INFLUENCERS OF DIGITAL TRANSFORMATION: A NEW CONCEPT OF USER PARTICIPATION IN IS PROJECTS

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INFLUENCERS OF DIGITAL TRANSFORMATION: A NEW CONCEPT OF USER PARTICIPATION IN IS PROJECTS

Research Paper

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Abstract

Influencers are very common in online marketing. Our study claims that the influencer concept can also be applied to digital transformation projects. Influencers of digital transformation projects may contribute to visualise the benefits and to convince the end users of these projects. Therefore, we introduce the “influencer” as a new concept for user participation and investigate how it enhances the conversational key-user concept. We conducted an explorative study in small and medium-sized enterprises (SMEs), which implemented either the key user or the influencer as participation concepts for digital transformation projects. We explored the relevance of influencers, by highlighting the differences of both concepts (i.e. influencer and key user) in terms of focus, role, motivation, communication, function, direction and objective. Finally, we investigated the success factors of digital transformation in this influencer concept. Based on our results, we formalise the influencer concept enabling the further implementation within organisations.

Keywords: Influencer, Exploratory research, User participation, Project management, IS project, Key user.

1 Introduction

On the Internet, influencers play an important role. Whether it is on Instagram, YouTube, or Facebook – they inspire or influence other people in their purchasing decisions for products (Brown & Hayes, 2008). Regardless of whether the consumer’s decision concerns the next holiday trip, the new cosmetic product, or the latest computer game, influencers have become one of the decisive factors in online marketing. The metaphor of a fisherman is often used to explain the effect of influencers (Brown & Hayes, 2008). The fisherman casts a big net to catch more fish. In terms of influencers, this means identifying those who have a large network and thus reach social communities so that as many people as possible can be influenced.

User participation is commonly defined as activities performed by users during system development (Barki & Hartwick, 1994a). Thereby user participation can have a positive impact on the success of an information system (IS). For example, it was shown that there is a positive link between user participation and user satisfaction (Kujala, 2003; Mckeen & Guimaraes, 1997), system quality (Lin & Shao, 2000; Melchor & Chaparro, 2008) as well as user acceptance (Bachore & Zhou, 2009). Two main types of user groups can be distinguished: end users and key users (Wu & Wang, 2007). End users are the ultimate users of an IS (Wu & Wang, 2007). Key users are IS users who are assigned to support other end users in the immediate work environment and who, for this purpose, participate during system development and cooperate with organisational as well as external specialists (Maas et al., 2016). Key users are typically software experts (Maas et al., 2016) and act as educators, trainers, advisors, and change agents (Wu and Wang, 2007). The participation of key users in the development process can significantly affect the success of an IS (Pan & Mao, 2013).
The concept of influencers can also be applied to IS projects. Subtypes of IS projects are information technology (IT)-enabled organisational transformation and digital transformation projects (Wessel et al., 2021). According to Wessel et al. (2021), IT-enabled organisational transformation projects leverage digital technology in supporting the value proposition and enhance an existing organisational identity. However, digital transformation projects in contrast leverage digital technology in (re)defining an organisation’s value proposition and involve a new organisational identity.

In our study we propose a new concept for user participation, the “influencer” and investigate how it enhances digital transformation projects. To this end, we look at small and medium-sized enterprises (SMEs) and their efforts to successfully address digital transformation. Since SMEs have more limited resources compared to large organisations, the challenges of digital transformation are more difficult to meet (Li et al., 2018; Weigel et al., 2020). Therefore, SMEs are dependent on finding a compatible path of digital transformation. We argue that influencers of digital transformation projects can help to make the benefits of these projects directly visible in the daily work and can convince end users of the project and its goals. This might lead to a better acceptance of IS projects in SMEs and can thus maintain the competitiveness of SMEs.

Therefore, we raise the following research question (RQ):

RQ: What are concepts of user participation in digital transformation and how do they differ?

Our study follows an explorative research approach. First, we use the existing literature on user participation and key users to gain a deeper understanding of the topic. Subsequently, we briefly introduce the concept of champions, which seems to be similar to the identified influencer concept. Then we interviewed a total of 11 people with a semi-structured guide. Our results show that the influencer concept has the potential to revolutionise SMEs’ approach to digital transformation. We discuss our results by deriving practical and theoretical implications. Furthermore, we emphasise the limitations of our study and identify avenues for future research.

2 Related Work

2.1 User participation

User participation can be defined as “participation in the development process by a member or members of the target user group” (Olson & Ives, 1981, p. 2). User participation enables users of an IS to interact with system designers and aid in many aspects of the system development process: planning, analysis, design, testing, and implementation (Lin & Shao, 2000). While some scholars use the term “participation” interchangeably with “user involvement”, others differentiate between these two terms (Harris & Weistroffer, 2009): For example, (Lin & Shao, 2000, p. 285) define user participation as “a behavioral construct (the degree of participative behaviors of users during the development process)” and user involvement as “a psychological state reflecting the importance and personal relevance that a user attaches to a given system” (Harris & Weistroffer, 2009) suggest that user involvement encompasses user participation, including both, hands-on and psychological contact during system development. We refer to (Barki & Hartwick, 1994a, p. 60) and use “user participation” when referring to “the assignments, activities, and behaviors that users or their representatives perform during the system development process” and the term “user involvement” when referring to “a subjective psychological state reflecting the importance and personal relevance that a user attaches to a given system”.

