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Leading digital transformation in elderly care – experiences of front-line managers

Sanna Ryynänen[1], Heidi Vainio[2], Hanna Vuojärvi[3], Susanna Rivinen[3], Marjo Suhonen[1]

[1] Administrative Sciences, Faculty of Social Sciences, University of Lapland, Rovaniemi, Finland; [2] Wellbeing Services County of Lapland, Rovaniemi, Finland; [3] Ageing in the Arctic, Faculty of Education, University of Lapland, Rovaniemi, Finland

Sanna Ryynänen, PhD, Administrative Sciences, Faculty of Social Sciences, University of Lapland, P.O. Box 122, FI-96101 Rovaniemi, FINLAND. Email: sanna.ryynanen@ulapland.fi

Abstract

The purpose of this study is to describe and understand the experiences of front-line managers in elderly care as regards digital change processes and the leadership skills required of them, as well as the perceived need for leadership support. The study is positioned at the interface between scientific discussions on human resource management and change process management. It focuses on the discussion related to the increasing digitalisation practices of healthcare work communities from the perspective of front-line managers in elderly care. The context of the study is leadership in change processes according to Weicks' Critical Sensemaking Model. The data for this qualitative study were collected through thematic interviews with front-line managers in elderly care (N = 14) in healthcare and social welfare organisations and were analysed using theory-bound content analysis.

In leading the collaborative digital change process, the features of the Critical Sensemaking Model are combined with the interactional, cultural, environmental, change and human resource management and digital competence development factors of the front-line manager's work community. The implementation of the digital change process requires knowledge of a sense of community on the part of the front-line manager's leadership, which manifests itself in different ways as communal learning, competence, leadership support, implementation of cultural change needs, dynamics of digital change, responding to the requirements of the operating environment and maintaining readiness for change.

The dynamics of the digital change process include the management of the functional aspects of change management, emotions and attitudes in human resource management, and the development of change expertise over time. In the social learning of the work community, interaction between front-line managers and employees is emphasized. The Critical Sensemaking Model can promote the development of cultural change in leadership and work communities. It helps to form a mutual understanding of the needs of the organisation's management and work communities for positive change, learning and sharing of competence, as well as following the clues and development trends of internal and external working

environment. Therefore, maintaining the readiness for changes of the digital working methods requires identifying and managing sensible events in past, present, and future.

Keywords: digitalisation, change management, leadership, work community, elderly care, qualitative research

Introduction

Digitalisation is shaping the working methods of healthcare and social welfare organisations and employee skills [1,2], also in elderly care [3]. Services for the elderly are a broad entity that includes healthcare and social welfare services from lighter services brought to the home to heavier care services provided in nursing homes [4]. In addition, the digitalisation of services is challenged by the varying digital skills of older people [2]. The role of leadership, especially that of front-line managers, has been found to be central in the context of the digital transformation process [5-7]. Front-line managers work close to employees, customers and patients, so their role is significant in the introduction of new digital tools [8].

The digital transformation process refers to the introduction of various digital devices, tools and platforms and the consequent changes in work performance [9]. It consists of the development of expertise in the work community related to digitalisation and, in the best of cases, communal learning, in the promotion of which the role of the front-line manager is central, in addition to fostering the commitment of the community members and a safe environment [10].

To understand the leadership skills needed in digital change processes, it is necessary to investigate the leadership of change processes. Research has identified that the need for leadership skills in change processes is often linked to the interface between change process management and human resource management [1,11]. Models of change processes have been developed to build an understanding of their stages of progress and functioning in the work community, which it is important for the manager to consider [12]. In the 2000s, attention increasingly focused on the human factors in the change process, such as experiences of employee participation [13]. The perspective of the interaction and cooperation skills of the organisation's personnel and managers in change processes has been deepened through discussion and sensemaking. The importance of discussion in meaningfulness and learning has been emphasised in a successful organisational change situation, for example, in connection with projects [14]. Furthermore, previous research on change processes has focused on attitudes related to personnel change [15], and there is a need for an open attitude towards digitalisation in leadership [6].

