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Digital transformation as distributed leadership: Firing the change agent

Anne-Christine Rosfeldt Lorentzen*

Aarhus University, Aarhus BSS, Fuglsangsvej 4, Aarhus 8210, Denmark

Abstract

Literature has tended to describe digital transformation (the implementation and use of new digital technologies to enable major business improvements) as a strategic and rational process with clear roles, the most important one being a Chief digital officer or Chief digital information officer, who is often an individual appointed as a temporary position to undertake the digital transformation. This study has testified to a less rational, more emergent process, where the digital transformation happens without a Chief digital officer and instead is managed conjoint in the top management team. Based on this study, it is argued that digital transformation can be understood as distributed leadership, which enables a more holistic approach to mobilizing and sustaining digital transformation.

Keywords: Digital transformation; chief digital officer; distributed leadership; executives; organizational ethnography.

1. Introduction

Companies in several industries are putting digital transformation at the top of their strategic agendas (Bonnet 2016; Singh, Klarner and Hess 2020, Hess et al. 2016). This type of organizational change is often – in some variation –

* Corresponding author. Tel.: +45 20219644
E-mail address: acrosfeldt@mgmt.au.dk

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described as the implementation and use of new digital technologies to enable major business improvements (Haffke et al. 2016; Hess et al. 2016; Horlacher et al. 2016; Singh and Hess, 2017; Andriole 2017; Chanias, 2017, and Hartl and Hess 2017). Digital transformation is a complex intra-organizational challenge of aligning the implementation of new digital technologies with the objectives of the organization, and its activities leverage digital technology in (re)defining an organization's value proposition and on that note even involves a new organizational identity (Wessel et al. 2020: 1). A common answer to this challenge is to appoint a Chief digital officer (CDO) or Chief digital information officer (CDIO) (Horlacher et al., 2016; Sia et al. 2016; Singh and Hess, 2017; Weill and Woerner, 2018). Consequently, CDOs have become a key factor in digital transformation, as well as change agents are in organizational changes more generally. In mobilizing and sustaining digital transformation we expect a CDO to manage initiatives that explore and harness the new digital technologies (Singh, Klarner and Hess 2020) and enable close collaboration between business and IT functions (Singh and Hess, 2017). Surprisingly, we do not know much about what happens when we remove the CDO from the digital transformation-equation, which is the case in this 18 months organizational ethnographic study of a financial institution undergoing digital transformation. Contrasting the digital transformation-literature, the organization succeeds after the CDO is fired for not being successful, raising the question: How can top-down organizational change towards digital transformation be mobilized and sustained without a CDO?

2. Digital transformation and the CDO as change agent

The ideal digital transformation is described as a strategic process where 'recipes' for implementing new digital technology are based on strategy and planning (Matt et al. 2015, Vial 2019). A crucial factor in this strategic process is the Chief Digital Officer (CDO), who is an individual being appointed – often as a temporary position – to help undertake the digital transformation (Vial 2019: 134). CDOs (i) manage initiatives that explore and harness new digital technologies (Singh, Klarner and Hess 2020), (ii) enable collaboration between IT and Business, and (iii) manage initiatives that explore the digital technology. With these responsibilities, the CDO is growing in importance across industries (Rickards et al., 2015; Singh and Hess, 2017). The CDO has been one of the fastest-growing C-level positions (Mathison, 2014; Sienko, 2015; Singh, Klarner, Hess 2020), since the first CDO position was created at MTV Networks in 2005 (Singh, Klarner and Hess 2020), and they are emerging as the focal leaders of digital transformation (Singh, Klarner, Hess 2020). Consequently, there is a growing interest among both scholars and practitioners in the CDOs (Singh and Hess 2017). Along the same line, change management-literature consider the change agent important in any change (Ford, Ford, and D'Amelio, 2008), and we usually expect a rationalized process with clear roles and responsibilities when working towards establishing and maintaining recipient acceptance and participation. The change agent is often, in some variation, characterized as someone who must:

> "(..) provide discursive justifications that establish the appropriateness and rationality of change adoption, create readiness for change, and increase not only the likelihood of recipient acceptance and participation in the change but also the speed and extent of that acceptance (Amenakis, Harris, and Mossholder, 1993; Green, 2004; Rousseau and Tijoriwala, 1999)."
>
> (Ford, Ford, and D'Amelio, 2008: 367).

Drawing on change management-literature, we might consider the CDO a prominent, temporary change agent responsible for the process of implementing new digital technology with the potential of radically altering the organization. Contrasting the expectations of a CDO being a strong change agent managing a rationalized process towards digital transformation, our ethnographic recordings depict a case, where the CDO is fired, and the top management team intuitively shares the responsibility of managing the digital transformation process. In order to explore how and why a digital transformation might become successful without an explicit change agent/CDO, we draw on distributed leadership, as this framework acknowledges leadership as a less strategic, less fixed phenomenon; and as more emergent and shared (Bolden 2011, Sklaviniti 2020). Focusing on the top management team is new in digital transformation. While strategic change-literature has often examined the role of the top management team in strategic change more broadly (e.g. Carpenter et al., 2004), it has provided little insight into executives' roles in digital transformation (Singh, Klarner, Hess 2020, p. 9). Based on the theoretical and empirical considerations above, we refine the research question: How and why is the role of the Chief digital officer in digital transformation fulfilled as distributed leadership within the top management team, when the official position is abolished or is not appointed?

