Designing an Enterprise Social Questions and Answers Site to Enable Scalable User-to-User Support

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Abstract. Nowadays, the information technology infrastructure within organizations is getting more and more heterogeneous. Recent trends such as bring-your-own-device or choose-your-own-device satisfy user requests for diverse devices they already know from their private life. On the other hand, following these trends results in an increased complexity of the organizations' infrastructure and a substantial rise in required effort for supporting users. In order to address this increased support demand, the establishment of a user-to-user support culture seems promising. An established concept to provide user-to-user support is the concept of social questions and answers (SQA) sites. SQA sites have been shown to be successful in the private context. Users can seek and provide knowledge and thereby support each other. This paper presents the design and evaluation of an enterprise SQA platform aiming to support employees in solving problems with processes or technologies. Building on already derived design principles, we discuss the design and implementation of the SQA prototype within an existing Customer Relation Management platform. The resulting system was then evaluated within five focus group sessions with professionals from various industries. The evaluation results show the validity of our design principles and the usefulness of the implemented prototype.

Keywords: BYOD · User-to-user support · Social questions and answer sites

1 Introduction

Only few years ago, companies' information technology (IT) infrastructures have been adapted to organizational rather than individual needs [1]. Thereby, organizations maintained control over devices, access points, interfaces and security controls. However, such rigid IT infrastructures are no longer up-to-date due to increased mobility and people are becoming more and more tech-savvy. Even in their private life, people started to solve problems and fulfill tasks with the aid of *"complex and relatively large-scale individually owned IS"* [1, p. 252]. Now, they are transferring their IT experiences collected in private life to organizational settings [2]. In doing so, people prefer to adapt their IT landscape not only to their tasks and problems, but also to their skills and experiences. Another reason why rigid IT infrastructures are outdated is the increased mobility resulting in an increased amount of remote work and

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people remain connected [3] not only with their friends and family, but also with their colleagues. Thus, the borders between private and professional life are getting blurred. When companies insist to maintain standardized IT infrastructure, their employees are forced to wear multiple devices and separate their two worlds. The separation of private and professional life, however, can result in loss of efficiency [3]. In order to address these trends, companies should adapt their IT infrastructure to more flexible forms in order to meet the needs of their employees.

Examples for such modern and flexible strategies are bring-your-own-device (BOYD) respectively choose-your-own-device (COYD) initiatives [4]. By applying these strategies, employees are able to choose their preferred technology for work purposes by themselves. However, in addition to obvious challenges such as security issues, BYOD respectively CYOD also result in a high heterogeneity of a company's IT landscape. As Gens et al. [5] already highlighted *"more devices, times more apps, equals exponentially more complexity for IT support"* [5, p. 4]. In private life, people deal with their need for support by consulting experts and expertise for example via the internet. In social questions and answers (SQA) sites users give support to each other and can receive expert assistance [6]. While SQA sites perfectly fit to explorative problem solving, they are inadequate to support specific problems, e.g. in the context of organizational processes. SQA sites base on indirect communication resulting in a delayed assistance. However in companies, ad-hoc problem solving is often necessary in order to achieve efficiency and effectiveness. Nevertheless, we strongly believe that SQA sites can address the issues of BYOD and CYOD strategies when adapted to organizational needs. Therefore, our research aims to design an enterprise SQA site that allows to support employees to handle not only technological issues related to a highly heterogeneous IT landscape, but also to fulfill their tasks and solve their work-related problems by applying the IT of their own choice. Consequently, our research aims to answer the following research question:

How to design an enterprise SQA site to enable efficient and effective user-to-user-support for employees?

The remainder of this paper is structured as follows: In Chapter 2, we will briefly discuss the related work on social software in organizations and SQA sites. After describing our research methodology in Chapter 3, we will present in Chapter 4 the design of our enterprise SQA platform by discussing the meta-requirements and design principles and outlining the implementation of the platform. In Chapter 5, we report the evaluation of our platform before discussing its results in Chapter 6. Finally, we will utilize Chapter 7 to reflect our research, its limitation and to outline our future work.

