IN DIGITALIZATION WE TRUST?

An exploration of the impact of digitalization on the trustworthiness of the leader in Dutch start-ups from the perspective of managers and employees

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Abstract

This thesis examines what impact digitalization can have on the trustworthiness of the leader through the lens of managers and employees in Dutch start-ups. The study explores the intersection set of trust, leadership and digitalization. As there was no prior research on the research issue at hand, a model that incorporated a process of trust and its interaction with digitalization has been constructed by the authors. The model relied on previous research on models of the trust process and characteristics of digitalization in the light of leadership. First a theoretical framework is built through a literature survey. A qualitative inquiry through interviews was carried out in order to be able to analyze the trustworthiness of the leader. The objective of the authors during the research was to document how leaders and followers perceived a trustee (leader) in a trust process with digitalization involved. The analysis revealed that even though digitalization has pervaded our lives; its impact on the trustworthiness of the leader has remained limited so far. Empirical data from this research indicated that the impact of digitalization on the three attributes of trustworthiness of the trustee was the strongest: objectives and intentions, competence and integrity. There were also digitalization related implications that could be drawn from the accounts of the interviewees. Thesis findings contribute to a better understanding of the role of the leader in a trust process in digitalized organizational environments and encourage further research in the field of trust especially when digital technologies have become so pervasive in the work life.

Keywords: Trust in Leadership, Digitalization, Leadership, Trust, Trustee, Start-ups.
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1 Introduction

1.1 Background

Consider employers who use predictive analytics to anticipate future risks and shape policies that could have punitive effects on specific individuals or groups. Or employees who are given wearable technology to encourage fitness and wellbeing in the workplace. Should they trust that their employers are being genuine in looking after their health or worry that digital health profiling could leave them out-of-pocket for health insurance costs - or even out of a job if they don’t conform to certain standards of health and fitness? (PWC Germany, 2015).

The issue of trust at the workplace has become one of the controversial issues with the pervasion of digital technologies in almost every facet of our daily lives. Companies are expected to invest in digital technologies in order to get ahead in the competition. Digitalization is presented in many cases as the panacea to many problems the organizations may be facing especially regarding profitability and effectiveness. While digital technology facilitates, adds value and helps economize many processes; it comes with some constraints. Employees’ subjugation to technology, removal of the individual autonomy, violations of privacy and work-life balance, and personal life pose problems both for individuals, leadership and organizations. Before the age of digitalization, Max de Pree, legendary chairman of the famous office furniture company Herman Miller Inc., wrote in his book “Leadership is an Art” that “Structures do not have anything to do with trust. People build trust” (2004, p.29). A leader therefore has an important role in creation of a trustworthy work environment.

1.2 Digitalization, Leadership and Trust

Digital technologies are reinventing the overall work experience for all levels of employees, including the leaders of organizations. Technology advances in artificial intelligence, mobility and analytics demand a new set of organizational capabilities that will empower a more liquid, responsive and innovative future workforce. (Accenture.com, 2018) According to PWC’s report on “Millennials at work Reshaping the Workplace” in 2011, which surveyed over 4300 people aged 31 or under, 41% say they prefer to communicate electronically at work than face to face or even over the telephone. Millennials routinely make use of their own technology at work and three-quarters believe that access to technology makes them more effective at work. This is the first generation to enter the workplace with a better grasp of a key business tool than more senior workers (PWC, 2011). Increasing infiltration of
technological developments at workplace by a ‘digital’ workforce that is comprised of ‘digital natives’ (younger generations) and ‘digital immigrants’ (older generations) will influence the work practices (Colbert et al., 2016). “Just as increased technology usage has influenced the competencies, self-awareness, and relational expectations of the digital workforce, the way that work is structured and carried out has also been impacted by technological developments” (Colbert et al., 2016 p. 734). Now information is easily and quickly accessible for the employees. Work and non-work related time and space are blending into each other.

Digitalization is currently one of the top trending topics changing society and businesses(Collin, et al., 2015). The Internet of Things (IoT), mobility, cloud, big data, augmented reality, blockchain, and social media are driving companies to the next level of digital customer engagement and IT-enabled business processes, products, and services (Auriga.com, 2016). Because of this, many researchers write about a new kind of industrial revolution due to digitalization (The Economist, 2012; Schwab, 2015). After steam, steel, electricity, and petrochemical revolutions, network-based digitalization is the driving force today on the stage of business and private life (Vogelsang, 2010). Yvette Zzauer, a senior consultant at Capgemini Consulting specialized in digital culture, transformation-change management notes that by 2025 about 40% of the Fortune-500 companies are likely to vanish due to megatrends like digitalization (Zzauer, 2017).

This period of digitalization is also referred to as a time of digital Darwinism — an era where technology and society are evolving faster than businesses can naturally adapt (Solis, 2014). This sets the stage for a new era of leadership, a new generation of business models, charging behind a mantra of “adapt or die”(Solis, 2014). In a survey about digital businesses conducted over 4,800 business executives, managers and analysts from organizations around the world, 76% of respondents answered that digital technologies are important to their organizations in 2015, and 92% say they will be important in 2018 (Deloitte University Press, 2015). Digitalization forces organizations to adjust strategies, organization structures and also their leadership practices.

While digital technologies facilitate transparency in processes, broader ethical questions about the way organizations use digital technology may threaten to erode trust in those institutions (World Economic Forum, 2015). Digitalization doesn't only affect society’s trust in
organizations, but it also affects trust within organizations themselves (Mackenzie, 2010; DeRosa et al., 2004; Blöbaum, 2016; Khan, 2016).

Like leadership, trust is hard to describe, let alone define. We know when it’s present and we know when it’s not, and we cannot say much more about it except for its essentiality and that it is based on predictability. The truth is that we trust people who are predictable, whose positions are known and who keep at it; leaders who are trusted make themselves known, make their positions clear (Bennis and Nanus, 2005, p. 55).

We can see the importance of trust in practise as well. Former HR director of the BBC, Lucy Adams, reveals that “one in five people say they wouldn’t believe their leaders would tell them the truth if they were confronted,” and added “You cannot view employees as a homogenous lump. We need to understand people in the same way as customers.” She adds that the need for people to trust their leaders has never been more important (Appleton, 2014). “The capacity to generate and sustain trust is the central ingredient in leadership. A leader can have the most glorious vision in the world and it won’t mean a thing if there’s low trust in the organization. The trust factor is the social glue that keeps any system together. It’s hard to gain and easy to lose” (Bennis and Nanus, 2005, p. 11). Trust is an important issue for businesses both with their external stakeholders such as suppliers, local communities, customers as well as their workforce.

While digitalization can be perceived as a threat it is as well used as an important tool for communication within organizations. Digital communication has come to shape the work structures, and the communication between employees and managers. It is critical for leaders to handle business communication and trust when managing employees. (Mackenzie, 2010) Maureen Mackenzie concludes from the survey she conducted that there’s an evolution of traditional management into the management of processes and people using digital and Internet technologies. The move is mostly away from face-to-face communications and leaning towards digital communications, which influences the development of trusting at-work relationships. Even though managers are aware of the importance of compensating the negative effects of diminishing face-to-face communication managers- according to the employees- are not doing enough (Mackenzie, 2010). As stated above there is a clear pattern present in digitalization has an effect on trust and other aspects of leadership. Articles and whitepapers written by big consultancy firms such as Deloitte and McKinsey Company are advocating for a different form of leadership in the digital era.
1.3 Research Focus and Question

It is important for digitalized organizations to understand how an healthy relationship between leaders and followers based on trust is maintained. According to the literature

*Trust is the lubrication that makes it possible for organizations to work. It’s hard to imagine an organization without some semblance of trust operating somehow, somewhere. An organization without trust is more than an anomaly, it’s a misnomer, a dim creature of Kafka’s imagination. Trust implies accountability, predictability, and reliability. It’s what sells products and keeps organizations humming. Trust is the glue that maintains organizational integrity (Bennis and Nanus, 2005, p. 55).*

It contributes to the overall performance of the leaders and organizations in the digital age. Our research question focuses on aspects of leadership, digitalization and trust. Current literature on trust in leadership and digitalization does not address implications of the links between digitalization and trust in leadership. Therefore we defined our research question around this research gap. The research question that follows out of the issue is:

*What impact can digitalization have on the trustworthiness of the leader?*

To answer this research question we will test a model we created from the existing literature. Therefore we will use deductive reasoning with qualitative inquiry technique of interviewing in order to get subjective perspectives of managers and employees from digitally mature Dutch start-ups. Start-ups have been chosen as they rely on digitalization for cost, productivity and innovative purposes and are also easily approachable by the authors. The model will be useful to reveal possible relationships between dimensions of digitalization and features of a trustworthy leader.

1.4 Author’s Involvement

Our prior interest in Millennials and their impact in the workplace inspired us to explore the digitalization concept and its impact on the trust and leadership. We chose this topic because we can both relate to the issue on a personal level. I, Zeynep, am interested because many businesses are prioritizing digitalization and this will have serious consequences for the workplace as well as follower-leader relationships. As a former HR professional I am interested in its impact on the human resources processes and the organizational culture. I, Primo, am interested in this topic because next to my studies I am working digitally for a company based in the Netherlands. Therefore I am directly involved with the phenomenon of
digitalization. My communication with the company goes through digital means. Thus my current work relationship with my manager is built on digital communication.

1.5 Outline of the Thesis

This thesis is structured in the following way. First, a literature survey is conducted to gain deeper knowledge and reveal the research gap. Thereafter a theoretical framework is built on the existing theories and models. A model is constructed by the authors to explore the possible interactions between digitalization and trust in leadership. Theoretical framework section describes basis of the model. Methodology section explains the scientific approach and techniques employed to test the model and produce the empirical input and quality of the research. The empirical findings, results and their implications are discussed in the Findings section. At the end of the thesis process, findings, contribution and future research possibilities are presented.
2 Literature review

In our literature survey we would like to focus on the basic premises of our research question. In the first part of the survey we will try to explore digitalization and its impact in the organizational setting. Its past as well as its evolution is an important question that we would like to understand so as to be able to grasp its impact in the leadership roles. As the field of digitalization has been mostly dealt under the information technologies, there is a technical terminology pertaining to our research that we wanted to clarify. We would like to understand how the business and academic literature view digitalization. The second part will be dedicated to the leadership in the digital era. We would like to look at the dynamics that digitalization affects and how this may impact the leadership skills and expectations. Finally we would like to examine trust in leadership. We will start with the concept of trust and how it functions as well as its prerequisites, results and elements in organizational setting. This approach in our literature survey will keep us updated and informed about our main three themes - digitalization, leadership and trust- and prepare us for the empirical part of our research.

2.1 Digitalization

Digitalization has been creating a big buzz around the business world. Capabilities of the digital technology such as social media platforms, mobile devices, applications, and analytics for businesses and customers around the world have been attracting a lot of attention. MIT Sloan Management Review and Capgemini Consulting conducted a survey in 2013 that gathered responses from 1,559 executives and managers from a wide range of industries. This survey focuses on digital transformation through the use of new digital technologies such as social media, mobile, analytics or embedded devices to enable major business improvements in enhancing customer experience, streamlining operations or creating new business models. The responses clearly show that managers believe in the ability of technology to bring transformative change to business (Fitzgerald et al., 2013). McKinsey & Company conducted an online survey about digitalization in April 2014 and got responses from 850 C-level executives representative of a full range of regions, industries, and company sizes and noted that “organizations’ efforts to go digital are picking up steam” (McKinsey & Company, 2014, pp.1-4). Executives expect the largest share of their digital growth in the coming years to be from digital customer engagement, followed closely by the digital innovation of products, operating models, or business models. Almost no organization will be immune from the
competitive disruption by the extensive adoption of digital technologies (McKinsey & Company, 2014)

2.1.1 Terminology

There are many technical terms about digital technologies and some of the most commonly used terminology includes “digitization”, “digitalization”, “digital transformation”. There are many definitions to these terms from different fields of study but we will be using the below definitions for our research. Consultancy firm Gartner defines digitalization as: “the use of digital technologies to change a business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business.” (Gartner IT Glossary, 2018). Our understanding of the term of digitalization involves the use of digital technologies to create added value to business which can range from cost effectiveness, efficiency to marketing and more. A few examples of digitalization include smart homes (for entertainment, security, childcare, electrical, and heating), e-healthcare, smart mobility, and smart cities. The widespread impact of digitalization affects everything from personal relationships augmented by social media and their services, to other relationships such as how citizens interact with support services in e-government (Gray and Rumpe, 2015). Anna Croon Fors asserts that the meaning of digitalization should be regarded open, dynamic, multiperspectival and unfinalizable (Fors, 2010).

“The term ‘digital transformation’ is used primarily to describe the transformation from partly digitized business and society models into fully digitized business and society models. As such, business models are completely based on ‘digital levers’ which are dependent on mechanisms unobtainable without the internet. The concept of ‘digital transformation’ therefore primarily deals with the managerial-technical viewpoint of business model transformation” (Riedl et al., 2017, p.481). From an IT perspective, digital transformation denotes the body of changes that occur to automatize tasks (Legner et al., 2017). Digital transformation is becoming more visible in different areas of the society such as IT based changes in political decision-making, judicial frameworks, and related to supply and demand in labor markets. Even our daily lives are becoming more immersed in digital technologies in which digital transformation has a significant outcome for businesses as it requires and enables companies to transact in the changing markets (Legner et al., 2017). The terms digitalization and digital transformation are often understood to describe the larger technical
changes in the society such as, mechanization, automatization, industrialization, and robotization -often as a mistake.

