

The transformative leadership compass: six competencies for digital transformation entrepreneurship

The
transformative
leadership
compass

Giovanni Schiuma

DiMIE, University of Basilicata, Potenza, Italy
Eva Schettini and Francesco Santarsiero
University of Basilicata, Potenza, Italy, and
Daniela Carlucci
DiCEM, University of Basilicata, Potenza, Italy

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Abstract

Purpose – In the digital age, companies require leaders to foster digital transformation entrepreneurship, i.e. the organisational attitude and orientation of the creation of a new business or the development of an existing business by having at the core or embracing digital transformation as the continuous development and application of digital knowledge for companies' value creation. This paper identifies six critical competencies distinguishing the transformative leadership profile supporting enterprises' digital transformation development.

Design/methodology/approach – The paper, through a critical literature review focussing on three research streams, i.e. wise, transformative and digital leadership, addresses the following research question: What competencies characterise a digital transformative leader promoting and encouraging digital transformation entrepreneurship? Methodologically, first, explorative analysis of the literature has been carried out exploring the role and relevance of leadership in driving companies' digital transformation. Second, focussing on the three leadership perspectives, wise, transformative and digital, the critical features distinguishing each view have been identified. A set of hypotheses has been formulated to develop a framework to profile a digital transformative leader. In the third stage, the framework of the digital transformative leadership compass has been developed.

Findings – The paper profiles the digital transformative leader, a critical figure in companies competing in the digital age to nurture digital transformation entrepreneurship. Six specific competencies are synthesised and proposed throughout the transformative leadership compass. It is presented as an interpretative framework helpful to understand what affects the organisational culture and behaviours driving digital transformation. The proposed model defines theoretical foundations to operationalise an assessment framework and developing empirical research about leadership characteristics hampering and enabling successful companies' digital transformation.

Originality/value – The study proposes a novel framework based upon a critical analysis of the leadership literature. Combining insights gathered from the literature review on transformative, wise and digital leadership, the need for nurturing a transformative digital leadership allowing enterprises to stay competitive and able to change and adapt to the scenario's evolution emerged. Accordingly, the paper defines the digital transformative leader as a leadership profile sustaining organisational and digital transformation. The transformative leadership compass is proposed as a model to outline the critical competencies distinguishing a digital transformative leader capable of driving continuous company innovation and specifically digital transformation entrepreneurship.

Keywords Digital transformation entrepreneurship, Digital transformative leader, Transformative leadership compass

Paper type Conceptual paper

1. Introduction

In the current business landscape, companies are challenged to become more and more flexible, intuitive, imaginative, resilient and creative to face the increasing complexity, turbulence, unpredictability and pace of change of the competitive environment (Schiuma, 2012; Santarsiero *et al.*, 2019, 2020). More and more organisations have to face unexpected and unclear scenarios and unpredictable challenges. Many different forces and trends shape the new business landscape, and the fast-evolving digital technologies are forcing breakthrough



and disruptive innovations. For companies to survive and prosper, they have to transform businesses and behaviours to respond to the business landscape's evolution, transforming challenges into development and growth opportunities. In this perspective, companies need to generate, manage and exploit tacit, explicit and practical knowledge to drive transformation and stay competitive (Nonaka and Takeuchi, 2019). In particular, the practical application of the organisation's generated knowledge, namely *phronesis*, turns out to be the distinguishing feature of wise leaders and wise companies fostering and supporting transformation (Nonaka and Takeuchi, 2011).

A new business world, often labelled as the digital age, distinguished by high-velocity change and rapid evolution of digital technologies, force companies to develop new products and services that might better increase organisational productiveness and customers' needs satisfaction. In this context, digital innovation contributes to generating a high amount of data, information and knowledge that might produce valuable insights for companies, address decisions and align the produced outputs to the market demand if codified and exploited correctly. Thus, digital technologies and solutions are increasingly recognised as an essential driver for organisations' competitiveness. In this vein, the concept of Digital Darwinism has been introduced (Goodwin, 2018; Vollmer, 2009) as a notion to point out that a natural selection is emerging that excludes organisations incapable of embracing digital transformation to change and reconfigure internal processes, review and develop products and services, and implement new digital solutions.

The fast development of digital technologies raises efficiency standards, increases market dynamics speed and decreases product life cycle. Technological innovation, thus, rapidly and easily becomes common and replaced by new emergent digital innovative solutions, and companies need to pursue continuous innovation approaches towards digital transformation. The current landscape, therefore, requires the adoption of agile and lean approaches. Companies make essential decisions to improve internal processes quickly and do not have the time for research and development (R&D) or produce the necessary new technology internally. Becoming agile and understanding and analysing the potential impact of new digital solutions and persuading the entire organisation in fostering continuous innovation has to become a shared mindset and cultural attitude. Accordingly, digital innovation is not only about technology innovation. It is more about the creation of knowledge and cultural viewpoints (Tabrizi *et al.*, 2019). Indeed, to guarantee an effective organisation's digital transformation, each employee should be engaged in the process, understanding its importance and potential, and demonstrating a holistic alignment with the company's strategic vision. In today's digital age, companies' significant challenges are engraining and driving continuous digital transformation journeys rather than finite change management processes. Transformation, contrary to change management, aims to reinvent the organisation and foster the adoption of new approaches and discover new or revised business models shaping the perceived vision of the future (Ashkenas, 2015).

