on hard- and software, as IT-adepts want to make us think. I am not against IT at all as one might think but I am against the wonder remedy hypothesis of the IT-Industry. To swim against the stream means that the IT-industry is misleading us in a wrong direction, that means: technology driven instead of content driven in the sense of useful handling of information and knowlegde
- 2. All human beeings are information professionals! Otherwise we won't survive in a complex, chaotic, and dynamic world. What then is our job in the LIS-Area ¹

So let us have a look at the following items: The Language Games of J.-F. Lyotard The Language Games of IT Economy The Strategy of IT Economy LIS Professionals The Philosophy of E-Classrooms LIS Training

The Language Games of J.-F. Lyotard

_

¹ LIS means in this paper both Library and Information Sciences and Library and Information Serice.

Referring to the language games of the renowned French postmodern philosopher Jean-François Lyotard² three rules are of importance to understand what is going on in a so called information and knowledge society.

1st rule: Legitimacy of rules of games

Rules do not refer to themselves. They are subject to an explicite or implicite contract among players. At first, they are created by the inventor(s) of the game. That means: if you want to be a player, you have to stick the rules otherwise access will be denied or you will be excluded from the game.

2nd rule: No Rules – no Game

As we know form western films, rules are essential for a game. A tiny modification of a rule changes the nature of the game. A plaything or a statement which is not conform with the rules does not belong to the game. Poker players got shot when cheating. Your IT system will not shoot you yet when misbehaving but it gives you a severe warning: if you continue in the same way, it says, an unreparable error will occure. The hint will sound like: restart the system or the monitor gets black. You also know this one "HTTP Error 404, 404 Not Found: The Web server cannot find the file or script you asked for. Please check the URL to ensure that the path is correct. Please contact the server's administrator if this problem persists"3. Statement: Each Statement has to be regarded like a move in a game

... and can be regarded as an external intervention into the internal structure

The Strategy of IT Economy

Against the background of the language game of Lyotard and the IT paradigm mentioned it is legitimate that the information and knowledge industry recruits players by using creative marketig tools like f.ex.

- lobbyism (ECDL: European Computer Driving Licence)
- forcing school, university, government, industry to integrated all new IT-gimmiks into their processes
- following the free strategy

In reality, we recognise that IT development and integration is very time and money consuming, so that we at the end have almost no time to deal with our genuin profession: coaching customers by reducing their conten driven information problems.

Here are some of the misleading interpretations, mentioned in my introduction, made by the information and knowledge industry. Information and Knowlege

- results from information- or knowledge bases
- Computer solves problems
- human experts can be replaced by means of Artificial Intelligence, Expertsystems or Neuronal Nets.

Without doubt; an excellent market strategy

The IT-Game/Paradigm

The world of IT can be regarded as a game in the sense of Lyotard. In my opinion many LIS-professionals got caught in an IT game (paradigm). They are preoccupied with IT-

² The Postmodern Condition: A Report on Knowledge. Minneapolis:1979. Lyotard refers to the principles of Semiotics by Morris and Peirce.

development instead of concentrating on customers they specialize in IT application. IT, then, itself is the plaything; or more provocative: a paradigm for a whole society and/or industry. The basic tool is the key board. There is a danger of becoming keyboard addicts. This reminds me of Friedrich Engels' Essay "The Part played by Labour in the Transition from Ape to Man (1876). In the Wake of the IT-paradigm one could interprete Engels' Essay as: "The Part played by IT in the reduction of human skills to ape level" (that means to Pavlovian conditioned creatures).

Everybody is allowed to take part in the game but he/she has to stick to the rules the Rules are defined as user guidelines, algorithm, programming languages, curricula).

To stick to the rules, it's all very well to say, but the rules

- are changing continously
- inventors themselves do know their own rules fragmentary only
- how then, should a user master the system?

LIS Professionals

To start with this theme, I want to quote Kay Raserowka from Botwana, the IFLA president elected. In her keynote speech at the 2nd Conference for Libararies and Information in Leipzig (2004) she said: "IT-Professional are in for the pipe, librarians are in for content". And then: "Libraries are the heart of the Information society".