2 Related Work

2.1 Social Network Sites in Organizations

Every organization operating in the online and/or offline space should be aware of social media [7]. Social media categorizes a group of applications or web sites, building

on concepts such as Web 2.0 and user generated content. Social media enables people to form online communities and to share their knowledge [8]. The term 'social network sites' is generally associated with the web-based services allowing users to construct a public or semi-public profile maintaining a list of other users they are connected to and the possibility to browse these user connections within this network of users [9]. Using the concepts 'social network sites' and 'social media' within organizations is considered as 'enterprise social software' [10].

Various scholars investigate the usage and acceptance of social software in organizations as well as private settings. Some of this research (e.g. [11], [12]) applied established constructs from technology acceptance literature (such as TAM [13] or UTAUT [14]) to explain the users' intention to use the social software on an individual level. Other researches, for example Zhou and Lu [15], found that one important antecedent for the acceptance of social software is the perceived network size, such as the total number of members of the social software or total number of peers of the user. The total number of peers in turn was found to influence the perceived usefulness and the perceived enjoyment of the investigated platform [16].

The usage behavior in the context of social software has also been analyzed on a group level with respect to the we-intention to use the system (see [17], [18]). In his study, Muller [19] identified two use types of enterprise social media: the passive ("lurking") and active ("contribution") usage. On the contrary, Pöyry [20] differentiate between participation and browsing as social media use types in a private context. Whereat, the adoption of social software depends on a balanced mixture of both use types ("lurkers" and "contributors"), the participation in social software often follows the 90-9-1 rule meaning that 90 percent of the users are pure consumers ("lurkers") while 9 percent are contributing few content and 1 percent contributes the lion share of content [21]. Therefore, the contribution and sharing of user generated content (such as knowledge) is an antecedent of the success of social software. The attitude towards the sharing of knowledge is positively influenced by subjective norms and a sense of self-worth [22].

2.2 Social Questions and Answers Sites

Harper and Raban [23] distinguish three types of internet-based questions and answers sites: (1) Digital reference services, (2) Expert services, and (3) Social Question and Answer (SQA) sites. SQA sites are defined as "*a Web-based service for information seeking by asking natural language questions to other users in a network*" [24]. They leverage the time and effort of everyday users to ask and answer questions [23] using various algorithmic strategies to allow for collaborative assessment of the quality of the submitted content [25]. SQA sites typically focus on individuals' information needs and do not explicitly consider the collaboration information accumulation of a group [25]. Many SQA sites have little structural or role-based organization, but share characteristics of online communities. These sites have a base of regular users who engage in off-topic discussions, reply to another instead of just asking or answering questions or take the role of a moderator [23]. Gazan [26] identified two roles of question answerers on SQA sites (specialists and synthesists) and two types

of questioners (seekers and sloths). Specialists are knowledge experts who provide answers without referencing other sources, while synthesists are the ones who do not claim any expertise and provide answers with references to existing solutions. Seekers demonstrate active engagement with the community and pursue communication regarding their questions. Sloths do not pursue further interaction with community members after receiving answers to their questions [26].

Other researchers focus on design characteristics of SQA sites and their evaluation with regards to usage behavior and answer quality. For example, it has been shown that systems which prevent social interaction among users suffer from underuse or were abandoned outright [27]. In contrast to this, the prominent example of an SQA site Yahoo Answers[1] has been found to be successful, because of its sophisticated reward features which intensify the user participation [24]. However, Yahoo Answers and some of its design characteristics have been critically evaluated and discussed in research. The feature to allow exactly one answer as best is a potential weakness, because there could be several answers which may be equally good or even better for a given question [28]. Another feature of Yahoo Answers, the possibility to annotate previous answers, contributes to a higher user engagement as it creates a sense of collaborative information seeking [29].

