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LEADERSHIP IN A DIGITAL ERA - IS "DIGITAL LEADERSHIP" A BUZZWORD OR A SIGNIFICANT PHENOMENON?

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Research paper

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Abstract

Digitalisation, digital transformation, digital workplace, data-driven organisations, big data, artificial intelligence – the discourse on different facets of digitalisation is present, powerful and sometimes convincing and seductive. "Digital leadership" is another, related phenomenon that has emerged in the digital era. Talking about leadership and using digital as a prefix: what is this all about? Is it a phenomenon of scientific and conceptual interest? Does it have a substantial practical significance or is it just another buzzword? This paper will investigate and reflect upon those questions with the aim to contribute to a deeper understanding of leadership in a digital era. The basis of this paper is constituted by a hermeneutic literature review of related research on leadership, digitalization and digital transformation. Thereto, five interviews with senior executives working with leadership in a digital era have been conducted. As a theoretical lens we applied the concepts of transactional versus transformative leadership. The analysis conclude that the transactional form of leadership seems to prevail. However, when practitioners talk about leadership in a digital era they emphasise the need for characteristics related to more transformative leadership. In this sense, we have identified an ongoing transition of leadership itself. Another conclusion is that leadership in a digital era is based on paradoxes and also about handling them. Finally, talking about "digital" leadership does not really contribute to the understanding or characteristics of leadership. Thus, we suggest skipping the prefix and instead talk about leadership in a digital era.

Keywords: Digital leadership, leadership, digital transformation, transactional and transformational leadership, digital workplace, paradoxes, ambidexterity.

1   Introduction

Digitalisation concerns the development and implementation of smarter, faster, more efficient and cheaper digital technology in order to create a better life of society, organisations and humans (Crevani, Hallin and Lindell, 2016). There are many definitions of this kind of digital transformation (see e.g. Vial, 2019), but they have some common characteristics and offers a "[…] tremendous potential for innovation and performance in organizations, and extends beyond the boundaries of the firm to affect individuals, industries, and society." (ibid., p. 137). Thus, digital transformation is on many organisational agendas and influence us all, in different roles and contexts. Based on the strong force technological development has on society, we might say we live in a *digital era* as a development of the "information age" and the "networks society" (Castells, 1996) or even a "second machine age" (Brynjolfsson and McAfee, 2014). In this context, a discourse about digital leadership, digital leadership capabilities and leading in a digital world has unfold (Tilson et al. 2010; Rose et al. 2015; Valentine and Stewart, 2015; Brennen and Kreiss, 2016; Crevani, Hallin and Lindell, 2016; Schwarzmüller et al. 2018). The dictionary term "digital" refers to 0's and 1's, which has little to do with leadership (Hearsum, 2015). Still, we have this tendency to connect "leadership" with emergent and contemporary concepts such as change, coaching, agile, relational, servant, value driven, sustainable, and now digital. This might be a way to develop different perspectives of leadership or, perhaps even more likely, new business concepts, e.g. on a market for consultancy services. But why and to whom is digital leadership relevant? And what do we actually mean by this prefix?

As stated above, digitalisation and digital transformation, has many different faces (Vial, 2019; Melin, 2018) and there might be good reasons to assume that there are different kinds of "digital" leadership as well. Just consider the process versus the result of digitalisation in organisations. Digital transformation is a kind of change process, while the result of digitalisation is a digital practice and workplace. Hereby, there are at least two side of the coin: the process, i.e. the transformation of practices and businesses, and the result, i.e. the output in terms of new conditions for work, digital customer offers, enhanced quality, revenue, etc. Hearsum (2015; see also Haddud and McAllen, 2018) argues that there is no collective agreement on the term "digital leadership" or what capabilities it requires. As a consequence, Hearsum (2015) means that the term and its underlying assumptions need to be defined in and on the basis of the specific organisational context. But does digitalisation *per se* influence the essence of what leadership is and how it can be understood? Isn't leadership at its core about managing practises and leading people? Well, there are voices that argues that recent technological advances do indeed influence both work design and leadership (Crevani, Hallin and Lindell, 2016; Schwarzmüller et al. 2018). However, the nature of these changes is still unclear partly as the phenomenon of digital transformation are quite new, partly as available literature is quite fragmented (Schwarzmüller et al. 2018). Together, this shapes a knowledge gap in the ongoing research, and a need to further develop knowledge on leadership in a digital era.

Looking at how digital technology is related to work design there are some obvious changes. Many organizations have some degree of digitalisation meaning the work activities performed, tools utilized, and information consumed are the same no matter if engaged in the office, at home or somewhere else. Even if the term *digital workplace* is not new, it has another meaning today compared with the mid-1990s when it started to be used. Nowadays, a digital workplace comprises "the physical, cultural and digital arrangements that simplify working life in complex, dynamic and often unstructured working environments" (Haddud and McAllen, 2018, p. 1).

