Are employees ready for digital transformation?

Employees' change readiness for and acceptance of base technologies for digital transformation in service SMEs

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Abstract
Digital transformation is becoming more prominent nowadays, whereas COVID-19 has accelerated its importance. Whilst various studies have examined the digital transformation process, they mainly concentrated on industries such as manufacturing, automotive, and healthcare, where the service industry is left behind. Furthermore, the employee perspective is often not considered in combination with the maturity level of the organization and customers. Hence, the purpose of this paper is to explore the enablers and inhibitors of employees' change readiness in service SMEs regarding digital transformation. For this purpose, fifteen semi-structured interviews were conducted with managers and employees from four organizations and analyzed through the Gioia method. Findings revealed that with a mix of leadership styles, the employee is more engaged through the process. Moreover, the maturity level of both the organization and the customer shows to what extent the organization can go along in the change. More specifically, the findings indicated a set of enablers consisting of goals and vision, skills and competencies, involvement of employees, and leadership. On the contrary, the inhibitors that arise from the study were organizational reluctance, inadequate data, and external market factors. Additionally, the understanding of the necessity for digital transformation over a long-term period is necessary given that results might not appear in a short term. This research offers a conceptual framework, with the enablers and inhibitors and the moderating role of maturity, to guide future research on digital transformation for service SMEs and practical implications.

Keywords: Digital transformation, change management, technology implementation, small and medium enterprises, service industry

1. Introduction

The world around us is changing and future industrial systems play an increasingly important role in society. These can be seen as smart technology systems that are the advent of a fourth industrial revolution, a so-called Industry 4.0. The new developments arising from Industry 4.0 are considered vital to creating a competitive advantage in a global market between manufacturing companies in national economies (Doh & Kim, 2014). Gomez-Reino (2018) defines Industry 4.0 as a current trend of designing and deploying technological solutions which develop a company's strategic acceleration capability which could even change its strategy completely. Industry 4.0 differs from the previous wave as it elaborates on the availability and use of vast quantities of data that streamline production processes without a human aspect. Next

to that, ICT is merging physical and virtual worlds called the cyber-physical systems (CPS), which consists of online networks of social machines that communicate via a network (Fonseca, 2018).

Machado et al. (2019) argue that within Industry 4.0, the terms digitization, digitalization, and digital transformation are common terms which can be used in context. The technologies of Industry 4.0 bring many benefits to manufacturing industries, where 96% of total enterprises in Europa are small and medium-sized enterprises (hereafter called SMEs) (Manufacturing Statistics, 2022). However, most of the current Industry 4.0 technologies are developed for, or by, larger organizations. And even though larger firms contribute to the economy, SMEs create an impact by creating jobs, economic growth and ensuring social balance. Next to that, earlier research acknowledges a gap in ICT adoption between SMEs and large corporations (Knight, 1999). Although SMEs are better equipped with ICT systems, the use of ICT is still insufficient for business purposes and the training of employees. This digital divide in SMEs is not only about money or technology but this arises from the lack of knowledge and skills among owner-managers and employees (Arendt, 2008). This could mean that many SMEs still must make the step to seriously embrace Industry 3.0 which makes the gap with 4.0 even larger. This gap will be investigated based on service SMEs as there is less literature available than in other sectors such as manufacturing.

Next to that, employees could show resistance to digital transformation which implies a lack of information, skills, knowledge, or managerial capabilities needed. In the worst case, they fear losing their job because of digitalization (Gupta, 2018). Smart analytical tools can only deliver value if it is used in a broader aspect of the transformation effort. Organizations still need human capital with the skills, influence, and motivation to co-create effective processes and turn insights into plans of action where continuity is a goal (Paik & Silver, 2019). This resistance of employees can be related to change readiness. This might be a leading factor for why change transformations fail in companies. When employees are already busy with their day-to-day operations, additional work to succeed in the change transformation shouldn't be higher than 10%. When it's beyond that, the change initiative will run into failure as the employee morale will fall and conflict arises between teams and line staff (Sirkin et al., 2005). Research from Rafferty et al. (2013) shows employees' change readiness, which is about the individual's beliefs, attitudes, and intentions to change. However, no evidence is shown yet whether employees' change readiness for and acceptance are related to digital transformation. To narrow the concept of digital transformation, the research of Frank et al. (2019) describes different types of smart technologies that relate to different stages with front-end technologies

and base technologies. Front-end technologies consist of the smart supply chain, smart working, smart manufacturing, and smart product whereby the base technologies include cloud services, the Internet of Things (IoT), big data, and analytics. The findings of the study by Frank et al. (2019) are only based on the manufacturing industry where this paper will extend the literature by focusing on the service sector and deepening into the base technologies which represent all front-end dimensions. This research focuses on base technologies to narrow down the concept of digital transformation and suggest that these advanced technologies positively affect business processes for service organizations.

This exploratory research aims to provide insights into the change readiness of employees in digital transformation for service SMEs and build a research framework including propositions for future research. The data gathered is qualitative and future research needs to confirm this theory. To fulfil this research gap, the following research question is proposed:

What are the enablers and inhibitors of service SME employees' change readiness for and acceptance of base technologies for digital transformation?

By addressing this research question, the research explored how a digital transformation would be applicable and could be adopted by service SMEs. Limited research is available on the change readiness of employees regarding digital transformation, especially in combination if we look at service SMEs. This paper elaborated on the multilevel framework of the antecedents and consequences of readiness for change from the paper of Rafferty et al. (2013). The research deepened into the individual level and looked at the antecedents of external pressures, internal context enablers, personal characteristics, and the change readiness cognitively and affectively. This might be relevant for all stakeholders, whereas employees feel empowered when they participate in decisions related to change and it provides them with a sense of agency and control. Companies need their employees to be ready for change as it would increase the success of the change project by creating ownership and commitment. When aiming for all these elements, it would create an advantage from both on an individual and organizational perspective. This gave a basis for the change readiness and what the outcome was regarding change supportive behaviour, job performance and job attitudes of employees. As the job might change for an employee, the feeling and belief toward the job should remain, or even be higher after the change. The elements of change readiness will be further explained in the theory section with the digital change readiness framework.