3 Research Design

In order to design an SQA site which enables an user-to-user support in an organizational context, our research applied the design science research (DSR) approach [30]. Thereby, we followed the design research cycle methodology as introduced by Vaishnavi and Kuechler [31]. The methodology defines five sub processes, which are executed iteratively: (1) awareness of problem, (2) suggestion of key concepts to address the problems, (3) development of a solution design, (4) the evaluation of the solution and (5) the conclusion to decide which elements of the solution to adopt.

Aiming to identify key requirements on the enterprise SQA site – also called meta-requirements [32] – we analyzed key literature already existing in related research areas. Next, we investigated existing SQA solutions existing in the internet to identify typical capabilities and derive design principles. Based on the design principles accounting for public SQA sites, we suggested additional principles that need to be considered in an enterprise SQA site. In the third step of the design cycle, we applied the identified design principles to develop an enterprise SQA instance in the form of a prototype. The final design was implemented as an extension module of an existing customer relationship management (CRM) software package in cooperation with a software company being the practice partner of the DSR project. Having a solid prototype, we initiated the evaluation phase. Therefore, we presented the prototype to several focus groups being formed by representatives of various companies. In this focus groups, the participants were asked to discuss the usefulness of each design principle. The findings were used to further refine the design of the enterprise SQA site.

[1] https://answers.yahoo.com/

4 Solution

While we intensively discussed the first two steps (awareness of problem and suggestions of key concepts to address the problems) of the DSR cycle in another article (see [33]), this article presents the design of the enterprise SQA site and its evaluation. In order to give the reader an overview, we will briefly summarize our key findings, before describing the artifact and its evaluation in detail.

4.1 Awareness of the Problem

In order to understand the problem domain (being the first step of our DSR project), we consulted existing literature on challenges of SQA sites. SQA sites implemented in private contexts are – as outlined in the related work section – subject of research. However, for organizational contexts we did not find any design principles informing the design of an enterprise SQA site. Therefore, we identified research areas that can inform the design of our solution based on existing research related to public SQA sites.

Table 1. Meta-requirements of an Enterprise SQA Site

Meta-Requirements		Exemplary Sources
Knowledge Management	1: Provision of an integrated access to both, experts and externalized experience e.g. in form of documents	[34]–[37]
	2: Monitoring of user context in order to provide access to knowledge based on current needs	
Social Networking	3: Information of users with regard to changes in the SQA site in order to speed up the support process by pointing out recent changes	[26], [38]–[41]
	4: Implementation of measures for self-regulation in order to increase the overall quality of both, structure and content	
Social Presence	5: Stimulation of users to include many social cues in their profiles by providing users enough room for self-expression	[9], [35], [42]–[45]
	6: Provision of options for direct communication reflecting the continuum for basic text message functions up to the technological state-of-the-art	
Motivation	7: Inclusion of emotional, gameful design elements that activate user behavior to support the use objectives of the platform	[19], [46]–[48]
	8: Provision of gamified services that lead to a new cognitive, emotional, social use of the core functionalities	

In total, we identified four main research areas: The first research area being of interest for our design is the knowledge management research field, since the SQA platform aims to serve for knowledge exchange and transfer in order to support employees in solving their problems. Because the platform connects its users for communication and knowledge transfer, we identified research and theories related to social networks as the second important stream. In order to motivate users of an organizational SQA platform, we also investigated various research fields examining important antecedents of user participation in such networks. Thus, a third research

field being of interest related to social presence, since the feeling of human warmth and sociability plays a major role in social networks. Another modern way of ensuring motivation to participate in social platforms is the implementation of emotional and affective functionalities (e.g. by Gamification mechanisms).

Based on the four research fields, we identified in total eight meta-requirements that need to be considered when designing an organizational SQA site. While an extensive discussion of the literature and the identified meta-requirements can be found in [33], summarizes the meta-requirements and some exemplary sources identified in the four **Table 1** research areas.

4.2 Design Principles

Having the meta-requirements, we identified in a next step the design principles for an enterprise SQA site. Thereby, we approached two steps: First, we analyzed popular SQA sites in the internet and extracted the principles behind their design. Second, we again consulted the literature to derive the design principles for an enterprise SQA site.