In a digital workplace, employees are, or have the possibility to be more or less constantly connected to their work (Mazmanian, 2013). Regular teamwork is to a large extent replaced by work in virtual teams (Gilson et al. 2015). The flexibility of workplaces makes it possible for employees to work wherever they want and when they want (Serbanet et al. 2015). The use of IT enhances the transparency of information and changes the communication channels in the organisation (Oldham and Da Silva, 2015). Technology give birth to new, digital products and business models (Nambisan, Lyytinen,

Majchrazak and Song, 2017), which in turn changes what actors do and how work is organised. As a consequence, actors' knowledge might become obsolete which give rise to an urgent need for competence shift (Schwarzmüller et al, 2018).

In addition, enhanced interconnectedness and networking both within organisations and with external partners (Schwarzmüller et al, 2018) and accelerating pace of change seems to increase complexity and decrease predictability (Pulley and Sessa, 2001; Nambisan, Lyytinen, Majchrazak and Song, 2017). Taking it all together, how does this changed context affect leadership?

Let us first of all state that leadership represent a critical organisational function that aids in maximizing the achievement of organisations goals (Woods, 2019), as such a highly relevant area of research. Consequently, investigating leadership in the digital era is a must in order to understand what leadership nowadays needs to stand for. As mentioned above, digital transformation is in the bud and there is a need for more research on how digital transformation affect organisations, workplaces and leadership (Hearsum, 2015; Haddud and McAllen, 2018; Schwarzmüller et al. 2018). The purpose of this paper is to contribute to a deeper understanding of leadership in a digital era. This will be done on the basis of two research questions: (1) How can leadership in a digital era be perceived? and (2) How does the prefix "digital" leadership contribute to the understanding of leadership in a digital era?

Based on this introduction the remaining parts of this paper will be structure in the following way; the review and description of related research will be described in Chapter 2, followed by research design in Chapter 3. Chapter 4 will then focus on empirical data and analysis and be followed by a discussion in Chapter 5 and conclusions in Chapter 6.

2 Related research

This paper builds on the assumption that we are acting in, shaping and re-shaping a digital era. In organisations, digitalisation and digital transformation is not only about implementing new technologies or replacing a manual routine with an atomised. It is about changing mind-set, processes, methods, ways of organising and working together (Schwarzmüller et al. 2018). It is about transformation in many perspectives and there is no single expression of digitalisation to talk about (Melin, 2018), instead there are many different focal areas and interests (cf. Vial, 2019). Taking this point of departure, we would like to highlight the role of leadership in digital transformation and the digital workplace. Does leadership in this context differs from leadership in a more traditional setting?

2.1 Leadership in a digital era

Schwarzmüller et al. (2018; in line also with modern IS classics such as Orlikowski, 1991) mean that as digital transformation changes the design of work, leadership needs an increased focus on health management, technologization and competency requirements compared with more traditional leadership. In addition, leaders will have changed influence as employees get increased influence, and there is an increased need for relationship-oriented leadership (Schwarzmüller et al., 2018). In a same vein, Oldham and Da Silva (2015) mean that leaders' level of power changes and technological development changes how we communicate. Crevani, Hallin and Lindell (2016) take it a step further and reason that the access to information might concentrate the power upwards in the hierarchical structure, but it is also possible to image a world where machines do calculations, make decision and act more or less on their own. On the other hand, digital media opens up for more information sharing and transparency, which in turn opens up for distribution of power (ibid). In both cases, the traditional leadership would become superfluous (ibid).

It is also argued that due to a growing amount of data, leaders' decision making is more dependent on intelligent analysis of big data (Van Knippenberg et al. 2015), rather than to be based on experience and intuition (McAffee and Brynjolfsson, 2012). Analysing and using more data is also twofold. On the one hand, leaders have greater opportunities to control employees, but the leader himself might also be subject to surveillance monitoring (Crevani, Hallin and Lindell, 2016).

The relationship-oriented leadership, emphasised by Schwarzmüller et al. (2018), is due to higher job demands and competence requirements together with a more challenging work-life dynamic. This can be opposed to Haddud and McAllen (2018) who argue for great benefits of the digital workplace when it comes to empowerment, inclusive workforce, improved work-life balance and innovation. Turning back to Schwarzmüller et al. (2018), relationship-oriented leadership calls for more individualized considerations in order to support the employee's development and ability to cope with new and higher demands. Networking and teambuilding are other aspects that leaders need to focus more on (ibid). Thus, coaching individuals and teams is suggested to be an important part of leadership (ibid). This is similar to research on leadership in virtual teams, which stresses the importance of inspirational leadership and also transparent reward systems (Joshi, Lazarova and Liao, 2009; Hoch and Kozlawski, 2014). Leading virtual teams might also force the leader to distribute more responsibility and mandate to the team members, resulting in leaders orchestrating rather than controlling followers (Schwartzmüller et al., 2016).

According to Pulley and Sessa (2001), technology intensifies a number of paradoxes that in turn stretch leaders' abilities. How to be *swift and mindful* in increased speed of change in increasingly connected organisations? How to embrace both the *individual and community* when digital interaction reduces face-to-face contact and thus social cohesion? How to balance *top-down and grassroots* when hierarchical structures and relationships are fundamentally changed through increased transparency? Put differently, how to use control while also increase collaboration. How to balance *details and the big picture* when the enormous amount of data eats time but is needed to identify patterns and make smart decisions? How to become *flexible and steady*, i.e. how to maintain focus on a common direction and purpose in the midst of continuous change? Each of these paradoxes can be seen as a *complex challenge*, which is defined as "a situation demanding action for which we have no resources for acting" (Pulley and Sessa, 2001, p. 226).