This research contributed to practice by giving insight into the change readiness of employees regarding digital transformation in service SMEs. This enlarges managers' knowledge and brings more awareness to their employees on the importance of digital transformation. Next to that, the adoption of digital transformation gives companies a step ahead of their competition.

2. Theory

2.1 SME characteristics

As mentioned earlier, Small, and medium-sized enterprises represent 99% of all businesses in Europe. The main factors whether an enterprise is an SME are staff headcount, and annual turnover/annual balance sheet. An SME employs fewer than 250 persons, does not exceed an annual turnover of EUR 50 million, and does not exceed the annual balance sheet by a total of EUR 43 million. In total, European SMEs employ 91 million people with €3934 billion value added (European Commission, 2020). When analysing SMEs regarding digital transformation, they have fewer resources and experience in managing new technologies. The CEO's involvement is larger in daily operations which comes at the expense of strategic and development-oriented activities (Stentoft et al., 2021).

SMEs are mostly limited regarding financial and human resources, and market information as well. Masooda & Sonntaga (2020) mention that larger SMEs show a higher observable benefit and have a more positive attitude towards Industry 4.0 than smaller SMEs. This results in a higher observable benefit whereas company complexity shows an observable challenge. Dolgui et al. (2021) argue that it is important to first focus on the company’s values and its customers. And only then start beginning with the implementation of individual technologies by Industry 4.0. Next to that, Barton et al. (2022) researched the requirements of the basic and the more advanced attributes of the Industry 4.0 strategy in SMEs. The basic elements are the following:

- Collection of all available company data
- Data must be protected against unauthorized access
- Usable data must be evaluated
- Employees need to be prepared for changes

The more advanced elements in SMEs regarding Industry 4.0 are as follows (Barton et al., 2022):

- Make the collected data visual

- Prepare an interactive representation of the system to find and eliminate weaknesses in the production
- Design integrated systems

Overall, these elements identify the essential attributes of Industry 4.0 for SMEs to advance their level of digitalisation. In the next paragraphs, Industry 4.0 and change readiness will be discussed where often referring to SMEs.

2.2 Industry 4.0

Shafiq et al. (2015) describe Industry 4.0, hereafter I4.0, as a "computerization of traditional manufacturing plants and their ecosystems toward a connected and continuously available resources handling scheme by Cyber-Physical Systems (CPS)". The goal of I4.0 is the smart factory with the characteristics of adaptability, resource efficiency, ergonomics and the integration of customers and business partners in business and value processes.

I4.0 is also related to other technologies such as augmented reality, virtual reality, digital twins, robotics, and advanced simulations (Masooda & Sonntaga, 2020). The intention is to explain and elaborate further on digital transformation as a concept for business and what it means in an employee's acceptance of digitalization.

Digital transformation

There is a lot of confusion about the meaning of digitization, digitalization, and digital transformation. Digitization is creating a digital format from non-digital things such as paper documents. This digital format can then be used by a computing system for several possible reasons. The second definition of digitization is using digital data, extracted from a physical system, to automate and digitize workflows and processes (I-Scoop, 2022; Vrana & Singh, 2021). Digitalization is something else than digitization. Digitalization is enabling and improving business processes, by leveraging digital technologies and turning them into intelligence and actionable knowledge. the concept is about systems of engagement and insight whereas digitization was more about systems of record. Another meaning of digitalization refers to the ongoing adoption of digital technologies across all societal and human activities (I-Scoop, 2022; Vrana & Singh, 2021).

Lastly, digital transformation is a broader aspect than digitalization. Digital transformation is the fundamental change of strategy, process, function, and products to derive benefit from technology. The organization need to keep monitoring the services that are offered and keep the customer as the focus with precise strategies to embrace technology. Digital

transformation not only requires technology but also the alignment of strategy and people, culture, talent development, and leadership (Goran et al., 2017). The paper of Gong & Ribiere (2021) showed a conceptualization of digital transformation and refines it as an ecosystem and societal challenge. The transformation refers to a change in a new form, function, or structure with the adoption of digital technologies to create new value. With digital transformation, it is important that employees could actualize the core capacities of the concept, openness, affordance, and generativity (Nambisan et al., 2019). Openness refers to open innovation practices, which can only be effective and efficient when employees have the digital skills to engage with these practices. Affordance refers to possibilities or opportunities for action. Employees need to be equipped with digital skills that turn digital platforms into different innovations that could be relevant. Generativity is related to the ability to produce unprompted changes in a blend or recombination with the help of many stakeholders. With these three core capacities, the organization should prepare its employees to take benefit of digital technology (Cetindamar et al., 2021). To achieve digital transformation, digital maturity first needs to be illustrated to see where a company stands. The next section will dive further into digital maturity.

Change readiness for digital transformation in a practical context

Organizations should keep moving forward since the level of competition is growing. To stay ahead of this competition, it is essential to increase innovation capacity and reduce the time-to-market as it is no longer enough to produce faster, cheaper and with higher quality (Bauer et al., 2015; Matt et al., 2020). Industry 4.0 should not only focus on the process of products, but also contribute by tackling global challenges such as sustainability, resource and energy efficiency, urban production, and demographic change. Smart assistance systems would enable creativity and more value-added activities for workers where the systems could eliminate routine tasks (Kagermann et al., 2013).