In total we identified 24 design principles – 18 extracted from public SQA sites and six additional design principles examined by analyzing existing literature. The analysis of the popular SQA sites like stackoverflow.com or yahooanswers.com and the identification of additional design principles being important for an enterprise SQA site is presented in [33]. **Fig. 1** provides an overview on the identified design principles (DP).

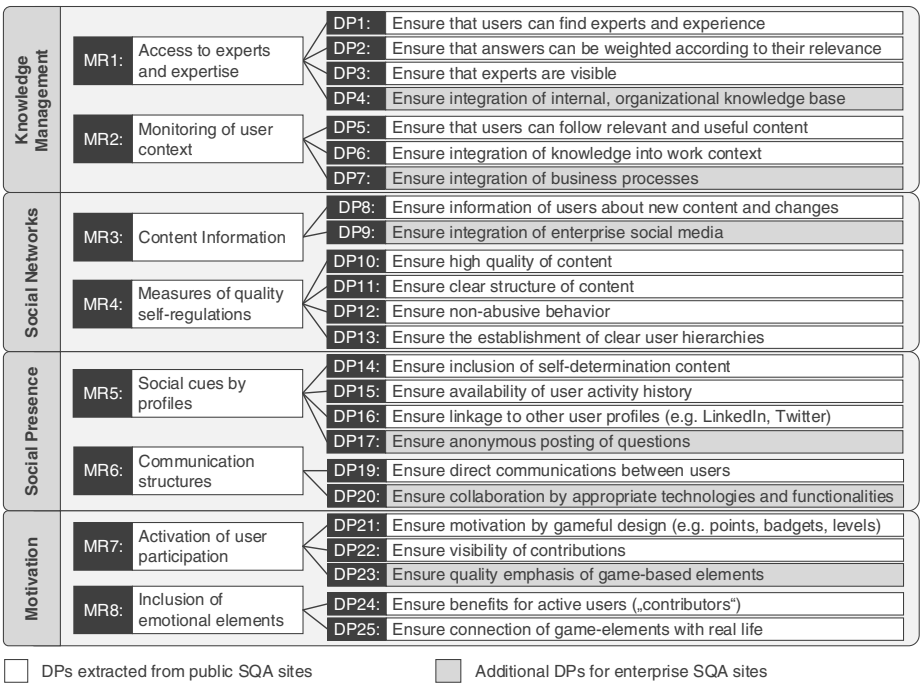

Fig. 1. Design principles for an Enterprise SQA Site

4.3 Design Decisions and Artifact Realization

While the formulation of the design principles serves for providing guidelines for an class of IS, the third phase of the DSR cycle specifically aims to create the solution to a problem through a more concrete specification of the functionality and architecture [49]. Therefore, we translated the design principles to design decisions being concrete functionalities of the enterprise SQA artifact. In the following paragraphs, the key design decisions are described and illustrated by screenshots (see **Fig. 2** and **Fig. 3**) of the realized enterprise SQA artifact.

The core element of the enterprise SQA site is the *multi-dimensional matching algorithm*, since it links knowledge seekers to appropriate knowledge providers. Thereby, the multi-dimensional approach aims to address different problem dimensions. Gorelick and Tantawy-Monsou [50] realize two main problem dimensions: either people are struggling in using the technology, or they have difficulties in performing the processes facilitated by the technology [50]. In order to address the large variety of problems, the matching algorithms has to monitor the context where the user experiences issues. Therefore, a *categorization of the problem context* is necessary where the characteristics of a problem will be specified.

