

UNIVERSITY OF DUISBURG-ESSEN

Seminar Thesis

On the subject

Social Media and its impact on Organizational Information Structures

Submitted to the Faculty of Business Administration and Economics
at the University of Duisburg-Essen

From: Patrick Hewelt
 patrick.hewelt@stud.uni-due.de

Supervisors: Prof. Dr. Frederik Ahlemann
 M. Sc. Florian Hesselmann

Summer term 2013. 8 Semester of studies

Abstract

Since a decade of years there is an extensive evolution noticeable, because new technologies in the internet offer many benefits to new organizational structures. These structures are changing to a much more modern flat hierarchy that don't need much authorities and encourage more individuality and creativity. So the introduction will provide a short presentation of the evolution from older virtual collaboration techniques to the trend called *enterprise 2.0* that is based on the actual key word *web 2.0*.

To provide an overview of the different possibilities for enterprises to offer a virtual collaboration, there will be a determination that includes on the one hand online social network services like Facebook, Twitter, Wikia or Blogger and on the other hand commercial (enterprise) social software like IBM Connections, Microsoft SharePoint or Jive. The next step will be an identification of these tools so it will offer a brief overview of the most important tools that are necessary to collaborate.

The aim of this work is a discussion of the impacts of the both types of social media in the main chapter to gain an understanding of the pros or cons that are related to the usage of social media in companies and its information structures. This provides a first step for the leadership to deal with social media for the internal purpose.

No scientific paper handled all possible impacts before and to close the gap, this paper is basically a literature review, but it also consists of many other impacts or aspects that have to be considered as well to have a good funding for decisions.

Table of Contents

List of Abbreviations	iv
1 Introduction.....	1
2 Free social network services and commercial social software	2
2.1 Differences between social network services and commercial social software	2
2.2 Identification of social media tools for collaboration.....	3
3 Implications of social media for organizational collaboration.....	5
3.1 Organizational structure	5
3.2 Organization culture	7
3.3 Intrinsic factor	8
3.4 Further impacts.....	11
4 Discussion	13
5 Conclusion	14
References.....	15

List of Abbreviations

CSCW Computer Supported Cooperative Work

RSS Really Simple Syndication

VoIP Voice over IP (Internet Protocol)

1 Introduction

This paper discusses the impacts of social media on organizational information structures and hence gives an expanded overview of many very important impacts that have to be considered before the implementation of social network services or enterprise social software.

In order to discuss these main impacts of social media for the internal use within an organization, there is a plenty amount of famous terms like groupware, CSCW (Computer Supported Cooperative Work), computer-mediated-communication, social computing, e-collaboration and finally enterprise 2.0. These terms describe mostly the usage of software to manage the communication or collaboration of an organization and to introduce a knowledge management (Artail, 2006, p. 551) (Jarke & Klammer, 2007, p. 52) (Schönenfeld, 2009, p. 45). While older trends like groupware or CSCW were just software applications that basically included a repository and an access control to work together on the same document, the actual trend enterprise 2.0 goes many steps further and includes much more possibilities and tools to collaborate and to communicate. The main point of enterprise 2.0 is the social aspect that provides a community for the employees.

2 Free social network services and commercial social software

This chapter gives an overview of the main terms social media, social network services, social software and organizational information structures. To provide a better understanding, a comparison between social network services and social software follows as well as a clarification of the targets that social media should provide in this context. The next step is the identification of all relevant tools offered by social media.

2.1 Differences between social network services and commercial social software

The both types have different meanings in the literature and because of a different usage of them in this paper, a precise classification is absolutely essential. Social media is used in this paper as aggregation of social network services and social software. Therefore a definition of social media is negligible, because it is just used for convenience. The focus on social media is limited by the usage of it only for internal communication and collaboration of the employees.

In this context, social network services are meant as:

“[...] web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.”
(boyd & Ellison, 2007, p. 211)

Popular examples are Facebook, Twitter, Wikia and Google Apps known from the web 2.0. In contrast to these non-restricted social networks, social software is meant as enterprise social software in this paper. Unfortunately many definitions of social software include also social networks and platforms to interact with external stakeholders (e.g. customers or supplier) or to educate the employees as well. To show the huge amount of impacts caused by the usage of social media in organizations, it is required to limit them to the core objectives of social software: the using of organizational information structures to communicate and collaborate.