For this reason, it is essential to nurture an organisational culture and a set of abilities fostering continuous digital transformation. Creating a digital transformation culture is not easy (D'Este *et al.*, 2012), and many factors contribute to this result. Leadership represents one of the critical catalysers of an organisation culture-oriented to transformation. For this reason, in today's digital age, leaders are responsible for fostering an organisational cultural attitude aimed at promoting and encouraging digital transformation entrepreneurship (DTE), that is, the attitude and orientation of the creation of a new business or the development of an existing business by having at the core or embracing digital transformation as the continuous development and application of digital knowledge for companies' value creation. In this perspective, leaders keen to foster and support their organisation's digital transformation should be distinguished by competencies driving and

facilitating the generation, management and exploitation of digital knowledge for continuous innovation and organisational value creation. Such leadership distinguishes a digital transformative leader, i.e. a leader capable of shaping a sustainable value-oriented organisation through an entrepreneurial mindset approach focused on digital knowledge generation, acquisition and application.

The acknowledgement of a digital transformative leader's pivotal role in imprinting and developing DTE poses questions about its profile and characteristics (Brungardt, 1996; Horner-Long and Schoenberg, 2002). Leadership competencies impact organisational performance directly and indirectly (Rohana and Abdullah, 2017) and organisational behaviour (Ivancevich *et al.*, 1990).

The extant literature has focused on the notion of transformative, wise and digital leadership to distinguish the characteristics of a new leader's profiles to drive organisational development in today's complex and turbulent business landscape. However, each of these research strands focuses on specific perspectives, like the need to develop wisdom, pronesis, or digital and technical skills, or soft skills and attitude to change (Nonaka and Takeuchi, 2011, 2019; Caldwell *et al.*, 2012; Imran *et al.*, 2020). It is missing a comprehensive view of the leaders' competencies defining a digital transformative leader's characteristics.

This paper aims to answer the research question: *What are the competencies characterising a Digital Transformative Leader capable of promoting and encouraging digital transformation entrepreneurship?* First, to address this question, explorative analysis of the literature has been carried out identifying the role and relevance of leadership in driving companies' digital transformation. Second, focussing on the three leadership perspectives, wise, transformative and digital, the critical competencies distinguishing each view have been identified. A set of hypotheses has been formulated to develop a framework to profile the digital transformative leader. Finally, the framework of the transformative leadership compass has been proposed. It outlines essential competencies that distinguish a digital transformative leader able to engrain digital transformation and foster enterprises' sustainable growth in the digital age. Specifically, six critical competencies have been identified, and the transformative leadership compass is proposed as a descriptive framework representing these competencies. It can be used for normative purposes to analyse and develop the essential competencies distinguishing companies engaged in successful digital transformation.

The paper is structured as follows: after introducing the theoretical background and explaining the research motivations, the second section illustrates the literature review and discusses the gathered insights, proposing a working definition of the digital transformative leader. The third section describes the six critical competencies distinguishing the digital transformative leader. They are presented and structured through the transformative leadership compass. Lastly, theoretical and practical implications are discussed, and research limitations and future development are outlined.

2. The role of leadership for organisational and digital transformation

Digital transformation is today's business imperative (Bharadwaj *et al.*, 2013; Santarsiero *et al.*, 2020; Schiuma, 2012). There are many reasons why an organisation should embrace digital transformation, such as developing and sustaining advantages in an increasingly competitive globalised world or dealing with technological changes to create sustainable value for new customer and the company's stakeholders (Frankenberger *et al.*, 2020; Muro *et al.*, 2017). The adoption of digital technologies, e.g. Big Data, Analytics, Social Platforms, Artificial intelligence, Blockchain, and so on, can impact organisational operations, customer relationships and business model characteristics. Thus, today's fast-changing and complex

business landscape require any organisation to be transformative (Frankenberger *et al.*, 2019) by integrating digital knowledge with traditional business and organisational competencies.

The enterprises that accept and nurture transformation are ready to embrace a new set of cultural principles. Transformation is not only about executing a well-defined shift in the way things work, as well as it is not only about implementing finite initiatives, but it encompasses a new way of organisational thinking and behaviour. Indeed, transformation is a process of continuously reinventing the organisation and discovering a new or revised business model based on a new vision for the future (Ashkenas, 2015). It is unpredictable, iterative and experimental because it can also revise the performance management approach.

Today, in the digital age, transformation is linked explicitly to technology and digital innovation. It can be viewed as a holistic approach to shifting organisations towards implementing new technologies and digital solutions to raise organisational performance by boosting organisational capabilities and competitiveness. However, digital transformation is about technology and people (Frankiewicz and Chamorro-Premuzic, 2020). Indeed, an organisation's technological revolution impacts all organisation's dimensions as a bundle of relations and implications, including organisational capital, human resources, managerial practices, product development, operations, process engineering and management decisions. Digital transformation is about acquiring technology and absorbing digital knowledge to enrich and enhance value creation's organisational capabilities. For this reason, analysing successful digital transformation initiatives is essential to consider people's and organisation's competencies. Particularly relevant are the top management competencies that affect organisational and individual behaviour.

The transformation process is much more likely to drive from the top, which does not mean an autocratic or hierarchical leadership style, but the acknowledgement that durable changes are encouraged by top managers' leadership (Sathe, 2007; Imran *et al.*, 2020). For this reason, the role of leadership in digital transformation is critical to carry and support an organisation towards a digital maturity journey. Specifically, the leadership style is essential for making decisions in a complex context and promoting and spreading a transformative digital culture within the entire organisation.

The notion of the digital transformative leader is proposed to point out its pivotal role to denote leadership's role in driving organisations' digital transformation. The competencies that such a leader should present is an open question debated in the extant literature (Brungardt, 1996; Horner-Long and Schoenberg, 2002). Some scholars have pointed out that digital transformation leadership competencies should be distinguished from those required for leading traditional organisations (Horner-Long and Schoenberg, 2002). Besides, considering the sustainable challenges that organisations have to address, it is crucial also to consider a moral compass (Paine, 2003; Freeman *et al.*, 2006). A critical review of relevant academic literature focussing on the emerging leadership style to drive organisational transformation has been carried to identify the distinguishing leadership competencies for driving digital transformation. In particular, three critical leadership styles have been identified and considered. In the following, each type is introduced together with the discussion of the distinguishing features.