3. Theory

In a comprehensive literature review of distributed leadership, Bolden (2011) draws on Gronn (2000) when presenting the concept as:

> "a potential solution to the tendency of leadership thinking to be divided into two opposing camps: those that consider it largely the consequence of individual agency (e.g. Bass 1985) and those that present it as the result of systems design and role structures (e.g. Jaques 1989)."
> (Bolden 2011: 251)

Gronn (2000) suggests that leadership should be fundamentally reframed, because it is more appropriately understood as a fluid and emergent, rather than as a fixed, phenomenon (Bolden 2011). Along the same line, scholars argue, that leadership is "a collective social process emerging through the interactions of multiple actors." (Uhl-Biens 2006 cited in Bolden 2011: 251). Scholars also argue, that distributed leadership is not something 'done' by an individual 'to' others, or a set of individual actions through which people contribute to a group or organization (Bennett et al. 2003). Instead, it is a group activity working through and within relationships (Bennett 2003, Bolden 2011). Similar concepts arguing for a reframing of leadership are 'shared leadership' (see Pearce and Conger 2003a for a review) and 'collective leadership' (Sklaviniti 2020). 'Collaborative leadership' (e.g. Rosenthal 1998), 'co-leadership' (e.g. Heenan and Bennis 1999) and 'emergent leadership' (e.g. Beck 1981) are also concepts or theories, which call for a more emergent and collective understanding of leadership, as well as the associated concepts of 'delegated', 'democratic', and 'dispersed' leadership (Bolden 2011). For this paper, we use 'distributed leadership' as an overarching term. Across the different concepts lies the idea, that we need a more collective understanding of leadership as a social process (Barker 2001, Hosking 1988, Bolden 2011). Sklaveniti (2020) argues for a processual orientation, proposing a definition for leadership as an "ongoing process signifying the pursuit of direction in the production of a space for co-action" (Sklaviniti 2020: 548). Sklaveniti (2020: 547) point out, that:

> "(..) theory-method decisions focus on emerging communication to understand what is meaningful and possible (Cunliffe and Eriksen, 2011; Ospina and Foldy, 2010), as well as on movement and direction, which shape co-action (Crevani et al., 2010; Ospina and Foldy, 2010; Wood, 2005)".

Sklaviniti (2020: 548) draws on Koivunen (2007) and Ladkin (2017) to elaborate, that, *the pursuit of direction points to the moment by moment construction of leadership, not as a temporal indication but as a fundamentally relational process, where relating brings on co-action.* Therefore, Sklaviniti (2020) do not set out to analyze relationships as entities (as would be the interest from an inter-individual orientation) but as what makes leadership happen. With this paper, we explore, how and why an organization succeeds in the digital transformation after the CDO is fired, which contrasts our theoretical knowledge. Following Sklaviniti's (2020) approach, we understand relationships as what makes leadership happen (Sklaviniti 2020). We explore the construction of leadership as a fundamentally relational process, where relating brings on co-action (Sklaviniti 2020: 548). Following Sklaviniti (2020), we focus on the emerging communication and the movements which shape co-action. Though distributed leadership highlights relations, it is important to balance the collective between the individuals and the situational aspects of leadership practices (Bolden 2011, 263-264). We therefore study not only how the relating unfolds but take the individual top managers – and their construction of the distributed leadership in the top management team – into account as well to explore why the leadership is distributed. This approach is in line with the methodological shift from studying how leadership is distributed, to a contextually situated exploration of how distributed and focused forms of leadership interact (Gronn 2010, Bolden 2011: 263) and with Bolden's (2011) point that a focus on the how is only one part of the story. Why leadership is distributed is another important question to raise (Bolden 2011, p. 259). Consequently, we describe how and why the leadership practice is distributed with the aim of nuancing our understanding of digital transformation processes. With a point of departure in distributed leadership as the theoretical framework, we aim to answer the overall research question by exploring the following sub questions: SQ1. How and why do the top management team construct their distributed leadership? SQ2. What is the consequence of this for the digital transformation process?

