Power to the Network: The Concept of Social Business and Its Relevance for IC

Christian Zinke-Wehlmann, Julia Friedrich, and Vanita Römer

Abstract The concept of IC puts the employee, in its potential role as crowdsource, Campaign Owner or initiator into focus. This reflects the emancipatory and participatory principle that goes hand in hand with the concept of Social Business. The basic idea of Social Business is not to link the business success of a company exclusively to its management capabilities or the business plan, but to understand and value the individual stakeholder as part of a successful enterprise network. For Social Business, value is not exclusively understood as business value; rather, the perspective is expanded to include social added value, in the sense that the value of the work for the employee, society or the environment is considered as an indirect corporate goal. Thus, Social Business is defined as a framework or strategy that uses digital social networks (enterprise social networks) with the primary goal of generating social, ecological and economic benefits. This article introduces the Social Business reference model, which supports the adoption and implementation of the outlined strategy and contrasts it to the ICU Model in order to identify the strengths as well as weaknesses of both models.

Keywords Social Business · Enterprise social network · Collaboration · Business transformation · Internal crowdsourcing

1 Introduction

“Ultimately everything that can be social will be social” (Hinchcliffe and Kim 2012, p. 55). This quote from Dion Hinchcliffe and Peter Kim illustrates a trend that is becoming obvious in almost all facets of businesses. The rise of Web 2.0 transformed the World Wide Web from a static information source into an interactive space. Web 2.0 brought “new technologies (like web services, AJAX, RSS,

C. Zinke-Wehlmann (✉) · J. Friedrich · V. Römer
Institut für Angewandte Informatik e. V., Leipzig, Germany
e-mail: zinke@infai.org; friedrich@infai.org; vanita.roemer@infai.org

mashups), new types of applications (i.e. social software, like wikis, blogs, social networking), new patterns of interaction, and new principles of organisation (e.g. participation, wisdom of crowds) as well as new business models (such as long tail, webtop, etc.)” (Fuchs-Kittowski et al. 2009, p. 372). Today, social networks and social media platforms such as Facebook, Instagram, wikis and blogs are ubiquitous. They are used in daily communication and provide for an instant exchange of information. Their impact on opinion-forming and communication processes has been progressively growing in the last decade. According to the Global Digital Report, 45% of the worldwide population actively uses social media in their daily lives (We are social and Hootsuite 2019). The rapid development of innovative digital solutions has sustainably transformed how people communicate and exchange knowledge. With the rise of social media, the perception of social presence is determined by the degree of immediacy (Kaplan and Haenlein 2010). This popularity also has a clear effect on the expectations of employees regarding the processes at their workplace (Cook 2017, p. 15). Within the context of business communication, both in B2C and B2B, latencies are more and more perceived as unnecessary and unpleasant delays. This means that organizations are expected to respond quickly in order to satisfy their customers’ needs. Likewise, the fast and permanent availability of information in the sense of knowledge management is of high relevance for employees.

The described changes have created a demand for organizational requirements (Haiba et al. 2014, p. 111; Shirish et al. 2016, p. 1121) and a novel understanding of work approaches, e.g., for flexibility and digital skills. Innovative approaches like the results-only work environment (ROWE) approach (Kelly and Moen 2007, p. 496), the New Work movement (Hackl et al. 2017) or enterprise gamification practices (Rauch 2013) are tackling these demands and stand in contrast to the traditional culture of doing business and work. Accordingly, it is not exaggerated to say that Web 2.0 has revolutionized the world of business. Internal Crowdsourcing (IC), as a community (crowd)-driven process that promotes the creation of improved products and processes, is only one example for new collaboration processes within companies that are supported by social technologies like enterprise social networks (Turban et al. 2011, pp. 205) and illustrate their transformative power. Moreover, enterprise social networks (ESN) support:

- Communication (e.g. information dissemination or feedback or support)
- Management (e.g. recruitment or agile team building)
- Innovation (e.g. crowdsourcing, bulletin boards or social bots as problem-solving services)
- Knowledge management (e.g. acquisition of specialist knowledge, knowledge exchange or crowdstorming)
- Training and learning (e.g. training exercises or technical support)
- Democratization of work (e.g. open discussion or empowerment of employees)
- Collaboration (e.g. parallel editing of documents and project plans)

The concept of Social Business basically describes the idea of implementing social technology within the enterprise to pursue a holistic business strategy for

Fig. 1 The Social Business reference model

optimization with the aim of creating value from using network effects and removing “unnecessary boundaries between experts inside the company and experts in the marketplace” (Enache and Sbughea 2015, p. 11). In a broader sense, Social Business is a framework or strategy that is applied with the primary goal to generate a social, ecological and economic benefit.