Cervani, Hallin and Lindell (2016) also reason about different kinds of paradoxes that affect leadership in a digital world. Digital technologies create new opportunities for cooperation and employees' initiatives, at the same time as it gives new opportunities to control and monitoring employees' activities. As mentions above, power can be both centralised and decentralised at the same time. Thereto, an enhanced flexibility on the labour market reinforce mobility and decreases loyalty, which in turn challenge the need for stability and long-term view on competence development and work with the working environment (ibid).

Another perspective on paradoxes is presented by Gregory and Keil (2014) who have investigated what kind of management styles is used to control IS projects. A key notion they use is "control ambidexterity", which is the use of different types of control to meet conflicting demands (conflicting demands that also can be labelled as paradoxes). They investigated an IS project which was managed by two project managers, as in shared leadership. One performed a bureaucratic and the other a collaborative management style. This was considered successful as the two managers could deal with identified tensions: control-trust, efficiency-commitment, and stability-flexibility.

2.2 The term "digital leadership"

Pulley and Sessa (2001) talks about *e-leadership*, which might be seen as a precursor to the term digital leadership. An increasingly networked environment is emphasised as a consequence of technology expansion. Hereby, we move from the industrial era where power and information are filtered through hierarchical structures and formal authority, to a network where power and information are informal and hyperlinked. In this context, they argue for five paradoxes (described above) that needs to be dealt with by leaders. This calls for a broader definition of leadership where practitioners make sense together of challenges they face and where everyone in the organisation participate in leadership (ibid.). This reasoning is in line with the discourse about future organisations and the need for more self-leadership (Laloux, 2014; Pflaeging, 2014). The idea that enhanced complexity calls for deeper engagement by all organisational actors in order to enrich decisions and the dialog with more perspec-

tives, is interesting. And if leadership, as a consequence, needs to be distributed and not tied to the ones in the top of the hierarchy, this will indeed change the role of leadership.

As argued by Pulley and Sessa (2001) this new environment requires more skills in perspective-taking, network and coalition building, storytelling, and team-based dialogue where actors co-inquire taken-for-granted assumptions, perspectives and rules. However, they emphasise that traditional leadership skills – that is, communications skills required to unify and motivate employees toward common goals – are as important as ever. But the technologically mediated environment adds a layer of complexity that has not existed before (ibid). None of the mentioned skills are really new, but there seems to be a more urgent need for them nowadays.

El Sawy et al. (2016, p. 141; see also Haddud and McAllen, 2018) argue that "digital leadership means doing the right things for the strategic success of digitalisation for the enterprise and its business eco-system". El Sawy et al. (2016) also state that it is about thinking differently about business strategy, business models, the IT function, enterprise platforms, mind-sets and skills, and the workplace. In this sense the term "digital" does not really concerns leadership as such, but leadership in the context of digital transformation (or a digital era in more general terms as we frame the context in this paper). On the basis of this assumption, digital leadership is more or less the same as change leadership as argued by Hearsum (2015). According to Hearsum the key digital leadership abilities can be copied from those of change leadership and emphasises: Adaptability, collaborative, innovative, user-centred, self and other awareness, systemic intelligence, protects voices from below, understands the difference between digital (technology) and digital (culture), understanding technology as it applies in the own context, pace awareness which means that sometime it needs to go fast, sometimes not. However, if digital leadership is more or less the same as change leadership why use a new term?

As shown, there are different ideas about digital leadership as a phenomenon, as digitalization and digital transformation in general. There are also different perspectives on what the object of inquiry is. Below we turn to the development of leadership research as a more general phenomenon, without the digital prefix.

2.3 The leadership research journey

Research on leadership has evolved over time and become more complex as theoretical frameworks and methods has developed (Bryman, 2004; Avolio, Walumbwa and Weber, 2009; Rantatalo et al. 2016). Northouse (2013) presents an overview of leadership research over time. Early research on leadership focused on inborn *individual traits* with the aim to identify what characterises the "good leader". This view of leadership was challenged by research that focused more on leadership behaviours (*styles*), situated leadership (*contingency approach*) and, later on, leadership *skills*.

Then leadership started to be discussed from a more holistic view incorporating the context and the followers as co-creators of leadership. Hereby, the relational view of leadership became of interest (ibid). An additional perspective of leadership is to consider its purpose. In this vein, leadership might be seen as a process of influencing other to attain goals shared by the leader and the followers (Rantatalo et al. 2016; Knight, Grant and Young, 2018). As such, leadership is seen more as a process than an inborn characteristic.

There is also a division between leadership and management (Knights, Grant and Young, 2018). While *leadership* in practice focus on establishing the direction, aligning people, motivating and in-spiring to accomplish sustainable improvement and performance (similar to Gregory and Keil's (2014) collaborative management style), *management* is about planning, organising, staffing, controlling and problem solving (which is more in line with the bureaucratic management style, ibid). In similar vein, one might make a division between a leader and a manager. The leader is relational, requires followers and might be an informal role. The manager is a formal position. To make it even more complex, Ronty (2013) argues that these two roles – leader and manager – need to be integrated in order to in-corporate both the rational, emotional and spiritual dimensions of leadership.