2.1 Wise leadership

Nonaka and Takeuchi (2011, 2019) highlight the need for a leadership style aligned with the current complex business landscape. They highlight the relevance of extending the knowledge-creating company's framework, proposing phronesis in addition to explicit and tacit knowledge to explain how wise leadership can drive organisational transformation and value creation. Nowadays, leaders are challenged to reinvent their corporations rapidly

enough to cope with new technologies, economic changes and other crises. For this reason, organisations need wise leaders that can shape a wise company capable of surviving and prospering. They need to exercise renovated competencies and use phronesis in their actions. The common good by striving to create social and economic value has to be at the centre of leaders' attention who have to be capable of pairing micromanagement with big-picture aspirations about the future. A wise leader should act as a thinking agent and own specific intellectual abilities and characteristics. In particular, make judgments knowing some factors as reality is contextual; decisions are made known; everything is in a continuous flux of change; actions are taken knowing that it is essential to do so in a timely fashion; decisions must be made knowing that it is crucial to consider at the company sustainability and longevity. Wise leaders, then, must see what is good and right for society and the company, and shape sustainability and become creators of new knowledge. In this perspective, Nonaka and Takeuchi consider phronesis's central role as the "experimental knowledge that enables people to make ethically sound judgments" (2011, p. 4); and wisdom is the attitude for leading an organisation towards a continuous transformative journey.

2.2 Transformative leadership

This leadership type has been addressed by several scholars adopting different perspectives of analysis (Bass, 1985; Bennis and Nanus, 2007; Berson and Avolio, 2004; Caldwell *et al.*, 2010; Jones *et al.*, 2008; Montuori and Donnelly, 2017; Shields, 2020).

Transformative leadership draws extensively on the idea of transformational leadership (Bass and Riggio, 2006; Burns, 2004). Caldwell *et al.* (2010, 2012) state that transformative leadership is an ethically-based leadership model integrating a commitment to values and outcomes by optimising stakeholder and society's long-term interests and honouring the moral duties owed by organisations to their stakeholders. Various competencies distinguish transformative leader. They use intellectual stimulation and challenge employees to accept innovative solutions to problems and challenge the status quo. They support organisations in decision-making and transformational activities by fostering the identification of possible alternative opportunities and developing a problem-solving oriented approach. Montuori and Donnelly (2017) affirm that an essential component of the transformative leaders' competencies is the art of improvisation. Generalising it is critical for transformative leaders to combine critical thinking with creative one developing the capacity of using the imagination as a source of continuous innovation and action.

2.3 Digital leadership

In the last years, with the growing attention to digital technologies and solutions rapidly transforming organisations and industries, the notion of digital leadership has been introduced to address the competence that leaders have to be developed in today's digital age. However, what competencies distinguish a digital leader driving digital transformation are still unclear (Imran *et al.*, 2020). El Sawy *et al.* (2020) define digital leadership as the capacity of doing the right things for the strategic success of digitalisation for the enterprise and its business ecosystem. They point out that organisations aiming to navigate digital transformation need to pay attention to competence development. Cortellazzo *et al.* (2019) and Imran *et al.* (2020), investigating the fundamental skills distinguishing digital leaders, identify five critical digital leaders' competencies. *Digital vision* that requires leaders to envision and communicate to people the digital future of the organisation; *Digital knowledge*, that means a good understanding of digital tools and of how a specific technology impact customers' business; *Failing fast*, the capability to fail and learn fast to save resources for the organisation, to go through with efficient project or tasks and stop something that does not work; *Empowerment*, the delegation of power toward those lower down the hierarchy to

ensure impactful digital transformation, fostering participation in decision making, expressing confidence in high performance and helping teams to feel part of this whole transformation; *Managing diverse teams*, in other words managing each team member differently, because to deliver complex projects in a digital transformation context, leaders need to develop cross-functional teams, for example, business and information technology (IT) teams.

Although adopting different perspectives, the above leadership styles point out the relevance of leadership in driving an organisation's digital transformation. First, leaders have to be transformative to enable an organisation to be wise and transformational. Second, leaders have to embrace digital knowledge. To denote these two characteristics, the notion of a digital transformative leader is proposed as a leadership profile of distinguishing those leaders who embrace digital knowledge generation and application to support organisational transformation towards continuous development of the sustainable value-oriented organisational capacity. A digital transformative leader believes that continuous innovation guarantees survival and ensures that everyone in the organisation is committed to putting into practice the principles of continuous transformation. He knows that the organisation should inspire or create a new future to survive. The future cannot be simply an extension of the past; it must be a leap of faith. In this regard, enterprises have to make jumps moved by their ideals and dreams and cannot be content with analysing empirical data and deductive thinking.

To distinguish the crucial competencies of a digital transformative leader, the transformative leadership compass is proposed. It identifies six critical competencies that characterise organisations navigating successfully digital transformation journeys.

3. The transformative leadership compass

To outline the crucial competencies that digital transformative leaders should practice, the transformative leadership compass is proposed as a descriptive framework identifying the essential competencies distinguishing a transformative leader's practice. The framework is intended to inform the assessment and the definition of initiatives for developing leadership abilities and organisational culture and behaviours to support organisational and digital transformation.

The model has been developed by drawing from the literature on leadership and digital transformation. It originates from the combination of theoretical insights on wise, transformative and digital leadership views, as introduced above.

The transformative leadership compass integrates and presents six essential leadership competencies (Figure 1). Each dimension proposes abilities that distinguish a digital transformative leader, connecting idealistic and pragmatic elements to digital transformative factors to create and apply new knowledge to facilitate DTE. In the following sections, each dimension of the transformative leadership compass is outlined.

