QualiMaster

A configurable real-time Data Processing Infrastructure mastering autonomous Quality Adaptation

Grant Agreement No. 619525

Deliverable D7.3

Work-package	WP7: Dissemination and Exploitation
Deliverable	D7.3: Dissemination Plan
Deliverable Leader	SUH
Quality Assessor	Ekaterini Ioannou, Mohammad Alrifai
Estimation of PM spent	1
Dissemination level	Public (PU)
Delivery date in Annex I	30.06.2014
Actual delivery date	30.06.2014
Revisions	6
Status	final
Keywords:	Dissemination plan, early dissemination report

Disclaimer

List of Authors

Partner Acronym	Authors
SUH	Holger Eichelberger
LUH	Claudia Niederée, Patrick Siehndel
SPRING	Walter Colitti
MAX	Oliver Pell
TSI	Evripides Sotiriadis

Table of Contents

Executive summary

This deliverable describes the initial dissemination plan of the project, which is based on the dissemination strategy outlined in the Description of Work. For the dissemination plan, first the dissemination strategy is discussed. Subsequently, this dissemination strategy is translated into planned dissemination activities. Furthermore, this deliverable summarizes the dissemination activities that have already been performed in the first half year of the project.

The dissemination plan will be revisited and updated during the project taking into account the actual project results as well as dissemination opportunities, which might be encountered during the project. An updated dissemination plan will be described in the deliverables D7.4 and D7.5. Those deliverables will also update the report on dissemination activities performed in the project.

1 Introduction

This deliverable presents the initial dissemination plan for the QualiMaster project. It defines the overall strategy for pro-actively presenting and propagating the QualiMaster project results within the relevant scientific communities, the interested industrial and organizational parties and the broader public. In addition to the dissemination plan, this deliverable also presents dissemination actions that have already been achieved in terms of an early dissemination report. A collection of these dissemination activities, especially press releases, and follow-up reactions is given in the Appendix.

This deliverable is structured as follows: In Section 2, we discuss the dissemination strategy of the QualiMaster project to be adopted throughout the project's lifetime. It is expected that this plan will still be extended and revised in the duration of the project. Furthermore, in Section 3, we describe means to implement the dissemination strategy through public relation and communication activities. In Section 4, we present the first dissemination actions performed in this early phase of the project. Finally, Section 5 concludes the deliverable. As indicated above, the Appendix illustrates recent dissemination activities.

2 Dissemination Strategy

The dissemination activities aim at providing tools and mechanisms that will increase the visibility of QualiMaster project results and generate awareness, on the one hand, in industry, in particular in SMEs, and, on the other hand, in the research community. Such visibility is a precondition for wider uptake of the project results. The goal of the QualiMaster dissemination strategy is to foster that the vision and results of the project will become widely known and highly influential.

2.1 Dissemination Principles

The dissemination approach aims at achieving effective communication of the results of the QualiMaster project to relevant stakeholders, including scientific communities, potential industrial adopters, and the broader public in general. In addition to the distribution of the project's vision and its results, we see dissemination as a reinforcing factor that the momentum the QualiMaster project aims at creating. Thus, all partners in the QualiMaster consortium will contribute to the dissemination and communication activities described in this deliverable.

2.2 Dissemination Approach

The project outcomes and results will be communicated in order to create external awareness, communication links and knowledge within the related scientific communities and on the side of potential (end) users. Users include professional or industrial adopters, in particular in the financial domain such as financial consultants, technology providers or banks as well as public bodies, in particular financial regulators. In order to provide dedicated information to the particular stakeholders, the QualiMaster dissemination plan consists of two dimensions:

(1) **Wide dissemination** addresses the broader research community, European industry and the wider public that will profit from the project. Its aim is to inform about the project and to stimulate interest at potential (end) users and adopters.

(2) **In-depth dissemination** targets potential stakeholders interested in the project results, outcomes and technologies. We classify them into the target groups shown in Table 1. For all target groups, the QualiMaster consortium plans tailored dissemination activities. As we will discuss in Section 3, we will set up means to attract, to link and to interact with the stakeholders of these groups. In addition to the evaluations defined in the description of work involving the West Pomerian University as a subcontractor, we will involve the stakeholders in the target groups into the project for feedback, (focused) discussions, early testing, adoption of methods or use of the QualiMaster technology.

Target group	Possible Dissemination activities
Regulatory bodies	● Information via existing channels of the industrial project partners ● Involvement in requirements collection and expert evaluation ● Presentation of project results on association events
Service and technology providers	● Contributions to special-interest magazines ● Attending and participating in workshops, exhibitions, and fairs ● Contributions to relevant industrial consortia ● White papers

Target group	Possible Dissemination activities
Potential end users	● Dissemination via channels to related industry and SMEs via their associations, specific meetings, and fairs ● Contribution to on-line forums, and mailing lists ● Social Web activities (viral dissemination)
Researchers	● Conference presentations ● Contribution to special-interest newsletters ● Publications of papers on high-quality conferences and in renowned scientific journals within relevant fields of expertise ● Contact to other EU projects especially in the field of (Big) Data Analytics

Table 1: Target groups for in-depth dissemination

For implementing the wide and the in-depth dissemination activities we have identified the following four channels:

- Online dissemination (wide dissemination) and use of Web 2.0 channels (in-depth dissemination).
- Event-based dissemination (wide and in-depth dissemination).
- Interactive dissemination (in-depth dissemination).
- Press releases (wide dissemination).

The individual channels are discussed in more detail in the following subsections. Further, we will discuss our plans regarding research and commercially oriented dissemination in two additional subsections. In addition to the overall dissemination strategy, all partners will follow their individual dissemination strategy as stated in the Description of Work.

2.2.1 Online Dissemination and use of Web 2.0 channels

The website of the project is a core means of online dissemination. This website is used to raise public awareness for the project's results. It contains (or will contain) project overviews and highlights; up-to-date information on intermediate and final project results, including public reports and publications as well as synthesis reports drawn from selected confidential material; project events, including, e.g., user group meetings, conferences and workshops; contact details, etc.

Furthermore, the consortium will investigate the usefulness and adequateness of various (further) Web 2.0 channels, such as Facebook, YouTube channels, etc. Although there are several different possibilities, the consortium will select, in addition to the already established Twitter account, the next most promising channel and use it for intensive online dissemination.

2.2.2 Event-based Dissemination

For event-based dissemination, we identified relevant conferences, workshops, exhibitions and other events where the project results will be presented and will update the respective lists regularly. In this section, we present the target conferences and workshops, general dissemination events and fairs relevant to the QualiMaster consortium identified as target events so far.