In our SQA artifact, the system automatically illustrates in which problem context the user can find existing solutions (marked by a yellow question mark). After clicking the yellow question mark, selection of various given contexts is provided where the user can refine the context he/she is interested in. In addition, the user is able to specify the problem context by selecting additional characteristics provided in a check-box list. Based on the categories, the enterprise SQA artifact is able to match

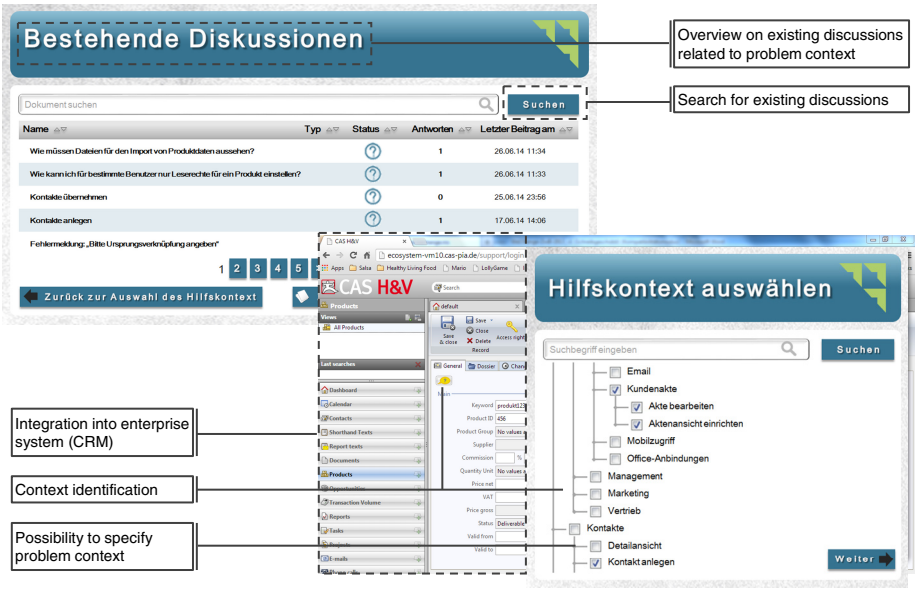

Fig. 2. Screenshots of the Enterprise SQA Site and context-related functionalities

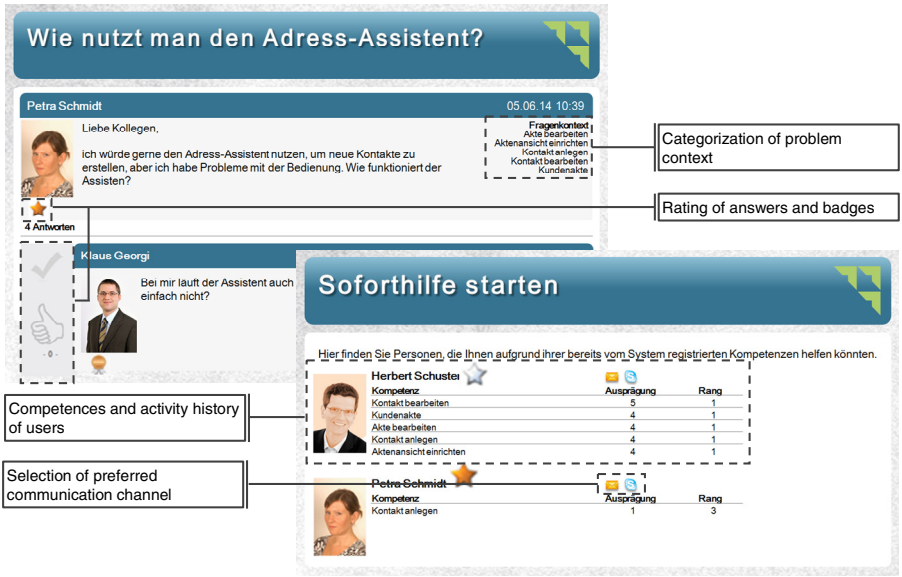

Fig. 3. Screenshots of the Enterprise SQA Platform and the profile-related functionalities

the current problem to categories and characteristics of existing solutions. Because the platform does not only connect knowledge seekers to experts, but also documented knowledge, a *connection to the enterprise knowledge base* is required. In our artifact, the connection has been realized due to the integration of the SQA site into the process-centric application system (particularly the CRM system of the practice partner) being connected with the enterprise knowledge base.