3.1 Grasping the essence of the digital transformation

Organisations must understand the importance of digital transformation and its real aim. In this perspective, the first competence of a digital transformative leader is "*Grasping the Essence of the Digital Transformation*", i.e. the capacity of connecting digital knowledge with business challenges to resolve problems, aligning dilemmas and solutions knowing what the digital transformation is for and the knowledge foundations at the basis of the technology. The critical question characterising this competence is: *what is the digital transformation for?*

The transformative leadership compass

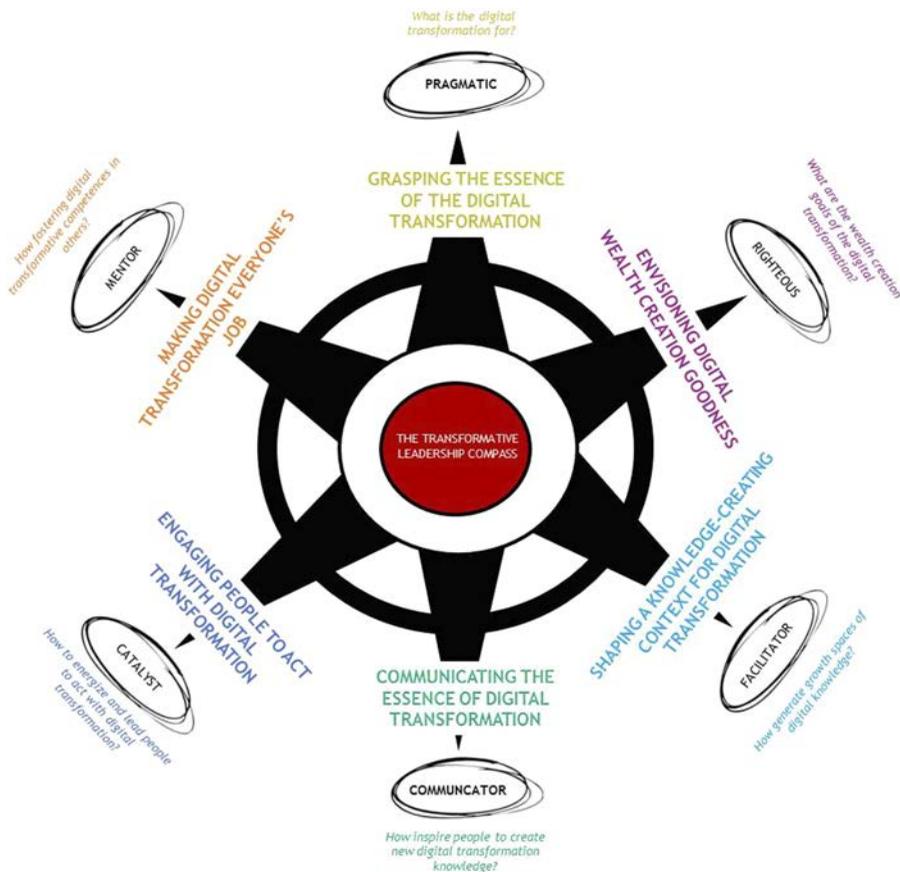


Figure 1.
The transformative leadership compass

According to [Nonaka and Takeuchi \(2011, 2019\)](#), the ability to “grasping the essence” reveals what is really behind products and organisational behaviour. Wise leaders do not merely focus on what they do but on the essence of what they do. Paraphrasing [Nonaka and Takeuchi’s \(2019\)](#) example of Terao producing toaster, the crucial aspect of grasping the essence is to question, Do we produce toasters or aim to make sure people can make the best possible toast at their home? So their slogan was simple, we aim to “Creating the best toast, not the best toaster”. Similarly, during the mid-90s, Ducati’s chief executive officer (CEO) Minoli outlined the turnaround program to relaunch the company; he coined the slogan “From a mechanical to entertainment company”, pointing out that the crucial value embedded into products was the experience customers would capture. The critical driver behind grasping the essence is a clear definition of the features affecting people’s satisfaction concerning what the organisation is producing. Wise leaders should make the best use of their intuition to grasp the essence, and the development of the intuition results from the experience based on tacit knowledge. There are three primary practices linked to this ability: (1) exercise critical thinking, understanding the idea behind the object of observation and the specifications; (2) See the “trees” and the “forest” at the same time. The ability to observe and identify both the details and the big picture is crucial for leaders who want to grasp reality

and be fully aware of a problem or situation; (3) Construct and test hypotheses following a scientific method.

The definition of a strong strategy is fundamental in digital transformation for digital business development (Larjovuori *et al.*, 2018). A digital transformative leader clarifies the organisation strategy's strategic objectives, ensures they meet the customer's wants and needs and informs the technology solutions and the digital knowledge characterising its product and services. He searches for organisational excellence by offering innovative product and services providing benefit to people and society, taking up the challenges through operational solutions to improve the quality of life inside and outside the organisation. For this reason, a digital transformative leader is solution-oriented and can be considered *Pragmatic* because oriented to achieve the targeted objectives and take decisions to solve problems. Pragmatism means being aware of reality and think about how it relates and can be connected to the larger context.

Moreover, pragmatism means thinking but not for the sake of thinking, but to drive actions and do. In a business environment increasingly unstable, leaders are forced to make decisions quickly and without complete information (Lynn Pulley and Sessa, 2001; Horner-Long and Schoenberg, 2002). They must learn to use their intuition and concretely act towards a direction: decisiveness and problem-solving abilities keep being highly relevant to leaders who navigate the digital landscape and become even more prominent in the future. Considering the current digital context, information systems can provide enormous amounts of real-time data, so a digital transformative leader should process a high volume of fast-paced incoming and outgoing data, summarise them and make sense of the relevant information. Alternatively, urgency would put leaders in situations to decide without having all information or thinking and analysing the problem, providing habitual answers instead of creating innovative solutions and new ideas. Digital transformative leaders have to strike the right balance between rationality and instinct to learn to manage these situations (Cortellazzo *et al.*, 2019).