The fourth industrial revolution might lead to modifications in business models through new ways of creating value. The traditional value chain is expected to change, and consumer involvement would be higher (Kagermann et al., 2013). Kiel et al. (2017) describes these novel business models as expanding value offerings by hybrid product/service solutions, and the integration of software solutions into existing systems. Next to that, the employee perspective must be considered as well whereas organizations should assess the employees' change readiness. The term change readiness is defined by Armenakis et al. (1993) as the beliefs, attitudes, and intentions that are related to the changes and the organization's capacity that is

needed to successfully apply those changes. However, more recent researchers have acknowledged that “affect” is a component that cannot be left out. Peers elaborate on change readiness in the extent to which individuals are cognitively and emotionally inclined to accept, embrace, and adopt the strategy or plan to deliberately change the current situation (Holt et al., 2007). To summarize the concept, Rafferty et al. (2013) define that the readiness of an individual for organizational change is influenced by the belief that change is needed and can undertake change but that it will have positive outcomes for his or her job as well. Next to that, the current and future-oriented positive affective emotional responses to the changing environment are just as important.

2.3 digital change readiness framework

As mentioned in the introduction, the theory of Gfrerer et al. (2021) shows a framework of perception of attitude and empowerment toward change between managers and employees on an individual and organizational level. The research proposed a framework which consists of two dimensions, individual difference factors and structural factors, and two levels namely the individual and organizational levels. The individual difference factors relate to the belief and characteristics of those being asked to change, whereas structural factors relating to circumstances under which the change occurs, firm members’ competencies and firm capabilities. The four segments will be shortly explained, and the matrix is shown in Table to know how the segments are distributed.

The findings of the research showed for segment 1 the perception of managers that their digital readiness is lower than employees perceive theirs. Within the management layers, the attitude toward digital transformation is significantly worse in middle management.

Segment two is related to members’ digital competencies on the individual level. Managers cannot enable their employees yet with digital skills, which also reflects the fact that employees rate their skills worse than managers rate theirs. The top management scored highest with the level of digital knowledge whereas middle- and lower-level management are on average.

The third segment refers to shared beliefs with digital empowerment and management support. The research showed that employees and managers assess digital empowerment and management support as insufficient. The employees' perception shows there is no support from the managers for digital transformation whereas most of the managers are not convinced they encourage employees to see digital transformation as an opportunity and neglect promoting it.

Lastly, segment four shows capabilities on the organizational level. Both managers and employees share the same opinion that organizational digital readiness is only just beginning to exist on a broader scale. They see the lack of digitally experienced managers although top managers perceive organizational digital readiness better than middle and lower management levels. The largest barrier to innovation managers perceives is the focus on day-to-day business, whereas employees consider the lack of innovation culture and budget restrictions as a large barrier to innovation.

Table 1 Framework of digital readiness by Gfrerer et al. (p. 27), 2021

Level	***Dimension***	
	Individual difference factors	Structural factors
Individual level	*Segment 1*	*Segment 2*
Organizational level	*Segment 3*	*Segment 4*

Digital maturity

Newman (2017), defines the term digital maturity as a goal and always changing and improving. According to Westerman & Mcafee (2012), digital maturity is defined as a combination of digital intensity and transformation management intensity. Whereas digital intensity is described as the investment in technology and changing the companies' operation. Transformation management intensity is related to the necessary capabilities which need to be developed to drive its digital transformation. Maturity is defined by Kane et al. (2018) as "a continuous and ongoing process of adaption to a changing digital landscape".

Within this research, digital maturity can be used as a guideline for whether it has an impact on change readiness. The difference between readiness and maturity is, according to Schumacher et al. (2016), that readiness "takes place before engaging in the maturing process where maturity aims for capturing the as-it-is state whilst the process". To identify the maturity of companies, Machado et al. (2019) sum up the characteristics that can be found in the table below. These characteristics are based on an organizational level factor to identify later in which later change readiness will be explained based on an individual level.

Table 2 characteristics of digital maturity (Machado et al., 2019)

Characteristics digital maturity
Digital is a core part of the organization with a clear digital strategy
Flexibility and adaptability

Strong digital fluent leadership
Skills, talents, and the capabilities to implement the strategy
Decentralized decision-making

To further elaborate on digital maturity, Mas et al. (2017) created a framework of capability dimensions and levels of Industry 4.0. This research will use it as a starting point regarding digital transformation to designate the organizations that will be interviewed to a maturity level.

- *Level 0 incomplete.* The basis of practices is partially achieved or there is not an implementation yet. The organization focuses only on fundamental operations such as requirement analysis, acquisition, production, and sales
- *Level 1 Performed.* The aspect practices are accomplished. Transformation is starting when technological infrastructure is acquired and tends to employ smart technologies such as IoT.
- *Level 2 managed*. The infrastructure of smart technologies is carried out but is operating independently and is not integrated into different functionalities. Digitalization is evaluated at this level.
- *Level 3 established.* Vertical integration and networked manufacturing systems. Standardized qualification of processes and operations
- *Level 4 predictable.* Horizontal integration through value networks. Data analytical tools are performed to improve productivity and efficiency.
- *Level 5 optimizing.* Synchronization between product and service development has been achieved. End-to-end digital integration of engineering across the entire value chain whereas the organization has continuous adaptation and learning from collected data.

2.4 Inhibitors of change readiness for digital transformation

In the table below (Table 1*)* the inhibitors of digital transformation can be found. One of the major inhibitors of digital transformation is human resources and changing work environment. Most people lack the required skills and by retraining staff, the circumstances on the work floor will change (Kiel et al., 2017). Bauer et al. (2015) acknowledge this as changing the working environment might lead to conflicts within the organization. Next to human resources, financial constraint is a large barrier faced by SMEs on the path to digital transformation (PwC, 2018). Another barrier that could hinder digital transformation is the low degree of standardization,

which may occur in inter-organizational relationships as well as the tools and systems (Matt et al., 2020).