4. Method

Empirically, in the context of a Danish financial institution, we explore the issue of how digital transformation might become successful without the strong change agent/champion, we expect the Chief digital officer (CDO) to be. In this particular organization, the top management hired an IT-implementation consultant in a temporary position (as a CDO) to help undertake the digital transformation by (i) managing initiatives in different units of the organization to harness the new digital technology and (ii) enabling close collaboration between business units and IT functions. After six months, the consultant was fired, and the position fell away, because the organization concluded, it had not been a success. We rely on empirical and interpretive research, because:

> "Interpretive research can help IS researchers to understand human thought and action in social and organizational contexts; it has the potential to produce deep insights into information systems phenomena including the management of information systems and information systems development."
> (Klein and Myers 1999: 67)

4.1. Organizational ethnography

We do a contextually situated exploration of how distributed leadership enable digital transformation without a Chief digital officer (CDO). We do so by focusing on the emerging communication in a top management team and how their relating unfold (Sklaviniti 2020), which enable an exploration of how top managers construct and shape distributed leadership during the digital transformation process and with what consequences. Such an approach requires detailed ethnographic studies of leadership practices and discourses in situ (Yammarino and Dansereau 2008, Bolden 2011, p. 263). Both literature on digital transformation (Vial 2019) and distributed leadership (e.g. Harris and Spillane 2008, Bolden 2011) calls for studying the respective concepts in a meaningful way with the experiences, practices, and discourses of leadership practitioners. Preferably by using ethnographic methods (Bolden 2011). Consequently, ethnographic methods (see Spradley, 2016) became a helpful method to get an understanding, of what actually happens within an organization during digital transformation. It is a way to not only get top managers' after rationalizations on implementing the new digital technology, but to study them in their everyday work activities which enables an understanding of the complexity, intricacy and mundanity of organizational life (see Ybema et al. 2009) and, in this case, of managing digital transformation without a CDO/change agent. A compromise between surface investigation and in-depth investigation (Spradley 2016: 101) was adopted in order to first seek the organizational context in holistic terms, and then obtain ethnographic focus by studying selected domains (top management meetings, unofficial top management conversations, and workshops with the top management).

4.2. Data collection

The ethnographic fieldwork was initiated one month prior to the hiring of the IT implementation consultant (the Chief digital officer/CDO). The fieldwork continued for six months while the implementation consultant (the CDO) was working on different initiatives, and for another nine months after the consultant was fired and CDO-function was abolished. Finally, another two months later (a year and a half after the ethnographic fieldwork was initiated) one of the authors did a two-day follow up-seminar with the top management at a conference center. The empirical material consist primarily of ethnographic recordings from participant observation and non-participant observation (Spradley 1980, 2016). The observations are of meetings in the top management team, where they would (i) prepare for strategy seminars with the middle management group, (ii) discuss strategy work in the organization, or (iii) meet with consultants from the financial sector's educational center. The observations depict (i) how the top management prepared for communicating with the middle managers about implementing Robo-advisors and how they adjusted their communication with middle managers according to what they learned about the middle managers' local implementation processes; (ii) how the top management reflected on the overall strategy and decided on specific steps towards reaching their goals, and (iii) how they discussed the role of Robo-advisor in relation to the objectives of the organization - and how to implement it. The above-mentioned observations provided an insight into how the top managers' relating unfolded (Sklaviniti 2020) in situ. The empirical material also consist of a two-day workshop, which one of the authors facilitated with the top management team; the top management team analyzed their organization, evaluated their current strategy, and began moving forward towards defining the next one. These observations provided an insight into how the top managers mobilized collective engagement (Bolden 2011) and

constructed their distributed leadership. Furthermore, the empirical material consists of ethnographic recordings of interviews and informal conversations with top managers (the managing director (CEO), Chief Operating Officer (COO), Head of HR, Head of Communication, Head of IT, and Head of Marketing and Business Development) alone or in pairs, interviews with branch managers from the two biggest branches, and with the IT implementation consultant (CDO). The interviews were unstructured in order to imitate conversations, allowing for following the organizational members' ideas, thoughts, and concerns. The informal conversations and interviews provided insights into the individuals, who are part of the top management team; how they understand and construct their individual responsibilities in relation to the group.

Table 1. A summary of the empirical material: 18 months of organizational ethnography. 142,74 hours

Hours in total: 143,75h	**Formal conversations and activities: 85 ¾ h**	**Informal conversations and activities: 58h**	**Insights**
Participant observations = 75 hours	15 x Meetings with TMT: **30h** 1 x Away day with TMT: **8h** 1 x CEO rehearsing strategy kick off speech: **3h**	Lunch and coffee breaks/'water cooler conversations' with top management: **18h** Transportation with top management and advisory board: Car rides, train rides: **7h** New years party: **9h**	How the top managers relating unfold in situ.
Non-participant observations = 28 hours	7 x Meetings and workshops with external consultants and the top management: **21h**	Lunch and 'Water cooler conversations': **7h**	How the top managers mobilize collective engagement and construct their distributed leadership.
Workshop (Interventional observations) **= 19 hours**	2-day workshop with the top management: **10h**	Lunch x 2: **1,5h** Coffee breaks x 8: **2h** Breakfast x 1: **0,5h** Walk x 2: **1h** Dinner and drinks x 1: **4h**	How the top managers mobilize collective engagement and construct their distributed leadership.
Interviews = 21,75 hours	HR director (6 x 30m): **3h** Communications director (5 x 30m): **2,5h** Head of business development (2 x 30m): **1h** IT Director/CIO (2 x 1h + 4 x 30m): **4h** IT Implementing consultant (1x): **¾h** HR director and Communications director (4 x 30m): **2** Communications Director and Head of Business Development: **1/2h**	Lunch and 'water cooler conversations' during "normal workdays" before and after interviews: **8h**	How the top managers understand and construct their individual responsibilities in relation to the group.