The words digitization and digitalization are also often used interchangeably, however digitalization should be clearly distinguished from digitization. Digitization is the technical process of converting analog signals into a digital form, and ultimately into binary digits, and is the core idea brought forward by computer scientists since the inception of the first computers (Hess, 2016 cited in Legner et al., 2017). “While digitization puts emphasis on digital technologies, the term digitalization has been coined to describe the manifold sociotechnical phenomena and processes of adopting and using these technologies in broader individual, organizational, and societal contexts” (Legner et al., 2017, pp. 301-302). Digitalization is an emerging, open and dynamic concept that has not been fully defined; it is an ongoing process that should be approached with sensitivity and openness to what it might encompass; a means rather than an end (Hagberg, Sundstrom and Egels-Zandén, 2016).

2.1.2 History and the Paradigm Shift

The history of digitalization unfolds with the history of information technology (IT). There are several innovative milestones in the history of information technology: computerization in the 1960s, data processing in the 1970s, personal computing in the 1980s, internet computing in the 1990s, digitalization and eventually digital transformation in the 21st century. Developments in information technology have been a big business enablers. In becoming digital, the social and economical elements and processes of the society is challenged. Internet is the mobilizer of the digitalization process but is not the only factor (Riedl et al., 2017). Christoph Degryse underlines three important developments that makes digitalization possible: “internet and the development of high-speed networks; Big Data, that is the merging by internet platforms of colossal masses of directly exploitable commercial, personal and geographic data; the explosion of new forms of mobile device – mobile telephones, tablets, etc.” (Degryse, 2016, p.7). Degryse argues these three developments changed distances and frontiers (not only national but also personal) due to the networks; created data as a new form of commodity exploitable by platforms, companies or start-ups (Degryse, 2016, p.7). The improvements in the fields of information technologies, communication and connectivity provided functionalities that reshaped the traditional business strategy and made it possible to conduct business across boundaries of time, distance and function (Bharadwaj et al., 2013).
Some researchers argue that digitalization is actually part of the development in the information technologies and business information management systems and “it is possible that a look back at 2017 in 5 or 10 years will reveal that digitalization was just another fad” (Riedl et al., 2017, p.476). The pervasive nature and extensive application of digital technologies in our lives however point to a paradigm shift. “Digital technologies are also transforming the structure of social relationships in both the consumer and the enterprise space with social media and social networking” (Bharadwaj et al., 2013, p.472).

What makes the current wave of digitalization different from the previous ones is that it is driven by its very users who expect sophisticated digital services and products. This can create pressure and opportunities especially in the market for products and services (Legner et al., 2017). The current digitalization wave also is making a significant impact on the corporate world. Digital technologies such as social media, big data, the Internet of Things, mobile computing, and cloud computing significantly influence processes, products, services, and business models as they can easily connect machines, communities and individuals, as well as facilitating new work, collaboration, and automation models (Legner et al., 2017, p. 306).

The accompanying discourse used to describe this emerging reality is still very tentative: digital, collaborative, sharing, on-demand economy. [...] It is interesting to observe that this new economy has been undetected in statistics for the most part, largely because the economics of 21st century digital technology is quite different from previous technologies that have impacted the labor market at a broad scale (Degryse, 2016, p.8).

2.1.3 Digitalization and Trust

While many organizations brag about the fact that digitalization makes their processes more accountable, transparent and trackable; the data infrastructure also enables to track and store data created by its very users and consumers -often in violation of personal privacy or autonomy. In many instances this is compared to the presence of a “Big Brother” that watches over its citizen as in the dystopian novel of George Orwell, “1984”, where surveillance and censure was considered the norm. In this process the users, consumers, employees as well as employers become vulnerable and risk losing their privacy and ultimately their trust in the organizations and leaders.

The possibilities of control offered by ‘digital management’ represent a challenge and potential threat to the world of labor and in particular the trade unions. These new methods of control enabled by digitalization may lead to a loss of trust towards management, causing
employees to become ‘disaffected’ (Degryse, 2016). As mentioned above, the new forms of management, including continuous real-time evaluation of worker performance on smart production lines, can become important sources of stress. It has also been observed that older workers (aged 45 and above) have a more tense relationship with new technologies that can contribute to a decrease in occupational wellbeing (Degryse, 2016). Degryse in his analysis of the digitalization of economy and the labour market in the EU, categorizes “digital management, policing of workers, risk of mutual loss of trust between employees and management” (Degryse, 2016, p. 51) as a potentially threatening circumstance for the future of labor.

2.1.4 Impact Of Digitalization
Moving towards digitalized business generally requires organizations to undergo a massive transformation that affects organizational structures, strategies, IT architectures, methods, and business models (Legner et al., 2017). This data-led management necessitates erasure of silo-based organisation methods in favour of a horizontal and open form of organisation within which the flows of information will circulate. As The Open Society in 2015 stipulates, information platforms become “the factory of the 21st century” (Degryse, 2016, p.13). Degryse (2016) also underlines the rise of a new kind of organization which he describes as firms that can adapt to the new technologies quickly, more project-oriented, efficient, innovative, flatter, flexible organizations.

2.2 Leadership In The Digital Era
Leadership has been essential for any business. Digitalization, changing business models, work environment and workforce seems to create an imperative for the leadership to change as well. Stijn Viane notes that “the digitising economy is compelling business leaders to cultivate a profoundly new mind-set and invest in new technology-driven capabilities for winning” (Viaene, 2017 p.1).

2.2.1 E-leadership
Research on leadership in ‘digital era’ received limited attention in the scholarly literature. A review of the literature shows that leadership and digitalization has been mostly examined by consultancy firms and institutions in a pragmatic fashion and reveals that a significant
majority of the research is towards a more innovative and eventually more profitable business. Leadership is generally perceived as a side issue as to how to make this happen.

In their analysis of the contemporary leadership theory and research in 2014, Dinh et. al. name e-leadership as an emerging theory of leadership and describe e-leadership theories as a thematic category that “encompasses the study of leadership effects of task, technology and distance in virtual space” (Dinh et al., 2014, p.58). Avolio, Kahai, and Dodge use the term “e-leadership” to describe leadership that is dispersed and is managing teams is through means of information technologies. The authors define e-leadership as a behavior, the use of electronic media for leadership communication purposes. They argue that successful appropriation of digital technologies is tied to the type of leadership and cultural system in which it is placed. Leadership is such cases evolves with technologies and prepares the organizations for adaptive change. The authors argue that through technology; beliefs, behaviors and expectations of the followers as well as leaders may be challenged and changed. This may lead to rethink new ways to accomplish goals (Avolio, Kahai and Dodge, 2000).

2.2.2 Impact of Technology on Leadership

Bennis emphasizes the importance of openness to the new, adaptive capacity and resilience for leaders to adjust to the digital world utilizing the speed and transparency the digital world offers. “Digital business strategy is a very important issue for leadership because it is going to fundamentally change every leader’s life—whatever type of institution they are leading”(Bennis, 2013, p. 635). Given the pervasive nature and the speed of the digital technologies, it may now be possible to develop high quality relationships between leaders and followers at a more rapid pace, where leaders have the ability to have more frequent virtual contact with followers. Of course, just as high quality relationships and even trust may be developed more quickly with the support of advanced information technology, so can poorer individual relationships be developed at an accelerated pace. With the integration of technology in organizations, the interpretation of distance between leaders and followers may also change (Avolio, Kahai and Dodge, 2000).

Given the dominance of digital technologies in the organizational settings the perception of leadership can become a social influence process. “What followers consider exemplary leadership will now need to take into consideration how leaders use technology to inform, monitor, and make decisions. How leaders and groups develop trust will no doubt be affected
by the use of technology in the development of their relationships, and ultimately in terms of
the impact of those relationships on shared or collective leadership” (Avolio, Kahai and
Dodge, 2000, p.660). Consequently, e-leadership will transform the models of leadership, and
its evaluation and development in organizations, even though many aspects of leadership will
also remain the same. Leaders who are more inspirational, caring, intellectually challenging,
credible, honest, goal-oriented, and stable will still be seen as more effective. Digital
technologies will have a say in this behavior (Avolio, Kahai and Dodge, 2000). “Emerging
information technology also provides greater transparency into the efforts, interactions, and
performance of employees. [...] social networks serve to connect individuals and groups with
asymmetrical preferences (knowledge, skills, beliefs, values, etc.) on the fly and allow them
to debate an issue to generate a new understanding of complex challenges, which can promote
greater alignment and trust in organizations” (Avolio et al., 2014, p.117-8).

Hesse poses an important question “Do technological trends change the conditions for
leadership?” and indicates that “It is beyond doubt that technology, IT and thus digitalization
have an impact on tasks and practices such as communication, information management,
coaching, knowledge management, collaboration, decision making (Hesse, 2018, p. 1856). Henry Mintzberg argues, “Managing does not change, not fundamentally. It is a practice,
rooted in art and craft, not a science or a profession, based mainly on analysis. The subject
matter of managing certainly changes, all the time, as do the styles that some managers
favour, but not the basic practice” (Mintzberg, 2015, p.2). He acknowledges that contribution
of digital technologies in speed and volume of information but the essentials of management
have not really changed. It is still communicative, pressurized, fast-paced, hierarchical and
action-oriented. The only thing that created a difference -not necessarily in a positive sense-
has been the email technology and with it the notion of having to be ‘always-on’ (Mintzberg,
2015). Gary Hamel in his seminal work “The Future of Management” (Hamel and Breen,
2007) believes that the practice of management should undergo a revolutionary
transformation over the first two or three decades of the 21st century. Hamel weighs in on the
new role of the leaders in the light of the technological changes in his article “Management
2.0” (2009). He describes Internet and its impact on the society as:

   Everyone has a voice. The tools of creativity are widely distributed. It’s easy
   and cheap to experiment. Capability counts for more than credentials and
titles. Commitment is voluntary. Power is granted from below. Authority is
   fluid and contingent on value-added. The only hierarchies are “natural”
   ones. Communities are self-defining. Individuals are richly empowered with
He argues that the role of management will shift towards a less hierarchical, less bureaucratic, and less centralized position.

2.3 Trust in leadership

2.3.1 Terminology

Trust is a widely discussed concept throughout many fields of research. Because trust is a widely discussed concept there are different views on trust. Hurley (2011) describes trust as “the degree of confidence you have that another party can be relied on to fulfill commitments, be fair, be transparent, and not take advantage of your vulnerability” (p. 36). Hurley (2011) specifies 10 factors that help establish trust: risk tolerance, adjustment, power, situational security, similarities, interests, benevolent concern, capability, predictability and integrity, and communication. “Trust exists, but is difficult to describe” (Blöbaum, 2016). “The studies by Simmel (1908) and Luhmann (1968) are fundamental to the view of trust as a social component within counterparts and cannot read their thoughts, trust is necessary in order for them to bridging knowledge gaps, “an intermediate state between knowledge and ignorance. (...) Someone who knows all need not trust, someone who knows nothing cannot reasonably trust at all” (Simmel, 1908, p. 346. Cited in Blöbaum, 2016, p. 5). In psychology the focus is on trust as a state of willingness to make oneself vulnerable (Mayer et al. 1995). Sociologists view trust as a quality of relationship (Sztompka, 1999). According to the Oxford English Dictionary (2013) trust can be defined as ‘firm belief in the reliability, truth, or ability of someone or something’. A generally accepted definition of trust within the organizational literature that we also employ in our research is: “the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995, p. 712). Blöbaum (2016) describes, eight key features of trust which can be distilled from overviews of trust research. Eight key features of trust are:

1. Trust arises between two units, the trustor and the trustee;
2. Trust is based on a free decision;
3. Trust is oriented toward the future;
4. Trust is founded on perceptions and experiences;
5. Trust entails a risk in the sense of the potential damage being greater than the benefit;
6. Trust bears reference (to a situation, an object, a performance, a problem to be solved);
7. Trust is constituted in an act of trust in which the trustor makes himself or herself vulnerable to the trustee;
8. Trust is easier to destroy than to build.

Trust can refer to different relations. A distinction is commonly made in the literature between personal trust that applies to the relation between individuals and system trust, that is related to the supra-individual levels (Luhmann, 1968). Blöbaum (2016) describes three possible points of references that can be distinguished from the perspective of the trustor:

1. Trust in people as role holders. This refers, for example, to leaders of an movement or organization, journalists in the media systems, doctors in the health care system, teachers in the education system, politicians in politics, or managers in the economy.
2. Trust in institutions or organizations. Newspapers, or for instance, the editorial department for politics at the New York Times, a hospital, a school, a political party, or a company would be examples of objects of trust at the level of organizations.
3. Trust in social systems. Journalism or media, health care, education, politics, and the economy are trustees in this respect.