One theory that has gained in popularity during the last thirty years is the *transformational leadership* (Northouse, 2013; Avolio, Walumbwa and Weber, 2009). Burns (1978), one of the first proponents of transformational leadership, contrasts it with *transactional leadership* and argues for fundamental differences between the two. A leader is either transactional or transformational; never both (ibid). Other scholars view these two theories as a continuum rather than opposites and even mean that a leader can potentially be ineffective in the absence of one of the two (Bycio, Hackett and Allen, 1995; Avolio, Bass and Jung, 1999; Bass, 2008). One might also say that transactional leadership is more conventional, while the transformative leadership is more modern.

These different standpoints, as well as theories, offer an evident-based platform of analysis. Thus, this paper will use the characteristics of transactional and transformational leadership as theoretical lens. At an overall level, transformational leadership is described as consisting of the following dimensions: charisma, inspiration, intellectual stimulation, and individual consideration (Bass, 1985). The transactional leadership, on the other hand, is described by: contingent reward, management-by-exception and laissez-faire leadership (Avolio, Bass and Jung, 1985). With the intention to look further into the differences between the two theories their respective and most prominent characteristics are described (see table 1). The thematization of the characteristics builds on Burns (1978), Bass (1985), and also the dimensions identified by Woods (2019).

Characteristics	Transactional leadership	Transformational leadership
Underlying principle	Control strategies and sanctions	Empowerment
Type of exchange	Economic contingent exchange – reward in exchange for compliance	Social exchange
Exercise of leadership	Management-by-exception	Shared, inclusive, participatory developmental process
Leadership traits	Authoritarian, hierarchical	Charismatic, visionary, inspiring, motivating
Leadership platform	Situational and positional authority	Ethics, morale and trust
Primary orientation	Task-oriented	Result- and purpose-oriented
Relationship between leader and subordinate	Transitory and constantly redefined	Enduring, individualised as well as system-oriented
Subordinates focus	Self-interest; achieve goals and fulfil leader's expectation to get rewarded	Organisational objectives; individual interest and conduct is aligned and in concert with the organisation as a whole
Subordinates response	Compliance to leader's exactions	Commitment
Power	Authoritarian	Value-based
Organisational setting	Stable; working within existing framework	Dynamic and flexible; constantly inquiring *what* and *how,* both at the individual and collective level
Working methods	Individual and competitive	Collaborative
Clarification of direction	Short-termed goals	Vision and purpose

Table 1.   Characteristics of transactional versus transformational leadership

3   Research design

This study is within an interpretive research approach paradigm (e.g. Braa and Vidgen, 1999; Walsham, 1995). The basis of this paper was constituted by a hermeneutic literature review (Boell and Cecez-Kecmanovic, 2014) of related research on leadership, digitalization and digital transformation. Doing this literature review was part of an overall reflexive research (see e.g. Alvesson and Sköldberg, 2009) (elaborated on more below) and therefore iterative. The empirical data were based on semi-structured interviews following an interview guide (Patton, 2002). Five interviews, lasting between 75 up to 90 minutes, were conducted in May 2019, of which three face-to-face at the respondents' office and two over phone. The interviews were then transcribed and analyzed. Despite the limited number

of respondents, they contributed with lived experiences which gave depth and richness to the understanding leadership in a digital era. Three of the respondents work in governmental agencies: two chief information officers (in the following, CIO1 and CIO2) and one chief architect (architect). One respondent is a senior management consultant (consultant) and one is chief commercial officer manager in telecom (CCO). The choice of respondents was based on three criteria: 1) managers working with digitalisation in order to have own experiences of leadership in a digital era, 2) experience of leadership during a period of at least five years in order to be able to reflect on potential changes in leadership over time, and 3) mangers in different organisational contexts in order to get a varied and multifaceted picture.

The analysis was focused on generating themes inductively (Ryan and Bernard, 2003, see further section 4.1 and 4.2). We have not focused on any specifically aspect (trait, skills, style) of leadership (Northouse, 2013), but instead been open and curious about different possible changes of leadership in a digital era in line with an inductive approach in this phase. The next step in the analysis (see section 4.3) was informed by previous research using transactional and transformational leadership characteristics as a theoretical lens, in line with a reflexive research process. The outline of these characteristics (see table 1) builds on Burns (1978) and Bass (1985) but is thematised on the basis of identified dimensions of Woods (2019). Those characteristics were compiled after the interviews; thus, assumptions are made on the basis of respondents' interpretations and reasoning (see further in section 4.3). The motive for choosing the transformational leadership is because this theory has received accelerating attention during recent decades and is talked about as a modern, forward-looking leadership. While transactional leadership reflects a more conventional approach that still characterizes many organizations. Thus, these two perspectives represent opposite aspects on leadership, which was seen as a useful point of departure.

4 Empirical data and analysis

In this section we will present an empirical-based illustration of digitalisation in practice and depict the respondents' view of leadership in a digital era (section 4.1 and 4.2, inductively generated themes underlined). Thereto, empirical data is analysed using the transactional and the transformative leadership theory as a lens (section 4.3, characteristics underlined).