In order to provide an understanding of the main terms, a comparison between social network services and social software will follow as well as a clarification of the targets social media should provide in this context.

The focus in this paper is on the internal communication and data exchange of the employees to offer collaboration and knowledge management. These tasks are meant by the term organizational information structures in this paper. These information structures are exclusive for the internal use and not for the exchange with other external stakeholders.

There are many factors to distinguish between social network services and social software. The most obvious fact is that social network services are mostly free and are financed by ads, but social software is commercial and demands yearly license costs. Also social software can be adapted much better to the structure and the processes of the organization than social network services that are the same for every user and company. Performance is another important factor, because social software can be installed on internal servers or external cloud servers. The latter provide a faster latency and a better availability. Therefore this leads to data security and safety that is much better in the intranet and social software than social networks that might be hosted in other countries with another behavior and other regulations. Also the support is a further factor, because the organization can handle problems self-dependently.

The targets of social media are to primarily provide a knowledge management (Döbler, 2008, p. 121) (Döbler, 2008, p. 122) to store and optimize the knowledge and information of the employees. Further goals are more satisfaction, creativity, innovations, sustainability and an optimization of the internal processes. Economic goals are investment protection, risk minimization, better quality, cost reduction, time saving, reusability, cooperation with business partners and customer orientation (Schiller García, 2007, pp. 85–86) (Smolnik & Riempp, 2006, p. 19). This all leads to an advanced competitive ability.

The employees of an organization are handled as users of social media who are content consumers as well as content creators (Reisberger & Smolnik, 2008, p. 571).

2.2 Identification of social media tools for collaboration

In the context of social media, social network services as well as social software consist of many different tools. To examine the impacts of social media on the organization, there is no need of differentiation between tools that are provided by social network services or social software. In fact, both types of social media offer these tools.

The basis for this identification are tools that are discussed in the papers of (Schönefeld, 2009, pp. 54–55) to gain a better understanding of the meanings. So the relevant collaboration tools and some popular examples are:

- Wikis (Wikia, WikiMedia, Atlassian Confluence)
- Newsfeed, community with profiles (Facebook, Xing, LinkedIn, Myspace, Google+, scl)
- Activity stream or news stream (RSS)
- Podcasts (YouTube)
- Instant Messaging or chats (ICQ, MSN, Skype, Facebook Chat, Pidgin)
- Weblogs or shorter blogs and especially Corporate Blogs (Wordpress, Blogger)

- Microblogging (Twitter, Tumblr)
- Tagging/Folksonomy (Delicious)
- Message boards (myBB)
- Video conferences, e. g. VoIP (Skype, Adobe Connect)
- Bookmarking (Delicious, Mister Wong)
- Social search or full text search (Mahalo, folkd, Sproose, Scour, Wink)
- Mashups
- data exchange/Content Management System

The examples can also be exclusive social network services or only software that can be installed on internal servers. They can be free as well as commercial. The most famous examples for commercial social software suites are Microsoft SharePoint Server, IBM Connections, Jive Social Business Software, Oracle WebCenter, Cisco WebEx and Google Apps for Business.

Additionally the tools like virtual games, prediction markets and social commerce go too far and are not relevant for this paper. Tools like Calendar Sharing are surely not widespread, but are also an element of social media. Also e-mail can be specified as a social media tool, but it will be replaced by other tools in the context of collaboration like instant messaging or video conferences. In addition to these tools, there is also the possibility to upgrade social software or social networks by plugins or expansions which add further functions (Döbler, 2008, p. 126).

3 Implications of social media for organizational collaboration

To provide an overview of the impacts that are caused by social software, this chapter treats them in the following categories:

- organizational structure
- organization culture
- intrinsic factor
- further impacts

In fact, groupware and CSCW (Computer Supported Cooperative Work) software were forerunners of social software and provided already many impacts on organizations. Based on these types of software, many impacts can be easily transferred to impacts of social software and are also consequently part of social media in this context. That is why the following impacts contain the implications of social software and social network services.

