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Change Factors in Enterprise 2.0 Initiatives: A multi-case comparison

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Abstract

The growing importance of Enterprise 2.0 is not adequately reflected in research on its implementation. This study contributes to understanding the change factors specific to Enterprise 2.0 initiatives. It draws upon grounded theory to compare sixteen case studies, integrates the findings in the context of socio-technical change and discusses similarities and differences compared to the field of ERP. The resulting change factors specific to Enterprise 2.0 initiatives can support practitioners in avoiding pitfalls of change management and present a starting point for researchers to empirically investigate change in Enterprise 2.0 initiatives.

Keywords: Enterprise 2.0, change management, socio-technical change, ERP

1 Introduction

Recent studies outline the growing importance of Enterprise 2.0, with 95% of respondents being familiar with the term and over 55% considering Enterprise 2.0 to be "important/very important" to business success, rising to 80% for the youngest demographic segment (Miles, 2010). However, most research is focused on tools and functionality, not on selection and implementation (Andriole, 2010).

This study aims at bridging this gap and addressing the issue of change management in Enterprise 2.0 initiatives by following a grounded theory approach to compare sixteen case studies. For our purposes, we draw upon McAfee's (2006) definition of Enterprise 2.0 as "the use of emergent social software platforms within companies, or between companies and their partners or customers." The remainder of this paper is organized as follows: Starting from our research design, we explain our theoretical lens and present our findings, which are then theoretically integrated and compared to change in the ERP

context. Concluding, we describe socio-technical change factors specific to Enterprise 2.0 initiatives.

2 Research Design

While following grounded theory, we use a traditional outline for presenting our work. The following sections outline the interpretive research approach of this study in distinct phases for a better traceability, describing the theoretical lens, research process, underlying data and the coding process. We emphasize that this structure does not necessarily reflect the course of action as these phases are intertwined closely in our approach. On occasion, this will be made apparent to the reader by cross-references.

2.1 Theoretical Lens and Research Questions

This paper discusses the findings of a comparison between 16 case studies of implementation initiatives for collaborative technologies within firms (Enterprise 2.0 initiatives). As a theoretical lens, the study draws upon an established framework for classification of Enterprise 2.0 technologies, the 8C Framework for Enterprise Information Management (Williams 2011). This framework has already been applied successfully to Enterprise 2.0 studies (Williams and Schubert, 2011). Figure 1 presents the 8C Framework with its two areas: The inner core, reflecting the functional goals of Enterprise 2.0 initiatives and the outer layer, describing the business context.





The focus of this work is the organizational context, rather than the functional goals (Communication, Cooperation, Coordination and Content Combination) of an Enterprise 2.0 initiative; hence, our discussion will address the outer layer only.

Content management deals with the management of digital content across its whole life cycle. Common activities are the collection, storage, classification and access of information. Additional requirements are access rights management (authenticated access to information), storage management and archiving systems. Special attention

needs to be paid to the integration of various information sources and the ability for a company-wide information search.

Compliance covers information risks and compliance restrictions. This includes risk management and implementation of mechanisms for regulatory compliance. Privacy and data protection issues need to be dealt with. Additionally, clear statements need to address accountability for specific information, usage policies, long-term storage (archiving) and documentation in the case of litigation.

Change focuses on the management of enterprise transformation and business process changes. Specifically, this includes changes in corporate culture and anticipating conflicting attitudes and values within certain departments or concerns of employees. The inherent change within the implementation of a collaborative technology must actively be supported by a variety of different activities.

Contribution includes the consideration of costs and benefits that result from introducing a new technology. Whilst costs are frequently easy to measure, benefits are harder to grasp, but can be characterized as the realized (positive) change the initiative enables. Resulting benefits can then be measured both at the level of the individual employee, and the entire organization.

From the areas of our theoretical lens we derived a primary research question to guide us in our analysis: *What contextual factors influence introduction initiatives of collaborative technologies (Enterprise 2.0 initiatives)?*

We also derived a secondary research question for every area of the outer layer introduced above, but as we moved on within our research process (see section 2.2) our preliminary findings (an emerged coding scheme, literature discussion, peer feedback) indicated an outstanding relevance referring to the area of *change* (Diehl and Schubert, 2012). Hence, within this paper, we introduce a research question addressing the area of organizational change: *What factors of change can be identified during the implementation of collaborative technologies within a business*?