Barki and Hartwick (1994b) identified two research streams on user participation: The first research stream investigates the impact of user participation on system development outcomes, e.g. system quality, use, and satisfaction (e.g. Hartwick and Barki 1994; Ives and Olson 1984). The second research stream investigates interpersonal processes, i.e. intervening and mediating the relationship between user participation and system outcome (e.g. Bostrom 1989; Robey et al. 1989). More recently, Schermann and Merz (2018) highlighted the role of user participation in a variety of project tasks including engineering, user training, and system adoption, as the predominant research stream (e.g. Hsu et al.
2008; Coughlan and Macredie 2002). Furthermore, research identified the relationship between user participation and adoption of IS (e.g. Hartwick and Barki 1994) as well as the role of user participation in the context of information security risk management as important research streams (e.g. Spears and Barki 2010).

Literature confirmed that user participation is expected to have a positive impact on the implementation and ultimate success of an IS (Cushing, 1990; Hunton & Beeler, 1997). It was shown that there is a positive link between user participation and user satisfaction in IS development (Kujala, 2003; McKeen & Guimaraes, 1997). Markus and Mao (2004, p. 535) propose that the quality of engagement by business professionals is important because “participation richness is related to [both] solution development and solution implementation success”. Moreover, it was pointed out that user participation can increase system quality (Boland, 1978; Lin & Shao, 2000; Melchor & Chaparro, 2008). It is confirmed that user participation can increase user acceptance of the system (Bachore & Zhou, 2009; Kujala, 2003) and that IS developed with user participation better match requirements and specifications than systems designed solely by IS professionals (Barki & Hartwick, 1989). Moreover, literature demonstrated that user participation creates a feeling of ownership to the IS, whereby user resistance will decrease and user commitment will increase (Lynne, 1983).

2.2 Key user

There are two main types of user groups: key users and end users (Wu & Wang, 2007). Key-user groups are “the main groups of direct users of the IS – those users who access the system directly or who use its direct outputs” (Gable et al., 2008, p. 387). They are selected from the operating department (Mahdavian & Mostajeran, 2013). As part of an IS project team (Wu & Wang, 2007), key users represent the involved business units, have domain knowledge, and have extensive software knowledge (Pan & Mao, 2013; Maas et al., 2016). In contrast, end users are the ultimate users of the IS. Their knowledge is limited to the part of the IS they need for their work (Wu & Wang, 2007).

Key users are involved in almost all stages of IS implementation projects (Mahdavian & Mostajeran, 2013): During the development phase, key users are the developers of the requirements of the IS (Mahdavian & Mostajeran, 2013). During the implementation phase, they are involved in the tests needed for implementing the system (Rizoto-Vidala-Pesoa & Kuznecova, 2017). During the roll-out and hand over phase, key users function as specialists in parts of the IS and act as trainers, help-desk resources, advisors and change agents for end users (Rizoto-Vidala-Pesoa & Kuznecova, 2017; Wu & Wang, 2007). However, most of the key users still fulfil their on-going business functions (Maas et al., 2016).

The relevance of key users was highlighted by Pan and Mao (2013). The authors mentioned four reasons why key users are critically important for system success: First, as representatives of the involved business units, their acceptance of the IS is a precondition for the system’s success. Second, one of the key user responsibilities is to provide business knowledge which is required for system configuration to ensure the fit between the IS and the respective business. Third, key users, as representatives of their business units, support business units’ managers in important system decisions. Fourth, key users are a prerequisite for effective knowledge sharing among multiple stakeholders, e.g. vendors, consultants, and end users from different business functions.

2.3 Champions

The role of champions was identified by (Schon, 1963) in a seminal article on radical military innovation. Schon (1963) claims that champions who identify the innovation as their own, promote the innovation actively and vigorously through informal communication channels. They risk their position and prestige to ensure the innovation’s success, and this is the key to overcome indifference and resistance that major technological change provokes.

Champions in terms of organisations are defined as individuals who informally emerge in an organisation (Howell & Higgins, 1990) and “who made a decisive contribution to the innovation by
actively and enthusiastically promoting its progress through critical stages in order to obtain resources and/or active support from top management.” (Roure, 1999, p. 4). Their primary focus is to “make a decisive contribution to the innovation process by actively and enthusiastically promoting the innovation, building support, overcoming resistance and ensuring that the innovation is implemented” (Howell & Higgins, 1990, p. 40).