3.1 Organizational structure

Social media has many main impacts on the organizational structure. These impacts concern e.g. the hierarchy, communication, control and decision making.

So a main impact affects the hierarchy of the organization. It is widely discussed, whether the hierarchy is affected by social media or not. In fact, both theories can be accepted. To avoid conflicts between users, there is a need for moderators to complement the responsible officers. On the one hand the hierarchy can become flat because of dropped responsibilities that are replaced by moderators. There is no need of direct responsibilities for information exchange, because they can be gathered much more easily and faster by using social media. Another reason for the need of moderators is the fact that the communication between the employees is just regulated by a few rules or norms (Koch, Richter, & Schlosser, 2007, p. 449). Each conflict is unique because of different cultures (Cai, 2005, p. 87). Of course these moderators and their tasks can be adapted by the responsible officers. Due to their knowledge and experience in the organization, they have the authority to manage the information exchange between the employees (Gulati et al., 2012, p. 736). Because of the networking that will be discussed in the next category, there is a more flat organization structure of networks that consist of relationships between the employees. Contrary to groupware that is based on static structures, social software offers the possibility to form own groups and networks. To benefit from social media, all information must be accessible for all employees in the organization (Döbler, 2008, p. 124). It allows a cross-border communication across the divisions, so every user can access all information and knowledge of all other users (Döbler, 2008, p. 124). Therefore there is a coexistence of the typical hierarchy (organizational structure) and the new

networks of relationships (process organization and self-organization) (Schönefeld, 2009, pp. 88–90). The organization has to face the new organization structures and be prepared for these changes, when social media is established for collaboration. Thus the organization has to care for adequate organization structure conditions that do not counteract the organization principles brought by social software (Döbler, 2008, p. 135). Also the organization has to “employ a variety of mechanisms, including planning, supervision, standardization of processes and skills” (Gulati et al., 2012, p. 736).

A further impact on the organization structure is the fact that social media offers many possibilities for a synchronous or asynchronous communication. So chats and video conferences are examples for tools that offer a synchronous communication. On the opposite asynchronous communication is provided by the commentary functions of microblogging and newsfeed platforms, blogs, discussion boards and mails. Both possibilities supply different character types of the employees, because the users can choose, which tool matches their attitudes: Introverted as well as extroverted users can participate efficiently in the information and knowledge exchange. For example, introverted users can prefer asynchronous communication channels like discussion boards to benefit from more time to react on a discussion and to offer a better quality of his or her answer (Gao, Dai, Fan, & Kang, 2010, p. 1850). Also introverted employees are maybe too nervous to use video conferences that offer a face to face communication. The offering of both communication types leads to a better collaboration. Of course synchronous as well as asynchronous communication have advantages and disadvantages. On the one hand, asynchronous communication allows a better reusability, because the information is stored persistently. On the other hand, synchronous communication enables a faster information or knowledge exchange, but can lead to information loss, because information and knowledge are not saved for everyone in the organization. A problem can raise up, when new employees join an ongoing communication (Prakash, Hyong Sop Shim, & Jang Ho Lee, 1999, p. 216).

There are some other important impacts according to social media. A further impact is the teamwork that increases the sense of unity. This also leads to a much minor imbalance in power, because no user can benefit from knowledge advances (Döbler, 2008, pp. 134–135).

The usage of social media allows a division of labor and more flexibility because of the big amount of facilities of the tools (Schönefeld, 2009, p. 83). The employees benefit from this enhanced collaboration, because they can adapt their way of working to the given tools.

3.2 Organization culture

Social media has also many impacts on the organization culture and concerns the networking, norms, symbols, work environment and the organizational citizenship behavior.