Our understanding of change draws upon Wilson (1992), who stresses its multi-facted nature and conceptualizes a change matrix, which characterizes change as either *planned* or *emergent*, and distinguishes between change as a *process*, and change as part of a strategy of *implementation*.

The following section describes the research process we followed to address the question.

2.2 Research Process

The chosen research process for analyzing the Enterprise 2.0 initiatives consists of three phases as pictured in Figure 2.



Figure 2: Research Process

In the initialization phase, the theoretical lens has been selected, research questions have been raised and case studies selected. The data collection and analysis phase consisted of intertwined coding activities, resulting in a thematic coding scheme. Section 2.4 presents a detailed discussion of the coding process. In the interpretation phase, preliminary results have been reviewed. Interpretation caused us to focus on the area of change and refine the research questions. Finally, in light of the new scope, data was again analyzed and further discussed in context of the field of ERP to find similarities and differences between both fields.

2.3 Case Selection

For analyzing the business context of Enterprise 2.0 initiatives, 16 case studies have been selected from research case study databases. In selecting the case studies a qualitative sampling was carried out (Miles and Huberman, 1994). The main selection criterion has been the usage of a collaborative technology within the implementation initiative. The cases have been written by independent authors as suggested by Fereday and Muir-Cochrane (2006), all of them using the eXperience methodology for writing research cases (Schubert and Woelfle, 2007). The eXperience methodology is based upon principles of case study research (e.g., Yin, 2003) and provides authors with a common template for cross-case comparisons. Nine of the case studies have been retrieved from the eXperience database (www.experience-online.com) and the seven remaining cases from the Enterprise 2.0 cases database (www.e20cases.org). An overview of the case studies, the introduced software tools and the business they were implemented in is presented in Table 1.

Case	No. of employe es	Source	Industry sector	E2.0 project objective	Software
ABB AG	120.000	E2.0 Cases	Energy and Automation Technology	Blog and Wiki for enterprise communication	Windows SharePoint Services 3.0
ADTELLIGENCE	10	E2.0 Cases	Advertising	Organising all information with social software (start- up company)	Misc. Web 2.0 tools
Börse Berlin	26	eXperience	Securities trading, B2B	Communication exchange between exchange and private investors	Invision Powerboard

BSCC	700	eXperience	Chamber of Commerce	Communication with members	salesforce
Capgemini	100.000	eXperience	Service und solutions, B2B	Expert identification and discussion	Yammer
Communardo Software	180+	E2.0 Cases	IT, Software	Enterprise microblogging	Microblogging bespoke software
ESG	700	eXperience	Development, integration and operations, B2B	Knowledge management	Atlassian Confluence
FRITZ & MACZIOL	700	eXperience	Consulting and system house, B2B/B2A	Knowledge gathering, transfer and expert search	Lotus Connections
Lecos	157	eXperience	Consulting and services, B2A	Team rooms, document exchange with external partners	Lotus Quickr
Namics AG	280	E2.0 Cases	E-Business Services	Company-internal multi blogging	Wordpress Blog
Obermeyer Planen + Beraten	700	eXperience	Construction	Internet-based collaborative project management	conject Project- management- software
Pentos AG	35	E2.0 Cases	IT, Software, Consulting	Employee blogging	IBM Lotus Notes
Rheinmetall	20.000	eXperience	Development and production, B2B/B2A	Team room, discussions and yellow pages	IBM Lotus Collaboration Technology
SFS Services AG	4246	E2.0 Cases	IT Services	Wiki for knowledge transfer	MediaWiki
Siemens	405.000	eXperience	Consulting, development and production, B2B	Global knowledge management and expert search	Liferay
T-Systems Mul- timedia Soluti-ons	1000	E2.0 Cases	Software, Consulting	Collaborative team work	Atlassian Confluence Enterprise Wiki

Table 1: Overview of analyzed case studies

2.4 Coding Process

The interpretive research approach of this study (encoding) is based up on the principles of grounded theory (Strauss and Corbin, 1998). Using the 8C Framework for classification helped avoiding drifting introspection on the data, and its areas are sufficiently abstract to not restrict emerging concepts and explanations.

The selected case studies were analyzed using established coding techniques and tools. The coding was carried out with ATLAS.ti (e.g., Mayring, 2000).