To develop a broader scientific foundations and demonstrate the benefits of Social Business, the research project SB:Digital aims at providing support to companies that strive to proactively design internal corporate processes and networks by using social technology. The developed framework, which we refer to as the Social Business reference model (Fig. 1), includes a process model that guides enterprises through the transformation process, a maturity model that allows an analysis of a company’s status quo in regard to Social Business, a Social Business role model as well as a collection of best practices. Within this paper, this framework will be compared to the presented ICU Process and role model in chapter “Systematization Approach for the Development and Description of an Internal Crowdsourcing System” to enhance the knowledge about the general question concerning how digital social applications can be applied successfully.

The guiding research questions of this paper are:

- How can processes and roles of IC be interpreted in the context of Social Business?
- Can the roles and processes defined in the ICU Model for the concrete ESN application area of internal crowdsourcing also be transferred to the (meta-)level of Social Business?
- What are the strengths and weaknesses of each perspective and how can they benefit each other?

2 The ICU Model

In order to build a basis for a comparative analysis of the ICU Model and the concept of Social Business, we will give a brief summary of the basic principles that have been presented in detail in chapter “Systematization Approach for the Development and Description of an Internal Crowdsourcing System” of this book.

Following the literature, we define IC as “an (a) IT-enabled (b) group activity based on an (c) open call for participation (d) in an enterprise” (Zuchowski et al. 2016). In order to understand the processes that constitute the ICU Model, we need to distinguish the different levels on which communication and decision-making regarding the process are taking place. In accordance with Ulbrich and Wedel (see chapter “Systematization Approach for the Development and Description of an Internal Crowdsourcing System”), three levels of communication can be distinguished:

- **Macro Level: Overall Process**

On this level, the IC Process and its added value need to be justified and communicated at the decision level. It is important that the overall process can be aligned with the framework conditions of IC in the company as well as with the company’s short-term and long-term goals. The communication target group here is the organization’s management.

- **Meso-Level: Campaign**

This is where the core piece of the IC Process takes place: The topic and the strategy are defined and communicated to the relevant sections of the organization. These processes are described as “invisible” as they are not open to the whole community.

- **Micro Level” Community/Crowd**

On the micro level, the process phases happen in the community, which means among the employees. These are described as “visible” phases, as they include marketing and promotion processes as well as communication about the ongoing progress of the crowd activities.

2.1 Process and Roles of ICU

Within the ICU Model, a specification of the process phases, the process levels and the roles are given. With reference to the process model of Gassmann et al. (2013, 2017), Ulbrich and Wedel design a process sequence that can be applied to the specific ICU context. For them, seven steps are necessary in order to complete a cycle of ICU application. These are defined as follows:

1. Impetus
2. Decision
3. Conceptualization
4. Execution
5. Assessment
6. Exploitation
7. Feedback

First of all, an IC Process needs to start with an (1) impetus, which can be induced by any person working at any level of the organization. Ideas are addressed to the

Crowd Team (as described below), which then decides whether or not to consider the proposal as a following step. This (2) decision is made regarding the necessities within the organization and the availability, to take responsibility for the content ownership of the outcomes. If a proposal is accepted, a campaign is initiated, and, as a following and third step, a (3) campaign concept is designed. Within the concept, it is necessary to first define the aims and objectives, in order for the campaign to lead to a meaningful and useable outcome. Depending on the defined goals, the strategy is concretized, which includes a timetable, marketing strategy and the various implementation steps. Next, the planned process is (4) executed, which means that after the marketing strategy, the campaign itself is carried out under the supervision of a Campaign Team. Critical in that phase is IT management and content management. What is more, communication with the crowd/community is a crucial part in this phase. After implementation, the collected content needs (5) assessment, which means a proof of relevancy regarding the initially set goals. The output needs to be sorted and (6) exploited in regard to the initially set campaign aims. The outcome can also be taken as a starting point for a following campaign. Ultimately, in order to ensure the ongoing success of the campaign and of IC in general, a continuous and transparent communication throughout the whole campaign is a decisive aspect.

Crucial for a successful implementation of IC is a division and assignation of roles. In the ICU Research Project, an ICU Role Model was created, which is based on the *Scrum* procedure model but ultimately contains a bigger variety of roles. They can be divided into primary roles, the ones that are crucial for a successful implementation of an IC Process and secondary roles, which fulfil more supportive tasks. All representatives together make the so-called Campaign Team.

