Can we serve two masters at the same time?

Doing empirical research in organizations adopting and using ERP systems has drawn my attention to unexpected consequences of tools and techniques used to facilitate the ERP adaptation. Tools and techniques seem to be developed by IT-specialists for IT-specialists, focusing on the IT-artifact and promoting a very structured and rational perspective. Most tools and techniques used to implement ERP systems are provided by the ERP vendor/implementation partner, and they are developed or chosen by the vendor/partner to help the implementation partner "get the job done".

The user organizations I have studied conformed to the implementation approaches suggested by the vendor/implementation partner, and although the organizations implemented ERP systems from different vendors, both the general approaches and the tools and techniques used were very similar. The approaches seem to be based on a rational and technocratic perspective, focusing on regulating the division of work between the implementation partner and the user organization, thus reviving the traditional approach making the user organization responsible for specifying the requirements and later on signing-off the design of the IT-artifact (Pries-Heje 2007). The implementation partner were concentrated on freezing and documenting requirements, populating data tables, making customizations and having users sign-off configuration decisions and customizations. Tools and techniques used had very limited ability to support important activities in the user organization as e.g. exploring and understanding derived socio-technical implications of different design suggestions, exploring and resolving conflicting requirements, and capturing and carrying over knowledge about design possibilities and design decisions from the project phase to the user organization (Pries-Heje and Dittrich 2007).

War stories from ERP implementations paint a picture of ERP implementations as complex, frustrating, influenced by interest conflicts, leaving a notion of misfits, fighting against resistance to change, projects running over time and over budget, complications of having customizations programmed in India, China or East Europe, difficulties acquiring knowledge about the ERP package, difficulties integrating knowledge from different domains, difficulties understanding how the system influences the work practice …. Not surprisingly new tools and techniques to "get the job done" are very appealing.

But what job? And who should the tool or technique serve? Should the cost of the IT-artifact or the derived organizational costs of an implementation be in focus, and how do they relate? Is it a temporal "job" or an ongoing emerging process? Is it a technical or socio-technical design process? Can organizations be understood as serial procedural processes depicted in (workflow) diagrams or are more sophisticated boundary objects necessary in the design process?

Academic research investigating and theorizing ERP implementation methodologies seen from the perspective of the user organization are however very limited. Fragments of the process e.g. change management (Boudreau and Robey 1999), use of reference models (Rosemann 2003) or the life cycle of ERP implementations (Markus and Tanis 2000) has been investigated but a more comprehensive understanding of implementation methodologies and how tools and techniques support a specific approach are needed.

In figure 1 below I have summarized contextual elements expected to influence the implementation approach. The elements are found in research papers (Robey et al. 2002); (Markus et al. 2000);

(Clemmons and Simon 2001); (Davenport et al. 2004); (Gosain 2004); (Steijn and Wensley 2005); (Kallinikos 2004); (Boudreau and Robey 2005); (Boudreau and Robey 1999); (Pries-Heje and Dittrich 2007) or explained by practitioners participating in ERP implementations (Pries-Heje 2007a).
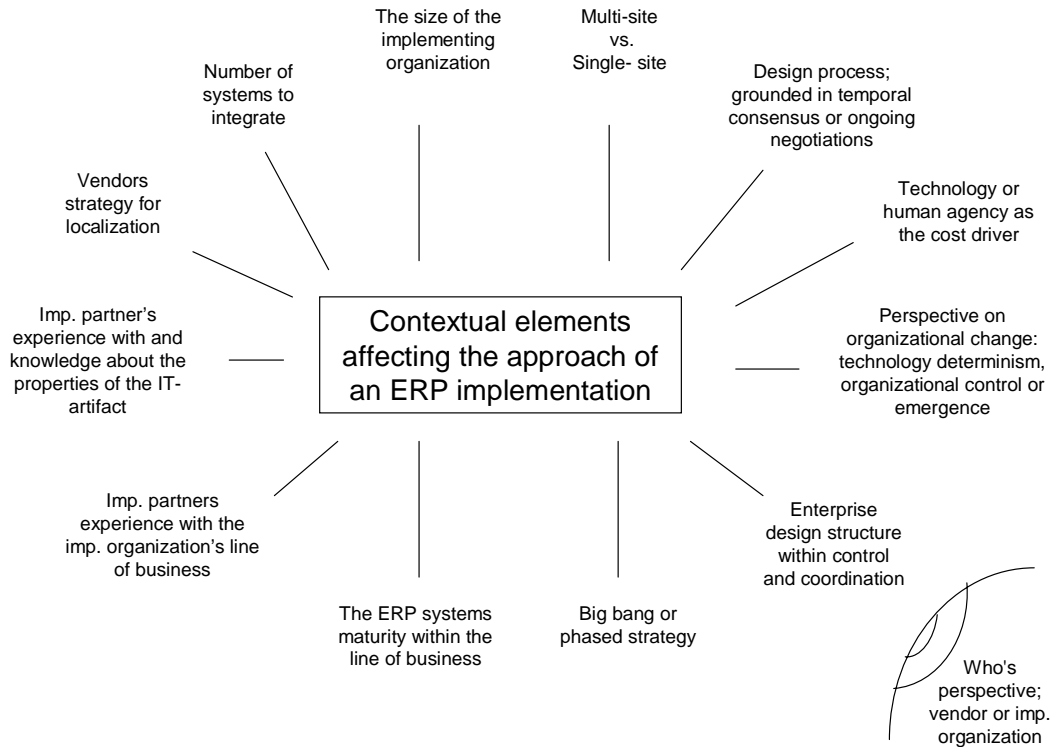
The figure is not meant as a complete account of possible elements, but should only serve to illustrate the diversity of elements to consider when deciding on a specific approach and the difficulties reaching a unified understanding of ERP implementations and issues related to ERP implementation. Thus the objectives when developing new tools and techniques and the properties of the new tool or technique will reflect the contextual elements taken into consideration and the instantiation of each contextual element.

This short position statement argues that there is a great need for developing new tools and techniques explicitly addressing methodological aspects of ERP implementations in user organizations. And that tools and techniques which are intended to be used by implementation partners and user organizations in cooperation need to relate to the complexity and emergent nature of ERP implementations that user organizations face. Especially tools or techniques supporting integration of knowledge from different domains (e.g. user organization – technology or between different professional groups) allowing socio-technical design suggestions to be developed and evaluated. Furthermore when evaluating the relevance and usefulness of new tools and techniques a wider-range of elements should be included, cost might be an important factor but without relating it to other important elements it's all for free.

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