In developing the initial coding scheme, we followed Miles and Huberman (1994) and the "grounded" or "open coding" approach of Strauss and Corbin (1998). Two researchers coded independently three of the studies before they performed the first check-coding to achieve an agreement of the emerged codes and their meaning. The

studies were recoded based on the codes agreed upon. Frequent meetings were held during the coding of the remaining case studies to assure constant high inter-coder-reliability. This way conflicts were resolved early and complete agreement was achieved. The result of this coding process was a classification scheme consisting of the emerged inferential codes. Along with the late phases and matching meetings of the open coding, more explanatory themes emerged and were discussed. In the next step, we identified more general structures and explanations for local incidents, and connections between codes. Pattern coding (Miles and Huberman, 1994) was applied and more abstract analytic units could be identified to group the codes. This step also resulted in recoding cycles and hence a refinement of the classification scheme. For a more detailed specification of our work see (Diehl and Schubert, 2012).

3 Findings

3.1 Conceptualized Coding Results

Following the main research question, 170 codes emerged during the coding process as described in section 2.4. Specifically for the area of change a classification scheme of 54 refined inferential codes emerged, relating to 267 quotations within the case studies. See Table 2 for the classification scheme.

Major categories	Information and a	Area of
(Grouping)	interential codes	action
Prerequisites	Agile approach	Processes
(Culture)	Cultural change not yet achieved	Organization
	Different employee behavior in social networks as within meetings	People
	Different employee behavior in blogging as within meetings	People
	Culture improved (more open minded)	Organization
	Culture not yet open minded	Organization
Prerequisites	Reduced barriers	People
(Attitude / Acceptance)	Employee fears proactively addressed	People
Prerequisites Management attention realized		People
(Involvement of employees)	Management as paragon	People
	Management interaction with employees improved	People
	Management support realized	Organization
Measures	Policies changed	Organization
(Behaviour / Regulations)	Process redesign during implementation	Processes
	Set of rules implicitly realized	Organization
	Official set of usage guidelines realized	Organization
	Minimal set of rules realized	Organization
	Social media guidelines realized	Organization
Measures	Ad-Hoc-Team Social Software implemented	Organization
(Conception and	n and Bottom-Up approach realized	

Implementation,	Experimental tool usage facilitated	People
Involvement)	Explorative implementation procedure realized	Organization
	Migration support for legacy data	Technology
	Pilot phase realized for evaluation	Organization
	Project management realized	Organization
	Lean project organization realized	Organization
	Project support realized	Organization
	Proof-of-Concept realized	Technology
	Step-by-step implementation procedure realized	Organization
	Top-down implementation procedure realized	Organization
Measures	Sufficient tool marketing via word-of-mouth realized	Organization
(Notification/ Announcement)	Internal tool marketing realized	Organization
Measures	Key-users introduced	Organization
(Divulgence)	Training unnecessary	Organization
	Training realized	Organization
	Climb of training effort identified	Organization
	Strong cases used for providing proof of benefits	Organization
	Internal tool support realized	Organization
	Use-Case-Workshops realized	Organization
Implications	Tool adoption improved within organization	Organization
(Results/Effects)	User acceptance improved	People
	Awareness improved	Organization
	Enablement for collaborative performance realized	Processes
	Change-Request-Process realized	Processes
	Well defined process for social software usage implemented	Processes
	Document exchange across the platform realized	Technology
	Initial training of employees improved	People
	Email traffic reduced	Technology
	Innovation capabilities improved	Organization
	Internal collaboration improved	Organization
	Employee involvement in knowledge transfer improved	People
	Change in use of new system realized	People
	Rolls & Rights management realized	Technology
	Support improved	Organization

Change Factors in Enterprise 2.0 Initiatives

Table 2: Classification scheme for the area of change management in Enterprise 2.0 initiatives

The list of inferential codes in the second column allowed for a grouping (first column) as described above. These groups were sorted into three major categories: prerequisites, measures, and implications. Moreover, we identified four areas of action within a business: organization, processes, people, and technology. All of the categories and areas appear to be closely interrelated and interdependent.

3.2 Review of Coding Results

In this section, we will discuss local incidents and resulting dependencies within our data, starting with the major categories identified in our classification scheme.

Prerequisites characterize the initial situation of the organizations, whilst *implications* describe the post-implementation state. *Measures* were carried out from existing *prerequisites* and lead to *implications* of the Enterprise 2.0 initiatives. These observations allow for a sequencing of our major categories: initial situation (prerequisites), followed by actions within the initiative (measures), resulting in a final situation (implications).

To illustrate the major categories and their existing relations, Table 3 shows the common topics based on their quotation frequency.