1. Crowd Master: Working on the macro level and meso-level, the Crowd Master is responsible for the general progress as well as the realization of the aims of the IC within the organization. Other functions are process monitoring and supporting the Campaign Owner in their task. The Crowd Master also has a connective key role as a representative of IC and promotes its implementation.
2. Campaign Owner: The Campaign Owner works at the meso-level and micro level and has a central function within the design and implementation of IC campaigns, connecting different perspectives and working closely with many others: Content Owner, Crowd-Technology Manager and the "Crowd". They have the responsibility for the overall design and execution, developing a campaign timetable, coordinating all activities and monitoring the entire process. Another central function of the Campaign Owner is to be disposable to the Crowd in case there are any questions or doubts. After ending the campaign, the Campaign Owner and the Crowd Master together make a preselection of the results.
3. Crowd-Technology Manager: As the Campaign Owner, the Crowd-Technology Manager works at the meso-level and micro level. They are responsible for the technological implementation of the campaign, as well as for designing and implementing the IT process and its various working phases (publishing the campaign, Crowdvoting, Crowdstorming, etc.). If there are any technological issues, the Crowd-Technology Manager can be contacted.

The secondary roles are crucial for the execution of the campaign, yet they do not have any directing functions. The Content Owner has the necessary expertise for the campaign topic and supports the Campaign Owner in developing the campaign design. Usually, but not necessarily, they are the one who initially proposed the campaign topic. Apart from the Content Owner, there are other supportive functions, called Secondary Counterparts. These roles are not fixed and can be represented by any expert that supports the Campaign Owner (e.g. the marketing department) or the Crowd-Technology Manager (e.g. the IT department) in the completion of their tasks. Finally, the role model describes the Crowd as the role that carries out the campaign tasks and brings in the content on which the results are based.

3 The Social Business Reference Model

In contrast to the ICU Model, as a process-oriented approach that supports a communication and innovation strategy within an enterprise, Social Business is a concept with a broader scope. As we defined earlier, the term “Social Business” basically describes the idea of implementing any kind of social technology within the enterprise to pursue a holistic business strategy for optimization with the aim of creating value in the meaning of social, ecological or economic benefit, from using network effects and removing collaboration barriers. While most of the enterprises nowadays use social technologies in their daily processes, the decision to use the technology with a strategic purpose requires a reflexion process. The Social Business reference model supports enterprises in the process of strategic reorganization.

3.1 Social Business Transformation Process

The first and major part of the Social Business reference model is the transformation process, illustrated in Fig. 2. It includes the Social Business maturity model. Overall, the process consists of four steps, which are outlined below.

Fig. 2 Transformation process towards Social Business

3.1.1 Step 1: The Status Quo Analysis—Maturity Model

Unlike IC, which can be understood as an encapsulated innovation process, Social Business is a holistic corporate strategy. In the case of Social Business, it is therefore necessary to broaden the view when considering prerequisites and framework conditions. Thus, the starting point for the Social Business transformation is a comprehensive status quo analysis. For this comprehensive analysis, we refer to the Human-Technology-Organization concept (Ulrich 2013; Strohm and Ulrich 1997), which is commonly used to examine sociotechnical operating systems. All three levels of an enterprise have to be examined in terms of their maturity. The levels are reflected in the five dimensions of the maturity model.

In the first place, the degree to which social technologies, e.g. ESN or enterprise blogs, and Web 2.0 functionalities, like media sharing or bookmarking, fit in the Social Business infrastructure of a company and are integrated, e.g. by creating interfaces for existing software systems, is reflected in the dimension of Social Business Technology. But the mere existence of technologies does not make a Social Business. Hence, the extent to which the applied technologies are used for collaborative processes within the enterprise (and beyond) is another indicator for the maturity and, thus, another dimension of the model. Furthermore, the (non-) existence of roles, which may be informal, due to a bottom-up evolutionary process, or ultimately a determined relevant factor of a Social Business strategy, is also a maturity indicator. Next to these technical and organizational aspects, the empowerment of the individual, a key element of the Social Business concept, has to be regarded. Thus, the individual's awareness in regard to enterprise collaboration, their ability to understand the effectiveness and benefits of Social Business and also their competence to identify challenges for Social Business are of high relevance. The last dimension of the maturity model looks at skills employees need to acquire to work in a self-determined network and collaborative environment. A lack of individual awareness and skills may result in a need for corporate trainings or campaigns. A summarizing overview of the dimension and the defined levels of the Social Business maturity model is given in Table 1.

An analysis of the maturity reveals weak points that stand in the way of a successful transformation and impede the adoption of the Social Business strategy.

Table 1 Social Business maturity model

Dimension	Maturity level			
Awareness	Lacking	Problem awareness	Process awareness	Responsibility
Skills	No SB skills	Understanding	Participating	Networking
Roles	No SB roles	Marketing-driven	Informal	Dedicated
Collaboration	Ad hoc	Team-wide	Company-wide	Network
Social Business infrastructure	No social technology	External services	ESN	Social software integration

As an example, an enterprise may have put a lot of effort into developing a technological architecture that integrates all types of social software. A lack of awareness on the part of the employees, who are the key elements of network-based communication processes, can nevertheless stand in the way of successful collaboration and thus achievement of the company's goals.