The ethnographic recordings primarily consist of ethnographic fieldnotes (Emerson, Fretz and Shaw 1995). The field notes were made during the meetings or directly after the corresponding events, writing under different conditions (Jarzabkowski and Bednarek 2014: 277); at a desk, in a bathroom, out in a hall, at a nearby café and in the car of one of the authors. Own thoughts and questions to the data were added to the field notes. Following the approach of Jarzabkowski and Bednarek (2014: 277), the field notes combine: (i) A summary of discussions and conversations that took place between key actors, drawing on the language of the field (close to verbatim reporting of what was said) including direct quotes. Interpretation, drawing on emotional experiences such as joking and heated disagreement, and notes-to-self about what seemed important in the observation. The notes became what Jarzabkowski and Bednarek (2014: 277) explain as: "(..) jumble of text that seeks to capture the researcher's experience in the field, and to provide a point of reference for accessing that experience again later.". From interviews and workshops, we have audio recordings.

4.3. Analysis

Alvesson and Kärreman (2007) present a research methodology where the researcher searches for deviations from what would be expected, given established wisdom, in empirical contexts. They call the methodology "Active discovery and/or creation of mysteries and the subsequent solving of the mysteries followed" (Alvesson and Kärreman 2007: 1266). They see empirical material ("data") as an inspiration for critical dialogues between theoretical frameworks and empirical work. Exploiting breakdowns to create a mystery, to put it in their words, is not new in social sciences (Alvesson and Kärreman 2007: 1268). Ethnography can be described "as a process of coherently

resolving breakdowns" (Agar, 1986: 39) and – in this sense – has a built-in propensity toward the type of theory development proposed by Alvesson and Kärreman (2007). They present six steps for theorizing from empirical material allowing the researcher to move from 1.familiarizing oneself with the setting by asking open questions such as 'what is going on here'? over 2.encountering breakdowns; something surprising to most members of the research community who are supposed to be able to make sense of and explain the observations, 3.formulating preliminary interpretations of a theoretical contribution based on broader relevance and earlier theory, and 4.engaging in more systematic work to developing a new understanding/theory to 5. solving or reformulating the mystery through the development of a new idea which offers a new interpretation of the phenomenon that inspired the mystery, and 6.developing the (re)solution of the mystery so that it gains a broader relevance for a specific terrain and positioning it more clearly in relationship to other theories (Alvesson and Kärreman 2007: 1271-1272). Following the methodology for creating and solving a mystery (Alvesson and Kärreman 2007), the familiarization with the setting happened by spending time in the organization as participant and non-participant observer. Seven months in the ethnographic fieldwork, we 'encountered a breakdown', which later created the mystery to be solved: The top management fired their change agent/CDO and - in contrast to a priori knowledge on digital transformation (see 2: Digital transformation and the CDO as change agent) - they continued the process without a CDO and seemed to intuitively share the responsibility of managing the change process towards digital transformation in alignment with the organization's overall objectives. The process of managing the transformation was less strategic and rational than the literature on digital transformation prescribes (Matt et al. 2015), and more emergent and fluid. We kept an open attitude towards the empirical material, which was not an atheoretical approach as suggested by some views on grounded theory (e.g. Glaser and Strauss 1967) (see Alvesson and Kärreman 2007: 1273) but about mastering our interpretive repertoire in relation to digital transformation and the role of the CDO reflexively (Alvesson and Sköldberg, 2000). When the growing interpretive repertoire (on the role of the CDO in digital transformation) confirmed the counter-intuitive nature of the breakdown, it became a mystery to be solved how and why the digital transformation succeeded without the CDO. Based on an iterative process, an understanding emerged of how the empirical material and body of literature on distributed leadership (Bolden 2011, Sklaviniti 2020) related to - and extended - prior knowledge on CDOs (Singh and Hess 2017; Singh, Klarner, and Hess 2020) and managing digital transformation (Haffke et al. 2016; Horlacher et al. 2016; Vial 2019; Wessel 2020).

5. Findings

The purpose of the analysis was to explore how top-down organizational change towards digital transformation can be mobilized and sustained without a Chief digital officer (CDO)? More specifically, we have investigated how and why the role of the CDO in digital transformation is fulfilled through distributed leadership when the official position is abolished. We did so by exploring two sub questions: SQ1. How and why do the top management team construct their distributed leadership? SQ2. What is the consequence of this for the digital transformation process? The findings below show that the top management team intuitively shared the responsibility of managing the digital transformation. A combination of how their relating unfolded and how they communicatively constructed the top management team, enabled a constant distribution of the individual points of view within the top management team, which resulted in a conjoint engagement and shared responsibility, which constituted their distributed leadership during the digital transformation process.

