Foreword

Several times, I have wondered about the priorities that we as academics and humans of modern societies set for our individual and collective contributions. I respect the episteme of absolute specialization, but I would love to see scientists dealing with the real issues of our society, and I would love to see people dedicating their scientific endeavors to the guidance of humanistic visions. The authors and the editor of this edition made an excellent work in this direction. It is not only the fact that it discusses an up-to-date theme, but it is mostly because in the work promoted the vision for Technology Enhanced Learning as a core component of the knowledge society. In most cases, humanistic or social sensitive visions require a rigorous engineering part. Visions require hard work in terms of technology support and it is often painful to realize that no technology is a panacea for the central issues. From this perspective, *Architecture Solutions for E-Learning Systems* goes beyond the typical verbalism. The adoption of e-learning is discussed with a holistic point of view; the edition covers the central issues of the current e-learning research agenda and provides key answers to e-learning engineering and pedagogical themes.

Everybody talks about the knowledge society. And everybody talks about the importance of developing flexible learning infrastructures that will disseminate learning content through personalized and adaptive methods to learners of different learning styles and needs. But on the other hand, societies require e-learning solutions, functional architectures, and systems that work and provide meaningful learning. In the last years, billions of dollars have been spent on technology enhanced learning systems. A sad finding is that often funded e-learning projects stop to offer their services after the completion of the project. In this situation, community can provide a solution. Web 2.0 and social software, collaborative authoring techniques and learning communities show the way for the evolution of e-learning field. Community is involved in content authoring and knowledge distribution and through collaborative filtering and community annotation, quality standards are met.

A couple of years ago, I had an interview with Professor Robert Zmud, and Chair Michael F. Price in MIS, University of Oklahoma. Given his legendary work in the adoption of technologies in business and organizational contexts, I asked him in a way how can we promote emerging technologies to the business world. His answer has influenced all of my research activities since.

As with all adoption situations, this is an information and communication problem. One needs to segment the base of potential adopters (both in the IT community and in the business community) and then develop communication programs to inform each distinct segment of, first, the existence of the innovation (know-what), then the nature of the innovation (know-how), and finally why this innovation would be useful to them (know-why). These adopter segments are likely to be very different from each other. Each will have a different likelihood of adoption and will likely require that a somewhat unique communication strategy be devised and directed toward the segment.

This is why this edition gives an excellent answer to the needs and questions of many people. E-learning is discussed here in the triptych know-what, know-how and know-why and the editing strategy of the book boosts the excellent quality of contributors. Many excellent academics and practitioners collaboratively worked for this edition. E-learning is and will continue to be one of the most significant pillars of the knowledge society. In this sense, *Architecture Solutions for E-Learning Systems* provides a critical step forward in the understanding of the state of the art in e-learning solutions. I am convinced that the future Web 2.0, social software, Semantic Web and other emerging technologies will drive a new era of e-learning solutions. With its transparent capacity of e-learning to support every business domain, a milestone of the knowledge society will be for sure an e-learning primer. A lot of effort must be paid to the introduction of e-learning into modern curricula. *Architecture Solutions for E-Learning Systems* can be used as an excellent text book for the relevant themes.

As a concluding remark, I would like to share with you some thoughts. There is always the question of the pace of change and the current stage of the maturity or contribution of e-learning. At this stage, we need strategy and hard work. Educating people in e-learning in for instance computer science or business departments means making them realize that knowledge and learning exploitation are our mankind characteristics that we must bring to the electronic world. If we do not support them, then our virtual world will remain unexploited. We must exploit the collective knowledge of humanity for learning and educating people.

I like the engineering approach of this edition. We must be able to address the e-learning challenge with concrete computer engineering in order to make sustainable solutions for real world problems. The fine grain of strategy, pedagogy and computer science will lead e-learning to a maturity level for unforeseen value diffusion. My invitation is to be part of this exciting, just started journey in the world of learning and knowledge and to keep in mind that the people who dedicate their lives in the promotion of disciplines for the common wealth from time to time need encouragement and support because their intellectual work is not valued in financial terms. This is why I would like to express my deepest appreciation and respect for the authors' and editor's contributions. The authors and editor have done a great job. And dear readers, from all over the world, you made a good choice. Let us explore together e-learning architectures for the society. And why not let us put together the new milestones towards a better world through the adoption of leading edge technologies in humanistic visions. Knowledge and learning for all can be a nice motto for the new century in our turbulent times.

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