Prerequisites	Management involvement & support	54 %
	(open minded) Culture	36 %
Measures	Implementation strategy	41 %
	User training	23 %
	Regulations	17 %
	Internal promotion	16 %
Implications	User acceptance	48 %
	Design of processes and access management	21 %
	Innovation capabilities	7 %

Table 3: Quotation frequency of common topics in major categories

Further comparison of the *areas of action*, based on the distribution of codes across them draws a relation to the sequencing order of the major categories:

- Prerequisites (total: 12 codes) can be primarily found in the area *people* (seven codes), whereas four codes are associated with *organization*.
- Measures (total: 27 codes) most often address the area of *organization* (22 codes).
- Implications (total: 15 codes) are spread evenly over the four fields of action (*organization:* five codes, *people:* four codes, *processes:* three codes, *technology:* three codes).

Despite the prominent association of the area *people* within *prerequisites*, measures are mostly taken in the organizational area, although *implications* are almost equally distributed across all areas.

4 **Results in Context**

The previous chapter consisted of a cross-case analysis of Enterprise 2.0 case studies, following a ground theory approach. As suggested by Urquhart et al. (2010), we put the findings in context to achieve theoretical integration.

In doing this, our objective is to contribute to understanding the following questions:

- 1. How do the case study findings relate to research in the IS field, specifically the issue of socio-technical change in information systems?
- 2. Are the findings consistent with socio-technical change issues in enterprise resource planning (ERP) settings?
- 3. What constitutes the characteristics of socio-technical change in the context of *Enterprise 2.0?*

In order to address these questions, we will briefly discuss theoretical contributions in the field of socio-technical change in information systems, drawing upon one framework in particular, as well as evaluate the findings in comparison to research findings in the area of ERP systems. Finally, we will examine the compatibilities and differences, and point out what we find to be specific characteristics of change in Enterprise 2.0 settings.

4.1 Socio-technical Change in the IS field

Change in the context of information systems remains a complex, challenging issue, which spans across several disciplines, including computer and information science, as well as management and organization sciences. As the aspect of socio-technical change plays an important role as inhibitor or enabler in the successful adoption and use of information systems (Bostrom and Heinen, 1977), it has been a focus area of IS research.

Socio-technical systems were first conceptualized by Bamforth, Emery and Trist (Trist, 1981) of the Tavistock Institute, in their action research in the coal-mining industry and the concept later evolved into an important theoretical lens in IS, and especially in context of socio-technical change (Ropohl, 1999). A socio-technical system consists of two subsystems, a social subsystem, encompassing people (actors) and structure, and a technical subsystem, consisting of tasks and technology (Kaiser and Bostrom, 1982).

In their approach to explaining information systems change, Lyytinen and Newman (2008) develop a punctuated socio-technical change framework they termed PSIC model (see Figure 3 for a representation of their framework). They define change as multi-level and punctuated: It is multi-level, since it "re-configures work systems by embedding . . . information technology components". As these work systems are rigid and complex, Lyytinen and Newman (2008) postulate IS change "must be planned and deliberate".

Following Gersick's (1991) understanding of change, Lyythinen and Newman (2008) also define IS change as primarily punctuated, taking place in metamorphic (revolutionary) episodes, and not primarily being incremental and continuous. Socio-technical systems, Lyytinen and Newman (2008) posit, possess deep structure, go through periods of stability, face episodes of system upheaval and this punctuated change appears on multiple levels of the system. They also point out that this change does not need to be understood as a negative event.



Figure 3: Framework of punctuated socio-technical change: PSIC model (adapted from Lyytinen and Newman, 2008)

Lyytinen and Newman (2008) define four possible outcomes from events: The first is a failed intervention, which is not sufficient to remove a gap. The second is a successful intervention, removing the gap with incremental change to the system. The third outcome is punctuation, a revolutionary change that generates a new deep structure. Finally, the fourth possible outcome would be a crisis, which would include an increased gap, and imply further problems and an ongoing transition.

Although their framework is not focused on incremental change, Lyytinen and Newman (2008) argue that it does, in fact, account for phases of incremental change, as well.

Closer examination reveals that the findings of our study can be represented through the PSIC model, but the framework's paradigm that IS change needs to be "planned and deliberate", is in conflict with our findings, which indicate gradual and sometimes incremental adoption.