The consortium has identified a number of target **conferences and workshops** for dissemination, which are summarized in Table 2. Publications and other material, such as posters and flyers, will propagate the results of the project.

RTD events	Description
IEEE Big Data	The IEEE International Conference on Big Data aims to provide an international forum that formally explores various business insights of all kinds of value-added "services." Big Data is a key enabler of exploring business insights and economics of services.
World Wide Web conference (WWW)	The World Wide Web Conference is a yearly international conference on the future direction of the World Wide Web. The conference brings together researchers, developers, users and commercial ventures—indeed all those who are passionate about the Web and what it has to offer.
ACM International Conference on Information and Knowledge Management (CIKM)	CIKM is a well-known top tier and premier ACM conference in the areas of information retrieval, knowledge management and databases. The purpose of CIKM is to identify challenging problems facing the development of future knowledge and information systems, and to shape future research directions through the publication of high quality, applied and theoretical research findings.
IEEE International Conference on Data Engineering (ICDE)	The annual ICDE conference addresses research issues in designing, building, managing, and evaluating advanced data-intensive systems and applications. It is a leading forum for researchers, practitioners, developers, and users to explore cutting-edge ideas and to exchange techniques, tools, and experiences.
International Conference on Advanced Information Systems Engineering (CAiSE)	CAiSE is a well-established highly visible conference series on Information Systems (IS) Engineering. It covers all relevant topics of IS engineering such as methodologies and approaches for IS engineering, innovative platforms, architectures and technologies, and engineering of specific kinds of IS.
International Conference on Very Large Data Bases (VLDB)	VLDB is a premier annual international forum for data management and database researchers, vendors, practitioners, application developers, and users. It covers current issues in data management, database and information systems research.
ACM SIGMOD/PODS Conference	The annual ACM SIGMOD conference is a leading international forum for database researchers, practitioners, developers, and users to explore cutting-edge ideas and results, and to exchange techniques, tools, and experiences.
Conference on Adaptivity, Personalisation and Fusion of Heterogeneous Information (RIAO)	The RIAO conference is a triennial conference, addressing research topics related to the design of robust and large-scale scientific and industrial solutions to information processing.
ACM/IEEE International Conference on Software Engineering (ICSE) / Symposium on Software Engineering for Adaptive and Self-Managing Systems (SEAMS)	The ICSE is the premier software engineering conference. SEAMS is typically co-located with ICSE and consolidated the interest in the software engineering community on self-adaptive and self-managing systems.
International Conference on Software Product Lines (SPLC) / Workshop on Dynamic Software Product Lines (DSPL)	The SPLC is the premier forum to discuss the most recent ideas, innovations, trends and experiences in the area of (dynamic) software product line engineering.

RTD events	Description
International Conference on Performance Engineering (ICPE)	The ICPE provides a forum for the integration of theory and practice in the field of performance engineering. It brings together researchers and industry practitioners.
ACM/IEEE International Conference on Automated Software Engineering (ASE)	The ASE conference series is the premier research forum for automated software engineering. Each year, it brings together researchers and practitioners from academia and industry to discuss foundations, techniques and tools for automating the analysis, design, implementation, testing, and maintenance of large software systems.
International Conference on Field Programmable Logic and Applications (FPL)	FPL, organized yearly in Europe since 1991, is the first and largest conference covering the rapidly growing and evolving area of field-programmable logic. Its objective is to bring together researchers and practitioners from both academia and industry from all over the world for broad discussions and exchanges on field-programmable logic, including, but not limited to: applications, advanced electronic design automation (EDA), novel system architectures, embedded processors, arithmetic, and dynamic reconfiguration.
IEEE International Symposium on Field-Programmable Custom Computing Machines (FCCM)	FCCM, organized annually in North America since 1993, is the original and premier forum for presenting and discussing new research related to computing that exploits the unique features and capabilities of FPGAs and other reconfigurable hardware. Over the past two decades, FCCM has been the place to present papers on architectures, tools, and programming models for field-programmable custom computing machines as well as applications that use such systems.
The International Conference on Field-Programmable Technology (ICFPT)	ICFPT is the premier conference in the Asia-Pacific region since 2002 on field-programmable technologies including reconfigurable computing devices and systems containing such components.

Table 2: Target Confererences

In the later phase of the project, the consortium has planned to also organize own events preferably in the context of larger events, such as related conferences. This will give the opportunity to present the project results in a more comprehensive and contextualized way as well as to discuss them with other experts in the field. Different forms of own events are under discussion including a Dagstuhl Seminar or a workshop at a larger conference.

In addition, the QualiMaster consortium will participate and support **dissemination and research events**, in particular those organized by the EU, such as the ICT events or networking events. This includes, if appropriate, the preparation of presentations or booths on the project results.

In order to address a wider expert audience also in business and industry, the QualiMaster consortium will present the project results on **trade fairs**. The consortium identified the fairs stated in Table 3 as relevant to the project. In particular, LUH and SUH will apply for presentations on the common federal booths in the research hall of the respective event. This is reasonable, as both partners have good relationships to the organizers due to previous participations and the institutes of both partners are located in close vicinity to the fair venue, i.e., a participation can be also be organized at a reasonable budget share.

Event	Description
Hannover Messe	Hannover Messe is the world's most important technology fair, a powerful driver of investment in new technology and automation. Hannover Messe is where businesses showcase their latest products and solutions.
CeBIT	CeBIT is the world's largest computer expo held yearly in Hannover, Germany, and it constitutes a recognized meeting place for disseminating the latest research results in ICT.

Table 3: Target trade fairs

In addition to these prominent events, the individual partners will disseminate the results of the QualiMaster project on events of the networks the partners are involved in, e.g., the meetings of research with politics (“Parlamentarischer Abend”) organized by LUH, the meetings of the industrial supporters of the computer science studies at SUH (“Gesprächskreis IT”, a regular meeting of more than 30 SMEs and large industry companies in the ICT domain) or the events of HI-REG, the society for the promotion of economic development in the region of Hildesheim.

2.2.3 Interactive Dissemination

In addition to providing information, the QualiMaster consortium will also actively seek for interaction with potential adopters of the QualiMaster approach. This increases visibility and helps in lowering the barriers for adoption, since concerns can be discussed and questions clarified. At the same time, important insights for the fine-tuning of the QualiMaster approach are expected from such interactions. Interactive dissemination will combine face-to-face interaction in events with online interactions using Social Web technology. Interactive dissemination will be initiated as part of wide dissemination activities, such as the project website or the dissemination events mentioned above, but also as part of the activities of the individual partners in their networks, in particular the business and customers networks of the two SMEs involved in the project.