First of all social media offers new ways to communicate and collaborate. These tools provide a job variation, because the users can handle social media for different purposes. Individual social networks or whole social software suites provide tools for communication and interaction between users (e.g. video conferences, instant messaging or newsfeeds) and tools for expanding their knowledge (e.g. wikis, podcasts). Usability has to be high for a successful active and mostly voluntary use of social media (Reisberger & Smolnik, 2008, p. 570). In the most cases, employees already got used to social media, know many functions and how to use them efficiently. Users have enough experience with social media, and if not, they can get accustomed very quickly to it, because the usability is similar in all tools. Also the look and feel of a social software suite is covering all software components and provides an easy handling. In addition to this, social networks and social software are constantly improved. If a user has a problem with finding or using a function, then other users will be surely disposed to help. Also teachings can help to get the employees used to social media and the further opportunities for collaboration and communication. In addition to teachings, also instruction videos or papers, handouts or responsible officers can help to achieve this goal.

Networking is a process of getting connected to other users. It also can be described as organization of relationships within or between groups (Koch et al., 2007, p. 450). A function of networking for an employee is the investment in a relationship to benefit from it later, when it is needed to reduce searching costs and costs for reaching a common goal (Koch et al., 2007, p. 450). It is beneficial for an organization to increase the networking of the employees to reach weak and strong ties between the employees that provide a better collaboration between the users and therefore save time and costs, if both users pursue the same target (Koch et al., 2007, p. 450). Social media enables a much faster and easier way to get connected to other users and to overcome one's inhibitions, because every user can manage his own network and the whole network are displayed visually for all other users (Koch et al., 2007, p. 451). The personal information, given by the users in their profiles, also influences the motivation of the user to participate in the network and to communicate with others (Reisberger & Smolnik, 2008, p. 571). To achieve an open communication, it is very fundamental to provide a pleasant atmosphere (Gao et al., 2010, p. 1850).

Problems in communication are usually caused by the “different cultures [with] different norms, symbols and representations” (Cai, 2005, pp. 86–87). Furthermore, to manage such situations, it is necessary for the employees to consider the domain competence and the point of view of each user (Cai, 2005, pp. 86–87). This provides a correct understanding of every

employee to avoid a bad collaboration (Cai, 2005, p. 87). To support this understanding, it is also important to consider that an employee assembles an internal amount of information in the course of time, has an own view to interact outwards with the others and communicates or collaborates through that view with other users with the collected internal information (Cai, 2005, p. 89).

3.3 Intrinsic factor

Further impacts concern the intrinsic factor of an employee and affect for example the motivation, creativity and the reputation of the employees. This factor impacts the quality of collaboration and communication. To benefit from social media, organizations should achieve or prepare the conditions for its usage that are results of the following intrinsic motivation.

First of all the intrinsic motivation of employees leads to an increase of job satisfaction, compliance to standards like fairness or team work and the reach of personal goals (Koch & Richter, 2009, p. 143). The increased job satisfaction is caused by new organizational structures and provides a flexible forming of self-organized groups (Döbler, 2008, p. 126). Also the new culture causes a fresh breeze into the old structures and processes, because the employees can use new opportunities provided by social media. The tools of social media are diversified and help the users in different ways to reach their goals. Users have to pay attention to the many changes of media formats, because they can lead to an overexertion and tiredness. Although any media format offers alternative opportunities that another tool doesn't provide. For example newsfeeds and chats are text-based, but voice or video conferences offer a much more personal communication that enables the interpretation of the voice (e.g. pronunciation) or the gestures and facial expressions. Because of this difference, dialogues can also be understood in different ways.

The employees have the possibility to form and express their own opinion. To gain this, they can use e.g. the commentary function in a blog. The discussion function of wikis can be very helpful. Aspects that aren't certain, can be discussed by all users. Wikis also offer a history system that can show all changes of the previous article versions. This can be used to show chronological changes of know-how and compare the given information relating to its actuality.