Our focus will be on role holders in start-up organizations. To examine this relation of trust we will address literature regarding ‘Trust in leadership’.

### 2.3.2 Trustworthiness of a Leader

Trust is a crucial part of an organization. According to Brown et al. “the degree of trust that employees have in their managers may impact upon firm performance” (2015, p.362). However, which factors influence the trust in leadership? These factors of influences are widely discussed within the literature. These features are discussed in the literature as ‘antecedents of trust’ or as ‘trustworthiness’ (Mayer et al., 1995). Because of these discussions about features of trustworthiness, many academics wrote about which features are perceived as trustworthy.

According to Warren Bennis (2009, p.152) the four features needed in order for a leader to be perceived ‘trustworthy’ are: “1) Constancy: whatever surprises leaders themselves may face,
they don’t create any for the group. Leaders are all of a piece; they stay the course. 2) Congruity: leaders walk their talk. In true leaders, there is no gap between the theories they espouse and the life they practice. 3) Reliability: leaders are there when it counts; they are ready to support their co-workers in the moments that matter. 4) Integrity: leaders honor their commitments and promises.” It is a set of characteristics pertaining to the trustee—in other words, it refers to “a characteristic of someone or something that is the object of trust” (Corritore et al. 2003, p 741).

Blöbaum (2006) describes five features that are discussed as antecedents of trusts or as perceived trustworthiness: Objectives and Intentions, Integrity, Competence, Symbols, Reputation. Mayer et al. (1995, p. 718) and Blöbaum (2016) listed different features of trust that are named in the literature: Butler’s work on availability, competence, integrity, loyalty, openness (1991), Giffin’s research on expertness, intentions, reputation (1967), Good’s notion of ability (1988), Hovland et al.’s concept of expertise (1953), Lieberman’s idea of competence (1981), and Solomon’s benevolence (1960). Mayer et al. (1995) condensed these factors into three sets: ability, benevolence, and integrity. As the literature review by Fulmer and Gelfand (2012) and the overview by Schoorman and his colleagues (2015) indicated, these antecedents are used in numerous studies. Castelfranchi and Falcone (2000, p. 802) described competence and benevolence as “the real cognitive kernel of trust.” Hence the literature review shows that scholars use different attributes to describe the trustee based on the trust process they envision however the most basic elements of the of this process can be described as competence and benevolence.

Besides the five factors which Blöbaum (2006) is pertaining to the trustee (Objectives and intentions, Integrity, Competence, Symbols, Reputation). He writes that the perception and evaluation by the trustor also influences his or her act of trust. These elements are:

- Experiences and knowledge
- Personality features
- Specific situation
- Communicative setting
3 Theoretical Framework

With the theoretical framework we intend to introduce and explore the relationship between the concepts of digitalization and trust in leadership. In this context, we aim to discuss how trust between a trustor and trustee is built, based on the model that was presented by Mayer et al. (1995) and expanded by Bern Blöbaum (2016). In 3.1 we will begin with presenting our model (Figure 1). You can find a full-size version of this model in Appendix I. In this model we focus on the impact that the leadership roles may experience in the trust process due to the digitalization. The digitalization phenomenon is elaborated as per the dimensions set forth by Khan’s research. Lastly we will further elaborate our propositions that are derived from our model on the relationship between trust in leadership and digitalization relevant to the position of the trustee.

3.1 The model

![Trust in Leadership and Digitalization Model](created_by_the_authors)

**Figure 1: Trust in Leadership and Digitalization Model (created by the authors)**

In dealing with the question of digitalization and trust in leadership, we sought to understand the concepts of digitalization, trust in leadership and the relationship between these. In this endeavor we focused on the models of trust in leadership and the characteristics of digitalization. There are different approaches to the establishment of trust relationship in the
literature, namely relationship-based perspective which focuses on the nature of the follower-leader relationship and character-based perspective which focuses on the leader’s character and its impact on the follower in a hierarchical relationship. In constructing our model we have chosen to work with the character-based perspective given its emphasis for organizational settings and we would like to observe the leader’s role in the trust and digitalization relationship. There are many trust models in the scholarly research. All the trust models basically involve a trustor, a trustee, perceived risk, propensity to take risk, and an outcome. We synthesized the trust in leadership models put forth by Mayer et al. (1995) and Blöbaum (2016) for the purpose of our research (These models are shown in the Appendices II and III). One of the most influential models to explain the process was constructed by Roger C. Mayer, James H. Davis and F. David Schoorman in 1995. Mayer and his colleagues focused on “the perception of the leader’s character and how it influences a follower’s sense of vulnerability in a hierarchical relationship.” (Dirks and Ferrin, 2002, p.612) Their model approached trust from the trustworthiness of the trustee which depends on his/her ability, benevolence and integrity. (Mayer et al., 1995) Blöbaum (2016) remodeled this proposition by adding more descriptive factors to both the trustee (symbols, reputation), and the trustor (frames of references such as background, experience, knowledge, perception of trustworthiness) as well as situation related factors (such as the specific situation itself, its context, communication style related aspects). Blöbaum described the trust (and distrust) as an outcome of the process whereas in the Mayer et al. model it was the process itself (Blöbaum, 2016).

Despite the expansive research on digitalization in the information management and systems literature, the scholarly work on digitalization, trust and leadership is limited. In order for us to be able to observe the impact of digitalization on trust in leadership we needed an anchor point that could define the dimensions of the process of digitalization for organizational environments. Shahyan Khan, in his research on leadership in the digital age at Stockholm Business School, worked on the effects of digitalization on top management leadership (2016). As part of his literature survey and theoretical framework he devised a framework of analysis that was comprised of the main features of the phenomenon of digitalization. In dealing with digitalization we used the six elements set forth by Shahyan Khan, which are “Interconnectedness, Diminishing time lag and abundance of information, Increased transparency and complexity, Hierarchy removal and dissolution of personal barriers, Decision enabler and integrity enhancing and Humanizing effect,” (Khan, 2016, pp. 17-19).
We will start by explaining the components of the trust process we created to better illustrate trust in leadership in organizational settings. Afterwards we reflect upon the six characteristics of Khan and expand on the possible implications of these six characteristics on trust in leadership. This framework provides us a wide and complex set of factors ranging from the trustee (leader), trustor (followers/employees), the situation related aspects -on organizational, team and individual levels- to the perceived risks and the propensity to trust. Given our research question and the basic outline of our trust model, which rests on the leader’s impact, we will observe and examine the impact of digitalization on trust in leadership, especially the trustee. This model we created was our reference point to analyze the interviews which we conducted with some of the leaders and followers of several Dutch start-ups.

3.2 The Trust Process

When analyzing the trust process it becomes necessary to break it down to its constituents and understand the relationship between them. Trust happens between a trustor and trustee where there are circumstance related concerns such as organizational culture, team psychology, a context and communication style. There are also two important elements which is the trustor’s inclination to trust and perception of risk that affect the outcome.

The trust process takes place between a trustee (leader) and trustor (follower) where we described the attributes of these actors. These are factors that are valid on an individual level. Trustee’s characteristics such as his/her competence, intentions-objectives, integrity, reputation and symbols have an importance to determine his/her trustworthiness. Trustor is sense-making of the trustee’s trustworthiness based on different cues that the trustor judges such as his/her own socio-demographic background, knowledge-experiences. Trustworthiness is defined in several ways in the literature. Corritore et al. say that “it is a characteristic of someone or something that is the object of trust” (2003, p.741). In some studies trustworthiness is used synonymously with trust however trust is the outcome of a decision to act; trustworthiness is the sum of the trustee’s attributes. We will be using the term trustworthiness to denote the trustee’s attributes. We simplified the attributes and introduced situation related factors to reflect the individual (culture, situation, context, communication style), team and organizational complexities, in the light of Burke et al.’s propositions (2007, pp. 622-623) since these have mutual effects on both the trustor and trustee. The sense-
making -bearing in mind the situation related factors- determines the trustor’s propensity to trust and perceived risk and thereafter his/her decision to trust (or distrust) in leadership.

First we would like to introduce the main actors in the process: the trustee and the trustor. We gathered trustee’s characteristics under five sub-headings namely competence, objectives-intentions, integrity, reputation, and symbols. Trustor is described with the frames of reference he/she uses based on his/her knowledge/experience and socio-demographic background.

3.2.1 The Trustee
Neither trustee nor trustor is clearly defined roles in the trust literature. Trustee in our model represents a leadership position in a hierarchical organizational setting. His/her actions and characteristics determine whether to be trusted or not. We defined the characteristics that enabled the process of building trust in leadership as: competence, objectives-intentions, integrity, reputation, and symbols.

3.2.1.1 Competence
Competence can be described as the ability to fulfill tasks in a specific situation that enables a person to have influence within some specific field. This competence or ability may be relevant to a specific technical area and the person may not be as ‘competent’ in other areas (Mayer et al., 1995). Quality is a key feature of competence with regard to its content and performance (Blöbaum, 2016). Burke et al. (2007) points to the leader’s ability to set clear compelling direction as well as functional norms including design of the work and resource allocation which can be considered as part of competence.

3.2.1.2 Objectives and Intentions
Objectives and intentions are related to what Mayer et al. labelled as “benevolence” and described it as “the extent to which a trustee is believed to want to do good to the trustor” (1995, p.718). In this context, “to do good” directly refers to a good intention, and benevolence is positively connoted. Blöbaum replaces this positive construct with a more neutral label of “Objectives and Intentions” to indicate the intent of the trustee as good or bad can be relative. It is important for the trustors to feel recognized for their contribution, valued, cared for and supported personally and professionally which then generates a perception of trustworthiness (Burke et al., 2007; Blöbaum, 2016). Empirical studies show that the motives
and interests of the trustee is perceived to play a major role in the assessment of the trustee’s trustworthiness (e.g. those who pursue commercial interests are assessed as being less trustworthy than those who pursue intentions associated with civil society (Flanagin and Metzger, 2000). “Followers express a deeper level of trust if they view their leader as more supportive and caring” (Burke et al., 2007, p. 616).

3.2.1.3 Integrity

Integrity refers to “consistency of the party’s past actions, credible communication about the trustee from other parties, belief that the trustee has a strong sense of justice. [...] the degree to which the party is judged to have integrity” (Mayer et al. 1995, p. 719). Trustworthiness is judged by the trustor based on previous behavior, reputation, congruity of values between the behavior of the trustee and the trustor, consistency of words and actions. “[...] if followers feel that their leaders cannot be trusted, they will spend less effort on performance and expend more energy documenting performance and finding workarounds. Studies show that when people are required to monitor the behavior of another individual, trust in that individual diminishes” (Burke et al., 2007, p. 617). One of the important components of integrity is accountability which can be defined as an obligation that people are held responsible for: “[...] Leaders that hold themselves personally accountable for their actions and that are formally held accountable for their decision-making processes are likely to be perceived as having more integrity and as more trustworthy” (Burke et al., 2007 p. 618). Similarly perceptions of fairness of the leader will create higher levels of follower trust due to increased perception of integrity (Burke et al., 2007).

3.2.1.4 Reputation

“Reputation means simply the record of past deeds” (Sztompka, 1999, p. 71). Reputation is formed from the first hand experiences such as social interactions, experiences and observations. Reputation is closely linked to competence and integrity of the trustee. Reputation is comprised of motives, integrity, competence, and symbols at the level of organizations and at the level of individuals. Positive experiences improve reputation and thereby increase the level of trustworthiness” (Blöbaum, 2016, p. 12). Embodiment of the principles, empowerment, accountability, fairness, and team management ability are among the factors that contribute to the development of trust. It is situation specific. Prior experience with the trustee will determine outcome of the trust process (Blöbaum, 2016).
3.2.1.5 Symbols

The precursors of trust - integrity, ability and motives- may not always be easy to identify for the trustors hence evidence that indicate trustworthiness becomes just as important. Academic titles, uniforms, online rankings, ratings are examples of symbols. The symbolic indicators enable quick, cost effective evaluation by the trustor and minimize the perceived risk. On the basis of digitally available data, the symbols embody the performances, abilities, and integrity of the trustee into transparent and instantly recognizable indicators of trustworthiness. “These elements are extremely relevant to assessments of trust for two reasons. One reason is that they are based on use and evaluation by other trustors; the other reason is that they are based on data and often appear in numerical form, a method of presentation that is considered to be particularly objective” (Blöbaum, 2016, p.13).

3.2.2 Trustor

Trustor is the person who perceives and evaluates the trustworthiness of the trustee. In our model, it represents the follower who makes a decision to trust (or not to trust) the leader. The trustor evaluates trustworthiness after a process of trust. This process involves the judgment of risks and trustor’s willingness to trust in conjunction with the trustor’s frames of reference (such as his/her background, personality, experiences). While the trustor is an essential part of the process, as part of our research question we focused on the trustee. In this way we sought to understand the leader’s interaction with digitalization and how the leader viewed the effects of digitalization on follower’s trust in leadership.