Data security could be an issue with digital transformation. Prior research addresses concerns about cybersecurity and data ownership. The spread of new technology can incite fear about the safe handling of private information (Heurix et al., 2015). Next to that, the integration of technology could be an inhibitory factor. Successful integration of components, tools and methods requires a flexible interface and reliable and stable systems. Implementing immature technologies threatens the product and process quality whereas Integration of different software packages is complex and brings risks to cybersecurity (Kiel et al., 2017). When adopting new technologies there is a need for a clear strategy and currently, there remains a lack of (technical) knowledge from experts to SMEs for the implementation. Furthermore, a lack of management tools for investments could arise in new processes as well, as there is uncertainty about the return on investment (Matt et al., 2020; Orzes et al., 2018).

2.5 Enablers of change readiness for digital transformation

Pressure is emerging for SMEs because of the advancement of technology, market demands, change in lifestyle and unpredicted events such as the pandemic (Lokuge & Sedera, 2014). One of the enablers for the change towards digital transformation is an organizational strategy in which Nair et al. (2019) highlight the importance of having a clear goal for an SME to implement digital transformation projects. Moreover, the digital strategy must identify areas where the organization will position the resources and identify capabilities. To come up with an organizational strategy, the organization needs to have skilled people to carry it out. To guide it properly, managerial staff need innovation cognition and social capital to promote the initiatives as they determine the success of digital transformation initiatives (Li et al., 2018). The leadership styles will be discussed later in the theory section. Next to that, another enabler is an organizational culture where IT initiatives play a pivotal role in a successful digital transformation. Some of the important organizational values are openness to change, innovativeness, willingness to learn, cooperation, and communication (Osmundsen et al., 2018; Hartl & Hess, 2017). To become prepared for digital transformation it is important to leverage the knowledge of digital technology internally and externally. Customers and end-user knowledge to remain up to date with the demand for digital products and services. Next to that, collaboration with start-ups develops more agile project methodologies where it reduces resistance to innovation (Piccinini et al., 2015). Another factor that reduces employee resistance towards digital transformation would be the engagement of managers and employees.

Participation in change processes enhances achieving goals and organizational commitment (Petrikina et al., 2017). Another important factor is attracting, hiring, and keeping people with talent and digital technology expertise together with business know-how (Piccinini et al., 2015). Lastly, research by Malodia et al. (2022) shows that leadership is critical in SMEs due to the scarcity of resources. Professional leadership is an important factor in decisions that require financial and organizational commitment, like digital transformation. The next section (2.6) will further elaborate on leadership styles.

Table 1 Enablers and inhibitors of change readiness for digital transformation

Inhibitors	**Source**
Human resources and work environment	Kiel et al. (2017); Bauer et al. (2015)
Standardization problems	Matt et al. (2020)
Data security	Heurix et al. (2015); Kiel et al. (2017); Orzes et al. (2018)
Integration of technology	Kiel et al. (2017); Orzes et al. (2018)
Lack of knowledge	Matt et al. (2020); Orzes et al. (2018); Barton et al. (2022)
Financial constraints	PwC, (2018)
Enablers	**Source**
Organizational strategy	Nair et al. (2019)
Skilled people	Li et al. (2018)
Organizational culture	Osmundsen et al. (2018); Hartl & Hess (2017)
Leverage knowledge	Osmundsen et al. (2018); Piccinini et al. (2015)
Engagement of managers and employees	Petrikina et al. (2017); Piccinini et al. (2015)
Professional leadership	Malodia et al. (2022)

2.6 Leadership

Leadership is important as it mainly sets the direction of an organization and focuses the employees' attention on objectives (Bass & Bass, 2008). It is the process of influencing people to do their best to achieve a common goal and persuade others to behave in the desired way (Armstrong, 2016). Bass (1985) introduced transformational and transactional leadership whereas Antonakis & House (2014) elaborate further on this theory by adding instrumental leadership. The findings of this research showed that instrumental leadership should be measured alongside the factors of the full-range model. With the addition of instrumental leadership, the model is considered the "fuller" full-range leadership theory. The reason for adding this leadership style is to create a broader overview and shows a strong association with prototypically good leadership on par with transformational and transactional leadership.

The distinction lies in monitoring the environment, and the implementation of strategic and tactical solutions. All leadership styles will first be explained and afterwards, the styles will be compared to each other.

Transformational leadership is based on the leader that inspires confidence and raises the value of outcomes by the interests of the followers (Bass, 1985). This style is based on four sub-dimensions:

- Idealized influence. This means the degree to which a leader is behaving admirably and triggers followers to identify themselves with this leader (Judge & Piccolo, 2004).
- Inspirational motivation. This shows the extent of communication of the vision to inspire and motivate followers using behaviour that adds emotional quality (Bednall et al., 2018; Judge & Piccolo, 2004).
- Individualized consideration. This dimension is linked to mentoring and coaching the followers on psychological needs (Bednall et al., 2018; Judge & Piccolo, 2004).
- Intellectual stimulation. This refers to leadership challenging assumptions, whereas the leader takes risks and asks for the ideas of followers (Judge & Piccolo, 2004).