Also the intrinsic motivation causes a satisfaction of being an expert for the other employees, the principle of reciprocity and the feeling of being part of a bigger thing (Koch & Richter, 2009, p. 143). Very important aspects of social media use in organizations are the possibility to find an expert individual or group and an increased transparency (Reisberger & Smolnik, 2008, p. 573). Users can find another specialized employees to support them in complex tasks (Koch et al., 2007, p. 451). Without social media there is a lack of transparency of employee

competencies in bigger organizations (Koch et al., 2007, p. 451). That transparency can be eliminated by social media, because the network can illustrate all persons who are specialized (Koch et al., 2007, p. 451). To find an expert, an employee can first use the (social) search, because each user can or rather should type in as much as possible information about himself. These information include for example not only personal interests (e.g. hobbies, likes and dislikes), but also information about the occupational title, the position, friend networks, the previous education and of course the previous works and achievements, actual fields of activity and the department. Further information can show up personal strengths and weaknesses. Social software connects each posting, commented, revised or written article to the user that created it. Each user has the opportunity to see this data to find the most suitable expert. To contact the located person of interest, the user can now choose a tool (e.g. instant or personal messaging). Another example for an option is a request in a discussion board that can include a question, task or an offer and conditions for a teamwork. The benefits of an expert search is to save time and money, because both factors can be much higher in bigger organizations without an expert network (Koch et al., 2007, p. 451).

With the usage of wikis, the willingness to take part in the knowledge accumulation and to share the own know-how will be increased (Reisberger & Smolnik, 2008, pp. 573–574). This leads to a changed innovative ability as well as a much more qualitative and extensive training of the users (Reisberger & Smolnik, 2008, pp. 573–574). The user benefits from an own image that is established and built up by the participation in wikis (Reisberger & Smolnik, 2008, p. 573). This can be surely assumed for social media generally as well, because each interaction with the other users can support the own reputation. The reputation can be increased by helping or working with another user, because then you can show your skills and knowledge. Though it can also lead to negative reactions because of arrogance or other character traits and therefore a decreased reputation. The self-image that is provided by social media usage shows, in what way other employees notice the user and in what way he wants to be noticed (Gao et al., 2010, p. 1847). Open social networks can also provide additional benefits: The organization can represent the knowledge of the employees to the publicity or use it as a free solution to manage internal experts without any costs (Koch et al., 2007, p. 452). So, acting as an expert provides a better reputation and self-fulfillment. It also motivates the employee to keep or to increase the quality of the performance.

The principle of reciprocity means that an employee participates in the social media to help other employees (Koch & Richter, 2009, p. 143). If the employee needs help for himself, he can expect from the community with its users and colleagues that one or a group of them will also help. In social media this aspect gets much more relevance, because the network of an employee illustrates all colleagues that are connected to him. These colleagues will try to

answer or help out to hold up the relationship between each other. Also an employee will ask his colleagues from his “friends list” first, because he knows them already better and knows what expertise they have. Gradually, an employee will be able to estimate his colleagues to ask the certain colleague immediately. He can also choose, whether he wants to contact him by a private message (e.g. instant or personal messaging) or by a public request (e.g. weblog or discussion board) that others can also see to join the process of finding a solution.

Being a part of a whole thing, is a further interesting aspect, because the employees can pull together. They can help each other and organize tasks in teams or groups. Especially wikis are very efficient for such users that want to interact with others, because many users can work on the same article, edit and correct it or make a new one. Due to the fact that a single article is edited by more than just one user there is an achievement of an increased objectivity, correctness and acceptability (Döbler, 2010, p. 391). Instead of the dominance of a single employee there will be a consensus created by all participated users (Döbler, 2010, p. 391). This consensus leads also to an outcome that fits better to the whole organizational structure with its conditions than a finding that is adapted to just a single achievement (Döbler, 2010, p. 391). Also wikis provide creating templates to have a framework for usual types of knowledge. Because of the many users each article can get structured well based on the given structure of all types data. Contrary to the objective wikis, blogs are much more subjective that should not be objectified (Hippner, 2006, p. 13). The commentary functions of some tools (e.g. newsfeed, discussion boards, weblogs or microblogs) lead to dialogues as well as discussions and criticism and therefore to more interactions between the employees. A positive communication culture can provide a better group connectivity, a much more informal contact and hence a faster opportunity to respond, react or decide.

