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## ► To cite this version:

Günther Schuh, Marcel Schwartz. Prerequisites for the Successful Launch of Enterprise Social Networks. IFIP International Conference on Advances in Production Management Systems (APMS), Sep 2017, Hamburg, Germany. pp.239-246, 10.1007/978-3-319-66923-6\_28 . hal-01666187

**HAL Id: hal-01666187**

**<https://inria.hal.science/hal-01666187>**

Submitted on 18 Dec 2017

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# Prerequisites for the Successful Launch of Enterprise Social Networks

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**Abstract.** The importance of social networks and, in particular, enterprise social networks in business contexts is increasing significantly. Regarding the prerequisites for a successful implementation of an enterprise social network, exclusively providing the technical infrastructure is insufficient. A holistic view that considers and integrates different perspectives is crucial for success. This includes technological, organisational and human aspects as equally important parts of the network. This paper identifies prerequisites for a successful launch of enterprise social networks and groups them along these three dimensions.

**Keywords:** Social network, social software, enterprise social network, socio-technical system, human-technology-organisation concept

## 1 Introduction

Technological developments have changed the way humans interact with each other. Replacing bilateral communication, e.g. on the phone, information is increasingly shared via social networks. Such networks have become a permanent feature in most of our private daily lives. Facebook counts 1.6 billion accounts, and 1 billion people use the instant messaging service WhatsApp. YouTube, Instagram, Twitter and Skype are also used by millions of people [1]. In 2015, a total of 2.14 billion people were active in social networks [2]. With some delay, social networks have also become more important in a business context: Companies like Microsoft, IBM or Deloitte have established enterprise social networks (ESN) to increase their ability to innovate as well as their employees' productivity [3].

Regarding future developments, the significance of enterprise social networks will keep increasing as more business leaders recognize their potentials to improve company internal communication, collaboration and innovation processes [4]. Those potentials include the following: ESNs allow to connect employees with each other according to specific needs. They help to reduce hierarchical barriers between employees and thereby improve knowledge transfer within the company [5]. All employees can be involved in the innovation process regardless of barriers of time or location. For these reasons, new solutions can be developed faster and with a higher chance of success [5]. Another aspect is that ESNs enable companies to uncover possibilities and risks earlier

than is possible within traditional hierarchical structures [5]. In addition, person-specific knowledge can be shared more easily [6]. In conclusion, ESNs have the potential to enhance the capability of companies to innovate and to increase work efficiency.

In order to exploit all existing potentials, the challenges associated with the launch of an ESN have to be addressed and overcome. This includes aspects such as data security [7], internal conflicts (e.g. conflicts with the works council or the company's management) [8], or unsuitable or lack of staff responsible for the operative management of the network [9]. The assumption that the only necessary step is the implementation of a suitable information and communications technology infrastructure and that employees will use the network without any further steps is considered untenable nowadays [10]. Many authors emphasize the importance of a structured network management which must be planned long before the IT infrastructure is implemented [9]. This leads to the central research question to be answered in this paper: What are the relevant prerequisites a company has to meet to successfully launch an Enterprise Social Network?

To answer this question, a short overview of the relevant definitions and the state of the art in related research is given, followed by a description of the applied methodology. Thereafter the research results are pointed out and thematically clustered. The paper concludes with a summary including some examples of how the relevant prerequisites can actually be met and an outlook on possible future research.

## 2 Definitions and State of the Art

In a business context, ESNs can be distinguished by both their purpose and target group. Regarding their purpose, ESNs can be differentiated by whether they focus on cooperation/collaboration or on innovation processes. In terms of target groups, ESN can be aligned with either company-internal or external users. Although the ESN typically has one of the above-named focuses, these are not necessarily exclusive, e.g. networks that focus on collaborative processes can also, as a side effect, foster innovation [11]. The application of ESNs mainly targeted at company-external stakeholders, e.g. to support customer relations, is increasingly important. This paper, however, focuses on ESNs essentially designed for company-internal users whose main purpose is to support processes of cooperation and collaboration[12].