Champions are often proposed as a means to promote the adoption of IS (van Laere & Aggestam, 2016). To accurately reflect the nature of IS, to capture the non-technical aspects that are seminal to successful IS innovation and to precise “critical stages” and “top management”, the definition of Roure (1999) was refined by Renken and Heeks (2019, p. 835) for the IS discipline: They defined champions as “any individual who makes a decisive contribution to the socio-technical innovation by actively and enthusiastically promoting its progress through critical innovation and diffusion stages in order to obtain resources and active support from all stakeholders.” Their primary focus therefore is to circumvent or push the innovation beyond approval and implementation barriers (Beath, 1991). By promoting their personal vision actively and vigorously, champions express confidence in the innovation, involving and motivating others to support the innovation and persisting under adversity (Beath, 1991; Howell & Sheabb, 2001). Renken and Heeks (2019) derive three characteristics to refine who IS champions are and what they do: First, IS champions focus on long-term results rather than short-term obstacles and therefore have a strategic vision about successful project outcomes and even beyond. Second, they focus on relationships to promote ideas, rally support and build consensus. Third, IS champions focus on resources by actively identifying and mobilising resources needed to advance the project.

3 Methodological Approach

3.1 Research design

This research is based on 8 interviews (5 individual interviews and 3 focus group interviews) with a total of 11 participants, conducted between January and March 2020. The interviews lasted between 40 and 60 minutes. Focus group interviews were sought whenever a participant had been employed in an organisation for a few years only (<=5 years). It could be assumed that these participants had not yet fully experienced the participation opportunities due to their low organisational affiliation and, thus, the evaluation might be limited. When making the appointment, we asked whether there was a supervisor or colleague who could also take time for the interview. In the case of K-1, the response to our interview request was the organisation’s IT expert. In response to our question about the supervisor, he additionally invited the managing director. In the case of K-3, the Chief Financial Officer (CFO) agreed to conduct the interview with us, who additionally invited the IT expert. Participant K-4 felt able to answer all the questions himself and independently, which was true. In interview I-2, participant 1 had been in the organisation for 2 years only, whereupon he invited a colleague with more years of organisational affiliation. The interviews followed an exploratory approach to find out how concepts of user participation are used in the organisation to successfully implement the digital transformation. Originally, we wanted to better understand the concepts of user participation in SMEs. However, we came across a new type of user participation, the “influencer”. In our interviews, it became clear that 4 respondents followed this new innovative approach.

We used a two-step approach to scientifically investigate user participation in IS projects. In a first step, we asked open questions, such as “What is your management structure in the organisation?” and “How did you organise the responsibilities in the organisation, especially the IT-related decisions?” In this process we discovered the role of the organisational influencer. Based on this, we were able to further develop our semi-structured interview guide in the second step. The interview guide was supplemented by specific questions, e.g. “To what extent are you involved in the projects?” and “Explain how the position of the influencer came about?”. This gave us insights from different perspectives of user participation, namely from the organisations that use a key-user concept and those that use the influencer concept. The explorative character of this study is based on instruments of the grounded theory coding methodology.
3.2 Data collection and analysis

All interviewed organisations have in common that they are active in the German industrial sector and are to be classified as SMEs. This combination enabled us to obtain different perspectives on the implemented user participation concept. Table 1 gives an overview of the conducted interviews.

<table>
<thead>
<tr>
<th>Interview</th>
<th>Used Concept</th>
<th>Age</th>
<th>Position</th>
<th>Work experience in years</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-1-1</td>
<td>Key user</td>
<td>45</td>
<td>CEO</td>
<td>20</td>
</tr>
<tr>
<td>K-1-2</td>
<td>Key user</td>
<td>40</td>
<td>IT</td>
<td>5</td>
</tr>
<tr>
<td>K-2-1</td>
<td>Key user</td>
<td>49</td>
<td>CEO</td>
<td>23</td>
</tr>
<tr>
<td>K-3-1</td>
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<td>51</td>
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<td>2</td>
</tr>
<tr>
<td>K-3-2</td>
<td>Key user</td>
<td>64</td>
<td>IT</td>
<td>30</td>
</tr>
<tr>
<td>K-4-1</td>
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<td>50</td>
<td>CEO</td>
<td>5</td>
</tr>
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<td>10</td>
</tr>
<tr>
<td>I-1-1</td>
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<tr>
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<td>Influencer</td>
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<td>Sales</td>
<td>2</td>
</tr>
<tr>
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<td>Sales</td>
<td>6</td>
</tr>
<tr>
<td>I-3-1</td>
<td>Influencer</td>
<td>46</td>
<td>Sales</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 1. Overview of the respondents

We started with the open coding method using the software MAXQDA (Corbin & Strauss, 1990; Glaser & Strauss, 1967). Two of us read the transcribed interviews and applied independently the open coding method. The sentences and paragraphs were assigned code phrases that best represent the content. Next, similar codes were collected from the interviews and converted into the axial code. In this coding paradigm, the experiences and characteristics of the influencer concept could be captured and mapped. For instance, for the following quotation: “I always think from the customer’s point of view because in the private customer sector it is almost normal for the customer to configure something like this digitally.” (Interview I-1), two independent codes (“customer orientation” and “customer as digital native”) were found. Finally, “customer orientation” was used as the axial code. Subsequently, the axial codes were grouped by subject areas. Different opinions were discussed with the third researcher and settled by agreement. We ended the data collection phase after all researchers had agreed that there was a low probability that significant new insights could be generated by additional interviews.

