

# Acknowledgments

When looking back at our lives, there are several moments that make us feel that they influenced not only the way we think but also the way we give to the people and the society around us. Moreover, when we consider our contributions to the things we decided to serve, in other words the Episteme that enlightens our hearts, brains and souls, we feel that the future is the ultimate objective.

This convergence proves the momentum for our efforts. We are working hard, and given our historical background, we envision a better future. This edited book acknowledges the work of many academics and practitioners who inspired our minds toward the ultimate characteristic of human beings — our knowledge and learning capacity.

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The KMR<sup>1</sup> group is a European research group, which is physically based at the Royal Institute of Technology in Stockholm, Sweden. Its members are driven by a desire to create new and powerful ways to structure and communicate information in order to support its *exformation* into knowledge and *transmutation* into understanding. The domains of research include educational, industrial as well as administrative settings.

The research of the KMR group revolves around a structured information architecture that is called a *Knowledge Manifold*. A KM supports a number of different strategies for the suppression and presentation of information. It consists of a number of linked information landscapes (contexts), where one can navigate, search for, annotate and present all kinds of electronically stored information. A KM is constructed by conceptual modeling of a specific knowledge domain in order to capture its underlying thought patterns in the form of context-maps.

When used for learning and knowledge management purposes, a knowledge manifold provides (at least) the following natural knowledge roles:

- *The Knowledge*
- *Cartographer*: who creates context-maps.
- *Librarian*: who fills the concepts in the context-maps with content components.
- *Composer*: who combines components and creates customized learning modules.
- *Coach*: who cultivates questions.
- *Preacher*: who provides live and engaging answers.
- *Plummer*: who connects questions to relevant preachers.
- *Mentor*: who maintains learner motivation and supports learner self reflection.

These roles can be taken dynamically — by both teachers and learners. “You learn as long as you are teaching, and you teach as long as somebody else is learning” is the basic pattern at work here.

The KMR group makes use of the KM architecture in order to construct a kind of Human Semantic Web (HSW), which functions as a conceptual interface to the underlying (machine) Semantic Web. The group members are participating in a number of international efforts to develop a Public Knowledge and Learning Management Environment (PKLME) based on Semantic Web technology, open source and open international ICT standards. Besides the KM architecture, the contributions of the KMR group to this PKLME include:

- The *Edutella*<sup>2</sup> infrastructure: A democratic (peer-to-peer) network infrastructure for search and retrieval of information about resources on the Semantic Web.
- The *Conzilla*<sup>3</sup> concept browser: A knowledge management tool for overview creation and collaboration, which supports the construction, navigation, annotation and presentation of the information in a knowledge manifold.
- The *SCAM*<sup>4</sup> framework: A metadata storage and access framework that helps applications to store and share semantic information about resources.
- The *SHAME*<sup>5</sup> framework: An editor framework that supports an evolving annotation process of resources in a way that enables the growth of an “ecosystem” of quality metadata.
- The *Formulator* (or *SHAMEditorEditor*): a tool for editing metadata editors that is built on top of the SHAME framework.
- The *Meditor*<sup>6</sup> editor: a flexible editor for metadata that can reuse parts of different metadata standards (such as e.g. LOM or Dublin Core).
- The *Confolio*<sup>7</sup> system: An electronic portfolio network that is built on top of SCAM, SHAME and Edutella, and which supports collaborative and reflective learning techniques. A prominent feature of the Confolio system is that it provides an “opinion publication network” of distributed and semantically searchable annotations. This opens up a new level of possibilities for customer relationship management.
- The *VWE*<sup>8</sup> composer: An environment for composing learning resources and building customized learning modules.

All KMR frameworks and tools are open source and based on Semantic Web technology. They are designed to support the ongoing shift of social interaction patterns from knowledge push to knowledge pull, such as the shift:

- from *teacher*-centric to *learner*-centric education.
- from *doctor*-centric to *patient*-centric health care.

- from *bureaucrat*-centric to *citizen*-centric administration.
- from *government*-centric to *citizen*-centric democracy.
- from *producer*-centric to *consumer*-centric business models.

## Endnotes

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- <sup>1</sup> Knowledge Management Research: <http://kmr.nada.kth.se>
- <sup>2</sup> <http://edutella.jxta.org>. This effort is coordinated by L3S (Learning Lab Lower Saxony).
- <sup>3</sup> [www.conzilla.org](http://www.conzilla.org)
- <sup>4</sup> Standardized Contextualized Access to Metadata: <http://scam.sourceforge.net>
- <sup>5</sup> Standardized Hyper-Adaptable Metadata Editor: <http://kmr.nada.kth.se/shame>
- <sup>6</sup> <http://knowgate.nada.kth.se:8180/SHAME/DemoEditor.jsp>
- <sup>7</sup> [www.confolio.org](http://www.confolio.org)
- <sup>8</sup> Virtual Workspace Environment: [www.vwe.nu](http://www.vwe.nu)