

ICWE 2004 Greeting

Ladies and Gentlemen,

On behalf of the Ludwig-Maximilians-University Munich I welcome you.

In front of preparing a short greeting to a long conference I had to decide on the style of my presentation.

Should it be **traditional**, elaborating on what the conference is all about and putting it in an historical context. Or should it be **modern**, leafing through many pages on the web and relevant magazines in order not to miss out the latest buzz-words. A few hours of googling around told me, that I would never be able to cut it and I would just be boring to a cutting-edge audience like this one in front of me. Fortunately, I remembered that I myself belong to the “Fortran-Cobol-Card generation” as Dennis Tsichritzis put it. Tsichritzis tells us, that the main characteristic of this generation of persons dealing with computers “is thoroughness and precision (not conservatism)”. Mistakes were very painful; you simply could not fool around with computers. Although this generation saw many changes, its members are still careful and thoughtful.”

This is very much as the American Heritage Dictionary defines engineering: “The application of scientific and mathematical principles to practical ends such as the design, manufacture and operation of efficient and economical structures, machines, processes, and systems.” Opposed to this is what I read in an almost four year old but still relevant report of Cutter Consortium. Here a survey of real world Web-Engineering comes up with scaring numbers:

- 84% did not meet business needs
- 79% ran out of schedule
- 63% exceeded the budget and
- 53% did not have the required functionality.

This is not the Web-Engineering we want. But it is an understandable situation if you put Web-Engineering in a historical perspective.

1. Web Page Construction

At this time the Web-Engineer hat to know HTML and HTTP. Not to complicated altogether, but of tremendous impact as we know today.

2. Web Page Design

Soon the Web-Engineer had to learn that what works does not always please. The Web-Engineer had to digest color schemes and fonts, navigation techniques, the magical number 7 plus/minus 2 mental capacity principle and the Keep It Simple Stupid (KISS) principle.

3. Web Site Design

Here we are beginning to think about user requirements analysis and specification. Storyboards come into play, navigation structures and user testing.

4. Web Site Construction

After a while the Web-Engineer found that constructing each and every page is laborious task especially if the application we are trying to develop has many similar pages like an online university calendar. Even if he had succeeded in creating all the pages he would have failed in maintaining them. At this stage the

Web-Engineer learned how comfortable databases can be and XML-repositories. He learns about secure transactions and gateways.

5. Web System Design

As soon as the Web-Engineer has mastered web site construction he can develop fairly large and complex web systems. But if he had not thought about how to manage information and designed the appropriate infrastructure to manage the information, he had a problem. Now he learns that design for maintainability and scalability has to be incorporated from the very beginning. It cannot be added afterwards.

6. Web Project Planning and Management

We see that experience in developing and maintaining a large web site will let us approach development of a web system in a very different way. Maturity shows in using proper Web Project Planning and Management.

I am very pleased to see that this conference has so many sessions on Web Quality, Usability, Interface Engineering, Modeling and Process Improvement. Mature Web-Engineering – in my opinion – takes into account that the web on the edge to become an indispensable technology, a technology large numbers of users “cannot do without” anymore. This exposes Web-Engineering to the socio-ecological context of technology use. I would like to emphasize that the introduction of a web information or electronic business system in an organization causes a paradigm shift and can significantly impact on the organizational structure and the way various business processes are carried out. This pushes organization wide web projects into the political realm. It will show the maturity and competitiveness of an organization how it will handle the impact of web-related technologies and cope with the transition of business processes, organizational policy and human resources.

I am grateful that this important conference takes place at the University of Munich. This will build a better cyber space for us if not a better university.

And now I have the honor to declare the conference to be open.