

A – Eingeladene Vorträge

A.1 The “Communities in New Media” Conference Series. Over 20 years of Research about Knowledge Communities in Science, Business, Education, Public Administration and beyond.

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1 Introduction

In Autumn 2017 the 20th annual “Communities in New Media” Conference (labelled with the German abbreviation “GeNeMe” – Gemeinschaften in Neuen Medien) presented innovative online technologies and processes for the organization, cooperation, and communication in virtual communities. GeNeMe is a forum for professional exchange especially in the fields of knowledge management and online learning with a strong link to IT support (e.g. Social Software Applications). The conference series focuses not only on technological and organizational aspects of the use of new media, but also takes a closer look at sociological, psychological, economical, didactical, and legal facets as well. GeNeMe is geared towards experts from research and industry. It is designed to promote practical and scholarly insights among participants from various disciplines, organizations, and institutions from academia, business and administration. With that domain history the conference has an even longer tradition than the European conference series Web Based Communities which may be seen as international benchmark on the field of community research conferences.

At previous conferences the GeNeMe 2017 invited speakers and guests taking a closer look at current trends with a balanced combination of analytical and applied perspectives. Overall, answers to outstanding questions dealing with latest online technologies determine more than ever how professional and private action can be shaped. The ever-increasing mobility of modern multi-media systems such as smartphones and tablets reframes every part of life, resulting in high availability and / or immersion.

The currently discussed digital transformation processes (Industry 4.0, IoT) were the most prominent topics of the 20th GeNeMe in 2017. While the focus lay on innovation and research, constituting pivotal methods and tools for digitally mapping knowledge-intensive cooperation in increasingly heterogeneous communities (augmented knowledge communities) have been addressed as well. In 2017 for the first time the field of knowledge visualization and knowledge-based architecture provided additional stimuli. Beyond the informational and media-/technological analyses, the practice of (organizational) knowledge integration, whether through knowledge management, learning or education processes, was considered as well.

Scientific profile and recent contributions

The GeNeMe conference is usually chaired by a group of scientists from the Faculties of Education and of Business & Economics as well as the Media Centre of the Technische Universität Dresden, supported by local branch initiatives like the Silicon Saxony e.V. industrial network or the Knowledge Research Center e.V. Dresden. As partners serve several universities of applied science, among them the Hochschule für Öffentliche Verwaltung Meißen (FH), the University of Applied Sciences of the German Social Accident Insurance (HGU), the HTW Dresden and the University of Applied Sciences Dresden in order to set up the conference series with both an academic and an applied industrial focus. Selected (inter-) national academic networks surround that conference, among those the German Society of Computer Science (GI), the international Society of Media in Science (GMW) and the Leibniz Research Affiliation Science 2.0.

Starting with the 15th GeNeMe in 2012 the conference became more and more international which influenced the language and affiliation of the papers submitted as well as the configuration of the Steering Committee, which guarantees the assessment of all the submissions.

The contributions to the most recent (2017) volume covered topics as for example the economic potential and the information management of online communities, the infrastructures for the working field of social communities. Technologies and methods for online communities and digital knowledge architecture have been addressed as well as mixed reality concepts for online communities and knowledge-work in teaching and research. For the first time GeNeMe did intentionally focus on special needs of the public administration (E-Government).

Specifically, the 2017 GeNeMe focused on the following aspects:

Community Management: Activity- and information management in online communities:

- Framework conditions and incentives for the design of proactive learning and knowledge communities: Requirements for community management
- A comparison of support mechanisms by online friends
- How to ensure sustainability within online communities in the context of an Erasmus+ project on social entrepreneurship
- Competence-oriented learning in heterogeneous groups in the MOOC “Ready for Study”

Public Administration: infrastructures and the context of social communities

- Application of an e-competence study in the IT area of a municipal authority
- Navigation through the information flood
- Performance monitoring and information technologies in the management of schools in Germany

Online Communities: Specified digital knowledge architectures

- Entrepreneurship and raising awareness for digital business modelling & marketing in mobile innovation labs
- Design of smart learning environments in in-company training as an interdisciplinary challenge
- Absorptive capacity in start-ups with its organizational as well as external determinants and their impact on the knowledge acquisition in young companies