The Critical Sensemaking Model (CSM) [16] is used as the theoretical framework for this study, and it focuses on rationalising the change process. It is a framework for perceiving an individual's change process and reflecting on one's own actions. The sensemaking included in the model refers to the process of building an understanding of the experiences of an ongoing new change event. Emotions affect the process of sensemaking and, in turn, sensemaking affects the emotional states of the actors [12]. The CSM model emphasises the importance of social interaction [16]. The model consists of creating a common understanding of the idea of change, whereby front-line managers are

tasked with answering questions related to the change process that are central to the employees' point of view [16]. However, this study does not examine the front-line manager's efforts to influence the sensemaking of employees, as in sensegiving [17,18], but the focus is on the front-line manager's experiences and understanding of the sensemaking in digital change processes.

According to the CSM model [16], individuals perceive the process of change through seven characteristics. The first is identity building, which in this study is based on identifying the front-line manager's own position in sensible environments that activate the organisation's digital transformation process. According to the second characteristic, the events of the change process are retrospectively linked to past experiences and understanding. The third characteristic is aimed at identifying sensible events that occur in the process of change, while the fourth is social interaction, which is used to perceive the process of change in the work community. The fifth characteristic involves the continuous processing of the change, while according to the sixth characteristic, the focus is on clues gleaned from events that promote the building of a common understanding in the work community. Lastly, the seventh characteristic emphasises the achievement of persuasiveness in creating an understanding of past and present experiences that can also be utilised in the future.

The aim of the study is to describe the experiences of front-line managers in elderly care regarding digital change processes and the leadership skills required of them, as well as the perceived need for leadership support. The study is positioned at the interface between scientific discussions on human resource management and change process management.

Material and methods

The research environment of the study was the GeroDigiLead research and development project, funded by the European Social Fund. The study is based on a qualitative research approach, in which the management skills and support needed in digital change processes are described and understanding is deepened from the perspective of front-line managers. Front-line managers in elderly care in two wellbeing services counties involved in the GeroDigiLead project were invited to participate in interviews. The interview data for the study were collected from fourteen front-line managers of healthcare and social welfare services for the elderly in the round-the-clock care and home care units of the wellbeing services counties of Lapland and North Ostrobothnia. Services for the elderly are part of the Social Services Division in Lapland and healthcare and social welfare services in North Ostrobothnia. Interviewees had been identified as having experience in leading digital transformation processes. However, during the preparation of GeroDigiLead project plan, it was observed that the use of digital tools may vary in the different service units of the wellbeing services counties under study. Research permits were obtained from the wellbeing services counties for the study and each interviewee gave written informed consent [19]. Their anonymity was protected throughout the research process. The processing and storage of research data followed TENK [20] guidelines, and the practices set out in the project's privacy statement.

The thematic interviews of front-line managers were conducted as individual interviews via Teams during early spring 2024. Based on previous studies on the management of change processes and the management of digital change processes in healthcare and social welfare, the focus was on the following: front-line managers' competence

development, attitudes related to the use of digital solutions, interactive management practices, promotion of inclusion as part of leadership that supports communality, and existing good practices in managing change processes. The duration of the interviews ranged from 25 to 50 minutes.

The data were analysed using qualitative theory-bound content analysis [21]. Firstly, after the data-driven analysis of simplified expressions and their subcategories, the upper and subcategories were examined in a theory-bound manner with the help of main categories derived from Weick's [16] theoretical model of the characteristics contained in critical sensemaking. With the help of sub-, upper and main categories, a category was formed that connected all the categories, entitled *communal leadership of the digital change process*. The data-driven categories describe the experiences of front-line managers in leading the digital change process and the support and skills needed. The unifying category described the phenomenon of the digital change process formed on the basis of the data-driven classification and the theoretical model as a whole. An example of theory-bound content analysis is presented in Table 1.