3.2 *Envisioning digital wealth creation goodness*

In a digital transformation process, the organisation's purposes should be questioned and realigned according to the digital transformation aims (Kreutzer *et al.*, 2017). Therefore, the rethinking of strategic processes in times of digitisation is crucial. In this vein, the competence defined as "*Envisioning digital wealth creation goodness*" concerns the capacity of taking decisions based on the goodness that the digital transformation will entail, considering the positive impact of goals and processes on organisation and society, to support sustainable growth. The critical question characterising this competence is: *what are the wealth creation goals of the digital transformation?* Addressing this question, a digital transformative leader ought to be guided by healthy values and a strong sense of ethics.

Nonaka and Takeuchi (2011, 2019) feature this competence with the ability of "Judging goodness". They point out that wise leaders always have a big picture of value creation, and they do what is good not only for the organisation but for the society at large and humankind. The ultimate goal of an organisation is to contribute to a better society. This equals developing a new idea or an alternative view of capitalism, which in its traditional shareholders' value orientation prevents business organisations from fully meeting the challenges society is facing. The creation of profits is essential for the survival of an organisation, but it does not mean that profitability is everything and that all actions should aim to pursue profitability. So, the only goal of a leader cannot be to make money, and he has to focus on making a difference. Accordingly, wise leadership shapes a better future, acknowledging the past and managing the present towards a vision. For this reason, it is essential to nurture idealism and hopefulness. Being idealistic opens the possibility to create new and different futures.

To envision digital wealth creation goodness, leaders need to be ethical. Indeed, ethical leadership has a crucial role in an organisation's success, and leaders have to implement ethical practices through their everyday actions, behaviours and talks (Ofori, 2009). A leader's opinions and choices are to be guided by idealism, and he ought to consider what people feel, to distinguish what is good from what is not. Leaders have to adhere to the values and principles proclaimed (Ladkin, 2008), based on a clear and noble mission, to be considered virtuous and credible.

Substantially, a virtuous digital transformative leader thinks that it is vital to elevate principles and values that benefit society, prioritising long-term purposes versus short-term goals (Lennick and Kiel, 2007, p. 209). He acts critically and responsibly, always having a big picture of the value creation proposition. A digital transformative leader is a knowledge transformer and does what is beneficial not only for the organisation but also for humankind because he knows that an organisation's real goal is to improve living conditions (Ladkin, 2008). Thus, making decisions based on goodness is about shaping a better future, acknowledging the past and managing the present towards sustainability. For this reason, it is essential to nurture optimism and hopefulness, according to spiritual leadership (Fry, 2003). Being idealistic opens the possibility to create new and different futures. A digital transformative leader should have a higher purpose: the only goal of a leader cannot be earning money but making the difference through digital transformation's actions (Nonaka and Takeuchi, 2011, 2019).

A digital transformative leader works on his awareness. Because of his ethical and moral thinking, he is *righteous*, motivating oneself and others to have a sense of spiritual well-being (Fry *et al.*, 2005) through calling and membership to create value congruence across a cohesive team. Cultivate a shared moral purpose fosters higher employee positive human health, psychological and spiritual well-being, organisational commitment, productivity and organisational performance (Fry and Matherly, 2006). This is because a spiritual workplace is not only more productive but may also be a source of sustainable growth and competitive advantage (Mitroff and Denton, 1999).

An organisation engraining the competence of envisioning wealth creation act to make people happier assuming that if people are happy everything else will follow up. A digital transformative leader knows that making people happy boosts people's performance at work, which raises the possibility of creating self-sustaining spirals between human productivity and human well-being, depending on a greater purpose of improving life. The first key to making people happy is working on oneself, nurturing emotional intelligence, intuition and creativity because digital transformation is about talent and soft skills (Frankiewicz and Chamorro-Premuzic, 2020).

Nonaka and Takeuchi (2019) suggest four essential practices leaders should develop to make judgements and decision about goodness: (1) By making experiences and particularly those gained through facing adversity and failure; (2) Write down the principles related to personal's values and ethics and share them. The principles are based on moral and ethical guidelines; (3) Searching relentlessly to pursue excellence; (4) Becoming well-versed in the liberal arts.

3.3 Shaping a knowledge-creating context for digital transformation

Nowadays, sharing common space allows people to recognise those relationships that lead to tangible benefits and create and maintain social relationships with various stakeholders. Organisations that cross digital transformation should facilitate exchange culture, creating spaces of culture sharing and learning growth. The capability to innovate and viable learning culture is closely connected (Brockman and Morgan, 2003). A digital transformative leader shapes the organisational capacity of creating a prolific context to nurture digital knowledge,

generating virtual and real growth spaces of digital and knowledge exchange. The critical question characterising this competence is: *How generate growth spaces of digital knowledge?*

According to Nonaka and Takeuchi (2019), wise leaders should exercise the ability to “create shared context”. Consistently with the knowledge-creating model, this equals creating the BA, i.e. a context for interactions, space, place or field in which relationships are forged so that human interactions take place to create a practice knowledge. It is a learning context that can be formal or informal to develop knowledge and embed knowledge into the BA. It can be physical (face-to-face) or virtual, internal or external.