Discourse Analyses and Empirical Analyses and Technologies

- Analysis of scientific conference tweets using the codebook and the software Tweet Classifier
- Discourse structure analysis of the crowd for urban design
- Usability of questionnaires on mobile devices
- Empirical analysis of student types
- Learning and academic analytics in learning management systems with related challenges and areas of action in a national university context
- Exploring customer satisfaction in alternate reality games like Virtual Scavenger Hunts

Knowledge-Based Online (Collaborative) Work in Teaching and Research

- Student readiness for online learning
- Measuring Knowledge in Computer Network Vocational Training by Monitoring Learning Style Preferences of Students
- The imparting of e-competences in places of the digital learning. Experiences from the European co-operation project CODEMOB at the interface between research and practice
- Anchoring digitization in the minds – using the example of a medium-sized company
- Open Educational Resources (OER) in Saxony: Status Quo – Potentials and challenges
- Knowledge as a Facebook instant article – a possible future scenario

Video-based cooperation in education

- Video portal systems in the university – a functional comparison for the video campus of Saxony
- Presentation of the pilot platform of the future Video campus Saxony
- Video-supported reflection in Iran – impact of gender and experience
- Computer-assisted professional training of sports teachers

Mixed-reality concepts for online communities

- Gamification types and motivation – experiments on badge, feedback, progress indicator and story
- Pokémon Go and the increasing of physical activity and social affiliation
- Experiences on the use of mixed and virtual reality in higher education

2 Development of the annual topics of the GeNeMe conference series

How has the academic profile of the GeNeMe conference series developed over 20 years? With this research question in mind it becomes obvious that even though the conference is documented in an excellent manner as OAP series, the dynamics of the research domain are less clearly visible. In order to elaborate that dimension in more details, the authors decided to apply two different empirical steps:

1. In a first approach a list of all proceedings will be provided, covering topics (titles) and editors.
2. In a second approach the very topics will be sorted by keywords in order to detect changes over the period of 20 years of research in the field of communities in new media.

With that approach we are in line with similar studies for other fields about so-called future online technology trends, for example concerning the field of E-Learning (Fischer et al., 2015).

2.1 Annual publications of the GeNeMe conference series

As in previous years, the GeNeMe was open to interested colleagues from the English-speaking world - with German being the predominant language of the texts published here. With regard to the improved international visibility of the GeNeMe community, it is worth mentioning that Scopus via Elsevier provides a powerful citation database of peer-reviewed literature. That database includes all the conference volumes at hand as soon as the full text version has been published on the Open Access System of the TU Dresden under www.qucosa.de.

The complete texts from all GeNeMe conferences since the beginning of the conference series in 1998 can be accessed on the Open Access Repository QUCOSA. For the sake of completeness, we list all previously published GeNeMe conference proceedings:

Table 1: List of all previously published GeNeMe conference proceedings

2017	Köhler, T., Schoop, E. & Kahnwald, N. (2017). Knowledge Communities in Business, Science and Public Administration. Proceedings of 20th Conference GeNeMe 2017; Dresden, TUDPress. [ISBN 978-3-95908-121-4]
2016	Köhler, T., Kahnwald, N. & Schoop, E. (2017). Knowledge Communities in Online Education and (Visual) Knowledge Management. Proceedings of 19th Conference GeNeMe 2016. Dresden, TUDPress. [ISBN 978-3-95908-144-3]
2015	Köhler, T., Kahnwald, N. & Schoop, E. (2015). Knowledge Communities in Business and Science. Proceedings of 18th Conference GeNeMe 2015. Dresden, TUDPress. [ISBN 978-3-959080-10-1]
2014	Köhler, T. & Kahnwald, N. (2014). Online Communities: Technologies and Analyses for Networks in Industry, Research and Education. Proceedings of the GeNeMe 2014; Dresden, TUDPress. [ISBN 978-3-942710-86-2]
2013	Köhler, T. & Kahnwald, N. (2013). Online Communities: Enterprise Networks, Open Education and Global Communication. Proceedings of the GeNeMe 2013; Dresden, TUDPress. [ISBN 978-3-944331-24-9]
2012	Köhler, T. & Kahnwald, N. (2012). Virtual Enterprises, Research Communities & Social Media Networks. Proceedings of the GeNeMe 2012; Dresden, TUDPress. [ISBN 978-3-942710-86-2]
2011	Meißner, K. & Engeliën, M. (2011). Virtual enterprises, communities & social networks. Proceedings of the GeNeMe 2011; Dresden, TUDpress. [ISBN 978-3-942710-35-0]
2010	Meißner, K. & Engeliën, M. (2010). Virtual enterprises communities & social networks; Proceedings of the GeNeMe 2010; Dresden, TUDpress. [ISBN 978-3-941298-86-6]