Transactional leadership is based on an exchange process where followers' needs are only met if they meet the set of performance measures (Bass, 1985). This style encompasses the following three dimensions:

- Contingent reward. When an objective is met the employee gets rewarded (Bass, 1985). Where an implicit reward is associated with transformational leadership, the explicit reward is more related to the contingent reward of transactional (Goodwin et al., 2001)

- Management by exception (active and passive). Management by exception active is related to when a leader is actively searching for deviations whereas passive refers to taking only action if the standard is not met or when there is a problem (Aga, 2016; Bass, 1990).
- Laissez faire. In this leadership style, laissez-faire is about relinquishing responsibility and avoiding decision-making (Bass, 1990).

Instrumental leadership is based on the leader's expert knowledge and monitoring the environment and performance, and implementation of strategic and tactical solutions (Antonakis & House, 2014). This style consists of the following four dimensions:

- Environmental monitoring. This means that the leader is actively scanning the internal and external environment (Antonakis & House, 2014).
- Path-goal facilitation. This refers to the leader's behaviour towards supporting achieving a goal and clarifying the goal (Antonakis & House, 2014).
- Outcome monitoring. Antonakis & House (2014) define this dimension as giving feedback to improve performance.
- Strategy formulation. The leader's actions are focused on developing goals and objectives (Antonakis & House, 2014).

Prior research has shown that when an organization implements a change, both transformational and transactional leadership positively support improving managerial engagement and enthusiasm (Holten & Brenner, 2015). On the contrary, there is an ongoing trend that shows a movement from transactional to more transformational leadership (Braf & Melin, 2020). But a choice needs to be made, as it can become transactional in terms of control by the tremendous amount of data about services and products (Braf & Melin, 2020). Studies have empirical evidence that transformational leadership leads to increased organizational learning and innovation which improves business performance (García-Morales et al., 2012). Most research focuses on transactional and transformational leadership regarding digital transformation, but instrumental leadership is still worth mentioning as it can still be researched as a unique and valid approach (Rowold, 2014).

3 Methods

3.1 Research design

Change readiness with digital transformation is a new topic in academic literature and since there was limited research available, this paper was exploratory and conducted in a form of a multiple case study (Edmondson & Mcmanus, 2007). The focus was on service SMEs to examine the change readiness of employees for and acceptance of digital transformation.
Case studies are generally useful in this exploring stage since they provide extensive data. Cases were chosen for theoretical reasons and could predict similar results or even contrary results. Next to that, it allows for assessing strategic and managerial implications, which provides insights into the current literature and even where to improve it (Glaser & Strauss, 2017).

This study examined multiple cases to avoid the risk of misjudging a single event and with more cases, data were compared across each other. However, multiple cases reduced the depth of this paper as the timeframe was limited but it can augment external validity. There were more resources needed, whereas this study conducted four cases. The case studies were executed at service SMEs of accountancy, business development, IT company, and digital marketing agency. All the approached SMEs were based in one country, the Netherlands (Voss et al., 2002).

This research used semi-structured interviews with open-ended questions. This choice aimed to have a total overview and discuss the process with the employees during the conversation. During the interviews, the interviewer asked questions that arise during the conversation and by doing this, we gained new insights (Huberman & Miles, 1994).

The people who were interviewed received beforehand a short introduction and explanation of the research to avoid any misunderstanding. As the subject of digital transformation can be complex and misunderstood, so to avoid misunderstanding the potential participants received a letter with the objective and what to expect from the interview. There was a form of preselection in the participants according to their knowledge of the systems and vision of the company. Next to interviews, observations and field notes were written. The collected data were analyzed and compared with the existing literature to form a strategic action on where service SMEs can improve the current situation to adopt digital transformation.

3.2 Case selection process and criteria

This study was conducted by using the network of a Dutch business development service company (Organization 1). They help North American companies expand their business in

Europe for more than 25 years. An overview of the participating organizations and proposed interviewed persons can be found in Table 2. The companies were targeted based on different scopes to find out if this would influence the relationship between change readiness and digital transformation. The criteria of the participants will be outlined in the next paragraph. The aim was to create a comprehensive overview of employees' change readiness regarding digital transformation, making it generalizable. All the interviews were conducted in the Dutch language.

Several criteria were used for the selection of organizations and to find the right persons. First, the scope was elaborated in Table 2 and was used to differentiate service SMEs. Secondly, within the organization the individual interviews were conducted at least with a manager and two employees, depending on availability. Thirdly, the digital maturity stage of the company was assessed by asking the interviewees based on the literature how they look at the company on where it stands. Three of the four organizations were assessed on a maturity stage level 0 incomplete. The assessment was based on the framework of Mas et al. (2017) where it was acknowledged that three cases are based on practices that might be partially achieved or not implemented yet. Organizations 1,2 and 3 are mainly focused on fundamental operations whereby most interviewees indicated that IoT was an unknown area in their company. However, organization 4 was assessed in level 1 “performed”, as they indicated that the transformation has started with tending to employ smart technologies such as artificial intelligence, which is one of the base technologies. This made the research intriguing by asking the interviewees what would stimulate them to get the company to the next level. Respondents were more convenient by answering questions about what would be helpful in the future rather than looking at the change in the past as they didn’t remember or knew what enables or inhibit their change readiness. The fourth criterion was that the organization must have at least knowledge and vision of digital transformation. Based on the criteria, 4 service SMEs were selected. The aim was to conduct 16 semi-structured interviews, four at each company, but at one company there were 3 interviewed due to circumstances. Organization 2 was a full-service digital agency; organization 3 was an accountancy bureau that helps organizations with financing advice and can support other concepts such as business intelligence. Organization 4 was an IT company that helps companies in the field of ICT. More information about the organizations can be found in the results section where each case is further explained.