3.1.2 Step 2: Objective Definition

Based on the status quo analysis, it is necessary to define objectives that take into account the overcoming of any identified weaknesses. The objective definition is essential in order to initiate the right processes like awareness campaigns but also to choose the right technological instruments and indicators to measure the success of the approach. It is not necessary to limit the number of objectives. Of course, an enterprise might want to achieve higher efficiency in regard to knowledge management and information dissemination between its employees and, at the same time, establish a sustainability culture within the business park by using network technology to support commuting and change the mobility behaviour of their employees (Zinke-Wehlmann and Friedrich 2019). Whatever the objectives of an enterprise might be, it must be understood that the transformation towards Social Business is not a linear process, but an iterative one. This means that the objectives might not be achieved in total in the first attempt. Also, it might be necessary to adopt or completely change single objectives due to changing framework conditions. Basically, three different types of objectives should be distinguished. These are:

- Optimization of the existing
The existing or current status has a considerable potential and can be further optimized.
- Extension of the existing
Progress can be built on existing solutions and can therefore be connected to functioning solutions.
- New solution:
Something new has to be developed as previous solutions do not meet the new or existing target requirements.

3.1.3 Step 3: Design and Transformation Process

While the first two steps, status quo analysis and objective, can be understood as the theoretical foundation or initial phase, the design work begins in the third step. In the design phase, again, the three levels of individual, organization and technology should be considered.

From a technological point of view, it is crucial to design the network or social technology according to the formulated objectives and requirements. The elaboration of required technologies moreover includes an individualization of solutions

(branding, CI, adaptation of technical workflows to processes in the organization). And Social Business design on a technological level also includes other relevant points, such as:

- Determination of adaptability and distribution of rights of the solution for the employees
- Definition and regular check of data protection guidelines, compliance and deletion rules
- Planning feedback channels and linking to corresponding responsibilities
- Examination of integration possibilities and evaluation of their suitability
- Determination of an implementation strategy

In addition, on the organizational level, certain framework conditions, such as work design (Koch 2008, p. 423) or an empowerment culture (Turban et al. 2016, p. 183; Winkler and Schulman 2012, p. 3), support the successful implementation of Social Business. In general, the employee is to be understood as a central element in Social Business, keeping the collaboration process running and carrying it with their actions. For this reason, organizations should establish an empowerment culture which, for example, involves the transfer of responsibility. Likewise, an open leadership style that does not restrict employees through hierarchical structures is supportive for Social Business (Schönbohm 2016, pp. 264). Further relevant aspects on the organizational level are:

- Development of roles, participation mechanisms and transparency
- Identification of actors and responsibilities
- Definition of new processes
- Formulation of communication strategy and guidelines
- Identification of knowledge flows
- Planning success control, development of key figures and parameters

On the individual level, it needs to be clear that the more networking and social interaction takes place, the more work becomes flexible, and the higher the level of self-determination is. It is therefore necessary to enable employees to act in a self-determined manner and freely within the social network in order to see themselves as the relevant stakeholders they are. This brings new requirements to the corporate culture but, at the same time, new chances for motivation and growth. Training or communication campaigns within the company may be necessary to sensitize employees to this new way of working. Next to these measures, Social Business design on the level of the individual means:

- Identification of competencies and establishment of training mechanisms
- Creation of incentives for active participation (e.g. feedback channels)
- Positive framing of employees and work groups
- Demonstration of advantages and benefits

This shows that the design and transformation process must not be limited to the technological perspective but has to take framework conditions and individual needs and requirements into consideration.

3.1.4 Step 4: Implementation

The final implementation is the operationalization of the Social Business concept that has been developed. At the same time, it can be the starting point for another iteration of the design process that might be initiated by another status quo analysis and an adaption or reformulation of objectives. The regular evaluation of the chosen approach, both from a management and stakeholder perspective, makes it possible to ensure the success of Social Business. The collection of feedback also makes it possible to identify undesirable developments at an early stage and to initiate suitable countermeasures.

3.2 Social Business Roles

Within the Social Business reference model, a Social Business role model was developed, as it became clear that, for a successful transformation, (new) roles and responsibilities need to be defined and assigned. The model is built on an empirical study that was run during the project and which included an analysis of job advertisements, expert interviews as well as a large-scale survey. It is important to point out that a role is not equivalent to a person or a job position. There were six roles included in this model:

- Social Business Manager
- Content Manager
- Developer
- Communication Manager
- Community Stakeholder
- Executive

These roles were defined more clearly by assigning responsibilities and functions which already had been specified at an earlier stage of the research:

The role with the most extensive responsibility is the *Social Business Manager's* role. The responsibilities are located in many different sections of the organization. First, they are responsible for creating a Social Business concept and strategy as well as channels for collaboration. Apart from that, a Social Business Manager is responsible for designing and carrying out trainings that are needed in the transformation. During the entire process, another task is to analyse and report on the progress as well as to take care of the ongoing supervision and optimization of the social network.