2.2.4 Press Releases

The consortium will prepare and publish press releases for the major milestones and events as follow-ups of those press articles published for the project start. Thereby, the partners will be supported actively by the respective departments being responsible for public and press relations such as the Communication and Marketing Team of the Leibniz Universität Hannover (Referat für Kommunikation und Marketing) and of the Universität Hildesheim (Stabsstelle Kommunikation und Medien/Pressestelle). These departments will support the project team in identifying the right target groups and in the preparation and distribution of the press releases. In particular, they support the consortium in creating press releases that “describe the goals of the project and its results in simple, jargon free language”. TSI will announce the progress of the project on the web pages of the Electronic and Computer Engineering department and of the Technical University of Crete. TSI will also promote the project’s key contributions in local as well as national newspapers. Whenever possible the benefits to the region/country and the importance of the local partner being part of an EU consortium will be highlighted.

2.2.5 Research/Academic-oriented Dissemination

Scientific dissemination will take place through publications of research results in related conferences and journals (cf. Table 2). The academic partners will foster the inclusion of research results as state of the art in lecture materials, training of students in the respective technologies

and encouraging them to join the research efforts as Masters/PhD students. Moreover, the academic partners will increase awareness of the project achievements within national and regional public institutions. In scientific publications, the consortium will aim to enable Open Access, wherever possible.

2.2.6 Commercially-oriented Dissemination

These dissemination activities aim at increasing visibility to stakeholders that might be interested in the take-up of the technology. Commercially-oriented dissemination, thus, includes presentation of results at fairs and exhibitions (cf. Table 3), on user forums, to industrial consortia and to regulatory bodies and in workshops and seminars to inform professionals in data stream processing.

3 Implementing the Dissemination Strategy

In this section, we discuss the actions and activities scheduled to achieve the dissemination strategy. Therefore, we will outline in Section 3.1 the project-wide plan for press releases, in Section 3.2 the website strategy, in Section 3.3 our planned activities for interactive dissemination, in Section 3.3.1 our strategy for involving third parties, in Section 3.4 actions on establishing links with existing projects and, finally, in Section 3.5 the open access strategy of the project. An early dissemination report on the dissemination activities carried out so far will be discussed in Section 4.

Please note that the QualiMaster consortium agreed on the principle support for open source for the (non-commercial) tools and parts of the infrastructure to be developed in the project. However, a detailed open source strategy must be in line with the exploitation of the project results and will be described in deliverable D7.4.

3.1 Plan for Press Releases

The QualiMaster consortium aims at preparing and publishing press releases at the major milestones at the project, e.g., MS4 regarding the QualiMaster applications running on top of the first integrated version of the infrastructure. Moreover, the individual partners will issue press releases at specific points in time if applicable, e.g., the completion of a specific capability of a tool, outstanding data analysis results, etc. In particular, for common press releases such as major milestones, the partners will synchronize the content in order to minimize the overlap and to maximize the impact.

3.2 Website strategy

An initial website has been created and is available under the domain www.qualimaster.eu. The structure of the website is organized in a user-oriented way avoiding the effect that the administrative structure of the project (deliverables, work packages, etc.) would be the first impression of the project itself. The initial version of the website focuses on project goals. The consortium is, however, aware that the website has to adapt over time to the status of the project. Therefore, it is planned to make the website increasingly more result-oriented, interactive and dynamic, as more project results become available over time.

When project deliverables will become available, the public deliverables will be published in a visible place on the website. These are and will be made available in a non-proprietary format (i.e., PDF/A for textual documents). The website will be cross-linked from/to other relevant EC and EC sponsored sites as part of the activities for establishing links to other projects (see Section 3.4).

The project's website already contains a news section (combined with Twitter), which will be RSS enabled very soon (in progress). This is used to advertise project related events, to describe its progress for an interested but not specialized public, to comment on how societal or technology developments in the world at large demonstrate the importance of or open opportunities for the technologies developed under the project.

When software developed in the project becomes available, the project's website will prominently indicate a link to the repositories of open source software produced in the project. All open source components published will be documented by means of textual documents and/or screencasts illustrating how to download, install and operate the components in question. Documentation manuals and screencasts will be specifically identified as project outcomes and prominently published on the project's website.

The website will be maintained and updated until the end of the project and it will be kept alive for at least 2 years after the end of the project.

3.3 Planned Activities for Interactive Dissemination

SPRING has an established market in the financial industry thanks to the development and commercialization of financial solutions. As a consequence, SPRING will be able to disseminate the QualiMaster results to a wide range of financial stakeholders. SPRING can directly involve over 10 institutional clients and over 1500 private customers. In order to maximize the impact, SPRING can use its marketing channels in the financial domain to reach a larger number of financial stakeholders.

SPRING's interaction with its clients is usually based on regular mailing lists and face-to-face meetings. Both channels will be used to disseminate the project results. In addition, the company intends to run workshops or focus groups towards the end of the project. This will allow the consortium to have a direct and interactive engagement with the end users and will maximize the dissemination and exploitation potential among the financial stakeholders.

SPRING is leader of WP6 and will involve its customers in testing and evaluating the QualiMaster platform. Involving the end users in such a way will also be used to execute dissemination activities. In addition, the direct engagement with financial players is also demonstrated by the fact that SPRING is developing a questionnaire to be sent to a group of customers and to other financial stakeholders. The questionnaire is being developed in the scope of WP1 in order to collect feedback from financial stakeholders and to refine the platform requirements and specifications. However, even if the questionnaire is not specifically dedicated to dissemination activities, it will surely open an important dissemination channel and will be the starting point for informing financial stakeholders about the QualiMaster activity and results.

MAX intends to disseminate project results to its customers in the financial domain as part of general marketing activities. In addition, MAX plans to disseminate project results to regulators and other relevant government agencies to interest them in take up of the developed technology. Dissemination will include contacting key market and regulatory bodies, proposing educational meetings explaining domain use cases and submission for publication of results in industry related journals.

3.3.1 Strategy for involving interested parties

In order to maximize the impact of the mailing list among the financial stakeholders, a specific mailing list strategy will be created. This mailing list strategy will be based on particular experience of SPRING and MAX in informing and engaging specific groups of customers and stakeholders interested in the products commercialized by the companies. Thereby, the QualiMaster consortium aims at avoiding information overload of interested partners while maximizing the interest and engagement of financial stakeholders.

The financial stakeholders will be divided into different groups, based on the information that the group members are interested in receiving. Based on the experience of our industrial partners, we will initially focus on two groups: a group of *customers* and a group of *institutional and business clients*. Possibly, the business clients group will be split into further, more specific sub-groups, such as a group of scientists who are only interested in receiving a subset of the information.