When analysing the user participation concepts in the interviews, some text passages could be clearly assigned to the key-user concept. In other text passages we found significant deviations from this known concept. Whenever we found deviations from the key-user concept known from the literature, we noted them. One interview partner (I-1) called his approach the influencer concept. After reviewing the commonalities of the interviews (I-1 to I-3) it became clear that we had found a new concept of user participation. However, interviews I-1 to I-3 all describe a similar conceptual approach, so we combined them into a new unified concept, the influencer concept.

4 Findings

First, we present the results of the interviews on the key-user concept (K1-K5) and then the findings on the influencer concept (I1-I3). We found that the self-image of the influencers and their attitude towards digital transformation issues played an immense role in the organisation. We examine both, the top management perspective, which looks at organisational conditions, and the employee perspective, which looks more at operational conditions. Subsequently, the differences between the two concepts are presented and discussed.
4.1 Interviews about the key-user concept

Organisations that apply the key-user concept are characterised by the fact that key users are responsible for a specific purpose. For example, one of the interviewed CEOs limits the area of responsibility of the key users to a specific software. Furthermore, different key users are responsible for the different departments of the enterprise resource planning (ERP) system. Thus, the responsibilities of the key users are limited to the process steps in a software.

“Our key users are always responsible for a specific system. We have key users for our ERP system and others for the CRM system. For our ERP system, we then have different key users for the different perspectives. For example, one person is key user for purchasing, another person is key user for the sales process in the software.” - Interview K3-1

This quote makes clear that key users are always limited to their task and the software they use. The scope is deliberately limited; all alternative solutions or process steps that are not covered by the software are not intended. The CEO and, e.g. the IT manager select the key users using previous knowledge of the latter as a basis. In the event the key users have new tasks to perform, they are sent for training to acquire skills that they will pass on to other employees in the organisation.

“A key user is a person who is already well acquainted with the software used. Depending on the area, you take the person who has worked most with the software so far. If nobody really knows the software, a young colleague, for example, is assigned to look after the software as a key user. This person is also trained.” - Interview K3-2

“In the end we usually make one of them an expert and s/he passes this on to the others. This is definitely the case when using a 3D scanner and the corresponding software. The training was so expensive that we could only send one person for training. That was the key user who then trained the other colleagues internally.” - Interview K-2

It is interesting that key users often do not select the task but are appointed to it or selected due to their qualifications. In the project context, a managing director sees the key user’s task to provide impulses for the new IS and to gain an overview of the areas of application of the software. The key user is invited to identify further possible applications of the software. However, key users are always limited to the software. It is in their responsibility to ensure a smooth operation of an existing IS.

“I see the demands on the key users as the persons who provide impulses for software use, who give an overview of the main topics, and since the existing business operation is in the foreground, the business operation must simply run optimally with the software.” - Interview K-2

For the purpose of process optimisation along a software development, key users act as an intermediary between management, IT, and end users. During the development process, they should pass on the requirements of the end users to the IT Department so that the IT Department can implement these requirements. Afterwards, the implemented requirements are communicated to the key users, who in turn pass the information back to the end users. The information exchange from key user to end user often takes the form of small training sessions. In this way, the key user becomes a multiplier for the new functions available in the software.

“The key users define the requirements for further system development. The IT Department then implements them and returns this information to the key user. The key user in turn then informs the department” - Interview K-1-1

Key users have the possibility to report problems and suggestions for improvement. These are forwarded to the IT Department as change requests. In contrast to the IT Department, the key user has a comprehensive overview of the individual processes in the organisation, as s/he represents the interests of the department s/he is working for. This facilitates mediation between management, IT Department and end users.

“Key users know how to present the problem or suggestions for improvement verbally, but they also have a good overview of the individual processes within the department, the individual interfaces to other departments, and can keep track of things.” - Interview K-1-2
The CEOs in our sample avoid making instructions or decisions without discussing them with the key user, since the key user has knowledge and experience in the project as well as the daily business and has an overview of the suggestions of other employees. Key users pursue the objective of finding a solution that takes into account the suggestions of the end users and represents an optimal solution for the organisation. In addition, the expertise of the key user is taken into account and – since the key user knows the software – the technical possibilities of the IT solution are also considered.

“I do all this only in cooperation with the key user. I don’t make decisions or give instructions at this, let me say, I like it when employees make alternative suggestions so that we can discuss them and find the best solution for the organisation.” - Interview K-4

4.2 Interviews about the influencer concept

The interviewed CEO is organisationally responsible for the influencer concept in his organisation and has introduced the concept in the organisation. He laid the foundation for the digital transformation and the influencer concept by taking his customers’ perspective. Since the organisation mainly produces for private customers, this customer group is already used to apply digital tools for product configuration. The CEO enables his organisation to digitally map a customer order from inquiry to delivery.

“I always think from the customer’s point of view because in the private customer sector it is almost normal for the customer to configure something like this digitally.” - Interview I-1

From this strategic perspective, the CEO has created a feasible roadmap for the digital transformation. He analysed the current situation of the organisation and determined that there is not enough internal IT expertise available for this transformation. The CEO therefore recruited an IT specialist as a freelancer to accompany the organisation on the transformation journey. However, it was important to the CEO that the organisation built up its own competencies in digitalisation. Hence, he selected employees in whom he saw the potential to help shaping this digital change. These employees should learn from the freelance IT expert and translate their knowledge into practical applications for the organisation.

