Knowledge Management During a long-term Crisis: Challenges with **Distributed Employees**

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Abstract: The pandemic caused by the Covid-19 virus led to an extensive, and rather immediate, situation of a substantial number of employees being "forced" to work from home. Even if the technology was developed for enabling this "new" type of telework, not all employees or managers were prepared for this abrupt introduction. The pandemic represented a crisis that needed the resolving of Knowledge Management issues, while maintaining a reasonable level of production. This posed managerial issues, such as maintaining communication with the employees, as well as maintaining the focus on the production, customers and other stakeholders. Our paper shows how the management in two different organizations, one public and one private, perceived the crisis and its challenges, and how they handled the various stages of the crisis. The managers have experienced the issues described in the literature of telework, Work From Home (WFH), remote work and flexible work, such as resolving to empowering leadership (EL), installing the employees with trust and autonomy and recognizing the loss of informal communication. They struggle to acquire an overview of the employees' well-being, at the same time as they experience a decrease in sick leaves and an increase in production.

Keywords: Knowledge Management processes, Crisis Management, Distributed employees, Communities of Practice

Covid-19 has brought a number of challenges for Knowledge Management in organizations. Among these challenges are taking care of employees' health, resilience and well-being when sent to home offices, and still produce and perform (Kirchner, Ipsen and Hansen, 2021). Even if working distributed has been new to quite a few employees and managers (Vargas Llave 2020), there are studies available of working from home (WFH) and telework (Bergum 2001, 2014; Kirchner et al. 2021). Most of the literature is concerned with the employees' situation, but it is also important to look at how the managers' transition to distance management has shaped their work regarding, e.g., Knowledge Management issues. Knowledge Management, defined as "encompassing any processes and practices concerned with the creation, acquisition, capture, sharing and use of knowledge, skills and expertise" (Alvesson, Kärreman & Swan 2002), may pose difficulties in performing with remote employees. WFH represents both challenges and advantages. The advantages are that WFH provides flexibility both in terms of work hours and autonomy, and that productivity increases (Hesketh & Cooper 2019). The challenges are tied to the employees feeling isolated and lonely (Hertel, Geister & Konradt 2005).

Kirchner et al. (2021) also underscore the importance for the manager with distributed employees to exhibit trust and to empower them. However, when trained and having worked as a manager for employees present at a workplace, this represents a transition to a different management situation. When this is also due to what is reckoned as a nationwide and worldwide crisis, the circumstances may be perceived as challenging. In addition, there is the uncertainty of the duration of the situation. The strain of the uncertainty of the ongoing long-term crisis may pose different managerial issues that need to be resolved.

The aim of this study is to investigate how managers have handled the crisis, and how they facilitated for Knowledge Management when employees are working distributed.

Hence, our research questions are: How does managers handle the long-term crisis?

How have they facilitated for KM processes when employees are distributed/working from home? In the following we will present the theoretical perspectives that has enlightened our study. We will also elaborate on our qualitative approach to the data collection, where we have interviewed managers in one governmental organization and one private enterprise. These in-depth interviews provided us with insight to Coombs (2019) also suggests that managers should keep their ears and eyes open for what is taking place within the organization. This is difficult when the staff is not present. However, it may be equally important, as the staff may still be communicating. Paying attention to "word-of-mouth" is therefore difficult, but establishing good routines for regularly communicating with all staff members may aid in picking up some of the dialogue (Duncan 2020). Also suggested by Coombs (2019) is to monitor social media in order to uncover unfavourable discussions.

Handling a long-term crisis may seem like "learning by doing" (Dewey 1938), and learning from experiences (Kolb 2014). Combining what we have described above with Kolb's experiential learning cycle (2014), with the fact that we have no controllable way of performing new actions other than to couple our experiences with the perceptions of the current situation, experiential learning from the crisis model may look like the figure below:

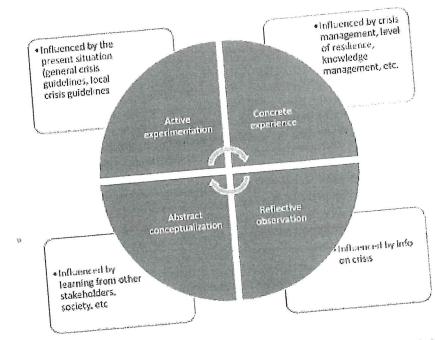


Figure 1: Experiential learning from crisis, inspired by Kolb's Experiential Learning Cycle (1984)

Here, the experience is reflected upon at the same time as the intelligence, and other info on the crisis is brought into what we may call reflective observation and evaluation/reviewing. The conceptualization should not only be about learning from the experience, but also take in learning from other stakeholders, from society and from other surroundings that may have an impact on the organization. The "Active Experimentation"-phase will then be not only to try out what one has learned, but also to pay attention to what is the present situation regarding the general guidelines and local guidelines, as well as one's own experiences.