Table 2 Characteristics of the participating organizations

	General	Digital maturity stage	Respondent	Gender	Role	Age	Years in service
Organization 1	• +/- 70 employees Business Development services	Level 0	E1-A	M	Project manager	27	3
			E1-B	M	Inside sales representative	39	4
			M1-A	F	Marketing & IT manager	38	5
			M1-B	M	Chief Financial Officer	66	11
Organization 2	• +/- 120 employees IT - Microsoft Dynamics 365 software	Level 0	E2-A	M	Trainer / consultant	49	12
			E2-B	M	Financial controller	33	3
			M2-A	M	Manager technical services	53	1
			M2-B	M	Director	55	15
Organization 3	• +/- 200 employees Accountancy	Level 0	E3-A	F	Business Intelligence consultant	23	2
			E3-B	M	Accountancy	24	3
			M3-A	M	Manager audit	28	3
			M3-B	M	Manager audit	28	2
Organization 4	• +/- 120 employees Digital marketing	Level 1	E4-A	M	Lead developer	43	14
			M4-A	M	Head of development	32	7
			M4-B	M	Chief Digital Officer	38	13

3.3 Instruments

Before, and after the interviews, there were observations at the organizations. These observations helped with noticing issues that the companies were facing during the process of digital transformation. By doing observations, we gained opportunities to form questions and ask about the issues in interviews. Participant observation has become popular lately, where Evered & Reis Louis (1981) identified two different paradigms called 'inquiry from the outside' characterized by the researcher's detachment from the organization, and 'inquiry from the inside' related to the personal involvement of the researcher during the process. This research was more focused on the inquiry from the inside as being there and reflecting on own personal experience entering an unfamiliar organizational setting. Furthermore, the knowledge acquired by the 'inquiry from the inside' allows more validity and relevance to organizational actors. All organizations were visited physically for half a day and three out of four joined during the lunch break. Especially the business development consultancy firm was visited regularly to observe the environment however, this is not an unfamiliar organizational setting for the researcher as she is employed at the company. Being visible on the work floor enables first-hand insight into the employees and hearing the gossip to perceive a more realistic view and to see how the employees talk about the company. However, bias could have played a role since it could be sensitive for the employees to give information as the researcher needs to be a trustworthy carrier of the confidential answers. This was addressed to the participants to give them trust and a safe climate (Voss et al., 2002). The field technique that has been used is the diary study with logging activities by making quick and perfunctory notes at the end of the day (Czarniawska, 2007). The field notes were written down and analyzed, and the main themes were separately identified from the interviews. The themes were compared with the field notes whereby the interviews were set as the base which will be supported by data from the field notes (Strøm & Fagermoen, 2012). The notes will be including physical surroundings, what actions are performed, expressions and indications of feelings.

The interview guide differs between managers and employees as it was supposed to have a view from the manager but also the perception of the manager from their employees. The interviews took around one hour and were recorded and transcribed, with the approval of the participants. The concepts that were discussed are change readiness, leadership style, and digital transformation. Whereas firstly started with a general concept of digital transformation so they were familiar and comfortable with the topic and later in the interview asked about their change readiness and leadership style. The preference was to conduct the interviews in person

at the place of the company, only one interview was via Microsoft Teams due to sickness on the day the researcher visited the company.

To examine employee change readiness, a questionnaire was used developed by Holt et al. (2007). The questionnaire consisted of 25 items on a 1-7 scale which created valuable insight into change readiness. The intention was to end with this questionnaire to get a total picture of the employee regarding change self-efficacy, appropriateness, personal valence, and senior leadership behaviour. It is only conducted with the employee to see if there might be deviations in what they are saying and what they are thinking. The power of this questionnaire is not high due to the sample size, so it won't be primary data to use but just as support if needed.

3.4 Data analysis

This paper will choose an inductive approach as the research question consists of quite new constructs and has not been studied earlier yet concerning each other. The purpose of the inductive approach is to elaborate on the existing literature and contribute to the literature.

After all the interviews are transcribed, the data will be analyzed by using the thematic analysis of Braun & Clarke (2006). This method is powerful when seeking an understanding of a set of experiences, thoughts, or behaviours across the data set. The thematic analysis is designed for searching common or shared meanings and relies on coding and searching data sets. The researcher keeps moving backwards and forwards to make gradual modifications. The researcher first transcribed all interview recordings into transcriptions with repeated reading to ensure that the data is intensively absorbed while looking for meanings and patterns. Next, the data is organized in a structure and setting the themes, by using the Gioia method, as this is a well-defined process flow which provides structure and corresponds well with the thematic analysis. The analysis starts with coding and ranks them in the 1st order codes to create a structure according to the Gioia method. In this phase, a high number of codes arises and is necessary for a detailed categorization of the data. The coding went totally based on the perception of the researcher where this phase, the literature was left aside. After the 1st order codes, the next step is to search for potential themes which will turn into the 2nd order themes. In this phase, codes that could not get be categorized could made it difficult to align all concepts. After generating and searching the codes and themes, they must be reviewed to ensure proper fit. In this stage, themes can be added, combined, divided, or even extracted (Kiger & Varpio, 2020). By grouping the 2nd order themes in aggregate dimensions, the data can tell a story in a proper way with a visual overview whereby the data structure is created. The goal of the data

analysis is pattern identification. Where the theoretical contribution will turn into a conceptual model and where future research could elaborate (Edmondson & McMmanus, 2007).

4 Results

Categorization of data

This qualitative research aimed to explore service SME employees' change readiness for and acceptance of digital transformation. The results are structured to answer the research question by elaborating on all second-order themes of the coding scheme with corresponding quotes to reinforce the construct. From the interviews, the aggregate dimensions are identified as the enablers and inhibitors to answering the research question.

Firstly, the results of the multiple-case study will be presented by outlining the current way of working in the four studied firms and observations. The following section is about the enablers and inhibitors regarding change readiness for and acceptance of digital transformation. All quotes from this section, and more related to the themes, can be found in appendix 4 where it is also shown from which organization it refers.