The above categorization results from a socio-scientific and organisational perspective on the topic. Focussing on the technological aspect, the term 'social software' is used for web-based solutions that enable communication, cooperation, coordination and collaboration in the context of networking of people [13].

Both perspectives have to be considered as equally important. Consequently, ESNs can be interpreted as socio-technical systems which can be defined as systems that neither exclusively consist of technical (plant, machinery) nor of social (work and process organisation) sub-systems but rather of a combination of both system types [14].

The current state of the art in research on ESNs is shaped by different approaches that have a particular focus on either socio-scientific, organisational or technological perspectives concerning their implementation and utilization in companies. This paper, in addition, provides a holistic view of the topic that integrates and expands the results

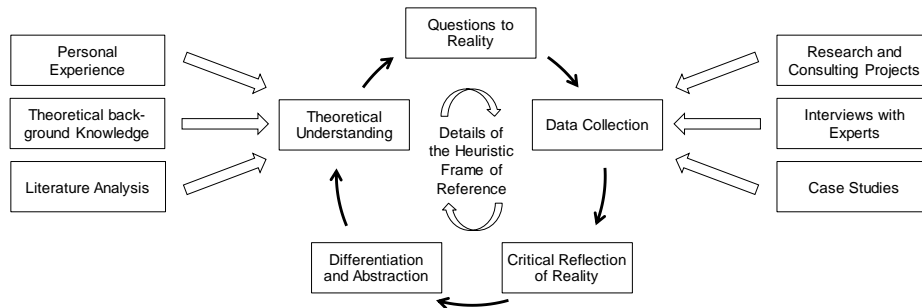
of existing research. Moreover, this paper can also be used as a guideline for companies seeking to implement an ESN.

### 3 Methodology

For the introduction of an ESN, a number of different challenges have to be met. Therefore a suitable reference framework has to be selected in which the factors for a successful launch can be structured and classified.

Following an extensive literature review, a holistic analytical approach to networks was chosen, based on the view of ESNs as socio-technical systems and, additionally, including the human element as a crucial factor. This approach, known as Human-Technology-Organisation Analysis, considers technology, organisational aspects and human individuals to be equally important parts of a well-functioning system. It places emphasis on the interactions between the individual elements and foregrounds the distribution of tasks between humans and technology (human-machine interface) [15].

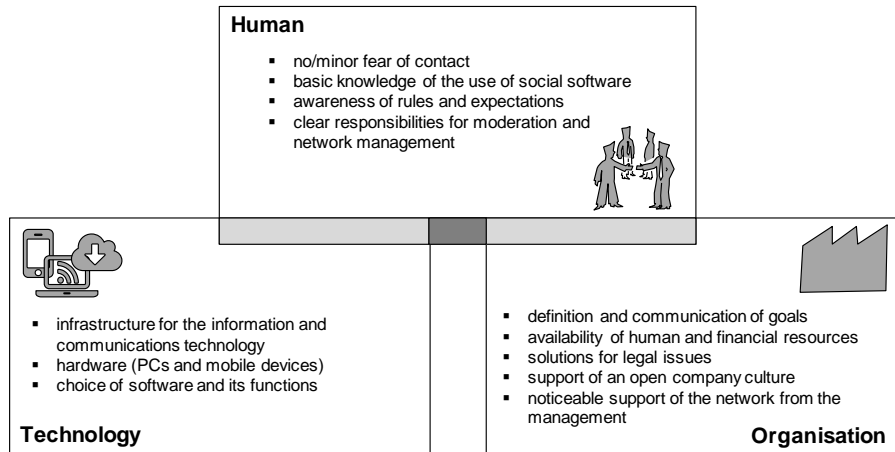
Applying Human-Technology-Organisation Analysis to the research of prerequisites required for a successful launch of an ESN, an in-depth literature research was carried out as a first step to gain a profound theoretical understanding. The results were discussed with experts from several companies of different sizes and business sectors that are very experienced in the application of ESNs. In discussions and workshops including structured interviews, using predefined questionnaires, it was tested whether the results represent actual company practices. As a next step, the results were further elaborated. The identified prerequisites were categorized along three dimensions and subsequently grouped into topic-specific clusters. This provides a systematic overview of the central aspects to be considered, which should be helpful to users later on. In order to ensure the correctness of the results, they were finally validated by experts. The entire process can be illustrated as follows [16]:



**Fig. 1:** Explorative Research Process [16]

## 4 Results

Following a Human-Technology-Organisation Analysis approach, the identified prerequisites for a successful launch of the ESN can be categorized along the dimensions of human, technology and organisation. The results, which are described in detail below, can be illustrated as follows:



**Fig. 2:** Prerequisites for a successful implementation of enterprise social networks, clustered following a Human-Technology-Organisation Analysis approach

### 4.1 Human Dimension

Within the human dimension, the prerequisites companies have to meet can be grouped into four thematic clusters.

First, employees should not be afraid of using the new ESN [7]. Reservations and anxieties about using the network may be due to various reasons: Possibly, they result from insecurity about new working methods which require sharing of non-finalised work results [17]. In addition, it is unusual for employees to comment publicly on their colleagues' or supervisor's work or to criticize it openly [8]. To overcome this, a positive and open error management must be established [13]. Employees may also be worried of losing control of their knowledge or of surveillance [8]. To prevent any complications, the company needs to alleviate worries that employees might have from the very beginning by establishing transparent work routines and structured communication [8]. Another prerequisite resulting from this is explained by Murschall [8]: "Members of staff should be prepared to let their sovereignty of information go and share their knowledge with others. If the employees participate actively in the network, its overall benefit increases and the network is more likely to be accepted by its users."

Another crucial requirement for success is that all affected employees have the basic knowledge needed to operate the new medium [8]. They need to know which functions offer what kind of benefits and what kind of content is useful to share. Additionally, it

is important to make decisions regarding the length, frequency and visibility of specific information that is shared via the ESN. At the same time, users also need to be aware of the benefits as well as the limits of the network [18]. It is important to know when a traditional telephone call or face-to-face meeting might be a better choice.

A further requirement for successful implementation is that there is fundamental clarity about and awareness of rules for members of staff [19]. Every employee needs to know how much time he/she should spend on using the ESN and what kind of information is to be shared to what extent [8]. In order to fulfil these prerequisites, companies should clearly define what they expect from the use of the network and communicate to the team the goals they want to achieve. This can be realized through participation, content, or code of conduct guidelines [20]. In addition, the benefits for employees must be clear to them, otherwise the ESN will not be used [21].

The network's success also requires that responsibilities for network management and moderation are defined early on [9]. There is now a consensus that the establishment and development of an ESN is a process that must be moderated and guided.

## 4.2 Technical Dimension

The technical prerequisites can be grouped in three thematic clusters. First, for the successful launch of an ESN, an appropriate infrastructure must be in place [6]. This includes the availability of a high data transmission rate and data storage capacity [21]. The ESN must be technically stable and react fast, if needed [9].

In terms of hardware, personal computers and/or mobile devices [22] will be required as well as servers [8]. Because of the increasing use of mobile devices such as smartphones or tablets, data can be saved on cloud-based servers [22]. Sensitive data or company secrets should, however, be saved on an extra server and have a unique decoding system for additional protection [8]. The firewall settings have to be adjusted so that mobile access is possible from outside the company's network.