The *Content Manager* is, as the name says, responsible for the research of information in order to provide a continuous creation of new and interesting content. They also develop new digital formats to present this content.

In Social Business, the *Developer* role contains the development of a suitable infrastructure (system integration, direct communication) as well as the development and supervision of chat applications.

Another central role is represented by the *Communication Manager*, who is essential for the direct and overall communication regarding Social Business within the organization or company. They act as a contact point to where questions and doubts of the community can be directed. By doing that, and with the creation and supervision of feedback channels, the Communication Manager collects and reports the employees' needs. Generally, they plan and carry out communication campaigns and issue guidelines and best-practice reports for internal communication.

The *Community Stakeholder* role is not further defined. Community members have no directly assigned responsibilities. Instead they are allocated supportive duties when it comes to reporting their needs, promoting a supportive corporate culture, attending and collaborating in trainings and developing the employees' autonomy.

Finally, the *Executive's* role works more on the basis of the transformation. This person is responsible for promoting a supportive company culture as well as promoting and supporting the employees' autonomy. They also need to facilitate employee participation.

3.3 Guidelines and Good Practice

The piloting within the research project created the opportunity to collect a number of examples of good practice for Social Business. Some of these were:

- The early involvement of works councils in order to create transparency and gather broad requirements at an early stage.
- Consider the data protection requirements of all stakeholders (business internal and external) right from the start.
- Define dos and don'ts for the network communication.
- Set incentives for the users (work facilitation, mechanisms of peer recognition).
- Failure is part of the (iterative) process.
- Create an infrastructure for digital collaboration that really meets the stakeholders' needs (create feedback channels).
- Strengthen the self-organization of employees.
- Give employees space and allow self-determination.
- Defining goals at all levels.
- Think and execute processes more flexibly.
- Neglect instructions and provide support and structure.

Moreover, we strongly recommend the tenets of Hinchcliffe and Kim (2012) as well as the recommendations given by Haiba et al. (2014).

4 The Relationship Between the ICU Model and Social Business

If we consider the levels of the two concepts, we can see that IC can be understood as one iteration in the transformation process towards Social Business. If IC is a concrete setting for Social Business, then a Social Business reference model could represent a metamodel for the ICU Model. The present article will, in the following, describe a comparative analysis of both models presented to point out the strengths and weaknesses of both models and suggest how both can be improved by complementing each other.

First of all, the paper will start with a small classification of IC within Social Business. For this purpose, the following framework (Table 2) is suggested. Aspects that are affected by Internal Crowdsourcing are marked green.

Due to the width of their scopes, both concepts set a different focus. The ICU Model is a precise and process-oriented model that supports the strategic conceptualization and realization of various topics relevant to the company. The strength of ICU lies in its precisely defined process model, which guides enterprises through the whole crowdsourcing process. Moreover, the description of dedicated roles helps to quickly assign responsibilities and, thus, get the process rolling. However, precisely at this point, i.e. the start of the process, a weakness of the model becomes apparent. Other than the reference model for Social Business, the ICU Model does not define any prerequisites. The presented state-of-the-art ICU Model is a campaign-based process; it starts with an impulse targeted at a specific (existing) team. There are some preconditions for this process:

1. First of all, to generate any IC impulses, previously a critical mass of employees/managers has to be aware of the potentials of IC and handle the IC-IT.
2. Some kind of a technical basis has to be set to realize this process.
3. Thirdly, there needs to be a community structure (roles and responsibilities) that can be addressed by the crowd.
4. In order to assure a successful implementation, there has to be an existing management strategy for IC.

Thus, the proposed ICU Model does not focus on the strategic development of IC; it is about the practical implementation and change processes of IC. That might be one reason why the analysis of the conditions does not have a prominent place within the model. However, the very detailed development process for each campaign and the general role model is one of the strengths of the ICU Model. Obviously, the model is highly content-driven and goal-oriented—which means that not the foundation for IC is addressed, but rather the IC design and implementation. Accordingly, the process ends with the campaign.