Digital transformative leaders with this ability are open-minded. They feed networks, develop social interactions and promote the creation of real or virtual spaces to encourage connections and comparison. Studies explaining how to create room for emotional and thinking sharing affirm that the diverse emotional and thinking landscape fuel relationship, team building ability and people’s innovative spirit (Sanchez-Burks *et al.*, 2020). Today’s business environment, characterised by social media and other digital platforms, provides new networking opportunities and the possibility to establish connections with colleagues and stakeholders through more immediate communication. Indeed, these sharing spaces become a knowledge-creating environment able to encourage digital transformation. In this regard, applying new learning methods and identifying new digital learning contexts might help improve the quality of learning and involve the participants in the learning process (Sousa and Rocha, 2019).

A digital transformative leader who is cohesion oriented can be considered a *facilitator*, i.e. a guide for creating a cultural context able to stimulate comparisons and growth spaces to achieve the objectives and make decisions that become a learning environment.

Creating spaces that generate and combine knowledge also means stimulating positive attitudes and creating an appropriate working atmosphere fostering well-being (Kogut and Zander, 1992; Salas-Vallina *et al.*, 2017). Well-being makes people more productive (Oswald *et al.*, 2015). It contributes to happiness, a fundamental incentive, especially for employees who intensively use the knowledge at work (Salas-Vallina *et al.*, 2018), stressing the capacity to solve complex problems through creative and innovative solutions (Herdberg, 1990).

According to Nonaka and Takeuchi (2011), the following practices are essential to create a context for interactions: (1) keep the doors open, encouraging openness; (2) capitalise on timing; (3) facilitate collisions sparking creativity and innovation; (4) be brutally honest; (5) establish a shared sense of purpose; (6) demonstrate commitment.

3.4 *Communicating the essence of digital transformation*

Organisations aiming at ensuring the transformation’s future success have to pay attention to ways and responsibilities to communicate how the vision and change will affect the rest of the organisation (Ismail *et al.*, 2017). Digital transformative leaders should communicate mission, vision and values in which they believe. Communicating the essence of a digital transformation equals the capacity to share the organisation’s purpose through a universal language, inspiring people towards storytelling tool using metaphors, stories and rhetoric. The critical question characterising this competence is: *how inspire people to create new digital transformation knowledge?*

Nonaka and Takeuchi (2011, 2019) describe this ability as “communicate the essence”. They suggest that wise leaders can translate and express complex situations and problems through metaphors, stories and other figurative languages that help to extensively and effectively communicate to people. Metaphors help to quickly grasp reality and the conveyed messages because they are grounded on people’s common everyday life experiences. In particular, the sport- and the child-based metaphors are powerful because they can vividly

visualise and tend to be emotionally very powerful. Stories can create an empathetic cognitive context facilitating the understanding of messages by leveraging someone else's experiences. A story can be based on his or her personal experience or recall someone else's experience. A story explains the ontological questions: the "what", "why", "who", "how", "when" and "where". A story can be defined differently, give sense to things and events and represent norms, experience and explanations of reality. A captivating leader can inspire people who become its followers spontaneously (Caldwell *et al.*, 2012). The use of figurative and inspirational language enables people from different cultural backgrounds to grasp messages more effectively. The communication of the essence also requires mastering rhetoric to motivate people by envisioning possible futures and creating aspirations or visions. In this context, rhetoric is understood as an effective way to communicate and motivate people rather than human communication to aim for purposeful and strategic manipulation. A digital transformative leader understands how people will perceive the messages and the reactions they will have.

For this reason, messages should be built not just from his or her perspective but essentially from the messages' receivers. In Rhetoric, Aristotle's treatise on the art of persuasion, three modes of persuasion are described: logos, pathos and ethos. Logos is about persuading an audience using logical arguments and supportive evidence. Pathos is about leveraging emotional appeal to convince people. Ethos is about inspiring trust and establishing credibility, which is affected by the communicator's moral credibility and history. It is related to what people think about the person before the messages are conveyed.

A digital transformative leader could influence the quality of organisational learning through storytelling. Therefore, imagination is one of the central meanings of being a guide for nursing leadership. A leader who inspires, creates living memories of organisations, keep them alive. He forms the corporate culture, influence and co-creates the basic principles of individuals and groups. Usually, organisational elements such as teams, communities and departments create their own stories that describe management style, relationships among employees, values, problems, usual activities and lessons learned (Boal and Schultz, 2007). A digital transformative leader exercising the ability to narrate and nurture tacit knowledge development will constitute the enterprise's future know-how. Fables, parables, legends and folk tales can also be used, with protagonists as animals representing people or myths that describe heroic acts of good and famous heroes. Therefore, a digital transformative leader could use stories to create scenarios and visions, codify tacit knowledge, explain ideas, smooth the implementation of change and overcome mental barriers people build against new knowledge (Denning, 2011). Besides, a digital transformative leader should also be able to communicate through social media and technology tools. He should adopt new communication and interaction methods in the digital era, leveraging social media and Internet tools (Cortellazzo *et al.*, 2019). Carte *et al.* (2006) point out that while leadership in the more traditional face-to-face context may emerge using various mechanisms; in the virtual context, it likely relies mainly on the leader's communication effectiveness. According to Roman *et al.* (2018), communication through IT with clarity and organisation that avoids misunderstanding is called e-communication. Leaders take everyday decisions using new communication and interaction ways (Cortellazzo *et al.*, 2019). Therefore, a digital transformative leader ought to know different communication tools and choose the right tool based on his target and different situations. For these reasons, a digital transformative leader cultivates imagination and employ new interactions way. He acts as a *communicator* who creates a leader-follower relationship through a strong personal bond. He solidifies personal connection, forges an identity between members and the organisation, and inspires high personal commitment levels. Some fundamental practices to develop the competence of communicating the essence are: (1) reading novels; (2) engaging in open and direct

conversation; (3) making effective use of historical imagination to create a new concept for the future; (4) learning rhetoric from memorable speeches.