“You have to imagine it this way: We don't have any IT professionals, we have a freelancer who supports us a little bit, but my ability is that I can develop people well. Then I chose this colleague because he was interested and wanted to continue his education.” - Interview I-1

For the CEO, an employee’s motivation to drive the digital transformation is the most important factor, i.e. the intrinsic motivation of employees to improve their work with digital tools. For each of the digital transformation projects there is a one-hour meeting every week and the influencers have become the driving force in these meetings. The CEO even observed that the actual progress of these projects has accelerated compared to previous projects. In addition, the influencers are more capable than the CEO of convincing the end users of the need for change. The CEO concludes that the process knowledge of the influencers significantly reduces the resistance of other colleagues to possible changes. He reasons that the influencers have really understood why these changes are necessary for operational processes. The influencers are involved in the entire process from idea to implementation. This involvement makes the sharing of project information much more efficient as the influencers inform the other colleagues almost casually about the project steps.

“The organisation consists of three product areas, and I looked at who had an intrinsic interest in digital transformation and I pulled these people from each area together. These influencers are part of the project groups, which means they are present at the weekly one-hour meetings. My experience is that the influencers understood that things change and that you have to change. Also, everything is getting faster and faster. It's a good idea to involve these influencers in the project from the beginning and then give them positive feedback to each department. That goes down much better than someone who implements it as a manager. If someone doesn't want to implement something, he always finds reasons why something doesn't work. This method works quite well.” - Interview I-1

After the introduction of the influencer concept, the CEO’s role in the projects also changed. From being a driving force of digital transformation in the beginning, he increasingly became a mentor for the
influencers. Initially, he actively supported the project. As the development progressed, the CEO was able to withdraw more and more, since the influencers as digital transformation drivers were much more involved in the projects than the CEO could have been. The involvement of influencers goes as far as that the digital transformation only works because the influencers are involved.

“What the influencers lacked was structure. I had to create a structure, purely organisational. For example, the influencers had to learn how to approach projects once a week, organise it and follow it up. That took about two years, but now it’s working very well and I just sit down at the Jour Fixe and they report. Sometimes they ask me, but that works quite autonomously. (...) You can see that the influencers have become independent in the meantime because they enjoy it. (...) I have a feeling that the digital transformation will only work if the influencers participate.”- Interview I-1

The interviewed influencers are commercial employees who spend only part of their working time in digital transformation projects. They are still involved in the operational tasks of the organisation in their departments and the task as influencers takes a second place. One of the interviewed influencers can also draw on experience in IS projects from his previous job. The other influencer, however, was recruited solely on the basis of personal motivation. Both influencers state that they can only successfully manage the digital transformation in cooperation with external IT experts.

“I’ve already managed IT projects in my life. Of course, the CEO found this fact interesting and included me. In the future it will be about the development of a new configurator, I’m not writing the software, but I’m the manager who creates the concept and supervises the implementation. For the actual implementation we have external people.”- Interview I-2-1

“The CEO addressed me: “Here’s the situation, IT-wise, how fit are you?” I said at the time that I was relatively inexperienced. But I’m interested in it. And then he gave me the chance. The good thing is that we work with an external IT company. When they finish various tasks for us, I look at the results and then the next time I can do it myself.”- Interview I-2-2

The two influencers work very closely together in their secondary activities. The interesting thing about their main tasks is that there is hardly any overlapping of expertise. Therefore, the influencers jointly examine possible projects and then decide who will take over which project. Of course, digital transformation projects concerning the main tasks are also supervised by the influencers, but projects that cannot be clearly assigned to a specific department are then “tackled together”. Thus, with the involvement of external IT experts, this clearly shows that nobody feels left alone with the projects at any point in time.

“We also divide the projects up a bit, depending on what we know. We come from two different departments, so he makes the configurator for one product group and I make the configurator for the other product group. The big projects, the projects where nobody is operationally specialised, we tackle together.”- Interview I-2-1

In addition to this self-organised division of tasks, the handling of the digital transformation projects is also an interesting aspect. Here it can be observed that the influencers apply the usual methods and procedures of project management. For example, a specification sheet is created that serves as a basis for external offers. On this basis, an offer is selected that appears to best meet the requirements. As the project progresses, it is remarkable that change management seems conventional at first glance. Only the persistence of the influencers should be mentioned. Since the influencers do not insist on a specific software but always have the optimal handling of the process in mind, they always question the project result itself very critically. For the influencers, a successful project is first and foremost a project that improves the previous process.

“We had defined an artificial intelligence that could automatically classify documents. For example, an algorithm that can distinguish between internal and external invoices. When the IT expert we hired told us that it didn’t work fully automatically (...), we wondered if another competitor could do it better. During the project we weighed up the pros and cons again. (...) In our projects we pay more attention to the process to be improved than just the software.”- Interview I-2-1
At the end of a project, the process must convince the influencers. This internal conviction is very important to convince the end users of the project’s success. Here, the influencers highlighted that they still feel responsible for their project results and the associated process even after a project has ended. For example, the influencers do not force these new processes on any of their colleagues but concentrate on showing the improvements. This convinces the end users after a certain training phase.