Refering to my statement that all human beings are information professionals and to Raserowka's we have to ask ourselves: What do I, as a LIS professional, expect from LIS professionals? Here are some ideas:

Real LIS-Professionals

- do not cultivate an informatics mimicry³
- are content driven not gadget driven
- know about the difference between data-information-knowledge
- offer taylor made service and no me-too-service (innovation driven)
- should be involved active and not passive in decision making processes⁴
- are core jobbers (not fringe jobbers)
- stress the human factor in VAS-Processes (Data-Information-Knowledge-Innovation)
- know that
 - data are provided by both computer and human beings
 - information is brainware
 - knowledge = brainware + a "philosophy" of evaluation for the integration of information in an information-/knowledge network ("philosophy of networking)

The Philosophy of electronic classrooms

If we talk about Information Literacy, we have to talk about learning processes. In doing so, the idea of an electronic classroom will soon be discussed. Here are my points of view. It seems that e-classrooms are a means to convert disoriented staff⁵ in attentive, motivated, and thirsty of knowledge staff. The problems are, that computer based training (CBT) is prone

³ i.e. hide themselves behind IT systems. For me a sign of a lack of self-confidence)

⁴ the keyword her is "due dilligence". In due dilligence processes lawyers, public accountants, or controllers are involved in the strategic planning processes, but LIS professional are rather passive involved as a kind of exchangeable suppliers of information.

to the left side of the brain (the side where the centres of logic is supposed to be located), the right side (the side where among other features creativity is supposed to be located) is neglected. If e-classroom designer put stress on "e" they cultivate a strategy of "drill patterns" (Will van Lück) or a "crossword intelligence" (Fredric Vester).

New methodes/media of teaching should

- improve the quality of learning,
- motivate learner to ask, amaze, and to be astonished
- not give (an algorithm driven path to) solution

Besides learning, learners need a chance to practise the skills learned. In fact, problems in economy, technology and science are not linear but complex nested and sometime chaotic Special types of problem require a real community (instead of virtual community), f.ex. training of motivation, negotiation tactics, broad-mindedness, ability to work in teams. Real presence of trainers/coaches are necessary for preparation of test, case studies, specialisation Simulation and business games as well as map exercises can be seen as acceptable approaches to close the gap between e-learning and classroom-learning. Two of the most important reasons for employing those systems are

- backing up back up initiative of one's own
- without a profund comprehension of the structure the user will not achive the results expected

To end up, here are some advantages and disadvantages.

Advantages

- No confessing of weak points (as in real classrooms)
- No commutation to and from training center
- individual timing
- No loss of labor time (off the job training)

Disadvantages:

- social oriented learning limited (discussion of leadership ability, ability to work in
- training of drill pattern instead for creative problem solving
- reaction of computer determines human behavior not understanding

LIS-training

Against this background institutions of higher education have to integrate both hard and soft skills (core or key competencies) in their programms for new generations of LIS professionals. Here are a short list of hard and soft skills.

Hard skills f.ex.

- IT Programming: SQL, XML, JAVA/PERL
- Business Administration: Controlling, cost accounting, marketing, leadership, negotiations techniques
- Information/Knowledge Management: Ontologies (topic map), Dublic Core, CSCW, Data Warehousing, Text Mining
- Project Management

Soft skill f.ex.

initiative of one's own

ability to work in teams

⁵ Staff means herel students, teachers, employees.

- intercultural communication
- livelong learning

A both theoretical and practical project management is a must. Project integrated learning (project conducted with external partners) will be the most effective method.

Conclusions

In my opinion are some trends virulent to which LIS professionals have to be attentive.

- Do the master of the IT game cultivate a fair play by sticking to the rules he/she signed by contract or do the change the game/the rules as they like it. Do they still have an allover idea of the game/rules (= marketing strategy)
- Does lifelong learning in a information and knowledge society mean:
 - being an IT expert? Or:
 - knowing how to meliorate data into information, information in knowlegde, and knowledge into (innovative) products/services or to broaden our intellectual horizon?

We are preoccupied with learning how

- to handle/use IT and its new releases/systems
- to solve IT problems
- to handle/use ,,all" information sources

LIS-Professionals/Instituts of Education shouldn't cultivate a informatics mimicryIT prevent us to concentrate on the essentials of our profession (time consuming)

And now two quotations uncommanted:

"The real issue for the future technology does not appear to the production of information, and certainly not transmission. Almost anybody can add information. The difficult question is how to reduce it?"

"IF Moses had been handed the 'Ten Commandments' on floppy disks, would word form high have survived through the ages?" ⁷

⁶ Eli Noam in Schenk (ed.) Medienwirkungsforschung. Tübingen 1987, p. 29 Medienöknom: Author of "Let Them Eat Megabits" and "Why the Internet is Bad for Democracy," Eli Noam (Columbia University) is speaking. Touches on the market failure of the entire information sector appearing before our very eyes.

⁷ Edward C. Baig: Technology raises issues of obsolence, data 'rot'", USA TODAY, July 27, 2004, p. 6A.