During a long-term crisis such as a pandemic, it can also be difficult to maintain "double-loop learning" (Argyris & Schön 1996), since there may be acute issues that constantly need to be paid attention to and resolved without changing the system. Nonetheless, it is necessary to review the short-term solutions, as some of them may not have been apparent, but may also contribute positively after a long-term crisis. In order to keep these experiences, Coombs (2019) suggests documenting this "crisis knowledge". According to Weick (1988, 1995), being able to store and retrieve this knowledge may secure its effective use. This may enable organizational learning on two levels (Coombs 2019): the crisis management team may learn as they are to adapt to the ongoing crisis, whereas at the organizational level it is thus possible to utilize the knowledge for learning about how to adapt post-crisis. It is important that the crisis management team share their knowledge with the rest of the organization so that the knowledge is not lost after the crisis (Coombs 2019). Coombs (2019) compares the crisis management team to a Community of Practice (CoP) (Lave & Wenger 1991; Wenger 2011), which may guide the organization as to how to maintain the knowledge developed within this CoP. Hence, the experiences from the crisis may be used to trigger change and development within an organization (Lampel, Shamsie & Shapira 2009; Koenig 2012).

According to Kirchner et al. (2021), WFH is more challenging for managers than for employees due to "difficulties in leading online", and "coordinating and collaborating with the employees across distance". This has therefore not changed since Bergum investigated managers in telework for his dissertation (2014). They also report on "having less informal talks" (including "informal communication about work", "finding people less accessible", and that it is "difficult to know how employees feel, to stay in contact with them and to encourage them to "see" each other virtually" (Kirchner, Ipsen & Hansen 2021)). The loss of the "water cooler chats" (Jung & Silva 2021) is difficult to replace, and may lead to a loss of relationships. Even if some organizations have attempted to have digital social happenings, the interest is declining over time. In fact, the issue of not connecting with their peers is reported to be "an incentive for employees to return to work" (Jung & Silva 2021). Informal communication may be the facilitator for idea generation, with McAlpine's (McAlpine 2018) investigations showing how teams with "location flexibility" have reduced idea generation.

However, as Kirchner et al. (Kirchner, Ipsen & Hansen 2021) suggest, distance management is "both a personal and organizational capability that must be learned and refined". They also suggest to the managers to interact with each other and share knowledge and experiences as a Human Resources initiative within the organization (Kirchner et al. 2021).

3. Method of inquiry

This started as a pilot study with a qualitative approach, in which our aim was to investigate how management was performed in organizations under the Covid crises. We wanted to explore how this long-term crisis was handled in the private and public sectors and seek to unveil any differences between them. Hence, we chose informants from one governmental and one private organization. We interviewed a total of six managers, from two different organizations (see Table 1 below). In the governmental organization, we contacted the top manager who agreed to let us do interviews in the organization. In addition to the top manager, we interviewed three department managers. The informants were selected by the top manager. Our contact in the private organization was an assistant manager and an informant from a former study. In this firm, we also interviewed one of the team leaders.

The data of the study was collected by doing semi-structured individual interviews using a digital programme (ZOOM). Because most people by now are used to communicating via digital, we experienced that we had interesting and sincere conversations, with the informants open and responsive to our questions.

Our approach in this study was to achieve from the informants their experiences and understanding of the situation, and the consequences of the Covid-19 crisis on their work-life.

The data was analysed and categorized by both empirical and theoretical categories and is presented below:

Table 1: Overview of informants

f Informatics			
1 Top manager	Female	Public organization	165 employees
2 Department manager	Male	Public organization	
3 Department manager	Female	Public organization	
4 Department manager	Male	Public organization	
5 Assistant manager	Male	Private organization	50 employees
6 Team leader	Male	Private organization	
6 Team leader			

4. Results and discussion

Here, we will present our results on how the managers reacted to the first phase of crisis management, how they perceived their organization to be prepared for crisis, and how the executed their management on the employees working from home. The informants' statements are in brackets ().