“My colleagues can always contact me if they have any questions. Usually it’s like this, then I don’t really get any feedback on the new projects. After one or two weeks, I talk to my colleagues to get feedback. (...) I then show the end users what benefits they have from the solution or how much time can be saved.” - Interview I-2-2

The level of communication between influencers and their colleagues is very informal. Information is passed on to colleagues almost casually, for example in short meetings or during coffee breaks. In this way, the influencers can inform about the progress of the projects at very short intervals. For more formal content, which is not intended to convince but to explain, the influencers use presentations sent by e-mail. According to the influencers, all this is done via “small channels”. More rarely, however, meetings in the presence of all colleagues and, for example also with the management, are possible to discuss project topics.

“We have a channel. On one project, I wrote a PowerPoint presentation and sent it around: ‘Look, it is super fast, super easy...’” - Interview I-2-1

“We communicate on a buddy basis. (...) I would say you could just get everyone together and talk to them.” - Interview I-2-2

Besides communicating and influencing internal colleagues, the influencers also serve to translate the digital requirements. Through their entire experience in digital transformation projects, they know how to draw up their own problems and the problems of their colleagues for IT experts and the CEO. Thus, a problem description first becomes a process analysis and then, depending on the urgency, a requirement for the software. In the opposite direction, the influencers are able to communicate the answers and solutions of the IT experts to their colleagues in an understandable way. In this way, possible misunderstandings and dissatisfaction are largely avoided.

“I’ve been called in due to my experience to get to the heart of the projects because I have often dealt with IT people and businesspeople who don’t necessarily speak the same ‘language’.” - Interview I-2-2

It is interesting to observe that the influencers do not see themselves directly as such. They identify themselves essentially through their main activity in the organisation. Although the activity as an influencer is not primarily in the foreground, this function is nevertheless omnipresent when the influencers casually talk about their projects and project progress. It goes without saying that the influencers consider current digital topics, such as artificial intelligence and its implementation, in one of their projects. The influencers also take responsibility for these projects and serve as contact persons for the CEO, end users and external parties. Here, they often provide unsolicited and casual information about the current status.

The end users are well informed about the projects of the influencer and organisation. This is particularly interesting because the respondent states that he is not primarily affected by one of these projects but nevertheless knows what the status of the project is and what possible consequences it will have for him.

“The influencers have told me this before, but I have not actively asked them about it because it does not directly concern me. It is then casually explained that it is a separate project to make our organisation as paperless as possible and that colleagues are familiar with its implementation.” - Interview I-3

It is also interesting that the end users want to become influencers for a solution as soon as this solution is available. Even more restrained but then in all clarity, the remaining end users are aware that as soon as a project is in the introduction phase, it should be supported. Due to a strong “feeling of unity”, every end user feels very identified with the organisation and projects of the influencer. This suggests that the influencer concept probably works because end users do not feel negatively manipulated, as it may be.
the case with external interventions, such as management policies or objectives (Green & Pawlak, 1983). The end users themselves feel much more infected by the project and its positive effects on their work.

“And when that happens, yes, then of course I have to become more of an influencer. Then I also have to inspire people that this is a great project and that they have a positive value for their daily business.” - Interview I-3

The end user has a very positive attitude towards the influencer concept. Furthermore, the end user understands the sense and value of the projects. Finally, it is easier for him or her to accept possible changes at an early stage. S/he feels involved in the projects, even if s/he is not an original member of the projects. The end user is passively and casually provided with information about the projects. This means that s/he is also aware of the effects of the projects on his or her future working environment and can adapt to those early on.

4.3 Overview of key-user concept vs. influencer concept

The influencer concept can be seen as an enhancement to the key-user concept that has been widespread and established in other organisations. The influencers have become the decisive factor for digital transformation projects. In table 2 we compare the main points of the influencer concept with those of the key-user concept. In the following section we go into these points in more detail.

<table>
<thead>
<tr>
<th>Concepts</th>
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<th>Influencer</th>
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<td>Function</td>
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<td>Direction</td>
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<tr>
<td>Objective</td>
<td>Sustainability of the software</td>
<td>Sustainability of the process</td>
</tr>
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*Table 2. Comparison of key-user concept vs. influencer concept*

**Focus:** The focus of the respective concepts seems to be different, although both concepts pursue user participation. While key users focus on a specific software implementation (Maas et al., 2016), influencers take a more holistic view of process change. Influencers, as we found out in this research, are experts in the business processes and always focus on the best possible change for the respective process. In case of doubt, influencers use different software solutions for the optimal process. Key users acquire specific knowledge about a single software solution and, therefore, have a more narrow focus because they are more involved with the software than with the process.