2009	Meißner, K. & Engeliem, M. (2009). Virtuelle Organisation und Neue Medien; Proceedings of the GeNeMe 2009; Dresden, TUDpress. [ISBN 978-3-941298-29-3]
2008	Meißner, K. & Engeliem, M. (2008). Virtuelle Organisation und neue Medien; Proceedings of the GeNeMe 2008; Dresden, TUDpress. [ISBN 978-3-940046-95-6]
2007	Meißner, K. & Engeliem, M. (2007). Virtuelle Organisation und Neue Medien; Proceedings of the GeNeMe 2007; Dresden, TUDpress. [ISBN 978-3-940046-36-9]
2006	Meißner, K. & Engeliem, M. (2006). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2006; Dresden, TUDpress. [ISBN 3-938863-77-3]
2005	Meißner, K. & Engeliem, M. (2005). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2005; Dresden: Institut für Software- und Multimedia-technik. [ISBN 978-3-86005-491-8]
2004	Engeliem, M. & Meißner, K. (2004). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2004; Lohmar: Josef Eul Verlag. [ISBN 978-3-89936-272-5]
2003	Publiziert in: Uhr, W., Esswein, W. & Schoop, E. (2003). Wirtschaftsinformatik 2003/ Band II: Medien, Märkte, Mobilität; Heidelberg: Physica-Verlag: [ISBN 978-3790801163]
2002	Engeliem, M. & Homann, J. (2002). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2002; Lohmar: Josef Eul Verlag. [ISBN 978-3-89936-007-3]
2001	Engeliem, M. & Homann, J. (2001). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2001; Lohmar: Josef Eul Verlag. [ISBN 978-3-89012-891-7]
2000	Engeliem, M. & Neumann, D. (2000). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 2000; Lohmar: Josef Eul Verlag. [ISBN 978-3-89012-786-6]
1999	Engeliem, M. & Homann, J. (1999). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 1999; Lohmar: Josef Eul Verlag. [ISBN 978-3-89012-710-1]
1998	Engeliem, M. & Bender, K. (1998). Virtuelle Organisation und Neue Medien. Proceedings of the GeNeMe 1998; Lohmar: Josef Eul Verlag. [ISBN 978-3-89012-632-6]

2.2 Publications and annual topics of the conference series

In a second approach, we have sorted the very topics of the conference series by keywords in order to detect changes over the period of 20 years of research in the field of communities in new media. To do so, we collected all keywords used in general for the description of the annual proceedings (but not the single articles' keywords) and combined them in a data base. The subsequent figure 1 shows the pattern of terms used in the conferences over the period of the last 20 years.

Obviously there is both stability and as well a considerable shift of topics covered by GeNeMe researchers. All in all, the core focus on online communities, knowledge management, online education and virtual organization is clearly visible over the years.

However other smaller foci seem to change more often over time, including eScience and research technologies, IT-support and eBusiness as well as open education. Some stability can be detected as well for the topic of knowledge management and its related fields like respective knowledge architecture etc. Comparatively new is the focus on knowledge cooperation and community didactics.