While the ICU Model proposes a detailed design and implementation process, the SB concept mainly focuses on an analytical part and comes with general guidelines for design and implementation. The proposed process is a strategy to apply a high variation of Social Business applications within organizations. Thus, the main focus

Table 2 IC in the context of SB

Social Business						
Main business function	Innovation	Collaboration	Management	Knowledge management	Training and learning	
Effects on	Idea and content creation	Communication activities	Work organization	Knowledge exchange	Learning activities	Democratization of work
Process	Campaign-based processes			Continuous transformation processes		
User	Intra-organizational		Customer-oriented	Cross-organizational		
Roles	Determined (top-down)			Evolved (bottom-up)

Fig. 3 Analytical comparison of Social Business reference model and ICU Model

of the SB concept lies in the development of enabling factors for digital collaborative processes based on specific starting conditions and strategic objectives (as well as operative objectives). The definition of objectives as well as the design of the transformative process mainly targets the three dimensions of the maturity model: human, organization and technology.

Obviously, both models meet at the design and implementation phase but on different levels. While the ICU Process is content-driven and seeks to define goals and practices for the concrete campaign, Social Business aims to design and implement the transformation to enable such processes like IC. Thus, the Social Business reference model builds the framework in which concrete steps on different application areas can be initiated and realized. Thus, it creates an environment for IC in general and the ICU Model in particular. The relationship between both models is illustrated in Fig. 3.

What can be seen is that the Social Business transformation process sets the preconditions to start a collaboration process—for example, the IC Process – and supports a structured processing by defining responsibilities and associated roles. In addition, by evaluating the human and technology dimension, the Social Business reference model enables organizations to define measures to develop required IC tools as well as create awareness and skills to finally get the ICU Process started.

4.1 Benefits for the ICU Model

The Social Business reference model propagates the idea that you never start a digital collaborative process on the greenfield and that it is also never enough to develop and implement an IT tool in order to be successful. Being successful always includes considering all affected levels: human, organization and technology. Within

this view, an ICU Model is a resulting collaborative model—as an output of the design phase. And the implementation of such processes and roles means a successful implementation of Social Business. Thus, Social Business can support processes that enable IC within a company—creating awareness, skills and the technological basis and applying processes, like the ICU Reference Model.

4.2 Benefits for Social Business

The ICU Model impressively demonstrates the needs for defined collaboration processes and role models within the organization for the design and transformation process and validates the presented SB concept. Moreover, it also shows the importance of content-driven processes, besides the required transformation processes. Keeping the transformation also on content level and engaging the users is important, as well as to develop a communication strategy for all organizational and process levels, like the ICU Model does.

4.3 Roles and Processes

The design of new processes for novel digital collaboration depends on the character and goals of the aspired Social Business application—that is the reason why the Social Business transformation process does not give any further advice for reference processes. The question is whether the ICU Reference Model also provides a generic process for a campaign-based Social Business application. The ICU Process starts with an impulse or a crowd-based trigger. For campaign-based scenarios, this is not always the case. There are existing campaign-based applications that allow a campaign to be launched based on a time consideration (such as monthly campaigns for changing situations) or a certain event (e.g. social-learning activities). Thus, an impulse or a crowd-based trigger is not a strictly necessary but rather an optional process component. Nevertheless, it is clear that every campaign has to be designed—to set goals, communication measures as well as various implementation steps. These campaigns are mostly analysed but on different levels. It is not always good to measure and analyse all activities at management level, because this can create mistrust and feelings of surveillance. Much more productive might be feedback mechanisms for the users (and only for the users) – which can be part of the analysis. This is also valid for debriefings/feedback and exploitation. Even if the crowd or the community is very productive, it is very important to include the stakeholders in the activities, especially for analysis, exploitation and the debriefing.

Furthermore, the ICU Model indicates a communication strategy for different levels of stakeholders. While the Social Business reference model up to now has only referred to the formulation of a communication strategy and provides some guidelines (or principles), the IC Model can enhance this recommendation.

Table 3 Synergetic functions of ICU and SB roles

ICU	Synergetic function	Social Business
Crowd Master	<ul style="list-style-type: none"> • Representative of the Social Business activities • Develops the overall concept, including transformation activities • Supervises the community • Supports the Community Manager • Sets goals and realizes benchmarking 	Social Business Manager
Campaign Owner	<ul style="list-style-type: none"> • Develops and implements content-driven processes • Has to design, carry, foster and coordinate the Social Business communication activities and projects • Monitors compliance with communication guidelines • Collects and reports community needs 	Communication Manager
Technology Manager	<ul style="list-style-type: none"> • Is responsible for development of a suitable infrastructure 	Developer
Content manager	<ul style="list-style-type: none"> • Creates and maintains contents • Fosters and maintains community-driven content creation • Integrates and distributes content 	Content Manager
Crowd	<ul style="list-style-type: none"> • Brings in needs and information 	Community Stakeholder

Communication and promotion are very important success factors; thus, the communication strategy is important on different levels (micro, meso, macro). However, digital collaboration and enterprise social networks also foster the democratization. This also involves the opportunity to soften hierarchies within the collaboration process because a crowd includes all actors within an organization on every level and each idea needs to be appreciated, whether it comes from the CEO or from a random employee. Even more, management and team or group leaders need to be active—it is also a success factor for cross-cutting collaborative activities (Schiller and Zinke-Wehlmann 2019, p. 49).