3.2.2.1 Frames of reference

A trustor filters his/her perception of the cues based on the frames of reference generating from his/her knowledge, past experiences, character and socio-demographic background. The perception towards the object of trust is usually part of a bigger organizational perception and collective knowledge which may sometimes involve biases. Experiences can be described as past interactions that are used as cues for future references. One’s experience and/or background may help form the image of an aspired or ideal leader and this will moderate the relationship between competence and the decision to trust. The degree to which subordinates perceive value congruence with their leader will also positively impact trust in leadership as the leader is seen to be more like them (Burke et al., 2007). Burke et al. also mentions that individuals are inclined to attribute internal responsibility for others' behaviors (e.g., she comes to late work because she is lazy) instead of considering external causes for behavior.
“Team members who have a tendency towards assigning internal as opposed to external responsibility for a leader's behaviour will be less likely to trust the leader when unexpected events happen, regardless of the actual cause” (Burke et al., 2007, p. 620). Perception of the object of trust is also very much related with the background of the trustor in which the demographic factors such as gender, age, education, occupation, nationality, social milieu play an important role. These can affect the perception of risk, inclination to trust and eventually the decision to trust (Blöbaum, 2016).

Besides the actors of this process, there are situation-related factors that point to the different levels of the society -from individual to team and organizational environments- that are relevant for the trust process. These situation-related factors, along with the actors’ features, impact the perception of risk as well as risk-taking behavior.

3.2.3 Situational factors

Situational factors in the trust process are setting related aspects that operate on organizational, team and/or individual levels. The relationship between the follower and the leader takes place in an organizational setting and the organizational culture shaped through policies, human resources activities plays an important role in employee’s trust for the organization. Organizational policies and procedures may limit or enhance the discretion of the employee and indicate to the employee how trusted he/she is. The enforcement of these policies is a leader’s task and how this enforcement takes place determines the trustworthiness of the leader. In organizations where individuals are respected and empowered, the leaders are mutually respected and deemed more trustworthy. Team psychology and climate on a day-to-day basis also have an impact on the perception of trustworthiness. Presence of psychological safety strengthens the leadership characteristics and trust in leadership (Burke et al., 2007). In an individual level, the context, situation and the communicative setting become important. Context implies whether the setting is private or public, work or leisure etc. An act may gain different meanings depending on different settings. Trustor’s evaluation of the situation in the light of his/her individual involvement and its consequences affect the risk calculation and eventually the decision to trust. Risk perception alters with different forms of communication. In face-to face communication, trustworthiness relies on performance and appearance while in other forms these are not relevant (Blöbaum, 2016).
3.2.4 Propensity to trust

Propensity to trust is the inclination to place faith in others' good intentions. It strengthens one’s belief in the trustworthiness of others. Individual propensity to trust will moderate the relationship between the attributes of the trustee and trust in leadership (Burke et al., 2007).

3.2.5 Perceived risk

The vulnerability is often emphasized in the trust relationship and the risk lies with the trustor. The existence of ambiguities between the leader and the follower cause the follower to search for the minimization of the risk. “As the degree of perceived risk increases more of the leader characteristics will be taken into account in making the decision to trust” (Burke et al., 2007, p. 620). There is a circular relationship between trust and risk: a person who trusts, risks something and only a person who risks something can trust (Blöbaum, 2016).

3.3 Characteristics of Digitalization

In his research, Khan analyses the impact of digitalization on leadership based on the research of different scholars and from his literature survey he aims to pinpoint the essential characteristics of digitalization that impact leadership. These characteristics are:

“1- Interconnectedness
2- Diminishing time lag and abundance of information
3- Increased transparency and complexity
4- Hierarchy removal and dissolution of personal barriers
5- Decision enabler and integrity enhancing
6- Humanizing effect” (Khan, 2016, p. 17)

These characteristics will be used as the part of our framework of analysis, to understand the impact of digitalization on trust in leadership.

3.3.1 Interconnectedness

Khan (2016) argues that interconnection and integration of businesses, tools, communication and social interaction as well as organizations has been augmented due to digitalization. Digitalization provided different possibilities to maintain contact.
3.3.2 Diminishing time lag and abundance of information

Khan’s analysis of time and information is noteworthy especially given its relation to the interconnectedness factor. Khan, concluded that “shorter timeframes for decision-making, increased speed of information, real-time organizational management and increased forms of interaction are results of diminished time lag and abundance of information” (2016, p.18) and that these have been enabled by the smart gadgets we have been using which function with the presence of ‘big data’ and business analytics.

3.3.3 Increased transparency and complexity

As digitalization technically facilitates the follow-up of procedures on the customer and employee front, it makes it possible to have transparent processes where each party can follow the processes and intervene when each sees it fit. On the other hand the variety and quick changes that occur in technology can create complications as to the practices of management in different organizational environments. “In the face of increased organizational complexity [...] further transparency is needed in order to manage organizational transformation [...]”. As discussed in Collin (2015) “Digitalization of the consumer inevitably generates the need for transparency to the retailer’s business processes” (Mäenpää and Collin, 2015, p. 91) (Khan, 2016, p.18).

3.3.4 Hierarchy removal and dissolvement of personal barriers

Due to cost and efficiency concerns the enterprises want to take advantage of what the technology has to offer and therefore try to rationalize their organizational structures into simpler organizations. Technology also offers different platforms such as social media that can be utilized for work and socialization hence creating another virtual venue for the follower and leader to be able to get to know each other better and mingle without the constraints of time and space. From a leadership-perspective, Westerman et al. (2014) for example argues that “time and attendance are artificial barriers that can be removed allowing employees to have a far greater say in how they work” (Westerman et al., 2014, p. 216) (Khan, 2016, p. 18).

3.3.5 Decision enabler and integrity enhancing

Given the facilities of technology that can transcend time and space, digitalization fastens the decision-making processes ranging from strategic company decisions to consumer purchase
decisions. Input that is needed to make a decision can usually be accessed through digital means most of the time and therefore shorten the time to make the decision. With the above four characteristics, Khan adds that “digitalization also affects personal integrity, as mutual trust for example is becoming a significant factor when selecting business partners” (Khan, 2016, p.19).

3.3.6 Humanizing effect

While it has been argued quite often that technology at work, especially the smart gadgets, are alienating us from the human contact we used to maintain in our communication; digitalization is also making it possible for followers and leaders to socialize and network via different and easier means and media. “As digitalisation reshapes the five key domains of customers, competition, data, innovation and value according to Rogers (2016), it also enables humans to easier interact, communicate and interlink through virtual platforms and tools (Tapscott, 1996), in a more authentic and intuitive way.” (Khan, 2016, p. 19)

3.4 Possible Implications of Digitalization on the Trustworthiness of the Leader

From a mathematical perspective there are thirty possible outcomes of the interaction between digitalization and the trustee in the process of trust in leadership in our model. This can be enhanced even more with the addition of the different elements in our model such as the trustor, situational factors and propensity to take risk and perception of trust. The attributes of the trustee are considered as antecedents in the trust literature which means that they have primary impact on the formation of trust in leadership. We will reflect on the possible outcomes of these interactions: Thus we take the five characteristics of trustworthiness of the leader (see 3.2.1) and look into the interaction of each characteristic with digitalization (as discussed in 3.3). We present our propositions below:

3.4.1 Competence and Digitalization

Having a technical expertise in an area, setting the scene for the team through vision, provision of the necessary sources, functional norms and the management of the team is an essential ability for a leader. Interconnectivity makes it possible for the leader to be connected with his/her team and better communicate the team vision and norms to the followers. The abundance of information and speed enabled by digitalization may pressurize the followers and the leaders alike in their daily performance and to process the cues for trustworthiness
arising from the competence of the leader however the possibility to access more information in a much smaller time frame can help both parties to make informed decisions regarding trust in the competence of the leader. Given the complexity of the business systems and demands of the current work environment, transparency provided by digital processes helps to better observe the leader’s abilities and clarify messages for direction and will also offer an ease of mind to followers in building a relationship of trust with their leaders. Dissolvement of personal barriers and hierarchy enhances the relationship between the followers and leaders as well as making it possible for the followers to join the decision-making process and therefore will contribute positively to the trustworthiness of the trustee. What may have gotten lost in the communication through the ranks of hierarchy can now easily find its audience. Decision-making is an important part of a leader’s task. Decision making for the management of team objectives, performance as well as the technical area of expertise is facilitated and speeded by digitalization. Due to the checks and controls the digital systems provide, digitalization also acts as an integrity enhancer for the management of the team and therefore contribute to the perception of trustworthiness of the leader. Digital technologies are making it easier to contact within the team and organizations through social platforms and tools in a more authentic way and this also applies to the communication of leadership abilities to managing the team. Humanizing characteristic of digitalization can contribute to the competence of the leader if used effectively.

The capability of the information systems to digitally monitor all transactions and communications conducted by the employees is a factor that puts employees in an uneasy position and shows the inequality in favor of the leaders manifested with the removal of hierarchy and dissolving personal barriers as well as the so-called transparency. These have a diminishing effect on the trustworthiness of the trustee.

3.4.2 Objectives-Intentions and Digitalization

Perception of the trustee’s motives constitutes one of the prerequisites of the trust process. Motives, which have been named as objectives and intentions within our framework, reflect the perception of the intent of the trustee. Empowerment, recognition, nurturing, coaching are important parts of its practice. Interconnectivity through different media helps the trustee, the leader, to express his objectives and intentions more authentically. It gives different venues to practice. Motives of the leader may not always be fully understood given the time pressure and abundance of information, but if digital technology and platforms are effectively used
they can become a substantial support for the expression of objectives and intentions. Increased transparency, dissolution of hierarchical organization let the employees observe the intentions of the leader and judge its fairness in a more direct, participative and democratic way. Given the capabilities of digital technologies, it is possible to empower employees through them and hence speed up the decision-making process. The humanizing side of the digital technologies is manifested best if they can be used to show that they are used for caring and not only for monitoring performance. Given the diversity of different media and tools this can be managed by leaders who are capable in using these and intent on developing a nurturong relationship with their followers. Through these means the trustee can increase his/her trustworthiness with regard to the expression of objectives and intentions.

3.4.3 Integrity and Digitalization

Integrity involves the consistent practice of a set of principles by the trustee that the trustor also adheres to. These practices revolve around integrity, accountability, fairness and congruity of values. Being interconnected through digital technology provides an open and transparent channel where the leader demonstrates his/her integrity, accountability and fairness. Digitalization accelerates the processes hence the trustor can benefit from the diminishing time lag regarding the decision to trust. In organizations moving to flatter hierarchies with digitalization, everyone become equally accountable for the bottom-line results as well as ethics. In such organizations the drive for organizational democracy and autonomy also dictates the application of policies and procedures in a fair way. Digitalization facilitates the vigilance and reinforcement of integrity and fastens the decision process. Therefore the trustor can see instant results to decide to trust (or distrust) the leader and likewise the leader can decide to intervene in case of a breach. Being monitored during this process however will produce a diminishing trust in leadership.

3.4.4 Reputation and Digitalization

Trust involves a risk of vulnerability. In the workplace vulnerability may come in the form of a risk to one’s reputation. Important indicators of reputation that the trustor uses to assess the trustworthiness of the trustee include: objectives-intentions, integrity, and competence. “Possessing a high reputation facilitates trust among followers and leaders and is associated with a greater degree of autonomy and discretion. In addition, a positive reputation will influence the likelihood that followers will perceive leader intentions in a positive light”
(Burke et al., 2007, p. 621). The interconnectedness provided by digital technologies make the position of the trustee vulnerable as he/she is exposed through different platforms. The reputation of the trustee, the trustor and/or the organization is generally available in the online media and can be verified, modified or falsified instantly due to the transparency the platforms provide. In this way the abundant information about the reputation provided thanks to digitalization reduces the time for decision-making. In this way a decision to trust or not trust can easily be reached with the available cues as they are verified or falsified by different individuals. Digital platforms, such as LinkedIn, facilitated access and provided transparent venues where the follower and the leader alike share the same technological infrastructure and represent themselves and the company they work for. Instant and comparative availability of track records are easily accessible and persuasive which augment the trustworthiness of the trustee. These possibilities at the same time reduce the personal barriers and in most cases the privacy. “Because reputation is considered to be a valuable asset, people are not necessarily willing to behave inappropriately at the risk of damaging it especially if development was a lengthy process” (Burke et al., 2007, p. 621). While some people may not be comfortable with sharing their personal life or professional career on the internet, which add up to the perception about one’s reputation, digitalization’s humanizing effect created venues such as Facebook and LinkedIn that thrive on this private information and made it possible (and ‘normal’) to share one’s reputation via these venues.

3.4.5 Symbols and Digitalization

In the case that information about the trustee’s competence, intention or integrity are evaluated, symbolic attributes such as clothing, titles can be foretelling of the trustworthiness of the trustee. Symbols provide an easy, transparent, instant and seemingly objective way to assess the trustworthiness. Often it is possible to track the history or make objective comparisons. Interconnected platforms make it possible to compare and contrast symbols instantly. Digitalization offers many ways to access the abundant online data to double check the reputation and symbols related to the person in question and therefore reduce the time to make a decision. Availability of these symbols may strengthen (or weaken) one’s image hence act as an integrity enhancer and therefore enable the trustor to decide. Digitally available information or digital tools do not distinguish between ranks and thus there is no hierarchy that impacts the perception of the symbols. Digitalization neutralizes the effects of hierarchy in the symbols and assumes pragmatic approach towards a certain purpose. Accessing and recognizing symbols also enable access to what was once considered as
personal space thus remove personal barriers. Digital media humanizes this access through different online platforms. In other words digitalization can help strengthen the trustworthiness of the trustee based on the readily available information.