**Role:** Key users in the project team are often only involved in certain phases of a project (Mahdavian & Mostajeran, 2013). For example, they are involved in the project for the collection, evaluation and training of requirements (Wu & Wang, 2007). This involvement of key users in the projects is a necessary but insufficient condition for the success of many projects. On the contrary, influencers are both, a necessary and a sufficient factor for digital transformation projects. Influencers are therefore an elementary component of the project. However, influencers are still active in their actual roles in the organisation. Influencers continue to carry out their previous tasks and manage to fulfil both tasks well through synergies between the digital transformation project and their main task. Key users are also divided into two roles as described (Maas et al., 2016). However, they often have one main role in an organisational process and the other role in a development project.
**Motivation:** The combination of main tasks and project tasks often motivates influencers intrinsically as they can see the possible improvements in the processes they work on every day. In addition, when influencers are chosen, care is taken to ensure that they have an interest in the framework of the digital transformation. Since key users are selected, e.g. by the project manager, they consider this task independently from the overall project (Mahdavian & Mostajeran, 2013). They are also used to the process, but their focus is on adapting the process to the project or software. Usually this key-user task is another task for which key users are paid or otherwise rewarded.

**Communication:** Key users often communicate in a request and response process. This means that key users receive a request, e.g. from the project manager (Pan & Mao, 2013). This request is answered with a software test or processing (Wu & Wang, 2007). This communication usually takes place internally, i.e. with the project team or with the end users. The project team plays an important role for the key users and their task in the project. Influencers, however, see themselves as independent and serve as the central point of communication within the project. They communicate in a kind of publication process. This means that influencers communicate regularly and unsolicited with end users as well as other people involved in the project. This does not require a request but rather happens randomly.

**Function:** Influencers pursue the function of promoting the change that the project aims to bring about. They are responsible for the projects and acceptance of these projects. It is therefore in the influencers’ interest to convince end users early of the changes brought about by their project. However, they do not understand this task as a work instruction, but rather implicitly promote changes by letting the possible improvements speak for themselves. This refers not only to their own process but also to the organisation’s processes. The function of key users, on the other hand, is to represent the interests of the respective departments from which they were appointed (Maas et al., 2016; Pan & Mao, 2013). This can mean that only those process steps that affect the respective department are taken into account by the key user (Mahdavian & Mostajeran, 2013). For example, downstream and upstream processes must be considered by other key users. This can lead to tensions between departments if a positive change in one department leads to negative changes on other departments.

**Direction:** The way how a concept is introduced has a significant influence to how the concept is lived afterwards. This difference becomes particularly clear when considering the two concepts. When key users are formally named by the CEO, they also see their task as a formal task. Here, there is a clear top-down system. Although the influencers themselves are called to this task by their responsibility for a process, it is more a passion than a task. Here, a bottom-up development is obvious.

**Objective:** In summary, key users are responsible for the software. Moreover, they train end users and are experts in the respective software. Key users are interested in further developing and adapting the software. They are involved in the expansion and sustainability of the software (Pan & Mao, 2013). In contrast, influencers are responsible for the business process. The software solution used is not as important to them as the expected improvement through it. When influencers notice that the changes do not achieve the desired effects, they question the decisions that have already been made. This leads to an enormously high sustainability of the processes, but it also creates risks regarding project continuity.

## 5 Discussion

To address our RQ, we surveyed SMEs which have implemented user participation concepts. We conducted explorative interviews with CEOs, IT managers, and end users to understand the different perspectives on the concepts used. Our research question aims at investigating concepts of user participation in digital transformation projects. From literature we were able to derive the key-user and the champion concept for user participation. However, from our interviews we identified a new innovative participation concept, the influencer. Since champions do not take over the role of a user in the system development, they can be unambiguously set apart from the influencer concept (Schon, 1963). Therefore, we highlighted the differences between the key-user and influencer concept in this study. Here, we were able to identify seven key aspects in which these concepts differ: First, the focus with which the employees pursue their respective tasks. Second, the roles of key users and influencers in the organisation. Third and fourth, in the motivation and the communication process. Fifth, the tasks
that are fulfilled by key users and influencers in a project. Sixth, the goals pursued by both concepts and finally, the direction from which the user participation was initiated.

The discovered influencer concept for digital transformation projects allows a transfer of the findings to the social media influencer. The influencer of digital transformation focuses on the process transformation with the objective of a sustainable process. Also, for the social media influencer it is important to keep an eye on the development (and thus the process) of their own content. To remain sustainably credible and trustworthy, social media influencers should be aware of their external impact and actions at all times. To this end, it is important to stand up for one's own views, to regularly reflect on one's external impact and, above all, to rethink one's communication (Enke & Borchers 2019).

It turned out that the concept of influence was introduced by the organisations themselves. In the absence of IT specialists, external IT support was purchased, and this support was always accompanied by an influencer. Since these influencers had a personal interest in the success of the IS projects, the concept was made more stable. The influencer concept does not only allow for user participation, but user participation is a fundamental part of the concept. Since the influencers can be project managers and users at the same time, they have a very strong opinion and expressiveness. This will certainly not work for every type of employee. Therefore, choosing the right influencer is an important task. In the case of the interviewed influencers, they are characterised by a high level of enthusiasm for digital transformation. Additionally, they show a high level of commitment and good communication skills.