4.2 Socio-technical Change in ERP vs. Enterprise 2.0

Enterprise resource planning (ERP) systems represent a significant area of both investment and change for enterprises, with large firms usually spending hundreds of millions of dollars on ERP implementation (Seddon, 2005). Supporting enterprise-wide business activities, they represent complex socio-technical change, and they require integration with existing technologies, infrastructures, policies and practices, both on an intra- and inter-organizational level (Williams and Hardy, 2005). By integrating an enterprise's workflows and information, an ERP system "imposes its own logic on a company's strategy, organization, and culture" (Davenport, 1998). Thus, ERP systems

embody socio-technical change, and the process of successful adoption has been extensively addressed by research (e.g., Finney and Corbett, 2007).

Hong and Kim (2002) have found organizational fit to be of critical importance to ERP implementation success, while organizational resistance plays a minor role. Markus and Tanis (2000) point out the normative nature of change in the ERP context, as system use is usually mandatory, which could explain that organizational resistance is often fruitless or carried out on a non-transparent level.

In their literature review of ERP success factors, Finney and Corbett (2007) state that change management is "one of the most critical of all ERP implementation success factors", but concede that there is "still much confusion . . . what exactly is included in the construct". Shedding light on the importance of success factors in various stages of ERP implementation, Somers and Nelson (2001) prioritize top management support, project team competence and interdepartmental cooperation as the top three factors overall (see Table 4). In the acceptance stage, the top three factors identified were interdepartmental communication, interdepartmental cooperation and top management support (see Table 5). Not within the overall top five factors, but ranked fifth during acceptance stage, was education about new business processes. Although change management appears separately in their study, ranked 19th, many of the other factors fit the range of typical change management activities, such as building management commitment, setting goals, involvement and training of users (Finney and Corbett, 2007).

All Stages

Rank	Critical Success Factor
1	Top management support
2	Project team competence
3	Interdepartmental cooperation
4	Clear goals and objectives
5	Project management

Table 4: Ranking of ERP CSFs across allstages (adapted from Somers and Nelson,2001)

Acceptance Stage

Rank	Critical Success Factor
1	Interdepartmental communication
2	Interdepartmental cooperation
3	Top management support
4	Project team competence
5	Education on new business processes

Table 5: Ranking of ERP CSFs in theacceptance stage (adapted from Somers andNelson, 2001)

These rankings provide an interesting basis for comparison with our findings. Because ERP systems are so widely used by enterprises, their implementation challenges have been addressed in more detail than those of Enterprise 2.0 initiatives. In the following section, we investigate the general and specific characteristics of Enterprise 2.0, by discussing the similarities and differences of change factors between ERP and Enterprise 2.0 (see Table 6).

Top management support, ranked first among ERP implementation success factors, includes setting reasonable objectives, developing an understanding of IT's potential and limitations, and communicating corporate strategy (Somers and Nelson, 2001). This understanding fits the Enterprise 2.0 case finding that *management involvement* and *support* is a critical pre-requisite.

Project team competence, covering skill level of the project team, and including both technological expertise and understanding of business requirements, was ranked second, overall (Somers and Nelson, 2001). In our study, the corresponding measures of *project management*, *organization* and *project support* have received less attention and are not

as focused on skill levels. A reason for this difference can be seen in the more complex nature of ERP implementations, both on a technological and business process level, whereas the Enterprise 2.0 initiatives we studied emphasize lean project teams.

The factors of *interdepartmental communication* and *cooperation*, ranked first and second during acceptance stage, includes the broad activities of sharing common goals, coordinating and communicating across departments, and within the project team (Somers and Nelson, 2001). In our study, the most often mentioned equivalent was *internal promotion*, which has a slightly different connotation. In ERP projects, business processes have to be defined and agreed upon across different business units, which implies the importance of cross-departmental cooperation. In the Enterprise 2.0 context, we found communication and coordination activities to be more limited to promoting tool capabilities and benefits to inspire acceptance.

Clear goals and objectives, ranked fourth in Somers and Nelson's (2001) study, encompasses determining the direction of the project, managing the "triple constraint" of scope, time and cost, as well as defining measurable objectives, and setting goals before approaching top management. In our research, the matching measures are *implementation strategy*, and the establishment of a *set of rules*. While this also implies setting objectives, it emphasizes the actual activities of implementing and using the tools, whereas in the ERP context, the meta-level aspect of project controlling is more prominent.

Project management, ranked fifth overall, is a broad term, including project planning, control, and defining and managing size, structure and scope (Somers and Nelson, 2001). Again, the corresponding measures of *project management*, *organization* and *project support* in the cases we studied point at a different level of complexity. ERP projects are large-scale undertakings involving project organizations consisting of steering committees, core teams and sub-teams. Actual teams of Enterprise 2.0 initiatives, on the other hand, often consist of less than a dozen members.