5.1. A non-symbiotic approach to digital transformation in the top management team

There was no symbiosis in the top management team; the top managers did not intuitively consider each other's point of view as suggested in some streams of distributed leadership. On the contrary, the top managers took a rather individualistic stand. When implementing Robo-advisor, the IT Director and the Head of Marketing and Business Development were very enthusiastic about the prospects of implementing the new digital technology. They were eager to implement it and to communicate about the possibilities for future development (and the competitive advantages). When the sales managers expressed their concerns during a middle management seminar, that financial advisors might not have the right skills to benefit from Robo-advisor, the IT Director suggested that - in the future - they should prioritize to hire financial advisors, who have better IT skills or who are interested in developing them. The Chief operating officer (COO) was more focused on getting the financial advisors to adapt Robo-advisor and did not see many issues on that note, since they simply had to do so. From this point of view, it was a rather forward task of

communicating this change to employees, effective immediately. In fact, the COO did not even see an organizational change or digital transformation; he argued that they were simply implementing a new tool. He did not share the concerns of the HR Director, who focused explicitly on the organizational culture and had an eye for both the middle managers, employees and top management group. She argued for constantly educating the middle managers, who were are all sent on courses on change management, courses on leadership, and courses on mental health, which she saw as an important part of nurturing the culture and enabling the middle managers to facilitate the digital transformation locally. In relation to the employees, she focused on the resources; do they have what they need from colleagues and managers. She found, that implementing Robo-advisor might be a big change for some employees, partly because it is a new system to get to know, and partly because it means a shift in how financial advisors work, what their product is, and because it changes the organizational structures (new units with new middle managers). These were issues, she raised within the top management team. During the final workshop, the main author raised a question about the role of Robo-advisor; is it a tool advisors use, is it a colleague to consult and perhaps overrule, or is it a supervisor, you have to listen to? For the COO, this was an odd question, since Robo-advisor is obviously just a tool. The HR Director was not quite sure about the role of Robo-advisor, but she immediately initiated a discussion arguing, that it might be a problem for the financial advisors, that they (the top management team) had not formulated anything specific about the role of Robo-advisors in relation to the new ways of working as a financial advisor. The COO commented that the discussion was "too philosophical" and not at all a practical issue in their organization. The Head of Communication recognized a communicative challenge, whereas the managing director (CEO) saw the discussion as an important part of implementing Robo-advisor and engaged in the discussion. In general, the main focus of the CEO in relation to Robo-advisor was a link to the corporate strategy and the overall objectives of the organization. *Where do we see ourselves in the future; what is our mission? How do we work in (the future)? How do we get there?* The Head of Communication was concerned with communicating the overall strategy, the digital transformation, and organization's objectives in alignment, while engaging the employees, and making the CEO available for questions and input – and in general with securing transparency and open communication lines both up and down in the organizational hierarchy. The top management team did not end up with a definite answer to what role Robo-advisor should play. However, the discussion served as an example of how the individualistic points of view within the top management team are aligned with each of the top managers' official roles. At first glimpse, this might indicate an anti-symbiotic type of leadership leaning towards sub optimizing. However, there are no "silos" within the top management team. In the following, we unfold how the individual points of view depicted in the empirical material not only is a non-issue, but actually enables the emergence of distributed leadership within the top management team and the fulfilment of the role of the CDO in the digital transformation process.

5.2. Emerging communication enable a conjoint approach

The top management meet frequently, both informally and at formal meetings, where they all engage actively. As presented in the example in the previous section, the top management team does not always agree on issues. However, starting from their own official management position, focusing on their own responsibilities and interest within the organization, the top management communicates a lot. The managers have developed a culture, where speaking one's mind is recognized as taking responsibility and being committed. We see it in the example of discussing the role of Robo-advisor. When all the top managers articulate arguments from the point of view of their respective official roles, the top management team reaches a holistic view on the digital transformation. From buying and contributing to developing the right digital technology (Head of Marketing and Business development and the IT Director), to department managers' concerns about the skills of the financial advisors, over how to communicate internally about the new ways of working (Head of Communication), branding the transformation externally (Head of Marketing and Business Development), to educating middle managers accordingly and reflecting on employees' needs (HR) and realizing the organizations overall objectives (CEO). All points of views are presented in most of the discussions. The top managers do not internalize all perceptions within the group, however they proceed on the foundation of having had the discussions where their own thoughts, concerns, ideas and visions have ben supplemented by others. The meetings are ongoing enabling a constant supplementation of one's own perspective. It might sound both intuitive, that top managers talk, and at the same time idealized that these talks happen frequently and actually enable a holistic approach to managing the digital transformation. Neither the formal meetings nor informal conversations are strategically planned to enable a shared leadership. The talks and meetings are often spontaneous collaboration or

intuitive working relationships (Bolden 2011) each of which Gronn (2002) considered as a manifestation of 'conjoint agency' (Gronn 2002).