5.1 Implications for theory

The concept of champions (Schon, 1963) is in some respects similar to influencers. However, champions are primarily strategically oriented and aim at a successful implementation of their projects. In this paper, we investigate user participation and propose a concept that extends the conventional key-user concept. Since champions do not take over the role of a user in the system development, champions can be unambiguously distinguished from the influencer concept.

User participation should not only lead to a better understanding of the IT solution developed but also be beneficial in the continuous process improvement (Barki & Hartwick, 1994a). Therefore, the introduction of a new role leads to a broader view of user participation in IS projects, as user participation should not only comprise software implementation but rather process change. The influencer role serves to bundle important aspects in an IS project and beyond. By introducing the influencer concept for IS projects, our research provides a new perspective and enhances the understanding of user participation. Since this is the first study exploring the concept and relevance of influencers in IS projects, our research provides initial knowledge about influencers in the context mentioned above. We described in detail how influencers were introduced and implemented in an SME. From this, we were able to deduce and create knowledge about the relevance of influencers for both, management level and end users. Moreover, our research provides a detailed differentiation of key users (e.g. Gable et al., 2008) and influencers in IS projects by means of identified dimensions, i.e. focus, role, motivation, communication, function, objective and direction. On the one hand, this differentiation expands existing literature on key users by providing a structured overview of the concept and its key characteristics. On the other hand, the differentiation of both concepts contributes to a deeper understanding of the influencers. This enabled us to conceptualise the influencer in IS projects. Overall, research can benefit from this study for further research on influencers as a new user participation concept in IS projects.

5.2 Implications for practice

From the influencer concept under research we can derive implications for the practical application in organisations. It should be noted that the influencer concept can be an exciting enhancement of user participation in IS projects. The proposed influencer concept was presented and explained in this study and contrasted to conventional key-user concepts. In order to implement this influencer concept successfully within the organisation, it should be noted that pure IS knowledge of an influencer is not necessarily decisive for the success of IS projects. Rather, it is important that influencers are intrinsically
motivated to drive these projects forward. Therefore, this research will help organisations to take up the influencer concept and to implement it fully or partially in their organisation. When selecting personnel, motivation for the project topic is a crucial factor.

The results of this study lead to the conclusion that digital transformation projects are better accepted in SMEs if these benefits are directly visible in the daily work – this is where influencers can help. Overall, these expected benefits played a major role in the interviews used to communicate about the projects. In this way the influencers can convince the other end users of the projects and the projects’ goals. This makes it all the more important that the influencers have access to informal channels of communication. These channels of communication enable the end users to informally exchange information about the projects and the expected changes. In any case, it is important that the CEO supports the influencers in changing their own way of working and that of the organisation. The influencer concept, as outlined in the results, can help to reorganise themselves and their projects. Even though the influencer concept relates to the context of SME, there is no argument against its application in larger organisations. Especially in larger organisations, where communication is less dynamic than in SMEs (Weigel et al., 2020), the influencer concept can help to communicate projects, their goals, and generate a wider reach.

6 Limitations and Future Work

We conducted a qualitative study to conceptualise influencers and highlight the main differences between influencer concepts and key-user concepts. Moreover, this study demonstrates the relevance of introducing influencers for IS projects, by highlighting the shortcomings of key users. However, as with every study, this research comes with limitations, which invites future research to build on our research. Since this research is based on a qualitative study, it comes with typical limitations of qualitative studies (e.g. weak internal validation). Apart from those, it is important to acknowledge further limitations which may create opportunities for future research: 64 German SMEs were contacted. These SMEs were selected because they have gone public with their IS projects, e.g. in the form of an article on the organisation’s homepage or in newsletters from industry associations. Of these, 20 organisations were willing to be interviewed. An initial review revealed that only 8 of the organisations had involved users in their development process. The interview partners of these 8 organisations were all male. In addition, more respondents commented on the key-user concept than on the influencer concept. The assumptions for the influencer concept are therefore based on four different views on the topic. In our opinion, however, this is sufficient to understand and conceptualise the influence and implementation of the concept in the organisation. Therefore, the proposed influencer concept should be considered as a blueprint for digital transformation projects. We encourage future research to further investigate this concept in more detail. For example, we are convinced that the influencer concept is also suitable for and applicable to IT-enabled organisational transformation projects (Wessel et al., 2021). Moreover, future research could investigate the influencer concept for organisations of other sizes, e.g. start-ups or corporate groups. We encourage future research to explore the applicability of our findings to different industries. For example, it could be examined whether the organisation industry impacts the implementation of the influencer concept. These findings could be used to further develop the proposed concept and its implementation. For example, this could lead to a better understanding of whether the implementation of the influencer and key user as two disjoint concepts is useful or whether the combination of both concepts is more practicable. In addition, we encourage future research to evaluate the success of introducing influencers for IS projects (i.e. change acceptance, employee-satisfaction, process improvement), since our research is focused on the conceptualisation. Furthermore, the influencer itself could become the object of research. For example, it could be investigated which personality traits have a positive effect on the participation in IS projects.

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8 References