Based on the experience of SPRING, it turns out that many users of the *business clients* group are mainly interested in new trading-software features that could lead to an improvement of their personal trading. We expect that the business clients group will have a more professional interest and understanding of risk assessment. Therefore, a higher level communication style will be used

within this group. Here, existing experience shows that here even a personalized communication strategy based on individual may be the most promising approach.

In the *customers* group, new features of the QualiMaster platform will be announced. In addition, we will consider establishing more personalized mailing activities to directly address specific questions coming from the customers group. This will initiate a more direct communication and will have a higher impact on the communication activities. It is important to notice that we aim at establishing a dedicated sub-group of *early adopters* in the customers group. Early adopters are specific users who are highly interested in using and testing the new features as early as possible. QualiMaster consortium will foster a constant engagement of these (beta-testing) users in order to get quick external feedback on the new features of the QualiMaster platform.

Being already operational and successful within the communication schemes of the industrial QualiMaster partners, the consortium expects that the aforementioned communication provides a high potential to maximize the impact of the communication strategy towards the QualiMaster financial stakeholders. Besides the targeted mailing lists described in this section, also mechanisms to display custom messages in the QualiMaster applications (as used for example by SPRING in their freeware products such as MARAN Trader), may be a further channel to attract interested parties. This channel will also be explored to strengthen the impact of the communication towards the QualiMaster customers.

3.4 Establishing links to other projects

Linking to other related projects is an important activity for leveraging project results from other European and national projects, for discussing and exchanging ideas on overlapping topics and interests and for improving visibility and take up of QualiMaster project results. In the first phase of the project, the focus for interacting with other has been on analyzing the results and activities of other projects in order to understand what can be re-used. As a result of this activity, QualiMaster is using results from other projects, for example from FP7 INDENICA the tools EASy-Producer and SPASS-meter or opinion analysis results from the FET project Living Knowledge and News and Blog analysis methods from the FP7 project SYNC3.

Later in the project, it is planned to more actively contact other projects, especially in the same strategic objective for fostering a more active exchange of ideas, concepts and technology.

3.5 Open Access Strategy

Open access supports the practice of granting free internet access to research results. As research is typically based and justified in terms of existing research, access to published research results is an important foundation for scientific work and, thus, open access can accelerate the scientific process. Basically, open access aims at both, access to scientific publications and access to the underlying data.
The EU policy initiative on open access foresees two modes for open access to publications, namely

- **Gold open access**, i.e., immediate open access that is provided by a publisher.
- **Green open access**, i.e., immediate or delayed open access that is provided through self-archiving by the researcher. Access to the research results may be delayed (also called ‘embargo period’) depending on the copyright rules of the respective publisher.

The QualiMaster consortium acknowledges the EU policy initiative on open access and aims at supporting the initiative with a balanced mix of the open access modes mentioned above.

However, nowadays achieving gold open access for renowned publishers implies a financial contribution to the publication process. Thus, the QualiMaster consortium will select:

- Gold open access publications if possible. Basically, a consortium decision on specific publications with expected high impact will be covered by project dissemination resources. Further, the partners will investigate alternative opportunities for gold open access publishing, e.g., open access journals, as well as to obtain further publication funding, e.g., through the publication funds of the German Scientific Community
- Green open access for all other publications, based on self-archiving (also of preprints or accepted manuscripts) in bibsonomy, ResearchGate, the websites of the respective research groups or the local OPUS online document servers (e.g., HilDok or the Institutional Repository of Technical University of Crete connected with the Greek Open Access Repository).

Regarding **open access to data**, the QualiMaster consortium aims at publishing non-licensed data generated and used during the project, such as test data sets, if this does not infringe any legal regulations coupled with the data. However, financial data used in the project as well as other licensed data and content cannot be disclosed.
Further, the consortium will publish **hardware IP cores** (Intellectual Property cores, designs that can be used as libraries) that have been implemented for QualiMaster, under the consideration of the licensed content, at the community of Open Cores (http://opencores.org/). These IP cores will be designs of more general interest, indicative algorithms for SVM (Support Vector Machines), CART (Classification and Regression Tree), or gSpan (subgraph detection without candidate generation). This will complement the set of software to be released under open source license. Please note that a more detailed strategy for the developed software and hardware components will be described as part of the exploitation strategy in deliverable D7.4.

4 Early Dissemination Report

In the description of work for the QualiMaster project, a variety of dissemination activities have been planned for the project. These activities aim at increasing the visibility of the project and at fostering project related interactions with different relevant communities. Along the lines of the dissemination strategy, initial dissemination activities have already been started in the first months of the project. This has happened in parallel to the refinement of the dissemination plan, as it is outlined in Section 2.

The dissemination activities performed so far include:

- The creation of a project logo and a template for project presentations, which ensure a uniform and recognizable visual appearance of the project in dissemination material.
- The creation of a project website (www.qualimaster.eu).
- The creation of first dissemination material (project fact sheet and project presentation).
- Start of project related Social Web activities.
- The creation of press releases and first uptake in media.
- First project related publications.
- First dissemination activities at the trade fair CeBIT 2014.

Those activities are described in more detail below.

4.1 Logo and Project Presentation

A logo inspired by the financial tickers at the stock markets has been designed and exported into various formats and sizes. The logo is depicted below (Figure 1) and can also be seen at the QualiMaster website. In line with the logo, a template for presentations has been designed using MS Power Point. This template will be used by all partners for project-related presentations.

Figure 1: The QualiMaster logo

A first set of dissemination material has been created, including a project presentation covering the goal and approach of the project as well as its organization and an initial project brochure. This material has been submitted as deliverables D7.1 (Project Brochure/Fact Sheet) and D7.2 (Project Presentation). The project presentation as well as the project brochure will be updated during the project in order to reflect the project results when these become available. Furthermore, a template has been prepared for the creation of deliverables.

4.2 Website

The QualiMaster website (http://qualimaster.eu) targets interested stakeholders from the financial domain, researchers as well as the general public. This initial version of the website focuses on informing about the idea and goals of the project and on presenting the initial results of the project.

The website is created using Wordpress. Using a framework like Wordpress allows us to integrate several plugins and functionalities into the website without the need of implementing these functions. Wordpress is also widely used and, thus, security issues are resolved quickly. Besides the fact that many of the components of the website are from different themes, Wordpress still allows us to adopt and customize the website depending on our needs.

The starting point of the website is a slide-show illustrating the major ideas of the project as depicted in Figure 2.