Furthermore, the choice of software and software functions is an equally important prerequisite for the success of an ESN [20]. Companies may choose to use standard software, which is generally cheaper to acquire and offers basic but stable functions [6]. They may, however, also decide to develop their own software. This comes with a higher workload and effort but enables the company to implement specific functions according to their needs and to use company-specific vocabulary, if desired [6]. Regarding the design of the user interface of the network, it needs to make sure that important topics are highlighted and that a useful content structure exists [21]. All in all, the software should be easy and intuitive to use [13]. Moreover, it must be possible to extend the software and add functions, if necessary. This is crucial as the goals of the network may change over time [21]. From a technological point of view, it is also important to integrate the ESN into already existing websites and systems [23].

## 4.3 Organisational Dimension

Regarding the organisational foundations that need to be laid, five thematic clusters can be identified.

It is of utmost importance that the company sets specific goals for the use of the network [20]. This should hold a strategic value and benefit for the company [24]. It is important to communicate the business objectives with the help of participation, content, or code of conduct guidelines, for example [20].

An additional prerequisite is to make sure that human and financial resources are available when needed [20]. Among other expenses, costs will arise for managers and moderators of the network, IT managers, and for the purchase of hard- and software [10]. Furthermore, expenses for business trips, additional trainings or events that cover network-related topics may be necessary [24].

It is also mandatory to consider legal issues beforehand. One of the most important aspects in this context is the question of copyright. Additionally, industrial law and data security rights need to be considered [7]. The works council needs to confirm the appropriateness and agree to the use of the ESN [8]. Apart from this it is crucial that no company secrets are passed on to third parties [25].

In addition, a relevant factor for the success of an ESN is an open company culture [19]. To establish such a culture, organisational barriers need to be reduced. This means that hierarchical structures need to be transformed into connected network structures [18]. Members of staff need to be ready to trust each other and exchange ideas instead of keeping them to themselves to strengthen their own position [26]. An open work culture also means that employees are allowed to communicate constructive criticism across all hierarchy levels [8].

Eventually it is important for the participation of employees that the company's management exemplifies the use of the network [26]. Therefore, the visible support from executives is another factor for success [20].

## 5 Conclusion

In this paper, prerequisites for the successful launch of an ESN were identified. In order to illustrate them and to facilitate their use in practice, Human-Technology-Organisation Analysis was used as a frame of reference. The essential advantage of this approach is that related social, technical and organisational challenges are integrated and considered simultaneously. For each of the three dimensions, a number of prerequisites were identified and subsequently grouped into thematic clusters.

Within the human dimension, it is important to allay employees' fears of using the ESN and to enable them to use it by preparing them sufficiently, e.g. in personal talks with network managers, who should also serve as contacts if users need further support. In addition, the rules and requirements of the network need to be made transparent, e.g. by providing trainings or short marketing videos. Furthermore, persons responsible for the management and networking of members of staff are to be appointed. On top of that, one of the most crucial factors is to clarify the benefits of using the ESN for the users' everyday work.

Focusing on technological aspects, companies need to provide a suitable network infrastructure and hardware and select an appropriate software solution. In this context it is most relevant to ensure the usability of the software, especially if the age structure of the employees is heterogeneous.

Regarding the organisational dimension, the following aspects should be considered: The objectives that are to be achieved by using the network need to be defined and communicated to all those involved. It is necessary that personnel and financial resources are available and potential legal issues are clarified in advance. As a final and most relevant prerequisite for the successful launch of an ESN, the management has to support an open business culture and promote the use of the network, including actively using the network itself.

This paper can serve as a guide for enterprises willing to foster intra-organisational collaboration via ESNs, as it provides a structured overview of relevant prerequisites for a successful implementation. As the paper does not focus on the description and analysis of best-practice approaches of companies that have already successfully launched an ESN, this could be a topic for future research.

## 6 Acknowledgements

The research results presented in this paper were partly developed as part of the ToMiC research project. This project is sponsored by the AiF under the program for the promotion of industrial research and development (IGF) by the German Federal Ministry for Economic Affairs and Energy under the number 18508 N.

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