A positive communication culture is also required for constructive feedback. The feedback in the form of answers, validations or reviews encourages users (Ireson & Burel, 2010, p. 355) and can lead to a better relationship network between the users. If the community of employees is open-minded about constructive criticism, the employees can learn as well as form their own opinion. Additionally, anonymity can be used to foster more honest criticism. The usage of social media provides the possibility to criticize well-known or unknown and disliked colleagues (Gao et al., 2010, p. 1847). To handle criticism and to avoid conflicts, there is a need for moderators (as described before) and regulations to facilitate constructiveness.

Another reason to bring an employee to use social media is the fun factor (Reisberger & Smolnik, 2008, p. 573) because of the internal opportunities to also exchange experiences, tips or informal non-topic things as long as the latter does not disrupt the business or harms other employees. Social media impacts the creativity of a single employee or a team/group of employees (Reisberger & Smolnik, 2008). A longer lead provides more freedom and increases

the creativity of the employees. The organization benefits from creativity as well as each employee. On the one hand an organization benefits from more efficient problem solutions and new innovative products or services. On the other hand employees benefit from a better satisfaction that affects the productivity of the whole organization, more freedom to try approaches from other fields of work or invent other approaches and have more fun at work. Additionally creative employees can inspire other employees to a much more creative approach. But to satisfy the users, they have to be open-minded about social media (Reisberger & Smolnik, 2008, p. 573). Finally, a longer lead also provides a self-organization which increases the productivity (Send & Riedel, 2012, p. 174).

3.4 Further impacts

There are many further aspects that are maybe not as important as the impacts before, but they have to be considered as well, because they can affect the information structures too.

First of all, the aspect of motivation is important to influence the employees to keep their communication or collaboration efficiently and to enhance it (Ireson & Burel, 2010, p. 354). Contrary to the discussed intrinsic factor that is also a kind of motivation, this part concentrates on the incentives that have to be provided by the organization.

For employees there is an antagonism, because they have to decide, whether they want to participate using social media with their knowledge (Hendriks, 1999, p. 91). On the one hand, the organization profits from the stored knowledge that is reusable and makes the organization much more independent (Döbler, 2008, p. 124). This enables a fast access to product- and market-relevant know-how to offer better products and services (Döbler, 2010, pp. 386–387). But on the other hand, the organization enriches itself on the knowledge of the employees, so they lose their know-how that makes them unique (Döbler, 2010, p. 394). It has to be considered that the work is based on competitive social relationships (Döbler, 2010, p. 394), because no employee wants to lose his job or his reputation due to another one that is better. This complicates an effective incentive system, because stimuli like bonuses for a continuous participation in social media don't success in hierarchical structured organizations that are based on these competitive relationships (Döbler, 2010, p. 394). If an employee inserts his know-how into a wiki, then all information and knowledge are stored permanently and are accessible for all other users, even when he leaves the company (Döbler, 2008, p. 134). Users tend to keep important know-how for the personal career and rather offer just extraneous information to all the other users in organizations that are characterized by structural conditions, a hierarchical thinking and employee competition to be promoted and to gain reputation (Döbler, 2008, p. 134). The organization has to face this conflict of interests and develop an effective incentive system.

Social media is usually used voluntary by the employees and causes two types of users: First of all the already accustomed users will provide a continuous activity in the social media and will accept the higher personal investments (Send & Riedel, 2012, p. 173). Hesitant users will first join the participation, when they can't abstain from the participation any longer, because their costs of disuse will rise above their investments to take part (Send & Riedel, 2012, p. 173). The organization is confronted with the problem to bring the hesitant users to social media, but can build on the other users that have the possibility to press ahead (Send & Riedel, 2012, p. 173) and to achieve already a good reputation.

Another aspect of social media is that the employees can access the social network or software without binding to the general labor time or workplace that provides much more flexibility (Döbler, 2010, p. 391) (Döbler, 2008, p. 126). To enable this flexibility, the social software has to be accessible outside of the intranet, if it is installed on internal servers. If the organization uses social network services or social software that is installed on external cloud servers, it also benefits from this flexibility. A further benefit is cost reduction due to the avoidance of travels (Smolnik & Riempp, 2006, p. 19).