The third important insight of the presented comprehensive analysis results from the comparison of the developed role models. While, from the perspective of Social Business, a general distinction is made between community-driven roles and organizational roles, the ICU Model concentrates on formal roles by adapting agile schemas. This makes sense, because it seems to be very clear that IC is an agile process. However, the importance of informal roles needs to be considered, because of the digital power of influencers as well as trolls to affect the success or failure of the campaign. To enrich both models, the following fundamental functions of the developed roles will be described in detail (see Table 3).

5 Summary

To finalize the work, we will give a brief answer to our introduced research questions.

Table 4 Strengths and weaknesses of the compared models

	Social Business	ICU
Strength	<ul style="list-style-type: none">• Generalized approach suitable for a lot of social applications• Highly focused on analysis and enabling of social application• Gives a framework	<ul style="list-style-type: none">• Detailed processes and implementation advices for IC campaigns• Focused on holistic communication activities• Gives practical advices
Weakness	<ul style="list-style-type: none">• High-level model, with high efforts to specify (not content-driven)	<ul style="list-style-type: none">• Has some prerequisites

- How can processes and roles of ICU be interpreted in the context of Social Business?

As described, both models work on different levels and prerequisites. From the authors’ view, the ICU Model is one instance of Social Business, with the condition that the presented ICU roles, processes as well as some kind of technical infrastructure and a basic understanding (awareness and skills) are given within the organization applying ICU. Thus, with an assumed medium to high Social Business maturity, the ICU Model is a perfect reference to implement IC campaigns successfully.

- Can the roles and processes defined in the ICU Model for the concrete ESN application area of internal crowdsourcing also be transferred to the (meta-)level of Social Business?

With the help of a small framework, parts of the ICU Process Model can be integrated into the Social Business context. One of the key results is the synergistic role understanding for both, the ICU and the Social Business model, presented above.

- What are the strengths and weaknesses of each perspective and how can they benefit each other (Table 4)?

6 Outlook

The work finally shows the strong connection between Internal Crowdsourcing and Social Business. Both are growing approaches in organizations—triggered by the New Work movement, democratic demands of the employees and the forces for organizations to win the war for talents as well as the economic benefits of digital collaborations. However, there is a need for organizations to develop and implement IC as well as general Social Business applications within their specific organizations, with specific goals. Mostly, these models imply a top-down approach, where management actively develops such digital collaboration schemas. In contrast to these approaches, a lot of initiatives develop from the bottom up. Most impressively,

the Working Out Loud¹ scene demonstrates how to boost a democratic culture within an organization. Researchers need to be very aware of these movements, as well as the social impact these tools bring into an organization. The integration of Social Media into business processes is a double-edged sword, and all stakeholders need to be aware of these two edges. On the one edge, you have the principle of equality and that every voice matters, which strengthens the democratic character of work. On the other side, the possibility of bullying and novel forms of discrimination are also very relevant.

Acknowledgement The work leading to this publication was funded by the German Federal Ministry of Education and Research under grant number 02L15A070 (Project: SB:Digital). The authors would like to express their thanks for this funding.