Further functionalities being important for the matching algorithm are the feedback and rating mechanisms. Based on these mechanisms a high quality of provided content can be realized [51]. Another advantage of feedback and rating functionalities is the improved matching of the problem context with users of the system being experts for the current context. In combination with the tracking of users' activities, the rating functionality marks a user as an expert. Each time a user provides an answer to a problem which is then marked as valuable, the solution provider will receive points of competence in his/her profile. In consequence, the more actively the users are contributing to and participating in the platform, the better will be the matching algorithm. Thus, the matching algorithm operates similar to a recommender system, where information are provided based on the ratings of other users and users' past behavior [52].

Based on the results of the matching algorithm, a list of users who can potentially support the knowledge seeker will be provided including their preferred *channels of communications*, which are stored in the user profile. **Fig. 3** depicts two screenshots illustrating the realization of the multi-dimensional matching algorithm.

5 Evaluation

5.1 Methodology

In order to evaluate the design principles, we implemented a qualitative approach using focus groups. Stewart et al. [53] define a focus group as *"a moderated discussion among six to twelve people who discuss a topic under the direction of a moderator whose role is to promote interaction and keep the discussion on the topic of interest"* [53, p. 600]. Scholars identified focus groups as an appropriate method for DSR artifact evaluations, in particular for enhancing the artifact design, and demonstrating the artifact's utility [53]. Focus groups can take an exploratory stance if their main purpose is to incrementally improve an artifact design, or a confirmatory stance if their main purpose is to confirm the utility of the design [54]. Our implementation of the focus group approach followed the proposal of Tremblay et al. [54] with the slight modification that we set a stronger emphasis on the confirmation of the utility of the design principles rather than their improvement. Thereby, our evaluation focused on the design principles being identified as an additional guideline for enterprise SQA platforms (in particular: DP4, DP7, DP9, DP17, DP19 and DP22). Altogether, we conducted five focus groups. The focus groups consisted of participants from different industries, including car manufacturing, software engineering and consulting. Each focus group comprised between three to eight participants and all of them were familiar with CRM systems. The majority of the participants were end-users of the CRM system, mostly sales and back office personnel. In particular, some of the focus groups even were customers of the practice partner of the DSR project. In order to consider additional perspectives, we also made sure that each focus group included IT professionals, such as IT support employees. Each focus group was held on premise of the corresponding company. Each session started with a 30 minutes introduction to the prototype and a subsequent question and answer session. Afterwards the participants discussed each design principle. The moderator guided the discussion by making sure the participants remained focused and that each design principles was addressed properly.

Collected data included audio recordings of the whole session and notes that were taken during the sessions by two researchers. Subsequent to each focus group discussion, the data were analyzed and key findings and statements were extracted and linked to a particular design principle. Similar statements were then grouped and generalized. Afterwards, we applied the dimensions of the SWOT matrix to categorize each statement as a strength, weakness, opportunity or thread. While the first two dimensions provided confirmatory input in whether the design principles had the anticipated utility, the latter two dimension provide exploratory insights into potential improvements of the artifact design.

5.2 Findings and Discussions

The evaluation of **DP4 – integration of organizational knowledge base** – supported the need for the integration of user-to-user support with organizational knowledge

management. Participants criticized the increasing heterogeneity of current knowledge management solutions in their companies which requires additional effort to identify relevant documented knowledge. With regard to the integration of the user-to-user support by the yellow question mark in the Enterprise System, one participant stated *"When individuals face problems, it can happen that they feel alone; maybe they even cannot cope with clicking a button or opening another support system."* Some participants argued that a platform which centralizes and standardizes access decreases the effort of finding existing knowledge and in turn would become more useful to them. The focus group discussions further shed light on the type of knowledge required. Besides immediate knowledge to a particular problem, the participants expressed their need to access supporting knowledge, for example, manuals or process descriptions that allow them to better understand the context of a problem. However, participants also pointed out various issues related to amount and relevance of the documented knowledge. In particular, outdate knowledge poses a significant thread to the usefulness of the platform. The management of the actuality of the knowledge should be supported or handled by the system. The participants suggested several opportunities for improvement, such as alerts requesting the knowledge provider to update the knowledge item or the possibility to mark knowledge items as invalid. In her work, Allee [55] already realizes that knowledge *"has a limited shelf live and can quickly become obsolete"* [55, p. 10]. Therefore, researchers [e.g. 56] of the knowledge management community suggest to consider the maintenance as an important process phase within the knowledge management process. Thereby, feedback and rating mechanisms can ease the maintenance of knowledge, since these mechanisms enable the identification of knowledge that is rated by other users as important and up-to-date, while outdated knowledge will be rated as less important [57].