5.3. Constructing the distributed leadership

Scholars on distributed leadership argue, that distributed leadership is not a replacement for individual leadership (Bolden 2011: 257), and that leaders do not have to see eye-to-eye to co-perform leadership (Spillane and Diamond (2007b, p. 11). Two or more leaders might seek similar, different or even opposing goals (Bolden 2011, 257). A main finding is that the distributed leadership is (i) communicatively constructed and (ii) relationally constructed:

The CEO rhetorically constructs the group: At a top management team seminar, the CEO tells the group to think about why they are the once who are a part of the top management team. "It is", he continues, "because you speak your minds. You are not afraid to express your opinions." However, the group is not only rhetorically constructed top down. The top managers have a lot of respect for each other and trust in each other, and it shows in the way the team talks about themselves. During a water cooler conversation, the HR Director stated, that she would not mind having the Head of Communication as her boss. This even though she is the leader of a large HR department, and he is the head of a smaller communication department. "He is just very smart", she added. The HR Director, Head of Communication and Head of Marketing and Business Development often meet, formally and informally. And the Head og Marketing and Business Development also meet frequently with the IT Director. Their relating gives way to co-action. The relating is not a strategic process. In this case, distributed leadership is 'institutionalized' within working practices as part of the overall 'culture' of the organization (Bolden 2011: 259), and this coordinated manner is not instigated deliberately.

6. Discussion

Focusing on (i) how the top managers' relating unfolded and (ii) their emerging communication, we found that the top management team intuitively managed the digital transformation process conjoint, after the change agent was fired. The findings confirm what we already know from strategic change literature; that CEOs and the top management's diverse experience can positively influence a strategic change (Finkelstein et al., 2009 in Singh, Klarner, Hess 2020 p.9), where in this case it contributes to the emergent change process towards digital transformation. Based on the empirical material, the paper argues, that digital transformation – as well as organizational changes more broadly – might benefit from these diverse experiences, *if* they are shared/distributed within the top management team. This finding challenges our knowledge on digital transformation in arguing, that a digital transformation process might successfully happen differently than the more functionalist, planned change processes (with resemblance to Kotter's (1995) approach to organizational change), which dominate the digital transformation-literature. The empirical material further challenges the idea that an organization needs a CDO and suggests that a top management team might fulfill the role of the CDO through distributed leadership. Reflecting on whether organizations need a change agent, the answer seems to be both yes and no. We know from the change management-literature and digital transformation-literature, that it is a good idea (see 2: Digital transformation and the CDO as change agent). However, in the empirical case of a Danish financial institution the top management intuitively shares the role of the CDO. No one leans back thinking that someone else is taking responsibility for the change process. It seems, that if an organization have already established a culture, where top managers communicate frequently and engage in discussions where they do not necessarily agree, the foundation for a more holistic approach to digital transformation might be established. In such a case, appointing a CDO because everyone else does, might not be the right solution. However, we need more research on digital transformations without CDOs in different types of organizational settings, and with different types of top management-cultures, in order to get a fuller picture, of how and if top management teams fulfill the role of the CDO, when the position is abolished or is not appointed in the first place. Most studies on distributed leadership have been conducted within the field of school leadership (Bolden 2011: 259), which means, we cannot argue, that distributed leadership is per se a way to better manage digital transformation processes, since the phenomenon have not been sufficiently investigated in this particular context. Furthermore, while some studies indicate that distributed leadership has a positive effect (e.g. Graetz 2000; Iandoli and Zollo 2008), others suggest that distribution of leadership might have a negative effect on boundary management issues (Storey 2004; Timperley 2005). Yet, other scholars display both the potential benefits of a carefully implemented distributed leadership as well as the dangers of a poorly conceived approach (Leithwood 2009 in Bolden 2011). Consequently,

instead of dictating what managers should do, the paper depicts a digital transformation process, which is less rational, and more emergent and fluid than the literature normally prescribes, nuancing our understanding of the phenomenon. In addition, the study calls for further exploring the CDO-role fulfilment in digital transformation. Moreover, for studying digital transformation as distributed leadership - and potentially an emergent process.

6.1. Validation

As a validation of the qualitative study, the findings were presented and discussed – and recognized – during a seminar with the top management team at a conference centre. The HR Director further commented, that they (the leadership within the top management team) had not always been like that (distributed). She summarized, that a respected top manager had been fired a couple of months before we initiated the ethnographic fieldwork 18 months earlier. The HR Director explained, that the top manager had been so quick to take responsibility of most activities, that the rest of the top management team often was not involved in the more strategic tasks. When the board fired the particular colleague, the rest of the top management team had feared the consequences. Now, retrospectively, they could see that, surprisingly, it had meant, that they now all shared the responsibility and had many more ongoing, informal conversations, which – in their opinion – enabled this "so called" distributed leadership.