Table 1. Example of theory-bound content analysis.

Unifying category	Link to main category from the CSM model	Upper category	Subcategory	Simplified expression from data-driven analysis	Data excerpt
Communal leadership of the digital change process	Identifying sensible events	Communal nature of digital competence management	Collaborative learning for digital transformation	Learning together	*We discuss those things together and try to guide everyone so that everything can be done, … even though there is a wide range of things, which some know better than others, so yes, as well as help and support each other, that's fine* (H10)

Results

The experiences of front-line managers in elderly care regarding digital change processes and leadership can be described with seven upper categories. They include a sense of community in leadership. The upper categories are the construction of the front-line manager's identity, implementation of cultural change needs, digital competence management, support for digital change process management, dynamics of digital change, responding to the requirements of the external operating environment and maintaining readiness for change.

The construction of the front-line manager's identity is described from different perspectives. It is formed in the interaction between the organisation and the work community, where the front-line manager recognises his or her responsible role in leading the digital change process. "And of course, we have a big responsibility here as supervisors to make sure that they [the employees] can take this [digital change] forward and support their skills here" (H14). The communal nature of identity building is manifested in the variety of sub-roles linked to the front-line manager in the work community and the entire organisation. The front-line manager feels that they act as an expert, leader and implementer of change management and technology in the digital change process, as well as a mentor and support for employees. The upper management of the organisation makes decisions about digital change, which is why front-line managers strive to understand the digital change of the work community and its process at different levels and perspectives of management. In the CSM model [16], the construction of understanding of the change process is based on identity, which is built through interaction and varies in different situations. With the help of their identity, the front-line manager forms their perception of the change process.

Front-line managers strive to understand the events of the change process and learn from previous experiences of change management and digital skills in their work communities. The descriptions of front-line managers show that creating an understanding of the change process is retroactive, i.e. new events are linked to previous experiences. The experience of different situations helps then to see the advantages and disadvantages of the past and present and provides insight as regards how to deal with the current situation. Learning from previous experiences ideally allows them to make sense of operations in accordance with the CSM model [16], which manifests itself in the need for cultural change within the organisation's work community. This includes the need for changes in the operating culture and the learning culture, which the front-line leaders describe as follows: "This is just the kind of paperless time we are trying to live in, and we are constantly moving towards the electronic in absolutely everything" (H5). "...And I'll need those digital management methods and other things" (H3). "I work with the staff, through which I get to learn that kind of in cooperation" (H3).

Digital competence management and communality are combined with the identification of sensible events. In the competence needed in the digital change process, differences in the digital skills of the work community are observed, which also serve as starting factors for motivating digital change. The differences in digital skills relate to age, but above all to interest in digitalisation. "Since we also have people for whom learning is not so easy, it is not dependent on age, but also on what interests people; even younger people can say that they are not interested in any of these digitalisations..." (H1). The communal nature of digital skills

management emphasises communal learning for digital change, which is summed up in the front-line manager's description: "...We discuss those things together and try to guide everyone so that everything can be done, … even though there is a wide range of things, which some know better than others, so yes, as well as help and support each other, that's fine" (H10). The front-line managers describe the communal nature of digital learning as a two-stage process: first as learning for themselves and then as learning for employees. In the communal nature of digital skills, front-line managers are in a central position in identifying events and their clues and linking them to past experience and understanding in accordance with the CSM model to implement digital change, and to translate them into action through change management and competence management.

Communal support for leading the digital change process includes the support of an expert or training organised by the organisation, the supervisors and colleagues of the front-line managers, as well as forms of agency in social interaction. Collegiate peer support is emphasised in the front-line manager's change management decisions: "Of course, the support of your supervisor in these matters, that you are at the cutting edge and how things are taken forward in the units, in what way, what kind of goals and in what way certain things are implemented, and what kind of plans there are for taking charge of things…" (H11). The social interaction of the change process is manifested through speech, discussion and collaboration, in which individuals, groups and different professional groups participate. "But I like to get to interact more with supervisors from other work units and talk and sit around the same table, because we are in the same organisation and we have the same issues on the elderly side, for example" (H4).