4.1 Practitioners' view of digitalisation

Within the private sector, the purpose of digitalisation was all about simplifying for the customer as well as the organisation itself.

> *We streamline processes and save millions. The more money we save, the more aggressive customer offers we can have. In the end, this is necessary in order to stay competitive, and it's highly driven by customer needs.* (CCO)

This was similar to the consultant's view who emphasised that digitalisation is about "*survival […] The driving force is not primarily money, but sustainability. To create a better world to live in.* In their reasoning, CCO had an obvious focus on economic benefit of the organisation, which in turn was based on tough financial demands from the owners and also high customer demands. The consultant emphasised more of a wider, society and sustainability-oriented mission.

The architect, CIO1 and CIO2 were quite operational, and down to earth, in their reasoning. They described digitalisation as a vehicle to develop how they operate. CIO1 meant that, "*the purpose is to enhance the quality by converting data to knowledge*; *to become more data driven and thereby create more value for the clients and the society*". CIO2 and the architect meant that the purpose is to become more efficient by using modern tools and processes and also secure that they are doing the right things. This can be interpreted as efficiency and effectiveness-oriented statements. CIO2 and the architect also emphasised that one driving force was to "*comply with laws and regulations*, *rather than having their own goals and value creation to aim for* (Architect).

All respondents had a feeling that the <u>pace of change</u> is faster than ever before and will continue to be high in the future. The main argument was grounded in the technical development that generates new possibilities that in turn changes people's habits and behaviours. They argued that opportunities come faster and changes quicker, and new services and products offerings are developed much faster.

> *It is easier to create new digital opportunities, for example, an app where the customer can pay directly. That is fixed in a day. Services is developed and becoming refined. It goes fast.* (CCO)

However, one potential hindrance of a continuing high pace of change is the human ability to copy with the changes. As emphasised by CIO1, "*the pace of change will not slow down and I do not know if there is any far limit, possibly the human ability*". This seems like a paradox, the technological development speeds up but is hindered by the human ability to change oneself and the praxis.

Concerning the <u>effect of digitalisation on management and planning</u>, the CCO could not really see any clear changes and emphasised instead: "*One should be careful about running large digitalisation projects. It is better to focus on making life easier for both the customer and ourselves*". This view can be contrasted by that of the consultant who was convinced that the governance needs to be altered.

> *The reward systems need to focus more on teams, rather than individuals. […] We need people who drives the development towards complexity and unpredictability. The 3-year plan is not working any longer.* (Consultant)

In a similar vein, CIO1 emphasised that "*caution as the underlying principle of our governmental practice – meaning, nothing should go wrong – needs to be supplemented with a more explorative perspective*". In CIO1's organisation, they had started so-called testbeds as one way to develop the explorative way of working. However, CIO1 meant that the explorative perspective needs to be a natural part of all leadership. CIO2 highlighted the need for new processes, ways of working and routines. CIO2 also emphasised that "*monotonous tasks disappear, the computers work all the time*". This was in line with the architect who also talked about automation of routines and an enhanced level of digital work design, and as a consequence we meet less face-to-face which demands for more use of communication tools like Skype.

> *The conventional leadership is challenged, one has no longer control of subordinates. You do not know what they do or where they are. […] One manages machines, more than leading people. (Architect)*

The empirical data gave different views on whether we face an enhanced <u>complexity</u>. CCO meant that it is the other way around: "*We get more and more data that makes it possible to make better decisions due to better data*". CCO explained that within the management team there are different opinions concerning offerings, but thanks to technology and data they could test directly to see what the customers think and make decisions accordingly. For example, instead of planning for the next marketing campaign by the use of an external PR-consultant, they nowadays do it in-house by testing different campaign in different channels in real time.

The architect, the consultant, CIO1 and CIO2 emphasised that there are so many interconnected factors involved now, and it is harder to predict what will happen. As a consequence, the decision making gets more complex. The consultant, CIO1 and CIO2 all argued that the 5-year, or even 3-year, plan is not relevant any longer. And when re-defining a process, there might be hundreds of alternatives that need to be handled, due to laws, legislation, integrity and security. *"It was also complex before, but changes did not occur in such a pace as it does now"* (Consultant). CIO1 also claimed that decisions can no longer be based on history. *We need to look forward rather than in the rear-view mirror* (CIO1). And the architect meant, "*there is an enhanced complexity related to handling all data. We get more feedback from the systems that we can act upon and use to follow up*". Regarding the vast amount of data now available, all respondents mentioned that one challenge is to get better at interpreting and use data. Taking advantage of all data seems to be a critical ability.

According to the respondents, none of their organisations had a clear and common <u>digitalisation strategy</u>. As described by CCO, *"we do not talk about digitalisation. We talk about our projects and strategic areas. Digitalisation is just a natural part of our business"*. The consultant talked about it in terms of an aspiration such as enhanced customer experience and internal efficiency. This could be contrasted by the public sector where they talked a lot about digitalisation, but felt they missed the alinement with the overall vision and goals of their organisations. In CIO1's organisation they had recently formulated a digitalisation strategy and the next step was to implement it in the organisation. Both CIO2 and the architect lacked a clear direction of digitalisation.