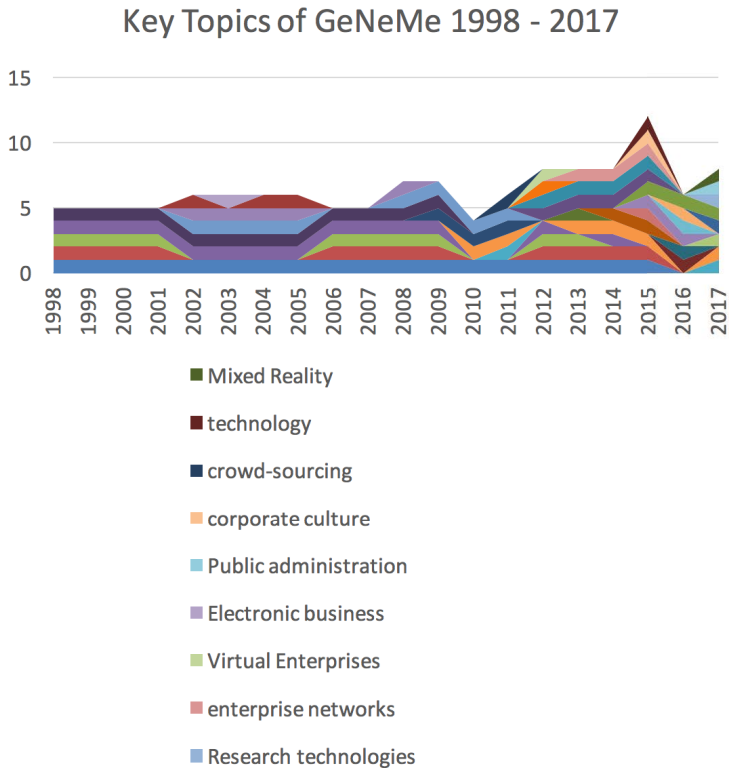


Figure 1: Key Topics of GeNeMe 1998 – 2017

A more general observation is the growing variety of terms used since 2012, the year of the change of the team of conference chairs. This is in so far noteworthy as the first team consisted of two chairs of media and business informatics while the

second (and still acting) team does consist of three chairs of educational technology, business information systems and eLearning. Most likely due to that variety the focus of the whole conference became somewhat broader, including education science and further scientific communities. Taking into account the above mentioned aspect of internationalization this can be seen as evidence of the multiple influences the conference received from an increasing number of international authors – though such may just be a hypothesis which still needs to be confirmed by a more precise study.

3 Outlook

In a next step the authors intend to develop a more detailed statistic, which will be focused on the Key Topics of each of the approximately 400 papers that were accepted and presented at the 20 GeNeMe conferences in the period from 1998 until 2017. A complementary analytical approach to the GeNeMe tradition - focusing on the GeNeMe authors of the last 20 years – can be found in this proceedings' paper „Erfolgsgeschichte GeNeMe? – Eine bibliometrische Untersuchung der Autorenschaft über zwei Jahrzehnte.“

An even deeper analysis might be conducted by applying the new technology just recently provided by the MOVING project (cf. <http://moving-project.eu>). It is an innovative training platform that will enable users from all societal sectors (companies, universities, public administration) to fundamentally improve their information literacy by training how to choose, use and evaluate data mining methods in connection with their daily research tasks and thus to become data-savvy information professionals (Vagliano et al., 2018).

Since the first prototype of the MOVING platform is available since January 2018 to the public, users of that data exploitation platform may not only improve their information literacy by training how to exploit data and text mining methods in their daily research tasks. As the MOVING search engine provides scalable real-time search, supports multiple document types, different file formats and different programming languages, it should be very applicable for our future analysis. Faceted search allows to retrieve various kinds of documents such as scientific articles, books, video lectures, and metadata. Graph visualization highlights relations among documents and related entities (authors, organizations, etc.) and offers an alternative way of exploring search results. Of course, a classical search list is also featured. For example, the user can click on an author's name and retrieve all documents authored by this person. To ensure a smooth user experience, dedicated tools allow us to separate different authors with the same name or connect different versions of the same document or different persons with the same affiliation. The Adaptive Training Support provides illustrative feedback in order to help getting

familiar with the platform and its features (e.g. by recommending features not having been tried so far). The innovative training platform can be tested for free at <https://moving.mz.test.tu-dresden.de/>

4 References

- Fischer, H., Heise, L., Heinz, M., Möbius, K., Köhler, T. (2015): Let's Look to Future! E-Learning-Trends and Hypes in Academic Teaching. In: EURODL – European Journal of Open, Distance and E-Learning. Special Issue Best of EDEN 2013-2014, S. 129-140. Online via: http://www.eurodl.org/materials/special/2015/Zagreb_Fischer_et_al.pdf.
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