While precursors of trustworthiness may be abused and subjected to manipulation, digitalization created new, straightforward and sometimes standard forms (especially in the case of symbols) of transparency; reduced the amount of resources that are exhausted on procuring information, and enabled instant comparisons which is not very possible outside the internet domain (Blöbaum, 2016).
4 Methodology

The purpose of this chapter is to introduce the tenets of the methodology employed in this research. In our research we adopted deductive and qualitative approaches. In this section the selection of approaches as well as the participants and the description of the general practicalities and data collection process will be provided.

4.1 Research Approach

In the building of methodology of theory and knowledge there are two main approaches, which are namely the inductive and deductive research approaches. Inductive reasoning relies on the idea of developing hypothesis and theories to explain empirical observations whereas deductive reasoning develops theories and hypothesis to test them through empirical observation (Lancaster, 2005). In management research there are several types of approaches that can be categorized according to the primary objective of the research. These are namely theory building, theory testing and problem centered research. Theory building research involves an inductive reasoning and aims at developing theories based on observations and other input. Theory testing approach aims at testing the existing theoretical knowledge with observations and carries a more deductive nature. Third approach involves the closer analysis of an existing issue or problem within an organization and aims to find a solution (Lancaster, 2005).

Leadership is one of the most studied fields in organizational sciences; there are a variety of sources from white papers to scholarly literature. Trust, likewise, is a field of research which draws interest from neurology, political science to management and leadership. Digitalization on the other has so far been dealt with mostly from a business-pragmatic point of view and its connections with leadership and trust has not been fully explored in scholarly literature. We are looking at the phenomenon in the intersection set of these three concepts. As we did not find prior research on the relationship between digitalization and the trustworthiness of the leader in particular, a model was needed to map the relationships and observe any possible interactions of these concepts.

Deciding on the research approach is critical for the development of the research design in order to address the research question properly (Saunders et al., 2009). We created a model of trust in leadership and digitalization to test our research question and aimed to see how it functioned in real organizational settings; in other words test the model we created. For the
purpose of this research, we decided to adopt a deductive approach. Deductive research is appropriate to test hypothesis and theories with empirical data. The deductive process involves the formulation of a theory or hypothesis, translation of abstract concepts into measures for observations, empirical observations and eventually falsification (or creation of as-yet-unfalsified theories) to explain a phenomenon (Lancaster, 2005). In the light of the deductive process we built a model and research question. We chose a qualitative approach, which uses interviews to reach empirical observations, and interpreted our observations regarding the model and research question.

4.2 Research Strategy

First stage of any research is actually about the articulation of how one sees the world. Their objective and subjective assumptions explain the nature of reality. Objective approach sees the world as a reality made up of solid objects which are measurable. Subjective approach emphasizes the perceptions and interactions of living subjects and perceptions shape the reality. It recognizes facts and reality with their multiplicity due to different individual experience (O’Gorman and MacIntosh, 2015). In our research we believe the subjectivity of the authors as well as the interviewees is important in the interpretation of the empirical data regarding digitalization and trust in leadership. This will be essential to reflect the multiple realities individuals may experience in the process of trusting a leader under the development of digitalization. Considering the nature of our research question and the limited scholarship in this field, it is important to get an understanding of the model using multiple interviewees and their insights (based on their responses and its analysis), while testing our model on the effects of digitalization on the perception of trustworthiness of the leader. Our aim is to have a better understanding of the ramifications of digitalization on the trustworthiness of the leader.

Research design can take different forms such as quantitative, qualitative methods or a mixture of these methods. Quantitative research aims at testing pre-determined hypothesis formulated based on existing theory. Qualitative research on the other hand aims at sense making of phenomena and develops theory from the collected data. For qualitative research it is important to focus on rich description of a phenomenon than on its quantification. This approach relies on the analysis of detailed interviews, observations, stories or visual recordings. When quantitative research is combined with qualitative design, as another research design, it can also provide a wealth of information, ability to reflect and interpret different perspectives and layers within a complex problem (Weathington, Cunningham and
Pittenger, 2012). Creswell et al. (2007) argue that qualitative research strategy is more useful in investigating how different people perceive their reality and environment. Since there’s no prior study on our research question to gain an understanding of the topic, a qualitative methodology is more convenient as it aims to provide a deeper understanding of the matters (Bryman and Bell, 2015). Given the subjective nature of our research and objective to test presumed relations between the concepts in order to get detailed insight into them we used qualitative method and conducted interviews. Interviewing is considered as one of the methods to get richer and more intimate insight into the trust relationship between followers and leaders in a digitalized work environment. This allowed room for the subjective interpretation by us as researchers.

We have also taken into account the limitations within the existing scholarship that Burke et al. mention in their article “Trust in leadership: A multi-level review and integration” which surveys different models of trust in leadership and state two methodological problems related to the study of trust. They note that measurement of trust through traditional surveys does not reflect the dynamic nature of trust and is merely a snapshot of the trust at the time of data collection. They add that traditional surveys may be problematic as the trust perceptions may not be shared by the trustor and the trustee due to different interpretations of context and experiences. Given the caveats of the traditional quantitative methodology, they encouraged qualitative or a combined approaches to be able to gain more insight into the matter (Burke et al., 2007).

4.3 Research Sample Selection

In our research we are looking at status of the trustee within a trust process. In this process we are observing how digitalization can impact the perception of trust in the leader. There are two roles in this story namely the trustor enacted by the follower and the leader in the role of the trustee. As the process of trust requires two parties’ interaction, it is important to get the insights of both the trustor and the trustee. Trust is an intimate and personal process therefore the perceptions are subject to sensemaking.

In order to observe the outcome of the possible interaction between trust in leadership and digitalization, we chose start-up companies which benefited greatly from digital technologies in terms of cost, effectiveness and profitability (McKinsey & Co, 2016). These start-ups
operated mainly in the IT related service industry in the Netherlands and are digitalized to a
great extent. We interviewed managers and employees from these companies. In these
interviews we sought to understand if the effects of digitalization would be observed as we
have mapped in our model.

We used non-probability sampling for our research. Personal connections with the start-up
scene in the Netherlands facilitated getting in touch with employers and employees from
Dutch start-ups (O’Gorman and Macintosh, 2015). There were a total of seven interviewees
and among these participants only two of these were in a dyadic relationship. This is
especially critical for getting more honest answers. Four of the interviewees were employees
and three of them were managers. We defined manager as any employee that has at least one
follower and employee as an individual who is working in subordination to a leader. The
gender, education level and current occupation of the participating interviewees were random.
The detailed information of the interviewees can be found in Appendix IV.

4.4 Data Collection

Each research methodology enables the implementation of specific types of data collection.
As part of the qualitative methodology there are different techniques of collecting the data
such as interviews, ethnography, observations, focus groups (O’Gorman and Macintosh,
2015). Weathington, Cunningham and Pittenger argue (2012) that interview is an effective
method to find out respondents thoughts, feelings and how they act in different situations. The
interaction between the researcher and the respondent can yield valuable insights into their
perceptions and thought processes. We chose to conduct semi-structured face-to-face
individual interviews through Skype. This provided the intimate and confidential setting that
is needed to comfort the interviewee. Semi-structured interviews enable the interviewees to be
more natural and flexible to be able to express themselves. This type of interviewing not only
increases reliability and comparability (O’Gorman and Macintosh, 2015) but also allow them
to express themselves more authentically and reflect on the issues freely. The atmosphere of
the interview as well as the non-verbal cues were also important factors for us to observe.

We prepared an interview guide which included our major concepts and detailed questions in
order to gather empirical evidence for all possible different facets of the relationship between
digitalization and trustworthiness of the trustee. The questions began with the general
concepts and later moved on to the implications that were outlined in the theoretical framework. They were open-ended questions and follow up questions or further questions to clarify responses were also asked in some cases. In order to give the interviewer the flexibility to adapt according to different participants, the questions were not always worded exactly the same however were loyal to the interview guidelines and produced the same end results. In order to maintain a standard approach as an interviewer, to ensure that interviewees can express themselves authentically and to be able to capture the verbal cues related to the themes; the interviews were conducted by the same researcher in Dutch in each interview. The interviewer recorded the interviews and took notes on verbal as well as non-verbal cues.

All the interviewees were briefed about the research and the interview. In case they had questions about the terminology their questions were answered promptly in order to get the most accurate response. Their permission to be published as part of our research was asked, to which all of them agreed. The interviewees agreed to disclose their identities. Most of the interviewees also asked to get a copy of the final version of the research for their personal use. The interview questions were revised several times both with our advisor and also during the thesis seminars that were held. Some of the questions did not exactly reflect the intentions hence were reformulated. This input was crucial for us to be able to express ourselves to the interviewees more precisely. First a pilot interview took place. After this initial interview, the questions and process was fine-tuned for further interviews to receive the most from the interviewees. The sessions with each interviewee were recorded with the permission of the interviewee. The interviews were conducted between April 2018 and May 2018 and each interview lasted between 45-90 minutes. They were later transcribed and summarized for detailed analysis.

The data that is collected as a result of the qualitative interviews is considered as primary data. (O’Gorman and Macintosh, 2015). The literature review we conducted helped us to have an understanding of the three concepts of digitalization, leadership and trust in leadership. This diverted us to the focus of our study which was the intersection of the three concepts where we built a model to analyze the interactions. The primary data that we acquired as a result of the interview process were used to interpret each individual case and make inferences regarding the interaction between the concepts. In this way it was possible to identify the themes that came up often and were contributing to our research question
4.5 Operationalization

As we were constructing our model we started off with the three concepts. We then created a model to integrate trust, leadership and digitalization to be able to test and observe the outcomes with the interviews that were conducted. The structure of our research as well as the techniques that we used are dictated by our research question. The interview guide we prepared is closely linked to the concepts and our model. The design process of the guide involved three levels: we began with the concept (trustworthiness of the leader, digitalization and the impact of digitalization on the trustworthiness of the leader), then we defined the sub-concepts of the concept as per our model (attributes of the trustee, characteristics of digitalization and the interaction between these two dimensions) and finally shaped the questions in order to be able to observe and map the cues provided by the respondents as per the subconcepts and concepts. As the answers of the participants were not predictable and there were no right or wrong answers, we crafted the questions in an open-ended manner.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Sub-concept</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trustworthiness of the leader</td>
<td>Competence</td>
<td>What makes a leader trustworthy in your opinion? Why is that important for you?</td>
</tr>
<tr>
<td></td>
<td>Objectives &amp; intentions</td>
<td>What do you expect from a leader/how do you gain trust from your employees?</td>
</tr>
<tr>
<td></td>
<td>Integrity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reputation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Symbols</td>
<td></td>
</tr>
<tr>
<td>Digitalization</td>
<td>Interconnectedness</td>
<td>What is your understanding of digitalization?</td>
</tr>
<tr>
<td></td>
<td>Diminishing time lag and abundance of information</td>
<td>What does digitalization mean for your company?</td>
</tr>
<tr>
<td>The impact of digitalization on the trustworthiness of the leader</td>
<td>Competence and Digitalization</td>
<td>&gt; Questions are built on the previous answers of the respondent. Examples include: “You mentioned that competence is important, how can digitalization influence this factor?” “One of the first points we talked about being interconnected. Does this have any influence on your trustworthiness of a leader?”</td>
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<tr>
<td>Objectives &amp; intentions and Digitalization</td>
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<td>Integrity and Digitalization</td>
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<td>Reputation and Digitalization</td>
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<td>Symbols and Digitalization</td>
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**Table 1: Operationalization of the concepts**
4.6 Data Analysis

After the completion of the collection of the empirical data, the interviews have been transcribed and the comments of the respondents were summarized and analyzed according to the verbal content as well as the observations of the interviewer for the non-verbal cues. The non-verbal observations, pauses are just as important as we are dealing with a subjective topic and they are factored into the analysis of the observations just like the verbal statements and this helps the conceptualization of the findings (Flick, 2015). The audio-visual recording of the interviews enabled the interviewer to revisit the interviews and analyze them with more precision instead of relying on his memory.

“In qualitative research, the emphasis is on telling a story or piecing together a puzzle that can help explain a particular phenomenon and its relationship to other factors in the people and environment(s) involved” (Weathington, Cunningham and Pittenger, 2012, p. 533). Flick (2015) argues that there is no right way to analyze the empirical data produced as a result of qualitative research. While this grants a certain level of freedom to the researchers it confines the validity of inferences. One of the commonly used techniques in the analysis of the qualitative empirical data is content analysis. In this technique the researcher decides on the criteria of measurement in advance and develops frameworks of analysis for classification to assess the content of the data (Lancaster, 2005).

In order to be able to observe the big picture based on the statements of the interviewees, the answers of the respondents needed to be structured according to our model hence the data had to be converted to a schematic overview. This was necessary for clearly analyzing the primary data as per the concepts and subconcepts we outlined to operationalize our model. As we are testing our model, we decided on the content categories for analysis in advance of the data analysis and initiated the content-coding process accordingly.