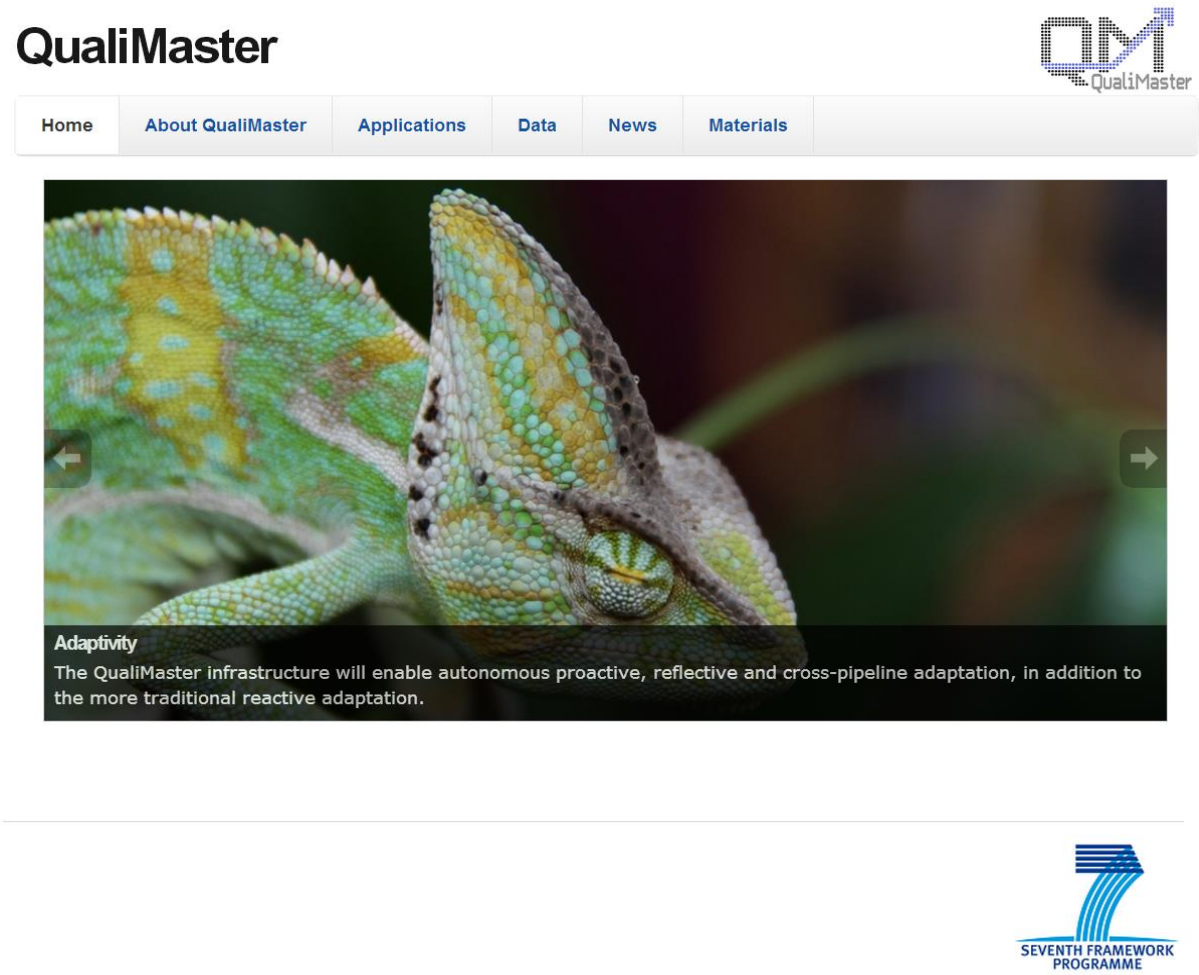


Figure 2: Landing page on qualimaster.eu

To gather the attention of new visitors we created/used pictures that are attractive and related to the core project ideas. From the starting page a user can navigate directly to the page of interest using the menu on the top of the page. Currently, the menu consists of the following items:

- **About QualiMaster**: A page containing links to more detailed descriptions for the project. This includes the abstract of the project and the partner overview.
- **Applications:** Here, we describe the main target applications for the project technology.
- **Data:** At the data page we provide information related to the datasets we are planning to use.
- **News:** The news site is updated on a regular basis with news related to the project. Besides news messages on the page, we also display the latest tweets from the QualiMaster Twitter account (cf. Section 0).

- **Materials**: At this site visitors can download project related materials, such as public deliverables.

The overall structure allows visitors to get an idea about the goals of the project. Additional functionalities of the website that are currently added include a RSS feed displaying the latest news from the website and a plugin to display and browse publications related to the project.

For monitoring the traffic and visitors of the website we integrated Google Analytics, as illustrated in Figure 3. This will be used to monitor the reach of this dissemination activity and to analyze the target audience.