3.5 Engaging people to act with digital transformation

Current organisations are increasingly characterised by heterogenous teams, with people from different cultures, ages and countries of origin. Moreover, many people have difficulty in accepting and embracing digital evolution. The competence of engaging people to act with digital transformation concerns the capacity to engage people and overcome the barriers, inspiring and holding together—given a common purpose—people from different generations, cultures, roles and primarily digital backgrounds. The critical question characterising this competence is: *how to energise and lead people to act with digital transformation?*

Nonaka and Takeuchi (2011, 2019) discuss that a critical dimension of the capacity of engaging is the ability to “exercising political power”. Political power is the ability to bring people together and get them to act. It is about mobilising people with different, even conflicting goals/interests to combine their knowledge and efforts toward a single target. It involves the leader’s ability to understand their people’s viewpoints and emotions and spur them to action. The capacity to exercise political power can be expressed by different skills, such the Steve Job’s ability to distort reality. But most importantly, it is about embracing and synthesising contradictions.

Today’s complex and fluid environment is increasingly distinguished by raising of weak problems and contradictions. A solution cannot be simply good or bad, positive or negative, idealistic/dreamer or realistic, unpredictability and stability, analog and digital. In such a context, rather than seeking an optimal balance between contradictions, a digital transformative leader should engage in dialectical thinking. Dialectical thinking deals with contradictions, opposites and paradoxes in situations that need to be sized as they emerge. It is about thinking in terms of “both/and” rather than “and/or”—so it is about pursuing both change and stability, disruption and continuity at the same time. For this reason, a digital transformative leader should answer the question: How can we simultaneously do both A and B? In the age of uncertainty, dialectical thinking matters more and more. It is an essential feature of a wise leader’s ability to hold two opposed ideas in mind at the same time and still retain the capacity to function and make decisions without losing sight of the greater good. Toyota is a case in point of a company embracing contradictions and paradoxes, making them a distinctive feature of their culture. It actively embraces and cultivates contradictions by harnessing opposite propositions to energise the organisation to search for winning solutions and excellence.

This competence relates to the inclination to lead a group towards a shared direction, with enthusiasm and energy, stimulating team motivation, bridge the gaps and supporting their professional way. A leader who encourages passion, commitment and excitement can create high commitment in an organisation and is considered a charismatic leader (Senge, 2006).

A digital transformative leader who wants to engage and lead people to act has to understand people through empathy and listening. Indeed, empathy enables the leader to understand if the people are reached. Without empathy, a leader cannot build a team or nurture a new generation of leaders: he will not inspire followers or elicit loyalty. Salovey and Mayer (1990) define empathy as the ability to comprehend another’s feelings and re-experience them oneself, claiming that it may be a central characteristic of emotionally intelligent behaviour. It is commonly described as the ability to project a person in another. Empathy is more than an intellectual exercise. It requires personal involvement and perception. A fortunate enough person to encounter an empathic listener feels reassured, recognised and accepted (Katz, 1963). This ability is considered an effective leadership behaviour in an organisational setting (Cooper and Sawaf, 1997; Goleman, 1998b; Yukl, 1998).

Developing empathy also means mediating, nurturing understanding and involving other people in the organisation process to generate knowledge. In this perspective, a digital transformative leader is a *catalyst* because he shows how to move forward in the complex digital landscape by using closeness with others and solid charismatic power.

The capacity to engage people to act and exercise political power can be developed by practising dialectical thinking. Dialectical thinking is about searching for a synthesis being comfortable with thesis and antithesis and two contradictory perspectives of reality. By accepting and embracing contradictions, wise leaders can navigate complex environments making decisions that best suits a situation without losing sight of the goodness to be achieved. Further practice is encouraging positive disobedience or disobedience with a consciousness. Encouraging disobedience rather than compliance push creativity and inspire excellence. People can be free and feel encouraged to express their contrary opinions. Each person is expected to act according to what (s)he thinks is right and not take for granted what a boss says, with the scope of making the overall organisation critical regarding the problems and solutions to adopt.

3.6 Making digital transformation everyone's job

Based on the emergence of the digital revolution, organisations require an employee base ready to embrace new working styles, filling roles that are just emerging and adapting existing jobs, opening them to integrate more data and automation processes. People should assimilate a new culture and adjust themselves to the workplace transformation brought by digitalisation, automation and robotics (Rangraz and Pareto, 2021). Moreover, cultivating soft and leadership skills becomes even more relevant for employees (Frankiewicz and Chamorro-Premuzic, 2020; Kane, 2019). Therefore, taking care of people's personal and professional growth and nurturing their talents is fundamental to promote digital transformation processes. Thus, a digital transformative leader's key feature is the capacity to spread digital transformation, supporting people to enhance their leadership skills and digital knowledge competencies. The critical question characterising this competence is: *how fostering digital transformative competencies in others?*

Nonaka and Takeuchi (2011, 2019) consider "fostering practical wisdom in others" as a critical ability. They sustain that wise leaders should distribute practical wisdom as much as possible through the organisation. So, an organisation can respond flexibly and creatively to any situation. The leader should be an example for others because people can often learn about practical wisdom by observing an exemplar's behaviour. A formal apprenticeship system can foster practical wisdom, allowing mentors to share experiences, contexts and time. A leader who believes in people provides others with opportunities to experiment and to improve continually. He diffuses energy and strength in the organisation, inspiring people to reach the collective purpose.

Navigating a digital landscape requires combining both people-oriented and task-oriented leadership behaviours because organisations are complex systems. A digital transformative leader should aim to create new meaning and insights by selfless commitment, continual learning, empowering others and personal example. He is generous and people-oriented: his behaviours regard mutual trust in interpersonal relationships, communication, respect for opinions and caring about employees' emotions. Leaders with these behaviours can show more interest in followers' needs and desires and act in this direction (Yukl, 2002). A leader is responsible for establishing a friendly atmosphere in a team to encourage all members to work together without feeling intimidated, frightened or insecure (Blanchard, 2010).