This leads to data security and safety, because social software as well as social networks that are provided by an external company, require the complete trust of the employees and employers. Due to the storage of the very sensitive information and knowledge, the organization has to consider, if a service provider is trustworthy or if it is safer to buy licenses and to host social software on internal servers. A further point is that the employees can already hold profiles, if the organization chooses to use an open social network (e.g. Facebook). This point is especially relevant, if an employee wants to leave the organization. In this case the organization has to decide, in what extent they want to merge the internal knowledge with the public profiles. The organization has also to pay attention to the privacy protection, because each user has to abstain his privacy by giving contact information or further personal data, but social media can't be used efficiently without abstaining the privacy (Reisberger & Smolnik, 2008, p. 570).

Incidentally, organizations can bring the employees closer to social media, if the responsible officers use it as well regularly (Smolnik & Riempp, 2006, p. 23). They can act as figureheads to motivate the other employees by a multiplication effect.

4 Discussion

The main impacts that are discussed in this paper, are mostly logical. But of course some aspects can also affect negatively on the organization and the associated internal communication and collaboration process. Social media can lead to a flatter hierarchy, but it can also affect a control loss or a too much informal communication culture. Anonymity can be used beneficial, but it can also maintain a bad communication culture which includes an impolite behavior or criticism that is not constructive at all. These exemplary aspects have to be analyzed more precisely, because it depends on each organization and individual.

The aspect of being abandoned to social media can be discussed in the other way round, because probably older employees who did not grow up with a computer or purely resist using social media. It depends on the distribution of the employees that work in the organization.

A further limitation is caused by the industrial sector, because e.g. organizations within the IT or service industry are surely already used to collaboration or communication software (Döbler, 2010, p. 393).

To decide, which solution (free social network service or commercial social software) is the most suitable for an organization, much more impacts have to be analyzed. Costs are especially very important, because they do not include just the license costs, but for instance also costs for teachings, a new information infrastructure or new processes. There is no general recommendation that the leadership can use for decisions.

5 Conclusion

This paper provides a huge amount of impacts that affects the information structures of an organization. Because of that a short review is helpful to keep an overview. First of all, there are four main categories that include organizational structure, organizational culture, intrinsic factor and further impacts.

The first category named organizational structure treats the hierarchy that is affected by social media. Also there is a need for moderators that support the responsible officers. Additionally social media offers synchronous as well as asynchronous communication that is very useful for two types of persons: introverted and extroverted employees.

The further category called organizational culture contains many aspects about the job variation, the habituation of employees to social media and networking that helps to connect each other.

Intrinsic factor includes the motivation of employees that can be influenced by the job satisfaction, the willingness to participate or being an expert. The employees are also influenced by being part of a bigger thing, the principle of reciprocity, fun at work and constructive criticism.

Further aspects treat basically the extrinsic motivation by the organization, data security and safety and the privacy protection.

All these impacts are important for a decision, whether social media should be used or not. Finally social media is just a collection of tools, because the organization has to implement the social media in its own structures and conditions (Döbler, 2008, p. 135). But anyway social media can simplify the knowledge management, if all relevant points will be considered.