Major steps in the content-coding process involves the definition of the recording unit, definition of the categories, test of the coding on a sample data, assessment of the accuracy and reliability of the sample coding, revision of coding rules to improve accuracy and consistency (Weathington, Cunningham and Pittenger, 2012). We decided to analyze the interview contents mainly according to the verbal inputs and we also factored the non-verbal communication inputs and the time spent per theme. We did not identify key words or phrases
as these would be limiting our sense-making to a great extent hence we sought to interpret the gist of their statements and other relevant cues. We prepared ourselves an initial table to map the attributes that we sought and identified the attributes as the five characteristics of a trustee and six characteristics of digitalization. After doing a test sample together we realized that this table was not enough to capture all the possibilities. This gave us a chance to test the content coding rules for an accurate and consistent evaluation, as another coder was involved in the process. Hereafter we created an additional table, and detailed all possible thirty interactions between characteristics of trustee and digitalization. All the responses from the interviews were coded in these two tables for the seven interviewees separately so as to distinguish and evaluate the comments of each interviewee. Our coding and mapping of the results revealed stronger relations for some interactions and weaker links in others. We then analyzed these interactions and their implications in the field of trust and leadership.

4.7 Research Quality and Ethical Considerations

Setting quality criteria for a research is a way to make an assessment of the research and its findings to create a better quality research (Mays and Pope, 2000). In research two criteria are considered essential to measure research quality; namely validity and reliability. The relevance of these concepts to qualitative research, however, are debated (Bryman and Bell, 2015). Four alternative criteria that are considered to be a better fit for qualitative research are suggested (Lincoln and Guba, 1985). These are credibility, transferability, dependability and confirmability.

In order to ensure the quality of the research we have taken into account these four criteria. The credibility of a study depends on how confident the readers feel about the results, after they have read the entire research (Saunders et al., 2009). Credibility requires detailed explanation of concepts and a deep understanding (Tracy, 2010). Creating an alignment with the research method and the research question as well as making an appropriate sampling for the research is crucial. For this purpose we worked with deductive reasoning as we wanted to test our model. We resorted to non-probability sampling given the available start-up connections. Multiple data sources were used to construct the theoretical framework and our model. Transferability aims to figure out how much the study results can be generalized and in order to maintain transferability, as authors we provided a detailed overview of the theoretical aspects, its model and operationalization along with its presumptions and
Limitations (Saunders et al., 2009). Dependability is important for further research on the same subject and ensures that the study has been consistent and can be used for reference (Tobin and Begley, 2004). In order to achieve this we explained every step in detail. Confirmability intends to show readers the neutrality of the researchers, and their impartiality throughout the research (Tobin and Begley, 2004). As researchers we have provided detailed descriptions of the choice of decisions. An extensive literature has been provided on the three concepts to remove potential bias.

All interviews were conducted according to the interview guidelines (see Table 1). As all the participants were Dutch the interviews were held in Dutch and later translated into English. This helped the participants to express themselves more genuinely and us to analyze any cultural cues that may have come up. The records of the Skype interviews made it possible to reflect the views of the respondents with minimal error and also facilitated revisiting and further analysis. The interviewer adopted an engaging approach to the interviews which helped the participants to become part of the creation of meaning as part of the subjective approach the researchers chose.

As the researchers, we built our stance throughout the research by doing an extensive literature review on the three concepts of digitalization, leadership and trust. During the data analysis and processing phases, as authors we maintained our consistency. Given the sensitivity of conducting interviews, ethical consideration was essential for the research (Saunders et al., 2009). It was critical for the interviewer to build a trustworthy relationship with the interviewees (which included briefing them about the process, setting the interviews at convenient times, ensuring their comfort). To further enhance the trust between the researchers and interviewees, the interviewees were informed that they would be given copies of the study for their personal use after the study has been completed.

4.8 Limitations

Limitations of our research include several topics. Neither digitalization, nor leadership or trust can be easily and readily described. Hence we reflected on the existing research corpus to grasp the theoretical knowledge around it and see how much we can mobilize this knowledge in our own research. Digitalization is a process that is still ongoing and it is not clear which direction it will take in the future hence we are dealing with the uncertainty of a
concept in progress. This could have long lasting consequences for the future of the workforce and the workplace.

As we were constructing our model we had to resort to the characteristics of digitalization that impact leadership set forth in the master thesis of Shahyan Khan due to the limited scholarly research in this field. Khan’s master thesis “Leadership in the Digital Age: A Study on the Effects of Digitalization on Top Management Leadership” defended at Stockholm School of Business in 2016 remains the sole work to set forth such criteria to this day.

We conducted our research with a small sample group to test our model. As the process of trust is a personal experience, interview with each leader and follower yielded a variety of outcomes related to the perception. A bigger sample size with the same methodology can be explored to better understand tipping points with regard to the observations in some interactions that did not reveal any connections with the interviews. We also acknowledge that culture plays an important role and different national cultures can yield different results.

Start-ups, while highly digitalized, are relatively flat organizations. An exploration of the same research question in more hierarchical organizational settings will probably reflect different complexities and different outcomes. As this research is based on the subjective interpretation of subjective experiences, measurement of the outcomes cannot be metric and are open to further interpretation.
5 Findings and analysis

In this chapter the findings of our empirical data are discussed. First, in 5.1, a short introduction is presented regarding the purpose of the empirical data. In 5.2 elaboration on how the empirical data is analyzed to find the implications. The empirical data will be examined in 5.3, 5.4 and 5.5.

5.1 The Purpose of the Empirical Data

The aim of this thesis is to find out what impact digitalization can have on the trustworthiness of the leader. Therefore a broad literature review was conducted and as result we created our own model which became our framework for analysis. The purpose of the model is to show the implication between six characteristics of digitalization described by Khan (2016), and the Trustworthiness of the Leader as described in our earlier model.

The first part (5.3) of the findings presents the interviewees understanding of trust in leadership. The second part (5.4) will be focused on digitalization within organizations. The third and final part (5.5) highlights the findings regarding the implication between the trustworthiness of a leader and digitalization derived from the empirical data. The purpose of the provided data is to illustrate the operationalization of our model with quotes from our interviews. Table 1 Operationalization of Concepts in (in section 4.4.1) provides an overview of the concepts and sub-concepts. In Appendix IV brief information about the interviewees are presented and coded interviews can be provided upon request.

5.2 Empirical Data and the Interactions Between Digitalization and Trustworthiness of the Leader

Initially the findings and analysis were structured by elaborating on every possible relation between the trustworthiness of the leader and digitalization as seen in our model. However this would lead to thirty different subheadings which would result in an unclear and difficult elaboration that would not contribute to the research objective. The findings will be analyzed by looking at each characteristic of the trustee that we described in our model in tandem with the characteristics of digitalization that Khan specified to describe the leadership in the digital age (Khan, 2016). The importance of the impact of a digital characteristic, on a factor of the trustee, will be analyzed according to the verbal inputs and the time spent per theme, as stated in sub-chapter 4.5.
This allows a deeper analysis of each factor of the trustee described by the literature and to pinpoint which characteristics of digitalization could have impact on the ascribed factor of the trustee. The analysis is therefore structured in 5.5 under five subheadings, as in subchapter 3.4, namely: Competence, Objectives-Intentions, Integrity, Reputation and Symbols.

5.3 Understanding Trustworthiness of the Leader

All the interviewees were asked what their understanding of trust in leadership is. The answers of the interviewees were in agreement with the model’s five characteristics, as also described in the literature by Mayer et al. (1995), Blöbaum (2016) and Burke et al. (2007). Not all interviewers referred each factor by its own, but by analyzing the data the results showed that each comment about the trustworthiness of the leader could be tied either to Competence, Objectives-Intentions, Integrity, Reputation and Symbols. A quote could also be tied to multiple factors instead of one.

The most referred characteristics by the interviewees was related to the objectives and intentions. “Another factor of a leader is to protect their employee from themselves sometimes. For example an employee can get a burn-out [...] What I then do is I will sit 30 minutes with the employee and just write a list with priorities. 80 percent of the time this already helps for the employee. I believe this will enhance the trustworthiness.” - Leader A. Leader A addressed the importance of listening and coaching the employee, which generated a perception of trustworthiness. (Burke et al., 2007; Blöbaum, 2016) This fulfills the implication which suggests that employees need to feel recognized for their contribution, valued, cared for and supported personally and professionally. The other leaders also mentioned the importance of objectives and intentions, however Leader B admitted that his organization could improve on this point. Similar to the leaders, the employees found objectives and intentions just as important. “A leader needs to listen. When you are a leader and people need to follow you then people need to be behind you. When you listen to your employees and taking their ideas. What I see in my manager is that he asks for my input and opinions. Therefore I got more motivated and I feel trusted. For that trust that he gives, my trustworthiness will increase in him as well.” - Employee B. Analysis of Employee C showed that ‘a listening leader’ and being ‘recognized for their contribution’ was the most important factor for building trust in the leader. The other employees also highlighted this factor as an
important factor for trust. A deeper level of trust is expressed by followers when they view
their leader more as caring and supportive (Burke et al., 2007). After objectives-intentions;
competence and integrity are the most answered factors by the interviewees.

A leader is assumed as a ‘competent’ professional, who provides a compelling direction, to
ensure that employees perceive their tasks and goals as challenging, clear, and consequential
(Hackman cited in Burke et al., 2007). Analysis of the interviews showed that competence is
an important factor for the interviewees. With the exception of one employee, all the
interviewees mention competence as an important trait. Employee D referred to competence
as an important factor: “Another one is they need professional knowledge of their trait.
Without it would really decrease my trust in the leader.” - Employee B

Integrity has also been addressed as an important factor for trust in leadership by several
interviewees: “A leader needs to be honest and a leader needs to stand behind its own
decisions. So he needs to have integrity. [...] It is important that the leader has a good vision
and ambition. There are many employees who came to me to look for what we are going to do
and I need to be able communicate consistently and clearly.” - Leader B. Leader B reflected
the importance of integrity for a leader. According to Mayer et al. (1995, p. 719) Integrity
refers to “consistency of the party’s past actions, credible communication about the trustee
from other parties, belief that the trustee has a strong sense of justice. Employee B also
highlighted the importance of integrity: “Also noticing when a leader is sincere and honest in
their communication, at every moment. So that the manager doesn't tell different stories to
different employees.” - Employee B

Reputation has not been addressed as much by the interviewees. However, reputation is an
overarching concept that includes objectives-intentions, integrity, competence, and symbols.
Therefore, each characteristic of the trustee also has an influence on the reputation. Positive
experiences improve reputation and thereby increase the level of trustworthiness (Blöbaum,
2016). An in-depth analysis of the interviews also confirm that each of these trustee
characteristics have an indirect impact on the reputation. The individual experience and
interpretation of the employee, in other words the trustor, determines if an experience is
perceived as positive or negative: “A leader will be able to more easily chat with an employee
on a private level, which can also be done at the coffee machine […] And this can affect the
reputation of an leader.” - Employee A. As Employee A remarked about how digitalization
can impact the factor objectives-intentions, he implicitly stated that the outcome of his experience had an effect on his reputation of the leader. Sztompka (1999) described reputation as simply the record of past deeds which is formed from the first hand experiences such as social interactions, experiences and observations personally or over digital means and this contributes towards the trustworthiness of the leader.

Symbols have been mentioned less than any other trustee characteristics. This may be relevant to the cultural, or individual backgrounds and could be further examined in future research. During the first section of the interview about the trustworthiness of the leader, no interviewee mentioned symbols as an influence on trust in leadership. However, in the third part of the interviews when discussing trust and digitalization, the factor symbols is mentioned a couple of times. This shows that the interviewees didn’t necessarily associate symbols with trust in leadership.

5.4 Digitalization within the Organization

All the interviewees were in agreement that leadership, their organizations and themselves are affected by digitalization. Most of the interviewees could give a description about digitalization. However, not all the interviewees could give a broad explanation and different views could be derived from the answers. This shows that digitalization is an emerging, open and dynamic concept that has not been fully defined as shown by Hagberg et al. (2016, p. 696). It is an ongoing process that should be approached with sensitivity and openness to what it might encompass; a means rather than an end. Leader B reflected more on automation than digitalization: Digitalization has started to develop rapidly. But in my opinion it is more automation. Thanks to stable internet connections, more automated processes could be implemented. Therefore business processes could be more interconnected with everything. And within an organization everything has become much more easier. Press on a button and you immediately see all the information you need. So new clients could be integrated in the system with ‘one’ press on the button. So therefore process has become much more efficient. - Leader B.

With addressing digitalization, not only automation was being recalled, also digital transformation by Employee B: Digitalization is that all our activities keep on becoming more digital. Especially the communication, via email, SMS, WhatsApp. Also Skype and all the
other media. I think that EventsIT is almost totally paperless. Which is a result of digitalization. - Employee B.

