ERP Future 2012

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Abstract This is the introduction of the ERP Future 2012 Research Conference proceedings. It provides a short motivation and an overview of the topics covered by the conference.

Todays distributed business processes cannot be managed efficiently without the use of information technology. In particular, enterprise resource planning (ERP) systems have significantly increased the profitability, productivity and competitiveness of corporations by removing the barriers to sharing information between functional areas and managing processes holistically. The key driver for this productivity and efficiency is the ability of modern ERP systems to manage business processes from beginning to end in an integrated, consistent and highly effective manner. But ERP systems are very complex information systems and the business as well as the technical environment is steadily evolving. Therefore innovations in business and IT resulting in suitable implementations have to be developed, adopted and evaluated to profit from the benefits of ERP systems permanently. According to the customer needs and influences of the rapidly changing business and technological environment the paradigm for ERP systems in general will change in the future.

Actual trends in ERP include without limitation software as a service (SaaS), cloud services in general, mobile solutions, ERP for small and medium sized enterprises (SME), open source and freeware solutions, e-learning support, social media integration, efficient and effective quality management and planning methods as well as techniques and criteria for the selection and evaluation process. The decision whether and how to take these trends into account has to be supported by scientifically evaluated studies. To provide a realistic result, such studies

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have to consider business and IT aspects. For instance, software as a service, i.e. on-demand software hosted on the cloud, comprises business challenges like total cost of ownership or ERP for SME as well as technical challenges like application integration or IT-security.

The ERP Future 2012 Research conference is a platform for research in ERP systems and closely related topics like business processes, business intelligence, and enterprise information systems in general. To master the challenges of ERP comprehensively, the ERP Future 2012 Research conference accepted contributions with a business as well as an IT focus to consider enterprise resource planning from various viewpoints. This combination of business and IT aspects is a unique characteristic of the conference that resulted in several valuable contributions with high practical impact. Revised versions of these conference contributions are collected in the present proceedings of the ERP Future 2012 Research conference entitled "Innovation and Future of Enterprise Information Systems".

A critical outlook regarding the future of ERP is given by the initial keynote speaker [1]. Two contribution related to keynotes discuss on how ERP systems and Lean Management methods fit together [2] and the challenges and potentials for organizations realized by Social Content Management Systems (SCMS) [3].

Understanding critical factors for successful implementation of ERP systems is essential for organizations. On the one hand, critical success factors of SaaS in SME are investigated [4]. On the other hand, critical success factors of implementation projects in U.S. federal offices are analyzed by a survey [5]. Additionally it is investigated, whether predefined ERP implementation methodology works for public companies in transitioning countries [6] and how cross-functional collaboration influences ERP benefits in ERP post-implementation integration projects [7].

Innovative business concepts require suitable implementations in ERP systems. In this context, the consideration of supply uncertainty of renewable resources in the basic data structures of ERP systems [8] as well as total budgeting and the interactive budget warehouse are presented [9].

ERP planning requirements are looked at by two contributions. One addresses the ERP planning garbage and how to prevent it in the manufacturing industry [10], and the other evaluates the need of semantic verification in planning requirements in general [11].

For taking the business perspective in testing ERP systems into account value-based requirements coverage [12] and a cost-benefit analysis for automated testing of ERP GUIs are proposed [13]. Additionally, one contribution presents a quality analysis procedure for request data of ERP systems that is applied in an industrial case study [14].

As SaaS is a major trend influencing the ERP market the analysis pattern for the transformation of ERP system landscapes by SaaS [15] and the customization of on-demand ERP software for SMEs [16] are discussed. To manage business processes, one contribution presents a platform for mobile, distributed workflow enactment services [17].

Looking at the human interaction with ERP systems, it is evaluated based on user perceptions whether a browser-based or a dedicated ERP client is needed [18] and what the critical success factors for e-learning as an end-user training method are [19].

Finally, to what extent ERP is utilized and suitable for decision making is also presented [20].

We thank all authors for their contributions. We hope that the contributions are interesting for the reader and valuable for the scientific community as well as for industrial application.

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