Finally, *education on new business processes*, ranked fifth in the acceptance stage, is concerned with the business process reengineering perspective, and with educating and communicating goals and perspectives to gain support of employees (Somers and Nelson, 2001). This corresponds to *internal promotion* and *training* in our study. However, in the Enterprise 2.0 context, training programs are often straightforward and basic, and sometimes dispensed with completely, when tools support a learning-by-doing approach. In the ERP context, the business process engineering perspective also addresses fears relating to job security, whereas Enterprise 2.0 tools are often promoted as increasing productivity without endangering employment.

Factor	ERP	Enterprise 2.0	
Top management support	Setting objectives, communicating strategy, IT's potential and limitations		
Project team competence	Skill-level, technological and business requirements	Lean project teams, users as project team, lower degree of specialization	
Interdepartmental communication and cooperation	Cross-departmental, cross- company alignment	Promotion-focused, use-inspiring	
Clear goals and objectives	Constraints management, measurability, meta-level	Implementation-focused, set of rules	

Project management	Large-scale, complex project organization	Lean project teams
Education on new business	Alleviate fears, gain support,	Inspire to use, lean training or
proceses	training programs	learning-by-doing

Table 6: Factors in ERP context compared to Enterprise 2.0

4.3 Socio-technical Change in Enterprise 2.0

In the preceding part, we have discussed the similarities and differences between change factors in the ERP and Enterprise 2.0 contexts. We found that most factors highly ranked in the ERP context (Somers and Nelson, 2001) could be mapped to corresponding change factors in the Enterprise 2.0 context (see Table 6). However, a closer examination of the corresponding factors revealed distinct and different focus areas: Where ERP projects call for complex project management activities, the equivalent activities in Enterprise 2.0 initiatives implied much leaner team constellations. More importantly, the large-scale nature of ERP implementations with its mandatory use and set go-live dates requires a planned approach to managing change in a revolutionary context. The adoption of Enterprise 2.0 initiatives, on the other hand, often includes gradual diffusion and evolutionary change, being based on voluntary use or starting with one business unit or project team. Hence, change strategies have to rely more on promotion. This more positive connotation of Enterprise 2.0 inspired change in comparison to ERP implementations is a significant difference, and implies an Enterprise 2.0 specific approach to change management (see Table 7).

Traditional (ERP) Context	Enterprise 2.0 Context
Revolutionary change	Evolutionary change
Large-scale projects	Small-scale projects
Cross-departmental business processes	Often project-team focused
High degree of planning and foresight	Flexibility and adhocracy
Mandatory use	Often voluntary use

Table 7: Nature of socio-technical change in Enterprise 2.0 vs. ERP

5 Conclusion, Limitations, Outlook

This paper aims at increasing the understanding of socio-technical change in the Enterprise 2.0 context. To achieve this, we have followed a grounded theory approach to analyze sixteen case studies of Enterprise 2.0 initiatives and identify common patterns of pre-requisites, measures and implications. To integrate the findings into theory, we have drawn upon socio-technical change theory and compared the findings to research in the ERP field. In doing so, we have identified similarities and differences between change in Enterprise 2.0 initiatives versus ERP projects. While similarities exist especially on the top level in terms of change factors, our results indicate that change in an Enterprise 2.0 context differs from change in ERP projects in several ways: ERP projects, due to their complex and business-critical nature, require large-scale projects with a high degree of control and foresight, affecting the whole organization, often in a big-bang roll-out. Thus, socio-technical change in ERP projects is revolutionary and often actively managed in a change program, which represents a

project in itself. Enterprise 2.0, on the other hand, frequently implies evolutionary change, as new initiatives are gradually adopted and often used on a voluntary basis. Hence, managing change in Enterprise 2.0 initiatives relies less on formal training and planning, and more on promotion and exploration (Richter und Stocker, 2011). Our findings contribute to both research and practice: Practitioners benefit from a caution when applying change management concept from other areas, such as ERP, to Enterprise 2.0 initiatives. For researchers, our study presents a starting point to further examine the specifics of socio-technical change in the Enterprise 2.0 field. Next steps could be the adaption of a socio-technical change framework to integrate Enterprise 2.0 specifics, as well as testing and expanding our findings on a broader empirical basis. This would address the main limitations of our study, which are rooted in its small sample size and do not support generalization.

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