The dynamics of digital change in the work community involves managing the time resources of digital change management practices, human resource management and digital change competence. The introduction of digital tools requires the management practices of front-line managers to be mastered at different stages of the digital change process. Human resource management for digital change is manifested in the adoption and distribution of employees' digital skills and in taking attitudes and emotions into account. "Teams as a tool, especially participating in meetings or trainings, is a bit like that for others; they are more like that, participants of course, but passive participants, but they don't dare when there's a live situation or something like that..." (H3). "…We have to think about the fact that we cannot leave the expertise behind, but rather we should try to expand it" (H1). The descriptions of front-line managers highlight the nature of digital change compared to structural and operational changes in the organisation. Digital transformation requires combining time resources with digital competence for change. "Knowing all kinds of programmes and becoming a tool, it takes time" (H2).

Front-line managers focus their attention on clues gleaned from events or situations to help them understand change. The demands of the external operating environment on the work community are manifested in the reaction to the development of the digitalisation of work and in the continuity of interaction in the operating environment. Front-line managers monitor and, if necessary, react to the requirements of the development of the digitalisation of work, for example, by introducing new digital tools and developing competence, which at the same time guides the competence development needs of the front-line manager and the work community. Front-line managers and work communities are also in constant interaction with their

operating environment. "...That, too, it's just that the challenge lies in the fact that it goes so fast that digitalisation doesn't always keep up, or the practice; that's the challenge" (H1).

To achieve the persuasiveness of change, the work community needs to be prepared for change, which focuses on responding to the need for training in digital change, adopting change positivity and orientation towards digital change in the future. Preparation for digital transformation is emphasised in the front-line manager's work community. "In my opinion, it's important that personnel receive sufficient orientation and training for the future programmes, the future equipment that will be used there, that the knowledge is sufficient and that they know how to make sufficient use of the technology and the digital side" (H11). The front-line managers' understanding of the importance of digital transformation in the future and the positive encouragement of employees towards this future are illustrated by the following examples: "Well, it's the future, really, that you don't even understand what it will bring, you just have to accept that everything goes into that digital stuff" (H9); "I always try to think positively that yes, that's it, and bring that positivity to the fact that all this kind of technology and digital know-how is just good and should make our work easier at some point" (H13). Therefore, maintaining the readiness of the work requires identifying sensible events in past, present, and future.

Communal management of the digital change process is built on the demands placed on the identity of the front-line manager and on the digital competence of the work community, which the digital transformation highlights as experiences and clues concerning events and interaction situations. It describes the characteristics of the Critical Sensemaking Model, which combines the interactional, cultural, environmental, change and human resources management and digital competence development factors of the work community.

The seven characteristics of Weick's [16] model emerge from the descriptions of digital change management by front-line managers. The results of the analysis are summarised in Table 2. The connections between the upper categories and the characteristics of the change process are illustrated by arrows. All the data-driven upper categories are united by a unifying category, entitled *communal leadership of the digital change process*.

Table 2. Communal leadership of the digital change process.

Main categories: characteristics of the csm change process	Links from upper and sub-categories to main categories	Upper categories	Subcategories
1) Identifying one's own position as an actor in the organisation		Perspectives on the construction of the front-line manager's identity	Identifying the responsible role in leading the digital change process
			Variety of sub-roles of the front-line manager
			Levels of digital change management by front-line managers
2) Linking the events of the change process to past experiences and understanding		Needs for cultural change within the work community	The need to change the operating culture of the work community
			The need to change the learning culture of the work community
3) Identifying sensible events		Communal nature of digital competence management	Differences in digital skills in the work community as starting factors for motivation
			Collaborative learning for digital transformation
4) Perceiving the process of change through social interaction		Community support for digital change process management	Expert support provided by the organisation
			Supervisor support
			Front-line managers' collegiate peer support
			Forms of agency in social interaction
5) Continuous processing		Dynamics of digital change in the work community	Managing digital change management practices
			Managing human resource management for digital transformation
			Managing the time resources of digital transformation expertise
6) Focusing on clues		Requirements of the external operating environment for the work community	Reacting to the digitalisation of work
			Continuity of interaction in the operating environment
7) Achieving persuasiveness		Maintaining the readiness of the work community for change	Responding to the training needs of digital transformation
			Embracing change positivity
			Digital transformation orientation of the future