The evaluation of **DP7 – integration of business processes** – was two-fold. On the one hand, participants consider the integration of user-to-user support into the business processes as a major strength. A participant underlined this strength by stating *"A big advantage – I see – is the direct linkage to the knowledge base so that I can jump from the process I am actually working at to the according discussion – to the 'world of information'"*. In general, the participants argued that the easier it is for users to ask a question, to seek support, and/or to answer a question, the greater will be the acceptance and motivation to use the platform. In contrast to this, participants criticized the categorization of the problem along the proposed dimensions. First, they argued that the need to manually adjust or extend the semi-automatic categorization of a problem creates additional effort, and therefore may create additional barriers to seek or provide help. This barrier to seek or provide help will be even higher if the usability of the implementation is poor, according to a participant. Another point of critique was the current granularity of problem categorization. The opinions within the focus groups varied on the optimal level of granularity. Participants raised the concern that a low level of granularity might result in an unspecific set of problem solutions, where at a high level of granularity might be too specific to find appropriate solutions to a problem. Summed up, the design principle was perceived as useful. However, the details of its implementation require additional reasoning regarding usability, and can furthermore benefit greatly from advanced recommender algorithms to classify a problem.

The focus group also confirmed the necessity of **DP 17 – anonymous posting of questions**. Participants argued that such a feature will lower the barriers to ask and answer questions in an organizational context. They reason that knowledge seekers or experts can avoid potential negative consequences if they are not exposed to the organization in their posts. However, the focus groups also pointed out that anonymity impedes the evaluation of the quality of posts because users do not know the person providing the solution and therefore require an alternative quality indicator.

All focus group discussions confirmed the integration of enterprise social media (DP 9) as well as the provision of appropriate technologies and functionalities for collaboration (DP19) for the usefulness of the enterprise SQA site. According to the focus groups, many knowledge seekers, for example less tech-savvy users, feel more comfortable when solutions are explained systematically. The main weakness of these design principles are the potential distraction from actual work. The possibility to imitate a direct communication between knowledge seeker and knowledge provider can lead to a high amount of communication requests for distinguished knowledge experts, resulting in less time for their actual work. Participants remarked that experts should be able to select whether they are available for direct communication or prefer non-direct communication methods. Additionally, some focus groups suggested different levels of escalation in which direct-communication serves as the last resort when no other support, such as manuals and documented users posts, is available or sufficient to solve the problem at hand.

The evaluation of **DP23 – quality emphasis of game-based elements** – showed that the majority of the participants view game-based design elements as generally beneficial. The focus group discussions highlighted in particular the importance of the checkmark mechanism to validate the helpfulness of the provided knowledge. However, the groups evaluated the ranking of experts derived from the checkmark mechanism critically. Here, they remarked that companies could easily abuse the information on competences to identify incompetent users. While most participants agreed with regard to the potential risk of assessing employees purely based on their participation at the enterprise SQA site, one participant commented *"As I understood the system, I first formulate a question and then receive a list of users listed in keeping with the motto: 'Based on their experiences, these users can help you'. Thus, in fact there is no assessment of people"*. Nevertheless, despite the apparent importance of the rankings for the selection of an expert from a list of potential experts, most focus groups rather prefer fewer exposed details, even though their own capability to select an appropriate expert for direct communication suffers. Interestingly, the participants where less worried about the information on competences stored in the system than about the information on competences visible in the user interface. Furthermore, the participants suggested that users are also incentivized for continuous contributions to the platforms, for example, by designating badges or states. Thus, as already realized by researchers such as Lawley [58] or Laschke and Hassenzahl [59] the participants recognize the need to connect the gameful elements implemented in the system with a real-world outcome being meaningful for its users and the organization. Failing to do so will result in the opposite effect, the "pure pointification" [60] will not sustainably increase the users' participation in the system, as shown by Thom et al. [61].

