

# The Social Navigator: A Personalized Learning Platform for Social Media Education

Michael Schmidt<sup>1</sup>, Uta Schwertel<sup>1</sup>,  
Christina Di Valentin<sup>2</sup>, Andreas Emrich<sup>2</sup>, and Dirk Werth<sup>2</sup>

<sup>1</sup> information multimedia communication AG, 66123 Saarbrücken, Germany  
{michael.schmidt, uta.schwertel}@im-c.de

<sup>2</sup> DFKI, Institut für Wirtschaftsinformatik, 66123 Saarbrücken, Germany  
{christina.divalentin, andreas.emrich, dirk.werth}@iwi.dfki.de

**Abstract.** We present the Social Navigator, an open, Web-based learning platform supporting training of Social Media skills in vocational education. It provides access to a rich pool of resources that enable teachers to integrate Social Media education into the teaching process and offers information and training material to trainees. Designed in an interdisciplinary approach, the Social Navigator builds upon a Social Web skill model, which is used to provide personalized, guided access to resources. Complementary, the integration of Social Web channels stimulates social interaction and helps users to implicitly acquire Social Web skills.

**Keywords:** Social Media Education, Personalized Recommendations

## 1 The Social Navigator

Social media have become an integral part of everyday's working life, particularly in the ICT industry. The skills needed to professionally use channels such as wikis, blogs, and networking sites include search, selection, comparison, administration, and publication of information. With the goal to increase the awareness for opportunities and risks of Social Media and to convey required skills, we are developing the *Social Navigator* as a personalized and social learning system [1].

For *teachers and trainers*, the system shall motivate the importance of Social Media skills for their trainees' working life and provide support in designing and running projects that convey Social Media skills; for *trainees*, it constitutes a platform that helps acquire Social Media skills through self-assessment tests, personalized learning object recommendations, and dedicated Web-based trainings. Designed as a Social Network, it stimulates communicative exchange such as sharing of experiences made with Social Media in vocational education.

**Social Media Skill Model.** The Social Navigator is centered around learning objects and information about Social Media skills, which describe the capabilities of adequately applying social media technologies [2, 3]. In [4] we presented an integrated model describing knowledge and skills for the use of the Social Web for learning and knowledge exchange. At its core, the model identifies four complementary facets for professional Social Media use, namely skills required to *create and edit information*, *communicate and comment on information*, *comprehend and evaluate information*, and *select and manage information*. The skill

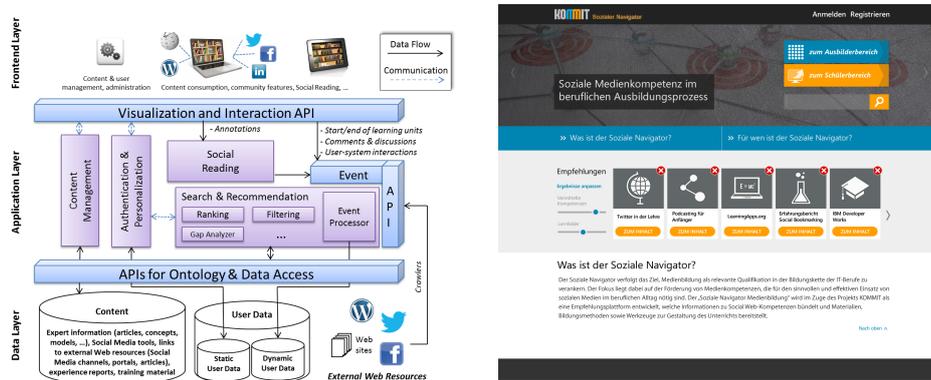


Fig. 1. (l) Social Navigator architecture; (r) Screenshot incl. recommendation stream

model is tightly integrated into the Social Navigator, serving as a means for classification, navigation, and recommendation of learning objects.

**Architecture, Design, and Implementation.** The architecture of the Social Navigator follows a three-tier approach (cf. Figure 1(l)), in which learning object metadata as well as dynamic user behavior are used by an ontology-based search and recommendation engine [1], to provide personalized information to end users (see e.g. the recommendation stream sketched in Figure 1(r)). In order to support mobile learning, the visualization and interaction API follows a responsive design paradigm that delivers output to desktop, laptop or tablet PCs in an optimized way. Another central component is a module for Social Reading, which allows users to annotate text fragments in learning objects, add comments or links to these annotations, and share them with others, thus enabling community-driven communication around integrated learning objects.

## Acknowledgments

This research has been co-funded by the European Social Fund and the German Federal Ministry of Education and Research within the project *KOMMIT*.

## References

- Schmidt, M., Di Valentin, C., Emrich, A., Schwertel, U., Oloff, C., Kammerer, Y.: A Social and Personalized Learning Platform for Vocational Social Media Education. In: Multikonferenz Wirtschaftsinformatik. (2014) 820–832
- Baacke, D.: Medienkompetenz-Begrifflichkeit und sozialer Wandel. Medienkompetenz als Schlüsselbegriff (1996) 112–124
- Parola, A., Ranieri, M.: Media Education in Action: A Research Study in Six European Countries. Volume 110. Firenze University Press (2010)
- Oloff, C., Kammerer, Y., Gerjets, P.: Theoretisches Rahmenmodell zu Fertigkeiten bei der Nutzung des Social Web für Wissenserwerb, Wissenskonstruktion und Wissensaustausch. In: 14. Fachtagung Pädagogische Psychologie der Deutschen Gesellschaft für Psychologie, Hildesheim. (2014)