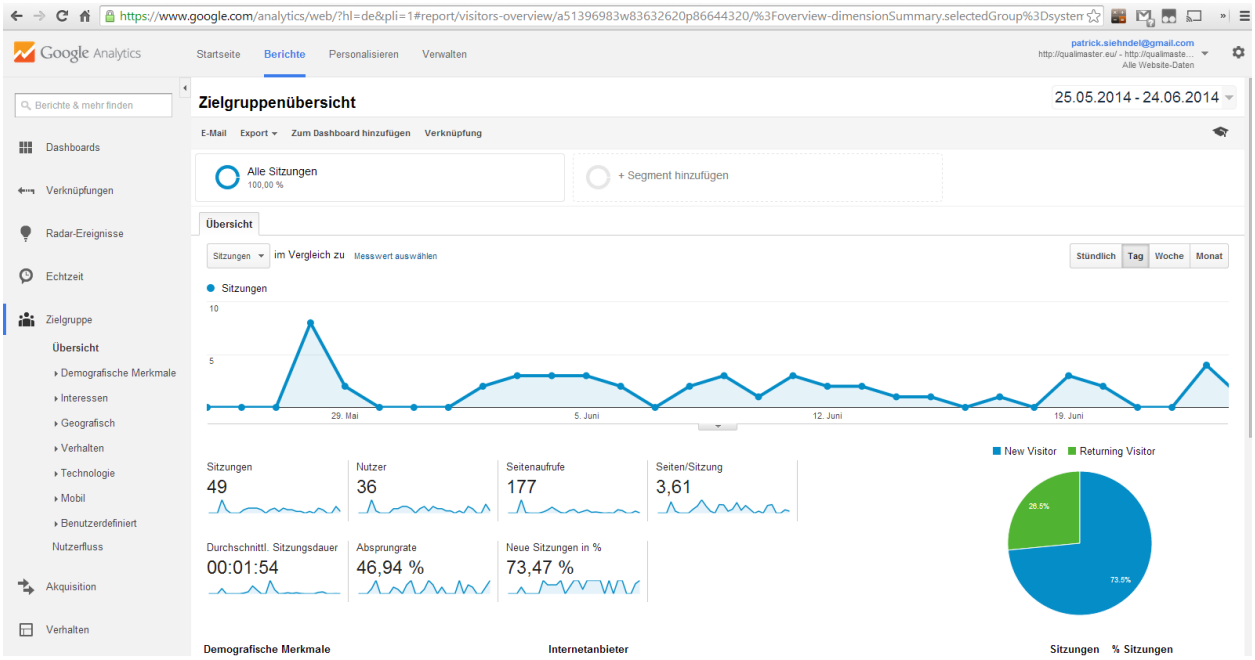


Figure 3: Google Analytics for monitoring traffic on qualimaster.eu

4.3 Social Web Activities

The use of social Web channels for project-related dissemination activities has gained in popularity in the recent years due to their dynamic nature, their low-effort profile and their possibility to directly and informally interact with interested community members. As a first project-related social Web activities, a Twitter account has been created for the project (see @QualimasterEU). This account is used to tweet about events that are directly related to the project and to share relevant information and links that are related with the project topic with the target community. Currently, we are working on strategies for selecting and creating content for the Twitter account on a regular basis and for increasing the visibility of this Social Web Activity.

4.4 Press releases and their uptake in Media

In this section, we summarize our currently published press releases, their uptake in media as well as reactions on the press releases (where applicable). The details of the press releases are collected in the Appendix.

At the end of January 2014, SUH published a press release on the project idea and the start of the QualiMaster project. Basically, the press article was published in the press section of the SUH website, and, as a short version, on the website of the Software Systems Engineering group, who participates in QualiMaster. The same press report was then distributed by the Stabsstelle

Kommunikation und Medien/Pressestelle of SUH to several national press agencies using a professional press information system. Subsequently, the full press article was published at the beginning of February 2014 on www.datendschungel.de, on the website of the regional radio station Radio Tonkuhle and, at the end of February 2014, in PC Magazin Professional. As a result, a first contact to interested industrial stakeholders was established.

4.5 Trade fair participation

Two partners, namely MAX and SUH, presented their company and recent results on the CeBIT 2014, the world largest computer exhibition located in Hannover, Germany. The topic of the CeBIT 2014 was “The future of Big Data” and this was the first CeBIT that focused more on a professional audience than on the consumer market. In addition to their actual presentation, both partners also disseminated the start of the QualiMaster project and the project idea to interested parties.

MAX exhibited at CeBIT 2014 as part of the UK pavilion of companies. Information on QualiMaster was included as part of the animated sequence running on the display screens in the booth. Please note that MAX was one of the companies visited by David Cameron and Angela Merkel as part of the show kick-off.

SUH presented their results on the national funded project ScaleLog as part of the Lower Saxony booth. Thereby, also the QualiMaster flyer was distributed and the project idea was disseminated to interested parties. As a side effect of this presentation, SUH established a contact to a local radio and TV station for future dissemination of the project results.

4.6 Publications

Also still early in the project, some first publications related to QualiMaster have already been published or accepted. These are the following:

- H. Eichelberger, K. Schmid, Flexible Resource Monitoring of Java Programs, Journal of Software and Systems (93), 2014, 163-186, http://dx.doi.org/10.1016/j.jss.2014.02.022
- R. Kawase, P. Siehndel, B. P. Nunes, Supporting Contextualized Information Finding with Automatic Excerpt Categorization, 18th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems, 2014
- H. Eichelberger, S. El-Sharkawy, C. Kröher, K. Schmid, EASy-Producer – Product Line Development for Variant-Rich Ecosystems, International Software Product Line Conference, 2014 (accepted for publication)

Further publications are currently under preparation and will be put on the website as soon as they get accepted.

The QualiMaster partners agreed to upload details of the publications to bibsonomy using the key “qualimaster”.

4.7 Presentations

Until now, no dedicated project-related presentations have been performed. However, the partners are committed to present the project ideas (with reference to the project), whenever there is an opportunity in the context of related events. For this purpose a presentation template has been created that ensures a uniform and recognizable display of the project at events. Furthermore, the project presentation created as part of deliverable D7.2 is offered to the partners as a source of

material for their own presentations, which will be adapted to the respective event and target audience.

4.8 Open Source Software

The consortium is aware that an open source strategy is an important exploitation path for software, which is developed in the project. For this purpose, the consortium will aim for open source software, wherever this is possible without affecting the rights and/or exploitation plans of the industrial partners in the project. For software, which will be open source, the consortium aims at making it available in publicly available software repositories, in order to ease take-up of the solutions developed in the QualiMaster project. This has already been done for the following software components to be used, maintained and extended in the QualiMaster project:

- EASy-Producer, a software product line development environment for Eclipse. EASy-Producer will be used for realizing the intended flexibility of the QualiMaster platform, i.e., the configuration modeling and the instantiation of tailored versions of the QualiMaster platform. Further, EASy-Producer will be used as a basis for the adaptation mechanisms using the EASy-Producer runtime libraries. EASy-Producer is maintained as open source software on GITHUB under Apache 2 license.
- SPASS-meter, a flexible low-overhead resource monitoring framework for Java. SPASS-meter will be used for resource monitoring in the QualiMaster platform in order to provide input to the adaptation mechanisms. SPASS-meter is maintained as open source software on GITHUB under Apache 2 license.

5 Summary and Outlook

In this deliverable, we outlined the plan of the QualiMaster project for disseminating the achieved research and development results to a broad audience. All members of the QualiMaster consortium are actively involved in jointly promoting the ideas of the QualiMaster project. The academic partners will disseminate their results with a focus on high-quality publications, technology transfer, teaching, and other mechanisms such supervisions of student and PhD theses. The plans of the industrial partners are centered around event-based dissemination, involvement of potential stakeholders, and demonstration activities.

Furthermore, we described in this deliverable the dissemination activities carried out by the consortium so far as well as initial reactions on these activities in terms of an early dissemination report.

In the upcoming dissemination and exploitation deliverables (i.e., D7.4 and D7.5), this dissemination plan will be updated and complemented by a tailored exploitation strategy. In addition, the description on the dissemination and exploitation activities will be updated accordingly. We acknowledge that the dissemination plan might have to be adapted over time according to external circumstances or experiences. Therefore, we are constantly monitoring the effectiveness and appropriateness of the plan described in this deliverable, evaluate them regularly, and will make adjustments accordingly.