6.2. Limitations

A notable limitation of the study is the nature of in-depth ethnography (Spradley 1980, 2016), where focus is on one organization, which makes it difficult to generalize beyond analytical generalization. We cannot predict, if a digital transformation led by the chief digital officer would also have been considered a success after 18 months, or if the digital transformation would have been considered a success after only six months of distributed leadership within the top management team. We need more ethnographic accounts of digital transformations with and without CDOs, and of what the practices are of those fulfilling the role, whether formally or emergent and intuitively. We need studies of what CDOs do, however, in light of this study, we also need studies of how the leadership emerges in the less rational and strategic cases of digital transformation; which contextual factors enable a holistic approach to digital transformation, and what challenges it (e.g. competition between leaders (Storey 2004), micropolitics (Bjork and Blase 2009) and the rhetoric of partnerships (Lumby 2009). On a practical note, the study is limited in the sense, that it does not say what top managers should do or even if they should pursue distributed leadership. This is in line with an ongoing discussion on whether distributed leadership (as well as 'shared', 'collective', 'collaborative', 'emergent' and 'co-' leadership) should be taken as a framework for improving leadership practice or simply describing it (Bolden 2011, p. 263).

7. Conclusion

This paper contributes to literature on digital transformation (Haffke et al., 2016; Horlacher et al., 2016; Vial 2019; Wessel et al 2020) and the chief digital officer (Singh and Hess 2017; Singh, Klarner, and Hess 2020) by applying distributed leadership-literature (Gibeau et al. 2020; Van de Mieroop et al. 2020; Spiller et al. 2020; Sklaveniti 2020) on 18 months organizational ethnography to explore, how a top management team in a financial institution mobilized and sustained the top down change towards digital transformation after firing their chief digital officer. Whereas existing literature has tended to describe digital transformational as a rational and strategic process with clear roles, the most important one being a chief digital officer, this case of digital transformation cannot be described in the same terms. Nor it is case of managers' individual actions. Instead, this study has testified to an emergent process of conjoint leadership through intuitive engagement. Without explicitly coordinating their activities, the top managers mobilized the change towards digital transformation from their own respective perspectives. The top managers were not "in sync" as suggested by some streams of distributed leadership. They all mobilized from their own point of view. However because they all engaged actively in the process, the leadership happed conjoint, and the result was a holistic approach to managing digital transformation. Conceptually, we suggest the notion of digital transformation as distributed leadership, and argue that a shared responsibility within a top management team might supersede appointing a chief digital officer in some types of organizations. Reflecting on whether organizations should omit to appoint a chief digital officer all together, the answers is less clear. Consequently, the study calls for further exploring the CDO-role fulfilment in digital transformation, and for studying digital transformation as distributed leadership - and potentially an emergent process.