Discussion

The contribution of the study was the use of Weick's CSM model to examine the digital transformation process as experienced by front-line managers in elderly care. The model has been used in previous studies related to change processes in healthcare [12,18], but, as far as we know, it has not been used in the context of digitalisation. In addition to studying the experiences of leading an individual digital change process, the model made it possible to include the interactivity of the work community, and particularly the perspective of peer support. It created an opportunity to examine the significance of the sense of community experienced by front-line managers when leading the digital transformation process and developing leadership skills. Using the model, it was possible to increase understanding of leadership and skills development in the digital change process, alternatively as an independent reflection on the identification and development needs in terms of the front-line managers' own skills, as well as the interactive construction of the digital change process that takes place together in the work community.

The progress of digitalisation in the working methods of the organisation's employees does not only require a need for change in management methods [6], but the digital transformation process also focuses on the leadership methods of the cultural change in the organisation's work communities. This is manifested in the need for change in the operating culture and learning culture of work communities. Changes in them are continuous processes in accordance with Weick's [16] model. The dynamics of the digital change process include the management of the functional aspects of change management, emotions and attitudes in human resource management, and the development of change expertise over time. They are emphasised in the learning of digital tools [6] and in management practices.

The leadership of digital transformation processes is linked in many ways to human resource management issues. In our study, it was found that a conversational atmosphere between the work community and front-line managers promotes leadership and its skills related to digital change processes. It also made it possible to bring difficult emotions into discussions [14,22], such as fears and frustrations related to the digital transformation process and one's own skills. The link between a conversational organisational culture and the progress of change processes has been found important in numerous previous studies [11], but in the context of digital transformation leadership skills the conclusion is new.

The study reinforces the findings of previous studies on the importance of engagement, a safe learning environment and leadership in promoting collaborative learning in the workplace [10]. Through their own actions, front-line managers can promote the creation of a safe learning environment in work communities and enable reflection on what has been learned in relation to existing competence and the goals set for digital transformation. The overlapping of individual and collective processes in the management of the digital change process supported the front-line managers' ability to identify their previous learning experiences of digital transformation, perceive their digital skills development and support needs, and actively seek ways to develop digital leadership skills in the work community. The identity of a front-line manager is built on the diversity of sub-roles, organisational levels and personnel perspectives.

The possibilities for the front-line manager to request and receive support to lead the digital change process from other front-line managers and from

their own supervisor are important from the perspective of digital change readiness. In previous research, identifying one's own leadership roles and the need for support in leadership were highlighted as human resource management needs from the perspective of digitalisation [5,8]. This study can be seen as an initial step on the basis of which research into the leadership skills of front-line managers in digital change processes and their development needs can be continued with more extensive or in-depth data.

Conclusions

The study generated new knowledge on the change processes in healthcare and social welfare in the context of the digitalisation of working life, focusing on front-line managers' experiences of digital change processes, their leadership skills and the perceived need for leadership support, which have been little studied in the field of elderly care. The Critical Sensemaking Model showed interactional, cultural, environmental, change and human resource management and digital competence development factors that are linked to the management of the digital change process of the front-line manager in the work community. In the practical implementation of digital tools, it is necessary to reconcile individual and communal learning with the methods of leadership and learning support. The Critical Sensemaking model can be used to form a mutual understanding of the learning process of change and the needs for expanding competence, as well as the development trends of internal and external readiness for change at work.

Conflict of interest statement

The authors declare no conflict of interest.

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