All the respondents meant that a digital transformation needs to be initiated <u>top-down</u>. As CIO2 said, *"there needs to be a clear purpose of where to go and what to aim for. A vision statement by the top management that is connected to the overall assignment"*. The consultant also emphasised the *"need to clarify what kind of abilities a digital transformation requires. Set a clear direction and purpose, then the rest of the organisation needs to be involved"*. CCO also argued for a top-down driven approach.

> *Create a statement owned by the top management [...] after a while, ideas come from the business itself. [...] I was worried that we would face resistance due to peoples fear of getting rid of their job, but our average age is 22-23 years and they like change. (*CCO*)*

The respondents all agreed on the main <u>challenges</u> of digitalisation, even if CCO was a little bit more nuanced. Security and personal integrity were emphasised by all respondents, together with compliance especially in the public sector. Another challenge concerns cooperation. As CCO said, "*today we need to work together as a team in order to generate new ideas*". Similar ideas were claimed by CIO1, "*there is much more cooperation now than ten years ago [...] Digitalisation is a group work we do together*". To build relations both internally and externally was seen as critical. As CIO2 argued, *"there are still too much silos and everyone mind their own business instead of working together"*. The architect also emphasised *"the need for enhanced cooperation, where you control and lead resources that you don't own"*. To strengthen cooperation, CIO1 meant that they need to work more with a common organisational purpose. The consultant meant that *"it is a lot about getting people to work together across borders, and stimulate responsibility and initiatives"*. However, as CIO2 mentioned, some hindrances that need to be addressed concerns prestige, competition between resources, and the management of the departments. These hindrances seem to concern both structures and culture.

As mentioned above there is a need to develop some core <u>abilities</u> in a digital era, such as the ability to interpret, analyse and use data in order to drive change and make decisions. And as mentioned by the consultant, this does in turn highlight the need for quality-assured data. *"How do we know what the data stand for and on which grounds? Content is not an IT-issue, it is a core business issue"* (Consultant). CIO2 emphasised the need for *"higher degree of specialisation as more and more low-skilled jobs disappears"*. At the same time CIO2 meant that there is a *"need for broader competences and competence development as an important task of the leader"*.

4.2   The impact of digitalisation on leadership

The empirical data show different views on to what extent <u>digitalisation influences leadership</u>.

> *Leadership is leadership ... there is no difference. "Digital leadership" is a buzzword. It's about leading a digital world, in digital transformation. Leading people. To be flexible. It's not about how we should relate to apps. (*CIO2*)*

The CCO seemed to have a similar view, but from a different point of departure, *"distance leadership has always existed - no difference. But nowadays it is easier to communicate using digital tools"*. CCO emphasised leadership characteristics like *"openness, energy and positivity"*. The consultant stressed *"management by walking around, to be close to the subordinates"*. The consultant also highlighted that *"this is nothing new, but we need change leadership more than ever. Act and do rather*

than plan everything". This was in the same vein as CIO1 and CIO2's answer to the question: What is especially important when it comes to leadership in a digital era?

> *We need to carry out more development together, and talk more about leadership to create a common platform. We also need to improve our ability to lead in change […] together with more explorative leadership. We need to feel safe in change and know where we are heading […] There is also a great need to stimulate individual responsibility and initiatives.* (CIO1)

> *"We need to lead people in order to move the practice. Get people on the train, and deal with those that do not want to. [..] We need leaders, not managers.* (CIO2)

The ability to read and interpret the environment, handle unpredictability and implement flexibility in the practice were three overall leadership abilities emphasised. The consultant also meant that *"it is even more about defining the frames and direction, and having the ability to constantly reconsider. […] managers who plan and stick to the plan are an extinct genus"*.

> *"We need to complement our traditional stabilizing and precautionary perspective with an exploratory one. The leader needs to be communicative and open, embrace diversity, test and learn, encourage new ideas and learn by mistakes. […] more of a learning organisation based on engagement and curiosity"*. (CIO1)

Thereto, as all respondents emphasised, there is a need to develop more self-organising teams and acknowledge individuals. As the consultant claimed, *"you need to see the individual – everyone has something they can contribute with on the basis of his abilities"*.

4.3   Empirical data in the light of a theoretical leadership lens

The underlying principle of leadership seemed to be based on both a traditional way of controlling and an ambition to create enhanced individual responsibility and initiatives, and more self-organising team. Subsequently, the empirical data depict both how things works in practice and an aspiration of what is needed. Concerning type of exchange a relational view were emphasised at the same time as compliance was highlighted as a key challenge, especially in the governmental agencies.

The exercise of leadership was about setting clear direction, lead change, team and individuals. However, this also seemed to be more of an aspiration than a reality as, for example, more or less all respondents lacked a clear direction for their organisational digitalisation. The leadership traits emphasised – such as communicative, openness and visionary – are in line with the transformational characteristics, at the same time as the governmental agencies were highly hierarchical structured. In addition, all respondents meant that the digital transformation must be initiated top-down which indicate an authoritarian trait in line with the transactional leadership. Concerning leadership platform, the governmental agents emphasised stability and compliance together with clear ambition to change – a paradox itself to handle. The primary orientation seemed to be both task- and result-oriented, i.e. a combination of transactional and transformational characteristics. However, based on their reasoning the result and purpose orientation seemed to be more of an aspiration than a reality.