References

[1] Alvesson, M., and D. Kärreman (2007): Constructing mystery: Empirical matters in theory development, Academy of Management Review Vol. 32, No. 4
[2] Andriole, S.J., (2017). Five myths about digital transformation. MIT Sloan Manage. Rev. 58 (3), 20–22.
[3] Bjork, L.G. and Blase, J. (2009). The micropolitics of school district decentralization. Educational Assessment, Evaluation and Accountability, 21, pp. 195–208.
[4] Bolden, R. (2011) Distributed leadership in organizations: A review of theory and research. International Journal of Management Reviews 13(3): 251–269.
[5] Chanias, S. (2017). Mastering digital transformation: The path of a financial services provider towards a digital transformation strategy. In Proceedings of the 25th European Conference on Information Systems, ECIS 2017.
[6] Emerson, R., Fretz, R., & Shaw, L. (1995). Pursuing members' meanings. In Writing ethnographic fieldnotes (pp. 108–68). Chicago: University of Chicago Press.
[7] Ford, J. D., Ford, L. W., D'Amelio, A. (2008):Resistance to Change:The Rest of the Story. Academy of Management ReviewVol. 33, No. 2.
[8] Gibeau, E., Langley, A., Denis, J.-L., & van Schendel, N., 2020. Bridging competing demands through co-leadership? Potential and limitations. human relations, Vol. 73(4) 464– 489
[9] Graetz, F. (2000). Strategic change leadership. ManagementDecisions, 38, pp. 550–562.
[10] Gronn, P. (2002). Distributed leadership as a unit of analysis. Leadership Quarterly, 13, pp. 423–451.
[11] Haffke, I., Kalgovas, B., and Benlian, A. (2016). The role of the CIO and the CDO in an Organization's Digital Transformation. In *2016 International Conference on Information Systems, ICIS 2016*.
[12] Harris, A. and Spillane, J. (2008). Distributed leadership through the looking glass. Management in Education, 22,pp. 31–34.
[13] Hartl and Hess (2017). The Role of Cultural Values for Digital Transformation: Insights from a Delphi Study. Conference: Proceedings of the 23rd Americas Conference on Information Systems (AMCIS 2017)
[14] Heenan, D. and Bennis, W. (1999). Co-Leaders: The Powerof Great Partnerships. Hoboken, NJ: Wiley.
[15] Hess, T., Matt, C., Benlian, A., Wiesböck, F., (2016). Options for formulating a digital transformation strategy. MIS Q. Exec. 15 (2), 123–139.
[16] Horlacher, A. and T. Hess (2016). "What does a chief digital officer do? Managerial tasks and roles of a new C-level position in the context of digital transformation." In 2016 49th Hawaii International Conference on System Sciences (HICSS).
[17] Iandoli, L. and Zollo, G. (2008). Organisational Cognitionand Learning. New York: Idea Group In-corporated
[18] Jarzabkowski, P. and Bednarek, R. (2014): Producing persuasive findings: Demystifying ethnographic textwork in strategy and organization research. Strategic Organization Vol. 12(4) 274–287
[19] Klein, H., & Myers, M. (1999). A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems. MIS Quarterly, 23(1), 67-93. doi:10.2307/249410
[20] Kotter, J. P. (1995): Leading change. Why transformation efforts fail. Harvard business review.
[21] Leithwood, K., Day, C., Sammons, P., Harris, A. and Hopkins, D. (2006). Successful School Leadership: What It Is and How It Influences Pupil Learning. Nottingham: DfES Publications.
[22] Lumby, J. (2009). Collective leadership of local schoolsystems: power, autonomy and ethics. Educa-tional Man-agement Administration & Leadership, 37, pp. 310–328
[23] Matt, C., Hess, T., Benlian, A., 2015. Digital transformation strategies. Bus. Inf. Syst. Eng. 57 (5), 339–343.
[24] Pearce, C. and Conger, J.A. (2003a). Shared Leadership:Reframing the Hows and Whys of Leader-ship. London:Sage.
[25] Rosenthal, C.S. (1998). Determinants of collaborative leadership: civic engagement, gender or organizational norms? Political Research Quarterly, 51, pp. 847–868.
[26] Sia, S. K., Soh, C., and Weil, P. (2016): How DBS Bank Pursued a Digital Business Strategy. MIS Quarterly Executive 15(2)
[27] Singh, A., Hess, T., 2017. How chief digital Officers promote the digital transformation of their companies. MIS Q. Exec. 16 (1), 1–17.
[28] Sklaviniti, C. 2020. Moments that connect: Turning points and the becoming of leadership. Human relations
2020, Vol. 73(4) 544–571
[29] Spillane, J.P. and Diamond, J.B. (2007b). Taking a distrib-uted perspective. In Spillane, J.P. and Di-amond, J.B. (eds),Distributed Leadership in Practice. New York: TeachersCollege Press, pp. 1–15.
[30] Spiller, C., Wolfgramm, R. M., Henry, E., & Pouwhare, R. 2020. Paradigm warriors: Advancing a radical ecosystems view of collective leadership from an Indigenous Māori perspective. human relations, Vol. 73(4) 516–543
[31] Singh, A., Klarner, P., Hess, T., 2 2020. How do chief digital officers pursue digital transformation activities? The role or organization design parameters
[32] Spradley, J. P. (2016) [1980]. Participant observation. New York, Holt Rinehart and Winston.
[33] Storey, A. (2004). The problem of distributed leadership in schools. School Leadership & Management, 24, pp. 249–265.
[34] Timperley, H. (2005). Distributed leadership: developingtheory from practice. Journal of Curriculum Studies, 37,pp. 395–420.
[35] Uhl-Bien, M. (2006). Relational leadership theory: exploring the social processes of leadership and organizing. Leadership Quarterly, 17, pp. 654–676.
[36] Van De Mieroop, D., Clifton, J., & Verhelst A., 2020. Investigating the interplay between formal and informal leaders in a shared leadership configuration: A multimodal conversation analytical study. Human relations. Vol. 73(4) 490–515
[37] Vial, G. (2019): Understanding digital transformation: A review and a research Agenda. *Journal of Strategic Information Systems 28* (2019) 118–144
[38] Weill, P., & Woerner, S. L. (2018). Is your company ready for a digital future? MIT Sloan Manage-ment Review, 59(2), 21-25. Retrieved from https://www.proquest.com/scholarly-journals/is-your-company-ready-digital-future/docview/1986318385/se-2?accountid=14468
[39] Wessel, L. K., Baiyere, A., Ologeanu-Taddei, R., Cha, J., and Jensen, T. B. (2020). Unpacking the Difference between Digital Transformation and IT-enabled Organizational Transformation. *Journal of the Association for Information Systems*.
[40] Yammarino, F. and Dansereau, F. (2008). Multi-level natureof and multi-level approaches to leadership. Leadership Quarterly, 19, pp. 135–141.