Further through the interviews, the interviewees had time to reflect on the impact of digitalization in their organizations. The six characteristics of digitalization became more visible in analysis of the empirical data. What stood out is that different opinions on different characteristics could be found in the interviewees. Multiple interviewees didn’t find digitalization as a decision-enabler or integrity-enhancer, while other interviewees observed this characteristic as part of digitalization. The same can be said for the hierarchy removal and dissolution of personal barriers. Most of the interviewees agreed that this is a characteristic of digitalization, however two interviewees disagreed. The remaining characteristics; interconnectedness, diminishing time lag and abundance of information, increased transparency and complexity and the humanizing effect were all recognized by all the interviewees as characteristics of digitalization. During the digitalization part of the interview, it became clear that the six characteristics of digitalization had limited impact on the trustworthiness of the leader for our target group as the interviewees were part of relatively small start-up organizations: “Digitalization causes diminishing face-to-face communication because of electronic communication [...] However, we don’t have that problem to the full extend because we are a small organization.” - Leader A. Leader A discussed the diminishing face-to-face communication as result of digitalization, which can be connected to interconnectedness of Khan (2016). However, she underlined that the diminishing face-to-face communication doesn’t affect her organization strongly because her employees work near each other in a small office space. Majority of the interviewees believed that the discussed characteristics could potentially have more effect in larger organizations. Nonetheless did the empirical data highlight that digitalization affects the organizations.

5.5 Impact of Digitalization on the Trustworthiness of the Leader

5.5.1 Competence and Digitalization

Competence has been regarded as an important factor for trust in leadership according to the interviewees. Leader’s expertise, setting the scene for the team through vision, providing for the necessary sources is regarded as a strong enhancer of trust in leadership according to the interviewees. By analyzing the empirical data thoroughly, several connections can be made between competence and digitalization. Several interviewees reflected on situations within
their organization where digitalization impacted the antecedent competence: “A leader needs to make sure he can easily communicate clear vision and strategy for the employees. [...] For example a leader can put a notice about vision and strategy on a portal or an email to communicate. And a leader should ask feedback on their giving vision and strategy. So therefore digitalization can provide an easier bottom up feedback as well. - Leader A. Leader A stressed the need to communicate a clear vision and strategy for the employees. Leader A stated that via digital communication, such as email and a virtual portal the communication of an clear vision and strategy becomes easier. Also, employees can easily give feedback through the digital means.

Interconnectedness, hierarchy removal and dissolvement of personal barriers are characteristics that influence how a leader can communicate their vision and strategy, thus it influences the competence of the leader: “You can also trace digitalization back to physical means within an organization. For example laptops, printers, Wi-fi access points. It is important for an organization to optimize this hardware. I have seen a lot of organizations that try to save money on physical office supplies whilst working digital. This can cause a lot of frustration with the employees.” - Employee A. Employee A spoke about the importance of good physical office supplies that come with digitalization. This is also mentioned by Leader A. According to Burke et al. (2007), providing employees with good office supplies has always been a necessity for a leader. When leaders fail to provide adequate resources, team members may perceive the leader as ‘out of the loop,’ unorganized, or generally ineffective which affects competence (Burke et al., 2007). All the interviewees stated that they are working online on the cloud, therefore the leader needed to provide their employees with the right tools for working digital. Providing the tools is characteristic of interconnectedness, as seen by Berman (2012) and has an implication on competence.

“We tend to give the digitalization factors to the younger employees. This can have a positive or negative effect on the trustworthiness of a leader. Especially when it is about something small like creating an email. Whenever a leader is not even able to do that, it influences the competence of a leader. But on the other side, a leader can use this in his/her advantage by asking aid from an employee for a more complex question and therefore putting the employee on a pedestal. Which can lead to a higher trustworthiness relation.” - Leader A. Leader A addressed that senior managers could have trouble with digitalization because they did not grow up with digital means. Leader C also addressed that this is the case. A deeper analysis of
Leader A’s statement showed that a complete lack of knowledge about digital technology affected the competence of the leader. This is connected through increased transparency and complexity, the competence of leaders can be affected from being illiterate in digital technologies. However, Leader A mentioned that a leader could use this as an advantage by asking aid from an employee. This is connected to the integrity of the leader and is discussed in 5.5.3.

According to our empirical data multiple digitalization factors can influence the competence of the trustee. The characteristics the interviewees mentioned are:
Ø Interconnectedness
Ø Increased transparency and complexity
Ø Hierarchy removal and dissolution of personal barriers

According to the analyzed cues and input of the data, ‘Interconnectedness’, ‘Increased transparency and complexity’ and ‘Hierarchy removal and dissolution of personal barriers’ have a strong implication on competence.

5.5.2 Objectives-Intentions and Digitalization

Empowerment, recognition, nurturing, coaching is an important part of being a trustworthy leader. The empirical data shows many connections between digitalization and objectives and intentions. Several interviewees responded that digital communication provides an informal way of communicating between leaders and employees. “It is easier to communicate through digital chat. I am able to send chats to my employees with small questions about how they are doing. This can have a positive or negative effect on the trustworthiness of the leader. If the chat’s purpose is for small talk and to know how the person is doing than it will have an positive effect. [...] It has a humanizing effect and it is an informal way of replacing meeting at the coffee machine.” - Leader A. Here, a deeper analysis of Leader A showed that through digital communication, a leader can show genuinely care about their subordinates and convey authentic concern in relationships (Caldwell and Hayes, 2007). Digital communication also enables humans to easier interact, communicate and interlink through virtual platforms (Tapscott, 1996).

Through being interconnected due to digitalization, there is a combination of dissolution of personal barriers and diminishing time lag. Several interviewees agreed that communicating via virtual platforms makes it possible to connect on a personal level with their leader and
employees. The diminishing time lag provides for a swift communication style which enhances the leader-employee trust gaining process (Khan, 2016). Thus digitalization created an humanizing effect which provides a positive effect on the objectives and intentions. The interviewees also mention that because of the interconnectedness and dissolution of personal barriers, leaders and employees can be contacted after standard working. “It depends how you seek contact with the employees. If I as a leader send out texts all the time after work hours to check up then it has a negative effect, but just a text about how it is going that creates a positive effect.”- Leader A. Monitoring employees by sending text after work time will have a negative effect on objectives and intentions, as stated by Burke et al. (2007). However, when the text is related on a personal level, it will have a humanizing effect which has a positive outcome. Given the diversity of different media and tools this can be managed by leaders who are capable in using these tools and intent on developing a nurturing relationship with their followers. Through these digital means the trustee can increase his/her trustworthiness, which is related to the expression of objectives and intentions. “The communication with the employees can be also far more informal. We have a big chat room where we can easily discuss work related questions, but there are also jokes being told and movie clip and memes are being shared as well.” - Employee A

However, other interviewees stated that digitalization can also have the direct opposite effect, as also stated by Employee A: “Digitalization can cause to take away personal interaction. For example, within my organization it is allowed to work 40% of the time at home. However, seeing your colleagues in person gives so much more than only digital.” - Employee A. The transition from face-to-face communications and more towards digital communications, influences the development of a mutual trust relationship at-work (Mackenzie 2010). Therefore, the interconnectedness diminishes face-to-face contact thus influence the expression of objectives and intentions negatively. It takes away opportunities for leaders to connect with employees in person on the work floor. Leader C strongly addressed this negative effect of digitalization on objectives-intentions as well: “A leader needs to make sure that he is been seen. Because of digitalization leaders can hide behind email but he needs to be present and active. People need personal contact and a leader needs to keep doing that.”- Leader B.

Hierarchy removal is a characteristic that comes back several times by the interviewees. Employees receive more empowerment as result of hierarchy removal and thus it has an effect
on objectives and intentions: “My organization is without a strong management-layer. Thus we have a flat organization. This has been made possible because of digitalization. As result of this a lot of people can say something about one project which can provide a lot input. However, this can lead to a situation where no decisions are being made. Therefore a flat organization is not always useful. So sometimes the manager needs to intervene and make a decision.” - Employee A. Other interviews also refer to the hierarchy removal and the empowerment of the employees that comes with it. However, several interviewees stated that the small size of the company already creates an atmosphere with less hierarchy. Leader B mentions that he always supported a flat organization, also before the impact of digitalization.

The empirical data has shown multiple implications between digitalization and objectives and intentions. The digitalization characteristics are:

Ø Interconnectedness
Ø Diminishing time lag
Ø Increased transparency and complexity
Ø Hierarchy removal and dissolution of personal barriers
Ø Humanizing effect

The analyzed cues and input implicates that ‘Increased transparency and complexity’, ‘Humanizing effect’ and ‘Diminishing time lag’ have a strong implication on objectives and intentions. ‘Hierarchy removal and dissolution of personal barriers’ is according to the interviewees a small implication. The small size of the organizations they are employed in already has less hierarchy and personal barriers.

5.5.3 Integrity and Digitalization

The characteristic ‘Increased transparency and complexity’ has been mentioned multiple times by several interviewees. Digitalization gives the leaders of an organization the liberty to monitor their employees which can give a negative effect on integrity (Blöbaum, 2016; Burke et al., 2007): “Digitalization also creates more control opportunities for the manager. Because the manager can on the cloud see when, where and what I was working on. A manager can put more control on his employees and many people, like me, don't like it. On the other hand error can be easily found and fixed. Therefore organizational optimization is easier to reach.” - Employee C. Employee C referred to his disapproval of being monitored, however he also understood the benefit of monitoring. All the interviewees mentioned that they get a feeling of injustice when a leader monitored an employee without a reason.
Injustice and dishonesty have a strong negative effect on integrity (Burke et al., 2007). All leaders stated that they were aware of the possibility of monitoring their employees, but they agreed that it gave a feeling of injustice and they did not practice monitoring in their organization.

“We are also planning to make the salaries transparent. However, that is where problems can occur. The feeling of injustice within an employee when he discovers he earns less than his college will be problematic. He will probably go to the manager for an explanation and this can affect the trustworthiness in the leader.” - Employee A. Employee A indicated that the increased transparency due to digitalization could make personal information available which was more difficult to obtain before digitalization. Information which employees perceive as injustice will have an implication on integrity.

Employee C stated, in opposite to Employee A, that it had a positive effect on integrity as well. “As an employee from my manager, I can see where his money is located and how much it is due to digitalization. Therefore there must be a strong trust relationship to feel comfortable as manager to share this. And because of this transparency I am more aware of where the manager lives, what he does and so on. And I think this works positively on me on the trustworthiness of the leader.” - Employee C.

The increased transparency coupled with the removal of personal barriers and humanizing effect of digitalization, force leaders to be honest about their private life. This has an implication on integrity. Several leaders and employees mentioned the implication of social media on trustworthiness of the leader: “Digitalization makes it also possible for the leader to express his thoughts and it makes it easier to relate with the employees. Therefore it will affect the trustworthiness. But it can go the negative way as well when a leader writes one thing and then later on says another thing. Because of digitalization it is much easier to look back what somebody said. And when the leader is not being honest, the trustworthiness will get negatively affected.” - Leader B. The reasoning of Leader B showed that a leader always needed to be self-aware about what he posted or sent online. One’s virtual persona, will transfer to the physical persona and it has an implication on integrity (Khan, 2016).

As the world grows more complex with increased uncertainty regarding increased transparency, battles of integrity will likely follow. This double-edged sword shows that
although digitalization can act as an integrity enhancer, it also enhances the pressure on the leader. The implications of digitalization on integrity are:
Ø Increased transparency
Ø Hierarchy removal and dissolution of personal barriers
Ø Humanizing effect
The analyzed cues and input of the interviewees implicate that all three characteristics have a strong implication on integrity.

5.5.4 Reputation and Digitalization

A positive experience will improve reputation of the leader and thereby increase the level of trustworthiness, as stated by Blöbaum (2016) Reputation combines the indicators comprised of competence, objectives-intentions, integrity and symbols and indirectly illustrates their trustworthiness via reputation. However, when a factor of trustworthiness of the leader is directly implicated, then it tends to matter first instead of reputation. Thus all the implications that have been discussed has an indirect influence in the reputation.