4.1 Cases

Case 1 (IT)

The first case study is conducted at an IT consultancy company that helps clients to implement Microsoft dynamics software. They use as much as possible from the Microsoft platforms and a lot of work processes are mostly automated via a digital workflow. An important change was the switch from analogue to digital, from Excel to Power BI and they are now working on the integration of systems. Next to that, the COVID crisis had mostly an impact on the organization on remote working. The only problem was the hardware for employees where the software was quickly adopted and used to work with Microsoft Teams. The only resistance that emerged was from the client side where they didn't feel like sitting behind the screen the whole day in the beginning phase and they couldn't invoice all working hours. Even though they are an IT company they still need to take steps towards a digital transformation. More processes could be automated, and they have the people to do that, but they are externally focused. One of the respondents elaborated on this with a Dutch saying: *"if you go to a painter's home, he often has the worst, painted window frames"*. For example, by implementing the newest versions at the customer whereas they are lacking by still having the oldest version of the software due to the lack of time. To illustrate this with observation when visiting the office, I needed to fill out a

form on a tablet with personal information and whom I was supposed to meet, but it didn't work properly in which the receptionist still had to do it manually and called the person.
The organization is using different Microsoft platforms, cloud computing, and Azure DevOps where on the contrary AI and IoT are unknown concepts for both the manager and employee and are not directly applicable to use for now. A roadmap for the upcoming three years was made by one of the employees to see which projects need to implement, however, decisions from management are made by the day rather than from a jointly defined vision and strategy. In the upcoming years, they will more invest in the quality of data and sales and marketing tools to gather more leads and have a better presence on the internet.

Case 2 (Accountancy)

The second organization where interviews were conducted was an accountancy firm that helps SMEs with financial reporting, audit and assurance, tax, business intelligence and many more. One and half years ago, the organization was still working in the old Microsoft Office 2010 and one of the respondents pointed out the following: "*If all your customers are working in Microsoft 365 and we still work in Office 2010, you literally cannot even open half the documents anymore. So, the switch to the new version was very important in workability and has been a great step for us".* They switched from Microsoft office 2010 to Office 2016 and afterwards to Microsoft Office 365 in which they simultaneously switched from Citrix to the cloud, amongst them "the modern workplace" which allows flexible working. The customers can be very high-tech with sophisticated processes, but the administration is often separate from the primary business operations which makes financial reporting possible to do despite the fact of not being a frontrunner with digital technologies. Besides that, they make use of Power BI, cloud computing in which they can carry out their work. The people are either embracing the new systems or are reluctant towards them as they didn't work or required too many actions. Next to that, some people are unaware of new features which are lacking due to no communication. The organization is currently developing a tool for continuous auditing which ensures compliance and is a self-learning system. Automating work processes would allow more time for more difficult work like estimation uncertainty and judgement however, it is not necessarily needed as the job still can be carried out. The future challenge for the organization is to get all employees in the right direction and be more data-driven.

Case 3 (Digital Marketing)

The next case study is conducted at a full-service digital agency that helps companies get a head start on smart innovations and creative solutions. The COVID crisis accelerated working remotely which the availability of employees increases as well with all communication systems. The same as with the accountancy firm is that some people embrace new systems and some are reluctant as there must be a need for relevance for change. Some need to know what it will bring, which goal is behind it and a clear purpose for use of new technology. Currently, they are working on becoming an ambidextrous organization in which it will, on the one hand, keep the short-term objectives and existing processes and business while on the other hand looking forward and seeking transformational innovations without exhausting the organization already. The organization is mainly still busy with further digitalization instead of the digital transforming processes. One of the managers clarifies this by saying: "*I think that our market hasn't transformed significantly yet as it's predominantly still digitalizing. We do have some digital transformation in our product portfolio where we now use AI for generating text which we used to spend 80 to 100 hours. But overall, I think we're mainly digitalizing".* However, not all customers are mature enough for all the innovations and solutions and the organization sometimes sees a knowledge gap even internally between employees. Other than that, one of the managers indicated that their future strategy will be focusing on applying more data and having the data accurate before taking the next step towards digital transformation.

Case 4 (Business Development)

The last organization is a business development company that helps North American companies expand in Europe. A new way of working emerged from switching from Citrix to the cloud and using Microsoft Office 365 except for the finance department which runs on a separate server for now. Everyone got IT equipment such as a laptop and headset and uses a collaborative digital workspace based on Microsoft SharePoint to exchange knowledge and enhance taking over the job from the predecessor. The IT manager stated that they normally implement changes from a top-down approach, for example with the introduction of Microsoft Teams. The organization changed towards a more bottom-up approach where she stated: *"We're now implementing a new CRM system, where we involve some employees from different departments by giving them the responsibility to carry it out through the organization and appointing them as "champions" to create support and embrace the new system/technology".* Next to that, the focus is on mining the existing systems to create a solid basis with data quality. As also mentioned in the two other cases, some people show resistance to using the systems as they

perceive it as double work and remain in an old habit. The challenge nowadays is the huge amount of data storage which is not for free. Next to that, the wrong way of using the system can be challenging as some employees are working on the individual one-drive in which you'll lose data when an employee is leaving also syncing files can be a problem that arises with all four companies that have been interviewed. For the future, the organization needs to keep up with all new features and it needs to be checked if everything is safe and useful. All developments are going very quickly where the way of working might be changing and contact with customers in which travelling is not needed anymore.