How did the managers react in the first period of the crises - crash management? Our data shows that the first reactions were a bit different in our two organizations. The manager of the public organization was initially very worried about whether they were able to serve their customers or not. She also was affected by the fact that her co-workers were worried. "I was very worried about how we were able to deliver our services to the customers...That was my first reaction. And then I started to worry about the staff if they would be ill" (1). In the private firm the managers' first reaction was a mere: "Now we will have to try something new, something exciting" (5). This changed to handling the serious challenges and consequences as the crises emerged; the firm lost markets and they had to let 30% of the staff go. In addition, they took care of the rest of the staff working at home isolated from their workmates, which was experienced as a very difficult situation (5). We interpreted these reactions within Fink's four stages of a crisis framework (Fink & Association 1986; Kash & Darling 1998). When the pandemic started, the signs were present, but the full extent of the crisis was yet to be visible. Any actions taken in the prodromal stage were most likely taken due to other reasons, such as the foreseeing of the crisis. The worry about delivery was typically in the acute crisis phase, as the issues the respondents addressed demanded urgent attention, with some even trying to stay positive.

4.2 How were the organizations prepared for the crises? The organizations were not prepared for the crises/lockdown. The respondents referred to "some chaos in the beginning" (3). In both organizations, the staff normally worked at the workplace. As the lockdown occurred, one department in the public organization was using teams video conference system as a pilot. This was installed overnight for use by everyone in the organization (1) (3). In the private firm, they had a few part-time employees working from home, but the regular staff worked at the workplace (5). This refers to the chronic crisis phase, as they are testing out new solutions (quick fix) to "put out fires". The technology, although well tested, was not tested out in the organization.

During the corona period, both organizations had a representative at the office to handle customer contact. Moreover, the top managers and middle managers were present at the office (1)(5). Consequently, they had the function of a crisis management group. This probably made the managers work more closely together and was beneficial in the processes of handling the crisis. The managers behaved the way Gangdal and Angeltveit (Gangdal 2014) suggest regarding working on obtaining an overview of the crisis situation, seeking the best solutions available. This resembles the closing into the resolution phase, although the crisis is still ongoing. They are looking for the best solutions, evaluating and implementing what they found to be the best working actions.

Here, we will elaborate on how the managers experienced having employees working from home. The managers have had a strong focus on maintaining the production and serving their customers. According to the top manager, the staff in the public organization worked more efficiently than under normal conditions (1). "Our experience was that it went better than expected." "Most of the staff have done their job, some even more than expected" (1). Having an office at home meant working longer hours, since they did not have to spend time on commuting or delivering children in kindergarten (3). This aligns with the signs of Empowerment Leadership (EL). The workers were empowered to "do the job" at the home office, and supplied with the technology and trust (Amundsen & Martinsen 2014) (Amundsen & Martinsen REF) and hence, delivered. One thing that came to mind was that the employees worked longer hours, which is something that may have been a warning sign regarding looking after the well-being of the employees. Long-term working long hours may result in health issues (Peters et al. 2014).

The challenge in both organizations has been that the managers lose the "human touch" when all meetings and communication are digital. "The interpersonal aspect is missing. One is leading with a blindfold" (5). This is a common issue from telework theory (Nilles 1998; Bergum 2014; Peters et al. 2014), and may represent a sign that needs to be handled at a prodromal phase.

In both organizations, the sick leave rate has been reduced during the pandemic, probably due in part because when working from home it is possible to do work assignments even when you are a bit sick. (1) (3) (5). Thus far, very few studies have verified this finding, with the exception of a Danish study (Navrbjerg & Minbaeva 2020). However, many studies refer to "flexibility" and "job effectiveness" (Grant, Wallace & Spurgeon 2013; Bergum 2014; Bolisani et al. 2020), so we may assume that when employees work while they may have been on sick

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leave, this may be perceived as both flexibility in work hours and enhanced job effectiveness, since under "normal" circumstances the employee would not have been at work.