Internet activity and social media has an implication on reputation. Reputation arises from direct observations and if the observations are perceived as negative, the reputation will be affected, as stated by Employee B: “If my manager puts images of her on Facebook where she is intoxicated, than I will look different to her and it may affect my trust in her.” - Employee B. Several interviewees responded, gave similar answers about reputation. As Blöbaum describes, social reputation is an evaluation of integrity. Thus as has been discussed under the heading of integrity and digitalization, leaders need to watch out what kind of content is placed online. It becomes hard for leaders to openly express themselves and share one’s flaws. It could damage the reputation of the leader. The characteristics that have an implication on reputation are:
Ø Increased transparency and complexity
Ø Dissolvement of personal barriers.
The analyzed cues and input of the interviewees implicates that ‘Increased transparency and complexity’ has a strong implication on reputation. Dissolvement of personal barriers is again not that strong because of the small size of the companies.
5.5.5 Symbols and Digitalization

During the interviews only two employees made an observation of symbols and digitalization. Leaders can use “symbolic indicators” (Blöbaum, 2016) to influence trustworthiness by recipients without using major resources such as academic titles, references or the white coat worn by the doctor (Blöbaum, 2016). Symbolic indicators are being applied to online presences because of digitalization. LinkedIn and other online platforms can provide the opportunity for leaders to show their symbols. “When I don’t know a leader that well, an online reference might have an impact on my trust towards my leader, but own experience will always win from online references.” - Employee B. Employee B referred to having no further implication of online reference on his current leader. It only affected his perception of trustworthiness when he has no prior knowledge of his manager. The characteristics of digitalization that affects symbol are:
Ø Increased transparency and complexity
Ø Dissolvement of personal barriers

The analyzed cues and input of the interviewees implicates that there is only a small implication between ‘Increased transparency and complexity’ and ‘Dissolvement of personal barriers’
6 Discussion

6.1 An overview of the findings

The findings show different associations between the characteristics of digitalization and the trustworthiness of the leader. Interconnectedness, increased transparency and complexity and hierarchy removal and dissolution of personal barriers have a strong effect on the trustworthiness characteristic of ‘Competence’. For ‘Objectives and Intentions’, the digitalization characteristics that have the strong impact are increased transparency and complexity, humanizing effect and diminishing time lags. Hierarchy removal and dissolution of personal barriers have a lesser impact on this characteristic. This is related to the small size of the start-up organizations which already have less hierarchy and personal barriers among their employees. For ‘Integrity’ increased transparency, hierarchy removal and dissolution of personal barriers and humanizing effect are the digitalization factors that have strongest connections. The findings show that for ‘Reputation’, increased transparency and complexity influence reputation greatly. Dissolution of personal barriers also has an implication but is again not that strong because of the small size of the companies. For ‘Symbols’ minor associations with digitalization were drawn by the interviewees. The implications that are visible for Symbols are: increased transparency and complexity and dissolution of personal barriers.

6.2 Critical reflection of the findings

We identified the following result through an extensive literature review and seven in-depth interviews which resulted in the final model. Our final model of ‘Implications of Digitalization on the Model of Trust in Leadership as per interviews’ can be seen in Figure 2. (In Appendix V a full-size model has been added for a better overview.)
Figure 2: Implications of Digitalization on the Model of Trust in Leadership as per interviews (created by the authors)

The model displays a simple overview about the impact of digitalization on the characteristics of the trustee. Instead of showing only the six characteristics of digitalization, like the previous versions of the model, we chose to show the effects of characteristics of digitalization per trustee characteristics which had an implication on the trustee. The previous version of the model would provide an confusing overview as result of the overlapping arrows.

After the interviews, the effects of most characteristics of digitalization could be identified in different degrees in all the five characteristics that define the trustworthiness of a leader. Digitalization does impact the trustworthiness of the leader. However, not every digital characteristic had a strong impact on each trustworthiness characteristic. One characteristic of digitalization, namely “Decision Enabler and Integrity Enhancing”, did not have any impact on the trustworthiness of the trustee in comparison to the other characteristics according to our empirical data. Therefore this characteristic isn’t shown in Figure 2. An outcome that we expected was that the digitalization would have a dehumanizing effect due to the diminishing
face-to-face communication (Mackenzie, 2010, p. 536-7), but this was not verified in our interviews.

Competence, objectives and intentions of a leader are better understood through digital means as digitalization offers different means to communicate and remain connected. Increased transparency and removal of personal barriers provided by digitalization help recognize the leadership competences of a leader in a better light. Competence was described as the ability to fulfill tasks in a specific situation, that enables a person to have influence over a certain domain (Mayer et al., 1995) and entailed the leader’s ability to set clear compelling direction as well as functional norms including the allocation of work and resources (Burke et al., 2007). Digitalization thus can serve to enhance the competence of a leader (e.g. communication skills) or help its communication and perception by the employees. Removal of personal barriers and hierarchy enhanced the relationship between the followers and leaders and therefore contributed positively to the communication skills of the leader and therefore the trustworthiness of the leader. Increased transparency, dissolution of hierarchical organization make it possible for the employees to observe the objectives and intentions of the leader and judge its fairness in a more direct, participative way. Burke et al. (2007, p. 616) stated “Followers express a deeper level of trust if they view their leader as more supportive and caring” hence digitalization can clarify the follower’s perception. When digital technologies are employed to build relations and not only monitor performance, the humanizing effect of digitalization positively impacts the perception of the trustworthiness of the leader. Digitalization can help empower, recognize and coach employees more effectively and thereby increase trustworthiness of the leader with regard to the expression of objectives and intentions. This leadership practice which can be tied back to the work of Avolio, Kahai and Dodge (2000) seems to be a process in progress. Avolio, Kahai and Dodge (2000) suggest that digitalization has a major impact on the perception of a leader’s behaviour (e.g. as inspirational, caring, credible, honest, goal-oriented, or stable behaviour). Being interconnected through digital means provides an open and transparent communication where the leader can demonstrate integrity, accountability and justice. The increased transparency, removal of hierarchies and humanizing effect of digitalization oblige the leaders to be honest about their work and private lives and make them accountable to the employees. The achievements and failures of leaders can be followed from online media almost instantly despite its potential risks on personal privacy. Digitalization makes it possible to publicize reputation for leaders and for the followers to verify the reputation. As reputation has an
important role in the construction of a perception of a trustworthy leader, this becomes especially important for the digital natives who have more affinity towards digital technologies. Symbols, which are closely related to the reputation of a leader, can be created, modified and accessed through digital technologies easily. This both provides a transparent way to assess the trustworthiness of the leader but also strips the leader of his/her personal barriers.

One of the remarkable results we discovered is how positively the humanizing effect of digitalization can affect the trustworthiness of the leader. Chat platforms like WhatsApp groups, Skype and the newest edition, Microsoft Teams, are tools for an organization to communicate, engage and be more effective. Twenty years ago, Tapscott (1996) already discussed the use of virtual platforms for virtual teams, however these chat platforms are now fully integrated in the organizational setting and they are also used for informal communication between leaders and employees. These platforms also increase dissolvement of personal barriers and allow the leader to build informal relationships which enhances the trust relations.
7 Conclusion

Digitalization, according to many contemporary management scholars, is having a fundamental effect on organizations, societies and individuals alike. It is also considered as one of the upcoming challenges for leadership in businesses. Research in leadership and digitalization has developed a vast literature, however, specific research related to the trustworthiness of the leader and digitalization remained limited. Thus, this study was aimed to examine the possible impacts of digitalization on the trustworthiness of the leader. We first surveyed the literature on trust in leadership and observed the available models to dismantle the process of trust in the leader. The existing models of trust are developed over a long span of time. We first focused on the Mayer et al. model (1995) as this is one of the oldest and most referenced models on trust in leadership. As our research question involved digitalization, the model constructed by Blöbaum (2016), which explains the trust process in the light of the developments in the digital technologies, was important for us. Hence we constructed our own model to explain the process of trust. We incorporated the characteristics of digitalization related to leadership to the model to observe and understand the possible interactions. After building the model it was essential to comprehend how this functioned in real organizational settings. We used a qualitative study and conducted seven interviews with managers and employees from Dutch start-ups to test our model. Thereafter, the findings of the empirical data were incorporated into our final model.

The findings demonstrated that there indeed was an impact of digitalization on the perception of a trustworthy leader. This impact was created with increasing interconnectedness and transparency, the removal of hierarchy and personal barriers and the humanizing effect of digitalization. The interviews we held showed that digitalization contributed especially to the competence, objectives-intentions and integrity of a leader if used effectively. Considering the models of Mayer et al. (1995), Burke et al. (2007) and Blöbaum (2016), this finding is in line with Mayer et al.’s model where they underlined the ability, intention and integrity of the trustee.

7.1 Contributions

The model we established and modified as part of our research can be used as a rudimentary structure to inspire future research on this topic in different disciplines. Our contribution with this study can be evaluated on various levels. First, the model has given a deeper
understanding on the trustworthiness of the leader regarding its constituents and attributes which affect leadership in an age of digital technologies. The second contribution is how the model shows the impact of digitalization on the trustworthiness of the leader. Scholars of leadership and management who research the concept of individual trust can use this thesis as a stepping stone for further research on the topic of the trust relationship between leader and follower. This study will also help practitioners of leadership and management in the organizational settings to observe how trust relationships can be built and maintained in a digital world. Our interviews with the Dutch start-ups provide a microcosm that may be helpful to observe for larger and more complex organizations.

The digital technology tools available in the market are not yet being efficiently used by leaders and organizations to their fullest capacity. Leaders can take this digital opportunity to build stronger teams. Digitalization changed how the trustworthiness of a leader can be perceived, however, contrary to our anticipation, digitalization was not as disruptive as we expected during this research. Digitalization will get truly disruptive when the digital immigrants will leave the workforce and the workforce is composed of digital natives. That will probably present a totally different picture for leaders and followers as well as teams and organizations.

7.2 Further Research

A different research methodology, such as a mixed research employing both qualitative and quantitative methods, could also produce interesting outcomes. While the qualitative research provides insights that are not possible with quantitative research, quantitative research may be helpful to make correlations regarding certain organizational statistics and the nature of digitalization and trust. This would not only enable the researchers to survey a bigger group but also observe and quantify any trends, preferences and outcomes. Surveys coupled with interviews can indeed yield rich empirical data and open new doors for the perception of trust in a leader in the digital age.

The literature on trust suggests that observing the team and organizational dynamics can produce important results for trust in leadership instead of solely looking at the dyadic relationships (Burke et al. 2007). Conducting this research in teams and bigger organizations could yield interesting results. Given the change in the workforce over the years conducting
this research with a research sample selection made up of digital natives could also yield different results. Cultural factors do play an important role in the establishment of trust. We already considered this as part of the situation related organizational and team factors. As we focused on Dutch start-ups, the cultural element is important to consider and it could produce different results in a different national setting as it impacts organizational, team cultures and individual relations.

7.3 Our Learning Process

This research has helped us to familiarize ourselves both with the scholarly work as well as its practice in real organizational settings. As there was no previous research on our specific research topic we had to work through three main fields of academic literature on the concepts of digitalization, leadership and trust. With the guidance of our advisor we created a model that we used as the framework of analysis for the intersection set of these three concepts. Our interaction with the Dutch start-ups gave us a feel around how the relationship of trust was established with the presence of digital technologies. This helped us to observe the big picture on the perception of trustworthiness of the leader in the digital era. While observable impact was less than we expected, it is nonetheless important to note that digitalization already started to create an impact on the trustworthiness of the leader. It will be even more exciting to watch its transformation in the coming years with the development of more digital technologies and changing workforce.
Bibliography


I. Appendix A: Research model before interviews

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**Trust in Leadership and Digitalization**

<table>
<thead>
<tr>
<th>Trustee</th>
<th>Six Characteristics of Digitalization</th>
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<th>Outcome</th>
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<td></td>
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<td>Objectives &amp; intentions</td>
<td>Diminishing time lag and abundance of information</td>
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<tr>
<td></td>
<td>Humanizing effect</td>
<td></td>
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**Frames of Reference:**
- Knowledge/Experience
- Socio Demographics

**Situational Factors:**
- Organizational
  - Team
  - Individual

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**Figure 3:** Full-size version of Trust in Leadership and Digitalization Model
II. Appendix B: Mayer et al. Model

Figure 4: Mayer et al. Model

Source: Mayer et al. (1995)
Figure 5: Blöbaum Model

Source: Blöbaum (2016)
IV. Appendix D: Interviewee Data

Leader A – Els van de Kar

<table>
<thead>
<tr>
<th>Name interviewee</th>
<th>Els van de Kar</th>
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<tbody>
<tr>
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<td>Director</td>
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<td>Manager</td>
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<td>Sector</td>
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Table 2: Leader A

Leader B - Edward Spelt

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<table>
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**Table 3: Leader B**

**Leader C - Roeland Dobbelaer**

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**Table 4: Leader C**

**Employee A - Kevin Miedema**

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Level of digitalization | Mature
---|---

**Table 5: Employee A**

**Employee B - Patrick van Seventer**

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<td>Sector</td>
<td>Service</td>
</tr>
<tr>
<td>Type/of product service</td>
<td>Providing IT-solutions for sporting events</td>
</tr>
<tr>
<td>Level of digitalization</td>
<td>Mature</td>
</tr>
</tbody>
</table>

**Table 6: Employee B**
<table>
<thead>
<tr>
<th>Employee C - Tomek Synowiecki</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name interviewee</strong></td>
</tr>
<tr>
<td><strong>Manager/Employee</strong></td>
</tr>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td><strong>Company</strong></td>
</tr>
<tr>
<td><strong>Sector</strong></td>
</tr>
<tr>
<td><strong>Type/of product service</strong></td>
</tr>
<tr>
<td><strong>Level of digitalization</strong></td>
</tr>
</tbody>
</table>

**Table 7: Employee C**

<table>
<thead>
<tr>
<th>Employee D - Suzanne Meinders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name interviewee</strong></td>
</tr>
<tr>
<td><strong>Function</strong></td>
</tr>
<tr>
<td>Manager/Employee</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>Company</td>
</tr>
<tr>
<td>Sector</td>
</tr>
<tr>
<td>Type of product service</td>
</tr>
<tr>
<td>Level of digitalization</td>
</tr>
</tbody>
</table>

Table 8: Employee C
V. Appendix E: Research model after interviews

Figure 6: Full-size Final version of Implications of Digitalization on the Model of Trust in Leadership as per interviews