To summarize, enterprise SQA sites are perceived as beneficial, since the IT infrastructure and the IS landscape is getting more and more complex and the SQA site actively supports employees in fulfilling their tasks. The support platform acts as a mediator between knowledge seekers and knowledge providers as well as between knowledge items and individuals. Consequently, the presented version of the enterprise SQA is desired by all participants of the focus group workshops. One participant, being a customer of our practice partner, even declared to introduce the enterprise SQA in his company in order to test the long-term effects of the platform because he was entirely convinced by the SQA usefulness for his company. Consequently, we forwarded the feedback collected in the focus groups to our industry partner in order to improve the design of the SQA platform.

6 Conclusion

In this paper, we present our research on the design and evaluation of an enterprise SQA site. While there exists quite some SQA sites for the private context (also referred to as public SQA), we could not identify research reporting the design of a SQA platform for an organizational context. In order to design an enterprise SQA site, existing knowledge on the design of public SQA cannot be used directly. Instead, the existing knowledge needs to be adapted and additional requirements addressing the specialties of the organizational context need to be considered. Therefore, we identified design principles for an organizational SQA site (also referred to as enterprise SQA site) by analyzing public SQA sites and literature discussing related concepts. Based on the identified design principles we designed a prototype of the enterprise SQA site being integrated in an Enterprise System offered by our practice partner. In our evaluation phase, the resulting enterprise SQA site has been assessed within five focus groups where participants provided feedback on the strengths, weaknesses, opportunities and threats of the design with regard to the underlying design principles.

At the moment, our practice partner refines the enterprise SQA by integrating the feedback received in the focus group. Subsequently, the enterprise SQA platform will be implemented within the company of one focus group participant. Because the participant was delighted to be integrated in the design and development process of the enterprise SQA platform, he agreed to conduct follow-up research within his company. Therefore, we plan to conduct a longitudinal study observing the usage of the refined enterprise SQA platform, the quality of the content (e. g. knowledge items) provided in the system, and users' satisfaction with the system.

We are aware that our research comes with some limitations. First, the design principles has been evaluated in a qualitative approach by conducting focus groups. While the application of focus groups is a feasible approach in order to receive first indications of strengths and weaknesses of the system, a long-term study is necessary in order to investigate the effects of the platform with regard to its real usage. We plan to mitigate this limitation in the next cycle of our DSR project by conducting a longitudinal study in the mentioned case company. Another limitation refers to the limited generalizability of our research results. At the moment, the design principles are

extracted from public SQA sites and literature of related research areas, and qualitatively evaluated. However, in order to make statements regarding the generalizability of the design principles further research is needed.

Although having some limitations, we perceive our research as a valuable contribution for both, researchers and practitioners. Our research extends the existing body of knowledge by introducing evaluated design principles for an enterprise SQA platform. To our knowledge, there are currently no attempts to design enterprise SQA platforms in research. However, we perceive the implementation of such a platform as beneficial, since it addresses the issues stemming from modern IT infrastructure strategies of organizations such as BYOD or CYOD. Due to such strategies, the IT infrastructure in companies is getting increasingly heterogeneous making the support for employees from a technical and a procedural perspective highly complex. Consequently, our research addresses issues being relevant for practitioners. In addition, by evaluating our artifact within focus groups consisting of different representatives of practice, our research follows the call of Peffers et al. [62] for more research in collaboration with practitioners. By integrating practitioners in the evaluation and (re-)design phase, design theories can demonstrate their applicability in real-world environments [62]. The conducted focus group evaluation reported in this paper is the first step in proving the applicability of our findings on enterprise SQA in a real-world environment.

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