References

- Cook N (2017) Enterprise 2.0. Routledge, London
- Enache MC, Sbughea C (2015) Social business models. arhtra.ugal.ro
- Fuchs-Kittowski F, Klassen N, Faust D, Einhaus J (2009) A comparative study on the use of Web 2.0 in enterprises. researchgate.net
- Gassmann O, Friesike S, Häuselmann C (2013) Crowdsourcing: Eine kurze Einführung. In: Gassmann O (ed) Crowdsourcing.: Innovationsmanagement mit Schwarmintelligenz: interaktiv Ideen finden, kollektives Wissen effektiv nutzen, 2nd edn. Hanser, München
- Gassmann O, Friesike S, Daiber M (2017) Crowdsourcing Methode und Prozess. In: Crowd Entrepreneurship (ed) Harald Pechlaner and Xenia-Isabel Poppe. Springer Fachmedien Wiesbaden, Wiesbaden, pp 23–39
- Hackl B, Wagner M, Attmer L, Baumann D (2017) Große Veränderungen und Ansätze für eine Neue Welt der Arbeit. In: Hackl B, Wagner M, Attmer L, Baumann D (eds) New Work: Auf dem Weg zur neuen Arbeitswelt. Springer Fachmedien Wiesbaden, Wiesbaden, pp 1–46
- Haiba M, El Bassiti L, Ajhoun R (2014) Toward enterprise 2.0: Opportunities, weaknesses and best practices. *Int J Bus Manage Study (IJBMS)* 1(3):108–113
- Hinchcliffe D, Kim P (2012) Social business by design: transformative social media strategies for the connected company. John Wiley & Sons, Hoboken
- Kaplan AM, Haenlein M (2010) Users of the world, unite! The challenges and opportunities of social media. *Bus Horiz* 53(1):59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kelly EL, Moen P (2007) Rethinking the clockwork of work: why schedule control may pay off at work and at home. *Adv Dev Hum Resour* 9(4):487–506. <https://doi.org/10.1177/1523422307305489>
- Koch M (2008) CSCW and enterprise 2.0: towards an integrated perspective. BLED 2008 proceedings
- Rauch M (2013) Best practices for using enterprise gamification to engage employees and customers. In: Hutchison D, Kanade T, Kittler J, Kleinberg JM, Mattem F, Mitchell JC, Naor M, Nierstrasz O, Rangan CP, Steffen B, Sudan M, Terzopoulos D, Tygar D, Vardi MY, Weikum G, Kurosu M (eds) *Human-computer interaction. Applications and services*. Springer, Berlin, pp 276–283

¹<https://workingoutloud.com/blog/a-recipe-for-changing-your-corporate-culture>

- Schiller C, Zinke-Wehlmann C (eds) (2019) Social Business: Studie über den Einsatz interner sozialer Netzwerke in Unternehmen. Fraunhofer Verlag, Stuttgart
- Schönbohm R (2016) Enterprise Social Networks (ESN): Keimzelle agiler Unternehmen. In: Rossmann A, Stei G, Besch M (eds) Enterprise social networks. Springer Fachmedien Wiesbaden, Wiesbaden, pp 247–275
- Shirish A, Boughzala I, Srivastava SC (2016) Adaptive use of social networking applications in contemporary organizations: Examining the motivations of Gen Y cohorts. *Int J Inf Manage* 36 (6):1111–1123. <https://doi.org/10.1016/j.ijinfomgt.2016.04.002>
- Strohm O, Ulrich E (1997) Unternehmen arbeitspsychologisch bewerten. vdf, Hochschulverl. an der ETH Zürich, Zürich
- Turban E, Bolloju N, Liang T-P (2011) Enterprise social networking: opportunities, adoption, and risk mitigation. *J Organ Comput Electron Commer* 21(3):202–220. <https://doi.org/10.1080/10919392.2011.590109>
- Turban E, Strauss J, Lai L (2016) The social enterprise: from recruiting to problem solving and collaboration. In: Commerce S (ed) Efraim Turban, Judy Strauss and Linda Lai. Springer, Cham, pp 181–203
- Ulrich E (2013) Arbeitssysteme als Soziotechnische Systeme – eine Erinnerung. *J Psychologie des Alltagshandelns* 6(1):4–12
- We are social, and Hootsuite (2019) Global digital report 2019. <https://wearesocial.com/global-digital-report-2019>. Accessed 29 February 2020
- Winkler C, Schulman SA (2012) Social business: an emerging Entrepreneurship research focus. *Entrep Res J* 2(4). <https://doi.org/10.1515/2157-5665.1089>
- Zinke-Wehlmann C, Friedrich J (2019) Commute green! The potential of Enterprise social networks for ecological mobility concepts. In: Camarinha-Matos LM, Afsarmanesh H, Antonelli D (eds) Collaborative networks and digital transformation. Springer, Cham, pp 128–139
- Zuchowski O, Posegga O, Schlagwein D, Fischbach K (2016) Internal crowdsourcing: conceptual framework, structured review, and research agenda. *J Inf Technol* 31(2):166–184. <https://doi.org/10.1057/jit.2016.14>

Dr. Christian Zinke-Wehlmann is the Leader of the Service and Knowledge Management group at the Institut für Angewandte Informatik (InfAI). He works in the field of sociotechnical support systems at the interface of work, technology and service systems and focuses on design-oriented research, human-technology interaction, digital collaboration platforms, empirical social research and the development of complex service systems.

Julia Friedrich holds a Master's Degree in the Study of Religions and Indology. She is a Research Associate at the InfAI's Service and Knowledge Management research group. Her primary research focus is the field of human-computer interaction. The results of her research which, besides Social Business, are mainly concerned with knowledge management and gamification, have been published in international journals and at conferences.

Vanita Römer is a Student Assistant at the Service and Knowledge Management group at InfAI. She brings first-hand experience in the implementation of social networks in enterprises and combines this with her expertise in the field of cultural studies.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.