References

- Artail, H. A. (2006). Application of KM measures to the impact of a specialized groupware system on corporate productivity and operations. *Information & Management*, 43(4), 551–564.
- boyd, d. m., & Ellison, N. B. (2007). Social Network Sites: Definition, History, and Scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210–230.
doi:10.1111/j.1083-6101.2007.00393.x
- Cai, J. (2005). A social interaction analysis methodology for improving E-collaboration over the Internet. *Electronic Commerce Research and Applications*, 4(2), 85–99.
- Döbler, T. (2008). Zum Einsatz von Social Software in Unternehmen. In C. Stegbauer & M. Jäckel (Eds.), *Social Software* (pp. 119–136). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Döbler, T. (2010). Wissensmanagement: Open Access, Social Networks, E-Collaboration. In W. Schweiger & K. Beck (Eds.), *Handbuch Online-Kommunikation* (pp. 385–408). Wiesbaden: VS Verlag für Sozialwissenschaften.
- Gao, Q., Dai, Y., Fan, Z., & Kang, R. (2010). Understanding factors affecting perceived sociability of social software. *Computers in Human Behavior*, 26(6), 1846–1861.
- Gulati, R., Puranam, P., Tushman, M., Fjeldstad, Ø. D., Snow, C. C., Miles, R. E., & Lettl, C. (2012). The architecture of collaboration. *Strategic Management Journal*, 33(6), 734–750.
- Hendriks, P. (1999). Why share knowledge? The influence of ICT on the motivation for knowledge sharing. *Knowledge and Process Management*, 6, 91–100.
- Hippner, H. (2006). Bedeutung, Anwendungen und Einsatzpotenziale von Social Software. *Praxis der Wirtschaftsinformatik*, 43(252), 6–16.
- Ireson, N., & Burel, G. (2010). Knowledge Sharing in E-Collaboration. In J.-L. Chappelet, M. Janssen, H. J. Scholl, & M. A. Wimmer (Eds.), *Lecture notes in computer science: Vol. 6228. Electronic government. 9th IFIP WG 8.5 international conference, EGOV 2010, Lausanne, Switzerland, August 29 - September 2, 2010 ; proceedings* (pp. 351–362). Berlin [u.a.]: Springer.
- Jarke, M., & Klamma, R. (2007). Social Software und Reflektive Informationssysteme. In P. Loos & H. Krcmar (Eds.), *Architekturen und Prozesse* (pp. 51–62). Berlin, Heidelberg: Springer Berlin Heidelberg.

- Koch, M., & Richter, A. (2009). *Enterprise 2.0: Planung, Einführung und erfolgreicher Einsatz von Social-Software in Unternehmen* (2., aktualisierte und erw. Aufl). München: Oldenbourg.
- Koch, M., Richter, A., & Schlosser, A. (2007). Produkte zum IT-gestützten Social Networking in Unternehmen. *WIRTSCHAFTSINFORMATIK*, 49(6), 448–455. doi:10.1007/s11576-007-0097-3
- Prakash, A., Hyong Sop Shim, & Jang Ho Lee. (1999). Data Management Issues and Trade-Offs in CSCW Systems. *IEEE Transactions on Knowledge and Data Engineering*, 11(1), 213–227. doi:10.1109/69.755630
- Reisberger, T. & Smolnik, S. (2008). *Modell zur Erfolgsmessung von Social-Software-Systemen*. Retrieved from http://ibis.in.tum.de/mkwi08/09_IKT-gestuetzte_Unternehmenskommunikation/03_Tobias_Reisberger.pdf
- Schiller García, J. (2007). *Enterprise 2.0: Web 2.0 im Unternehmen*. Saarbrücken: VDM-Verl. Müller.
- Schönefeld, F. (2009). *Praxisleitfaden Enterprise 2.0: Wettbewerbfähig durch neue Formen der Zusammenarbeit, Kundenbindung und Innovation ; Basiswissen zum erfolgreichen Einsatz von Web 2.0-Technologien*. München: Hanser.
- Send, H., & Riedel, A. (2012). Erfolg im Enterprise 2.0: Selbstorganisation und Freiheit gegen vorstrukturierte Planung und Steuerung. In T. Köhler & N. Kahnwald (Eds.), *Communities in new media: virtual enterprises, research communities & social media networks. 15. Workshop GeNeMe '12, Gemeinschaften in Neuen Medien; TU Dresden, 04./05.10.2012* (pp. 173–179). Dresden: TUDpress.
- Smolnik, S., & Riempp, G. (2006). Nutzenpotenziale, Erfolgsfaktoren und Leistungsindikatoren von Social Software für das organisationale Wissensmanagement. *Praxis der Wirtschaftsinformatik*, 43(252), 17–26.

“I confirm that the work submitted is my own and that appropriate credit has been given where reference has been made to the work of others.”

Mülheim an der Ruhr, 2013-07-21