Regarding the relationship between leader and subordinate, and subordinates focus and response, those characteristics were not specifically talked about in the interviews. Neither does the study incorporate employees' view. Nevertheless, several of the respondents talked about the need for enduring and individualised relationships, more engagement and responsibility. Again, this indicated an aspiration of a more transformational leadership. This was also confirmed by the respondents' view of cooperation. Everyone emphasised the need for more collaboration both internally and externally. Thus, there seemed to be a need to shift focus from accomplishing tasks within the own local context to reach more overall and common goals by working together. In other words, to go from transactional to a more transformational leadership.

Concerning power, on the one hand, words like self-organising teams, engagement and group-work indicate a more transformational leadership. However, due to statements like *"top management needs*

to set the direction" and *"digitalisation should be top-down"* a degree of authoritarian leadership seemed to prevail. The <u>organisational setting</u> appeared quite stable, at least in the frame of the governmental agencies. However, all the respondents talked about the need to be more dynamic and flexible, partly as the organisational contexts were changeable and complex, partly as the work required more internal and external collaboration. As CIO1 emphasised there was a need to be more explorative and curious about testing new ideas and ways of doing things. This is in line with <u>working methods</u> that seemed to be individual and competitive as well as collaborative, but it was emphasised that the collaborative method needed to be developed. Regarding <u>clarification of direction</u>, all organisations had their vision, but in practice a lot of work seemed to be focusing on short-termed goals and measures. Still and again, several respondents expressed an aspiration to be more visionary.

5 Discussion

This section discusses theoretical standpoints in relation to empirical data in order to understand how leadership in a digital era can be perceived and whether it differs from leadership in a more traditional setting.

5.1 Leadership in transition

On the basis of the transactional and transformational leadership used as a theoretical lens, one interesting empirical observation is that leadership in practice seems to be more of "a bit of both", than one or the other. On a general level this might not be surprising since categories like this can be viewed as stylistic ideal types. This observation contrasts Burns' (1978) picture of leadership as either transactional or transformational, as well as Gregory and Keil's (2014) reasoning that different management styles is based on different personalities, modes of thinking and behaving. It is instead more in line with Bass (2008), Avolio, Bass and Jung (1999) and Bycio, Hackett and Allen (1995) who view the two perspectives on leadership more as a continuum rather than opposites.

From a broader organisational perspective, the idea of "a bit of both" is in line with the concept of paradoxes descried by Pulley and Sessa (2001; see also Stacey, 2012) and the ambidexterity described by Gregory and Keil (2014).

> *This is not a matter of a balance between the opposites, but the creation of a different dynamic in the ongoing tension between the opposites. We then have to talk about unstable stability, regular irregularity or predictable unpredictability.* (Stacey, 2012, p.12)

One might wonder whether these paradoxes are here to stay. From the perspective of digitalisation and the aspirations expressed in empirical data, one might assume that when digital transformations are accomplished (if we can talk about an end at all) organisations will represent more of transformational leadership. This assumption is based on the idea that the context of leadership is changing and we move towards a more collaborative, networking and distributed way of organising work. In other words, away from the traditional transactional leadership. On the other hand, if the pace of change will continue, leaders will probably have to deal with both the more or less stable ongoing operational practice as well as exploratory and innovative aspects such as development of products, services, competencies and processes. In this case, characteristics of both transformational and transactional leadership might be needed. Concerning leadership characteristics, empirical data showed that a combination of transactional and transformational aspects are present. However, repeatedly transformational aspects were described as aspirations, rather than reality. This illustrates a transformation of the leadership in itself. It seems to be an ongoing movement from authoritarian to more including and participative leadership. In other words, from a transactional to a more transformational one. This assumption is strengthened by the ideas concerning complexity (Stacey, 2012), paradoxes (Pulley and Sessa, 2001), ambidexterity (Gregory and Keil, 2014), and organisation, leadership and self-organising (Laloux, 2014; Pflaeging, 2014).

Looking further into the specific characteristics of leadership in a digital era, neither research nor empirical data show any great leaps or new paradigms. It is more like some aspects are more important in some situations, while other aspects are less important (cf situational leadership, Hersey and Blanchard, 1977). In addition, some leadership fundamentals remain the same, such as ability to communicate, motivate and unify, define frames and direction (Pulley and Sessa, 2001). However, one difference is that the scope of time seems to have changed from more long-termed planning to shorter time periods. On the other hand, the respondents talked about the need for overall purpose and direction, rather than concrete goals.

Another dimension emphasised in empirical data is the need for cooperation, engagement and co-creation (cf. Pulley and Sessa, 2001), while the traditional urge to control is less feasible today; at least it appears different. Control of subordinates seems to be replaced by mutual trust and responsibility. In addition, the ability to lead change is also emphasised in both empirical data and in prior research (cf Hearsum, 2015). However, for example, charisma as one central trait of the transformational leadership (Bass, 1985) was not mentioned at all in the empirical data. The respondents talked more in terms of transparency, openness and curiosity, rather than the leader as a hero and role model. Based on this, one might assume that the leader's position is changing to be more equivalent with the one of the followers. Still, one dimension that challenge the focus on trust and responsibility, is the fact that digital technology makes it easier to create systems and processes of control from leaders' perspective.