Moreover, to help people focus on their leadership capabilities, a digital transformative leader should nurture critical thinking in others, helping them make decisions that best suit a situation without losing sight of the goodness to achieve. This ability helps to deal effectively

with social, scientific and practical problems that characterise the current complex society. It is a learned skill that must be developed, practised and continually integrated, and it is a crucial leadership ability to be open-minded in the pursuit of knowledge. Typically, four barriers often hinder the integration of critical thinking in the learning process and education: lack of training, lack of information, preconceptions and time constraints (Snyder and Snyder, 2008). A digital transformative leader willing to train leaders and nurture critical thinking promotes problem-based learning environments to increase people thinking skills and knowledge acquisition. He creates a culture of inquiry where people can discuss their thinking processes and practice logical constructs. People will become more willing to reconsider and revise their thinking. The focus will be not as receivers of information but as users of information. Critical thinking requires training, practice and patience because people have to ask themselves: Should it be viewed differently? What is my knowledge based upon? Finally, the reward is that people can critically think for themselves and solve real-world problems.

A digital transformative leader should take care of people's growth through personal and professional learning programs and trust. He should be not afraid to assign them a challenging task that presumes responsibility and a sense of risk. It is essential to promote empowerment in the organisation, which aims to support the acquisition of power to increase individuals and groups' ability to actively control their own lives (Rappaport, 1981). Organisational empowerment includes all the processes and organisational structures that increase member participation and improve its effectiveness in achieving its goals. An organisation that allows its members to enhance control over their existence is called an "empowering" organisation: it makes it possible to realise the potential of the individual who feels an internal desire for change. A leader that enhances empowerment also encourages a social process through which people, organisations and communities acquire competence over their own lives to change their social and political environment to improve equity and the quality of life (Wallerstein, 2006). To nurture an empowering organisation, a digital transformative leader shows trust to employees by encouraging them to activate talent, propose ideas and take initiatives and solve problems. The reason is that perceived trust often stimulates people to offer performances that exceed their expectations. A digital transformative leader is a generous *mentor* tending to encourage people to nurture leadership competencies and support talented people's professional development in digital transformation.

4. Conclusion

This paper proposes the transformative leadership compass as a framework identifying six crucial competencies distinguishing a digital transformative leader. The framework is based on a critical review of the literature focussing on three leadership styles, i.e. the wise, transformative and digital leader. The search for competencies distinguishing a leader in the digital age is raising interest among scholars. The paper contributes to the debate, gathering the main insights from the extant literature, introducing the digital transformative leader's leadership profile as a leader who embraces digital knowledge generation and application to support organisational transformation towards continuous development of the sustainable value-oriented organisational capacity.

The management literature has largely discussed management championship and leadership's relevance for implementing successful digital transformation initiatives and, more generally, change management programs. Leadership is essential to foster an open culture and promote attitude and mindsets driving organisational behaviour toward transformation. Today's business landscape forces companies to become agile and lean by

continuously developing and embracing new knowledge that has to be put into practice to drive innovation. This paper introduces the digital transformative leader as a leadership profile to explain the role that executives can play within organisations to spur, catalyse and sustain DTE, that is, the act of creating a new business or developing existing businesses by having at the core or embracing digital transformation, i.e. the continuous development and application of digital knowledge for companies' value creation.

Integrating the wise leader's model proposed by [Nonaka and Takeuchi \(2011, 2019\)](#) with the transformative and digital leader's perspectives, six crucial competencies characterising the digital transformative leader have been outlined and represented with the transformative leadership compass. The framework is helpful to understand what affects the organisational culture and behaviours driving digital transformation. It defines the theoretical foundations to operationalise an assessment framework and developing empirical research about leadership characteristics hampering and enabling successful companies' digital transformation.

This paper's contribution from a theoretical viewpoint offers insights to understand better the leadership features driving and affecting the successful development of digital transformation initiatives and the development of enterprises' digital transformative behaviours. For practice, the paper introduces notions that can help design and develop management initiatives that foster an enterprise's capacity to undertake digital transformation development.

For developing the transformative leadership compass, we have adopted the principles of the grounded-based theory. By a deductive analysis of the management literature, we have formulated the hypothesis grounding the framework. However, the rigorous application of the grounded-based theory requires also the collection of insights from the field. The lack of the combination of the deductive analysis with an inductive one represents the main limitation of this study. For this reason, in developing further the research, the authors are going to investigate, using secondary resource data such as biographies and recorded interviews, the profiles of leaders who have developed successful digital enterprises. Moreover, a series of semi-structured interviews with an executive engaged in digital transformation journeys will be gathered. The qualitative empirical analysis will provide observations to test and refine the model. Therefore, the proposed conceptual model defines the theoretical foundations for future empirical research to shed light on the leadership competencies supporting successful companies' digital transformation. In particular, the further development of the study will operationalise each framework dimension to identify items for assessing the digital transformative leader's competencies. A survey will be designed to collect data valuable to develop both descriptive and inferential analysis concerning the relationships between transformative leadership competencies and enterprises' digital transformation development. Accordingly, the transformative leadership compass provides the guidelines to design a performance scorecard to evaluate a digital transformative leader's competencies and perform benchmarking analysis. In particular, considering companies dealing with digital transformation, the competencies model created could be used by the human resource (HR) department or business Consulting firms to measure specific behaviours that a leader should catalyse within organisations. For example, it might help talent/performance management, defining what performance success should look like for leaders within a digital organisation, or a performance appraisal, to assess managers during a performance review properly or to create a growth and development plan.

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Corresponding author

Eva Schettini can be contacted at: eva.schettini@unibas.it