Over the past six months, employees have had the opportunity to choose to work from home when making agreements with their closest leader. Both organizations have experienced that many of their employees prefer to work from home, especially those with a family (5) (6). Those living alone and working from home have had more trouble with isolation over a longer period of time. They prefer to come to the office when this is possible (3) (6). We find this to be rather interesting, as this supports the suggestion from Kirchner et al. (2021) about seeking to share their knowledge with other managers, and discuss solutions as a Human Resource initiative.

There are more digital meetings that are more formal, which gives little time and place for informality and small talk (2). The top manager relies on the middle-managers to take care of their co-workers (1). One example is that they arrange team meetings with 4-7 persons - which provides more room for dialogue (3). This supports what is recommended, as it allows for combating the negative effects of telework, namely less informal contact with the employees (Kirchner et al. 2021). With fewer employees to cater to, the informal talk is easier to facilitate. Many managers mention that it is difficult to have informal talks (Bergum 2014; Peters et al. 2014; Kirchner et al. 2021), but do not refer to group size regarding meetings. Nevertheless, we may assume that it is easier to connect in groups with fewer members than in large groups. This is also an example of resolving a crisis (Fink 1986), and should be evaluated for future work post-Covid-19.

The managers report on the consequences of a lack of informal contact with employees when working from home. They miss out on the informal conversations in the cafeteria during lunch, and the informal meeting "by the water cooler" or when having a coffee. As this informal talk is not only a social activity, but a part of practicing leadership, and when not being able to keep up the contact with their employees, they miss out on updates and informal knowledge sharing as a part of the day to day management.

Generally speaking, they miss out on socializing with colleagues (1) (2) (3) (5), which in turn seems to create a situation that leads to more tension within the organization (2).

"I can see that when it comes to the social attachments, (the crisis) takes its toll on the relationships between colleagues (...). The level of conflict is higher than before,...the climate for cooperation is harder."(2)

This is in line with what Jung and Silva (2021) found in their investigations. When focussing on the production, both organizations report to have gained a higher productivity. But they seem to have some problems with keeping up the development processes under the periods of lockdown. "The challenge is developing new ideas.. I don't think we are doing this ... as well as when we were present at the office." (3)

This is in her opinion due to the lack of physical meeting and possibility of informal communication in the workplace. (3)

Jung and Silva (2021) also claim that there is a loss of innovation and collaboration when communication is reduced to online only. This is supported by McAlpine, in which she claims that face-to-face meetings are the best facilitator for idea generation. This also displays some of the KM problems: difficulties regarding knowledge sharing and acquisition (Davenport & Prusak 1998; Hislop, Bosua & Helms 2018). Even if the overall impression is that they have adapted to the conditions determined by the crisis (Coombs, 2019), they may have difficulties managing the "double loop learning" (Argyris and Schön, 1996) within the organization, due to the difficulties of supporting the informal communication and developing the CoP's.

Lack of informal knowledge sharing may have a long term effect of reducing the chances of developing Communities of Practice (CoP's) (Lave and Wenger, 1991; Wenger, 2011). As CoP's are one of the prerequisites of knowledge development processes, this may lead to fewer opportunities of developing the organization.

5. Conclusion

Our material shows that both organizations have had challenges when handling KM issues during the long-term crises in their organizations. They have found some solutions to the problems through the use of digital

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programmes and systems in order to disseminate vital (explicit) information and have been able to keep up production.

Both organizations report on digital solutions that has enabled them to maintain communication and continue production, made it more flexible for example regarding work hours for employers and employees when working from home and also less registered sick leaves.

The managers in the public organization report a high production and effectiveness.

The consequences from the lack of physical meetings and informal arenas for socializing and "small talk" have been less development of new ideas due to less informal communication and also more tension between the units in the organization. If not dealt with, this can result in stagnation and problems with cooperation, learning and organizational development.

Indeed, both organizations have resolved their immediate crisis, but should be aware of learning from the crisis, and look at different long-term solutions that may include continued flexibility. They consider reinstating faceto-face meetings, to a certain extent "rebuilding" and maintaining the "water cooler talks" (informal communication) and thus enable the formation of CoP's. This will support the generation of new ideas and enhance collaboration and thus not only the employees' well-being, but also revive much needed Knowledge Management issues, such as collaboration, knowledge development and sharing.

In this article, our focus has been on the managerial issues on the ongoing crisis. The next step will be to process our data from the employees in these organizations. We will investigate how they have perceived the Covid-19enforced Work From Home (WFH), and compare this with the data presented in this article.

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