5.2   The leader's role in a digital era

On the basis of this study, we have identified three main perspectives on the leader's role in a digital era. The first concerns *workplaces* which becomes more digital and flexible in different ways (Mazmanian, 2013; Serban, et al, 2015; Haddud and McAllen, 2018). Leaders – and also co-workers – need to use digital tools in the daily practice in order to have meetings, follow-ups, and so on (Oldham and Da Silva, 2015). This requires the ability to use those digital tools.

The second perspective concerns *leading change*. Now more than ever, there is a need to motivate, guide and recognise co-workers and develop their competences in the process of digital transformation. The ability to lead change seems to be a skill that needs to be an integrated part of all leaders (cf Hearsum, 2015).

The third perspective concerns *paradoxes* (Pulley and Sessa, 2001; Stacey, 2012) and *ambidexterity* (Gregory and Keil, 2014). Those phenomena seem to be of more obvious importance in a digital era characterised by enhanced complexity and unpredictability. Leaders need the ability to embrace unpredictability and implement flexibility in the organisation. Thereto, based on empirical data, one principle in some practices is precautionary. This is not only valid for governmental agencies, but also in, for example, banking where compliance is highly important. Things need to be right within certain frames and have a high quality. However, perhaps we now need another balance between "doing things right" and "doing the right things". When transforming practices within a digital era it seems important that leaders have curiosity to investigate, experiment and are open to multiverse views on what to do and develop, and how to understand both possibilities and hindrances. Leaders need to let go of control and encourage innovations in the daily practice. It is about changed mind-set.

Finally, some words about the concept of "digital leadership". From a research perspective, the discourse on digitalisation, digital transformation and even digital leadership seems critical as a part of the continuous knowledge development in the area. We need to strive for conceptual clarification regarding phenomenon we talk about. However, talking about "digital leadership" seems not feasible neither from an ontological or practice-oriented perspective. The term "digital" does not really have anything to do with the leadership *per se.* Instead, let us continue to talk about and investigate leadership in the frame of the digital workplace, digital transformation and digital era.

6 Conclusions

This paper has investigated leadership in order to better understand the phenomenon in a digital era. In its core, leadership is about managing practices and leading people. There is nothing new about that in a digital era. However, in the era of digitalisation, globalisation and an accelerating pace of change, leadership has nowadays a new context. Organisations face enhanced complexity and unpredictability, which makes it hard for leaders to maintain the same control as they are used to.

Based on this research, we claim that *leadership itself is changing*. Some leadership fundamentals remain the same, such as ability to communicate, motivate and unify, define frames and direction. However, how these abilities are shown in practice changes over time. For example, the communicative ability has changed from directive in the industrial era to more dialogical and participatory in a digital era. An ongoing trend seems to show that there is a movement from transactional to more of transformational leadership. However, just because we digitalise does not automatically mean that leadership will be more transformational. It could be the other way around and actually become more transactional in terms of control by the enormous amount of data we collect about behaviours, services and products. Thus, there is a choice to be made. A consciousness choice concerning what leadership is needed in the specific context. Another claim is that leadership is embedded in a *context of complexity and paradoxes*. The context sets the prerequisites for leadership. The digital era is characterised by complexity, unpredictability and multiverse interconnected aspects. Thus, there is a strong need to work more together in order to innovate, jointly sense and respond, and include different perspectives needed to make good decisions. The complexity seems to nourish paradoxes which need to be embraced in the leadership. As a final claim, based on this study, *leadership is not becoming digital as such* (which one might interpret when the prefix digital is used), rather it is performed in a digital era. Sometimes we need labels to emphasise certain aspects of, for example, leadership. This is especially valid when we face new challenges and explore different ways of handling them. But having understood what we are talking about we might let go of those labels. Thus, regarding "digital leadership", we suggest burying this concept in favour of "leadership in a digital era". The latter seems to be far more relevant to talk about in order to acknowledge leadership in its new context.

Based on this rather limited empirical study some implications for future research can be outlined. The empirical material could have involved additional senior leaders in order to generate more rich data. Another limitation might be that we have studied leadership rhetoric rather than leadership in practice. Since there might be a gap between leaders' rhetoric and their practice, further research on leadership practice in the digital era is needed. Still, we believe the picture painted adds to the scientific discourse when aiming to understand leadership in a digital era. The findings complement the more technically oriented, optimistic or even naïve research on digitalisation and research claiming that everything is new. We claim that we can learn from history, and that traditional leadership is still valid and present in practice, but it seems that we need to pay more attention to transformational characteristics of leadership. From a practice point of view, leaders can be informed on what is important to deal with and that choices need to be taken in order to frame an appropriate leadership in the own context. As future research there is a need to deepen the inquiry of leadership in a digital era using the same theoretical lens and involving both employees and leaders to reach a more comprehensive and generalizable study. Another idea is to study how leadership of first line managers is affected by the digital era. Finally, it would be interesting to further investigate leadership in different organisational contexts, for example, to further compare leadership in private businesses with public sector organizations.

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