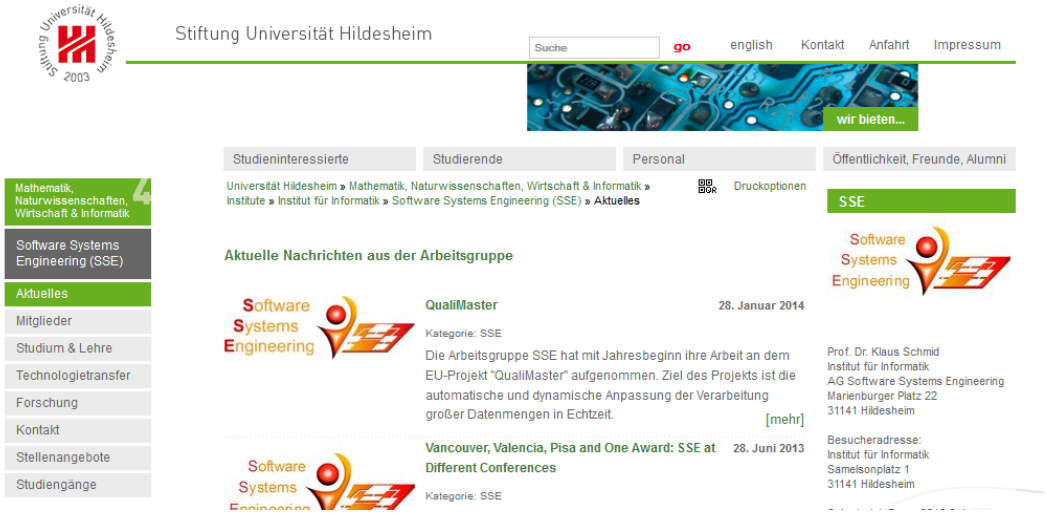
Appendix: Press Releases

In this section, we provide an overview on the currently published press releases as well as uptakes of these initial press releases in other media (including URLs where available).

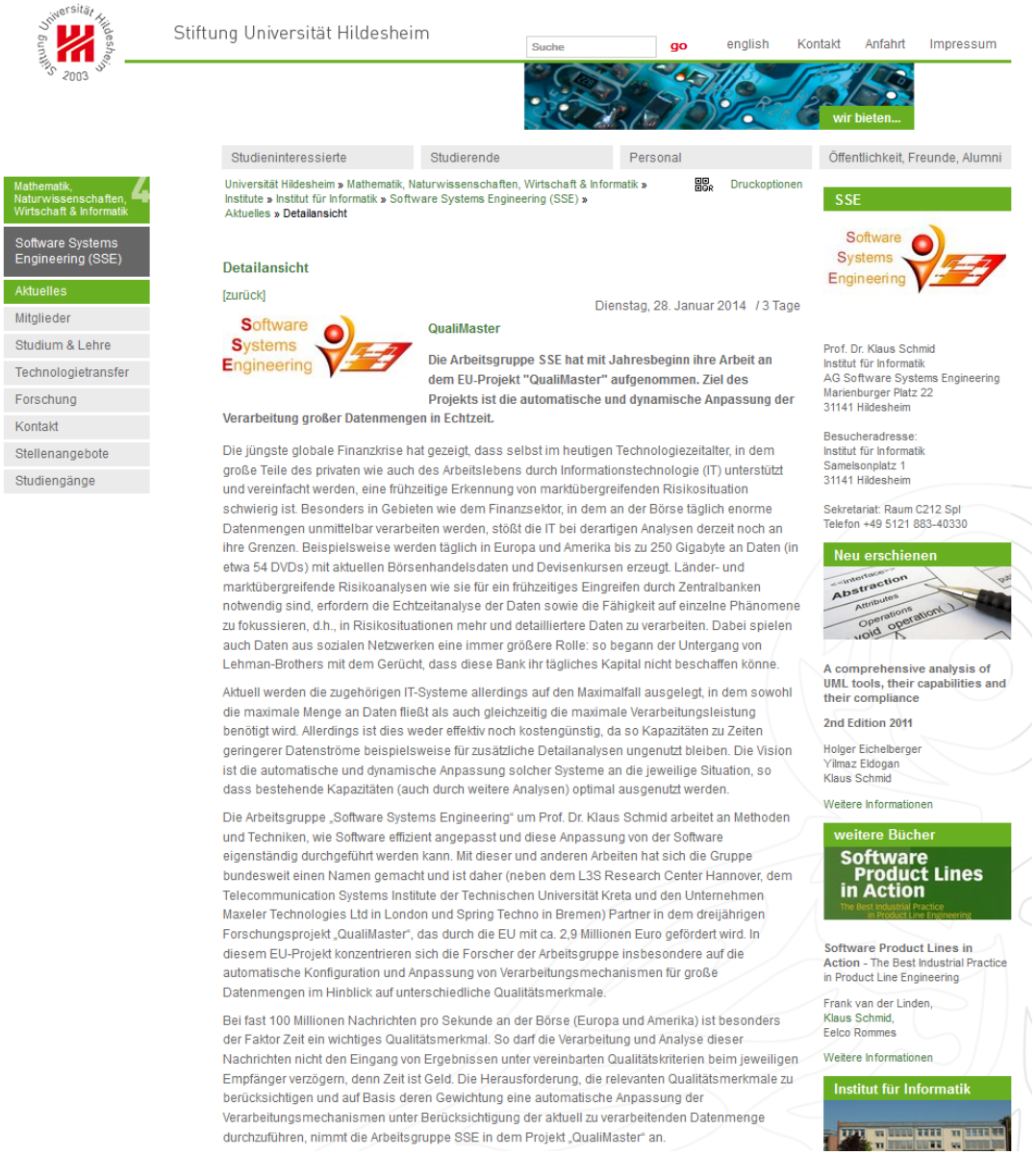
Short news on the website of SUH (January, 31st, 2014, now in the press archive), in German

Full press article on the website of SUH (January, 31st, 2014), in German

Short news on the SSE website (January, 28th, 2014), in German and English



Full press article on the SSE website (January, 28th, 2014), in German and English



Full press article on datendschungel.de (February, 4th, 2014), in German

04 FEB 2014

Big Data im Finanzmarkt

VERÖFFENTLICHT IN BI- UND IT-MARKT

Anpassen, statt verschwenden: Große Datenmengen in Echtzeit verarbeiten.

„Im Finanzsektor, in dem an der Börse täglich enorme Datenmengen unmittelbar verarbeitet werden, stößt die Informationstechnologie bei Analysen derzeit noch an ihre Grenzen", sagt Christian Kröher, Informatiker der Universität Hildesheim.

Beispielsweise werden täglich in Europa und Amerika bis zu 250 Gigabyte an Daten – in etwa 54 DVDs – mit aktuellen Börsenhandelsdaten und Devisenkursen erzeugt.

„Zentralbanken führen Länder- und marktübergreifende Risikoanalysen durch. Dabei spielen auch Daten aus sozialen Netzwerken eine immer größere Rolle: so begann der Untergang von Lehman-Brothers mit dem Gerücht, dass diese Bank ihr tägliches Kapitel nicht beschaffen könne. Bei der Echtzeitanalyse unterschiedlicher Daten fokussieren sich die Banken auch auf solche einzelnen Phänomene. Dann müssen sie in Risikosituationen mehr und detailliertere Daten verarbeiten", erläutert Kröher.

Aktuell werden die zugehörigen IT-Systeme allerdings auf den Maximalfall ausgelegt. So fließt die maximale Menge an Daten – gleichzeitig wird die maximale Verarbeitungsleistung benötigt. „Das ist weder effektiv noch kostengünstig, da so Kapazitäten zu Zeiten geringerer Datenströme beispielsweise für zusätzliche Detailanalysen ungenutzt bleiben", sagt Dr. Holger Eichelberger von der Universität Hildesheim. Systeme müssten lernen, sich automatisch und dynamisch an die jeweilige Situation anzupassen, so dass bestehende Kapazitäten – auch durch weitere Analysen – optimal ausgenutzt werden.

Die Hildesheimer Arbeitsgruppe „Software Systems Engineering" um Prof. Dr. Klaus Schmid arbeitet an Methoden und Techniken, wie Software effizient angepasst und diese Anpassung von der Software eigenständig durchgeführt werden kann.

Aufgrund der langjährigen Erfahrungen sind die Forscher nun Partner in einem EU-Projekt: Die Informatiker entwickeln automatische Konfigurationen und Anpassungen von Mechanismen, um große Datenmengen zu verarbeiten. Kooperationspartner der Uni Hildesheim sind das L3S Research Center Hannover, das „Telecommunication Systems Institute" der Technischen Universität Kreta und die Unternehmen Maxeler Technologies Ltd in London – ein Spezialist im Bereich Hardware-basierter Echtzeitanalysen von Finanz-Datenströmen – und Spring Techno in Bremen. Das Bremer Unternehmen entwickelt Finanzhandelssysteme, die Analysten und Händler mit Echtzeitinformationen und Visualisierungen unterstützen. Die EU fördert das dreijährige Forschungsprojekt „QualiMaster" mit etwa 2,9 Millionen Euro.

Das EU-Projekt beschäftigt sich mit Algorithmen, Modellen und Techniken zur Echtzeit-Analyse großer Mengen von Finanzdaten um den möglichen Ausfall von Märkten (besser) vorhersagen zu können. Um dieses Ziel zu erreichen, ist es notwendig, schnell, flexibel und autonom sowohl Analysealgorithmen als auch die unterliegende Infrastruktur an sich ändernde Rahmenbedingungen zu adaptieren.

Bei fast 100 Millionen Nachrichten pro Sekunde an der Börse in Europa und Amerika ist besonders der Faktor Zeit ein wichtiges Qualitätsmerkmal. So darf die Verarbeitung und

Full press article in PC Magazin Professional (February, 27th, 2014), in German

PC Magazin Professional
27.02.2014

PCM PRO TREND & TECHNIK

BIG DATA IN ECHTZEIT VERARBEITEN

Datenströme verteilen

Bei Echtzeitanalysen großer Datenmengen lässt sich mithilfe von dynamischer Performance-Verteilung noch viel Geld sparen. ■ FRANK-MICHAEL SCHLEDE UND THOMAS BÄR

Forscher der Universität Hildesheim beschäftigen sich mit Algorithmen, Modellen und Techniken zur Echtzeit-Analyse großer Mengen von Finanzdaten, um so beispielsweise den möglichen Ausfall von Märkten vorhersagen zu können.

„Im Finanzsektor, in dem an der Börse täglich enorme Datenmengen unmittelbar verarbeitet werden, stößt die Informationstechnologie bei Analysen derzeit noch an ihre Grenzen", sagt Christian Kröher, Informatiker der Universität Hildesheim. Beispielsweise werden täglich in Europa und Amerika bis zu 250 Gigabyte an Daten, das entspricht rund 54 DVDs, mit aktuellen Börsenhandelsdaten und Devisenkursen erzeugt. Zentralbanken führen Länder- und marktübergreifende Risikoanalysen durch. Dabei spielen auch Daten aus sozialen Netzwerken eine immer größere Rolle. „So begann der Untergang von Lehman-Brothers mit dem Gerücht, dass diese Bank ihr tägliches Kapitel nicht beschaffen könne", erklärt Kröher. „Bei der Echtzeitanalyse unterschiedlicher Daten fokussieren sich die Banken auch auf solche einzelnen Phänomene. Dann müssen sie in Risikosituationen mehr und detailliertere Daten verarbeiten", erläutert Kröher.

Aktuell werden die zugehörigen IT-Systeme allerdings auf den Maximalfall ausgelegt. „Das ist weder effektiv noch kostengünstig, da so Kapazitäten zu Zeiten geringerer Datenströme beispielsweise für zusätzliche Detailanalysen ungenutzt bleiben", sagt Dr. Holger Eichelberger von der Universität Hildesheim. Systeme sollten lernen, sich automatisch und dynamisch an die jeweilige Situation anzupassen, sodass bestehende Kapazitäten, auch durch weitere Analysen, optimal ausgenutzt werden.

Ein System, das große Datenmengen in Echtzeit verarbeitet und sich dabei an die jeweilige Datenmenge eigenständig anpasst, also etwa bei kleineren Datenmengen runterfährt oder neue Analysen bei freien Kapazitäten startet, fehlt noch. **tb**

→ **https://www.uni-hildesheim.de**

Press information at Radio Tonkuhle (February, 2nd, 2014), in German

Radio Tonkuhle
07.02.2014

Informatiker der Uni Hildesheim starten EU-Projekt zu Finanzdaten

Freitag, 07. Februar 2014 um 09:23 Uhr

Informatiker der Universität Hildesheim arbeiten an Lösungen, wie sich Systeme besser an Datenströme anpassen können. Ziel ist es, große Mengen an Finanzdaten in Echtzeit zu analysieren um einen möglichen Ausfall von Märkten vorhersagen zu können. Aktuell werden an der Börse täglich enorme Datenmengen unmittelbar verarbeitet, sagte der Informatiker Christian Kröher von der Uni Hildesheim.

Die zugehörigen IT-Systeme würden dabei auf den Maximalfall ausgelegt und fließen mit der maximalen Menge an Daten. Das sei weder effektiv noch kostengünstig. Die Forschungsgruppe arbeitet an Methoden und Techniken, wie diese Software effizient angepasst und diese Anpassung von der Software eigenständig durchgeführt werden kann.
Die EU fördert das Forschungsprojekt bis 2017 mit 2,9 Millionen Euro.

soc