General overview of cases

Despite that digital transformation offers the opportunity to innovate and grow, all case organizations still need to take steps to realize these opportunities. All cases use cloud services whereas three out of four Microsoft platforms and one mainly Google workspace. The three cases that use Microsoft platforms are all in maturity level 0 but are different from each other, whereby the IT organization is a Microsoft partner and further developed than the accountancy firm which has recently switched to Microsoft Office 365. However, these two cases heavily use Power BI to have interactive, up-to-date, and real-time data and a better insight into the operational business. The other two cases are using Power BI not that intensively or not at all. The business development organization doesn't have an interactive dashboard for management information and must do a lot of manual activities to retrieve the data for operational business. Overall, the digital transformation within all case organizations can be perceived as not yet started or in the beginning phase. It has been observed that most of the respondents are not yet familiar with the concept of digital transformation and what base technologies – cloud, IoT, AI and big data – can bring to the organization. Especially the cases with a low maturity level are not acquainted with the concept, this impacts the findings as the conversation was more focused on their way of working and the processes rather than on the base technologies or how they look at the digital transformation within their work. In the next section, the findings will be discussed in more depth. The findings resulted in a data structure which is illustrated in Figure 1 with corresponding first-order codes and second-order themes of the two aggregate dimensions.

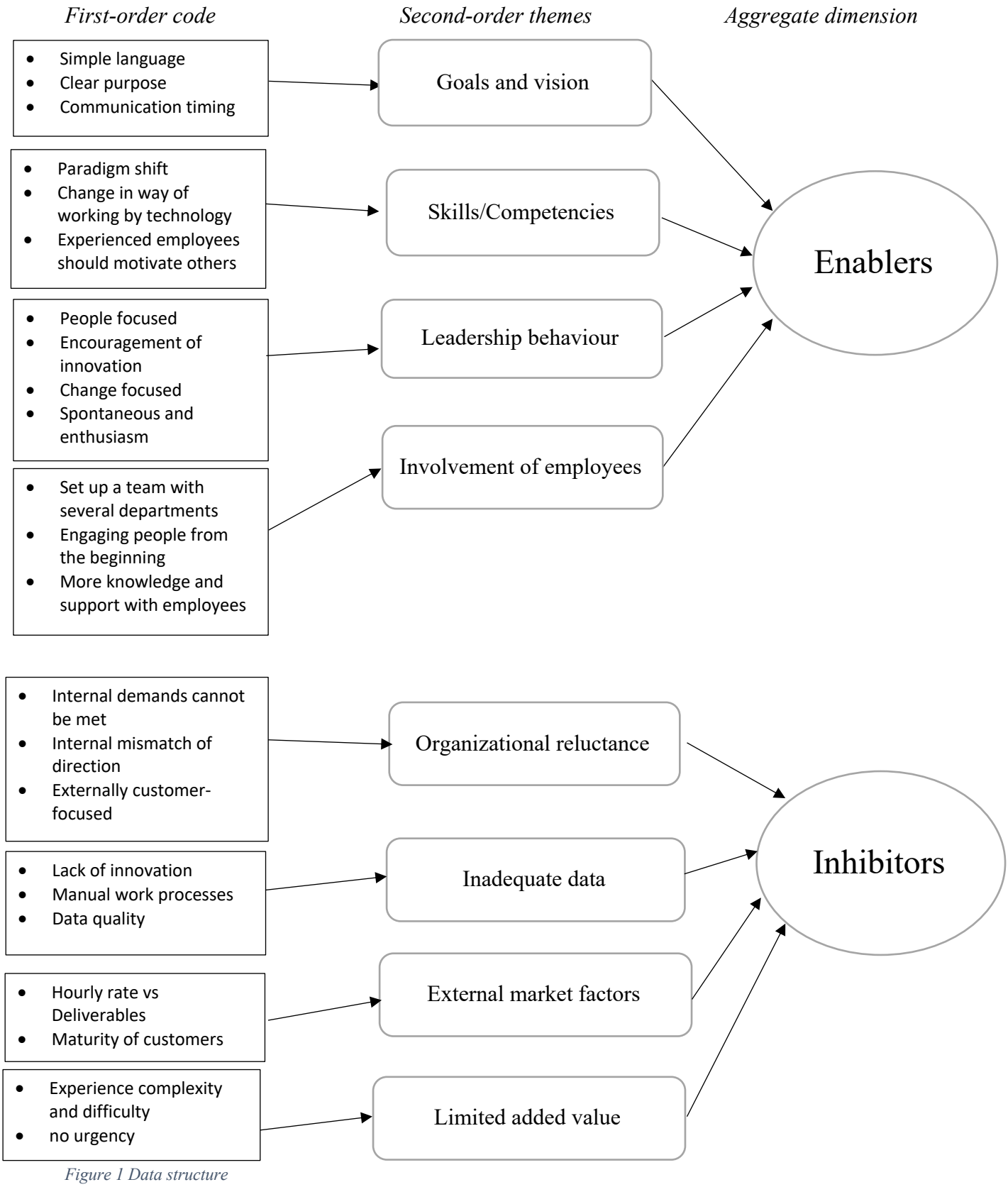

Figure 1 Data structure

4.2 Enablers

The aggregate dimension of the enablers consists of the second-order themes of goals and vision, skills/competencies, leadership behaviour and involvement of employees. This aggregate dimension provides elements to gather input for service SMEs, enabling factors for employees' change towards digital transformation.

Goals and vision

Firstly, it was found that respondents emphasized the importance of goals and vision. The first-order code that showed a lot of recurrence regarding goals and vision was the need to communicate the direction very clearly and in simple language. To illustrate it, one of the respondents pointed out that communication must be concrete and tell in easy language about the objectives and the technology that is needed to achieve this. These objectives are often not technological goals but might be the demand of the customer. The respondent elaborated: *"technology could help with the goal, but if you push technology for technology's sake, you get resistance".* So, by communicating transparently a clear direction, employees are more aware of what to expect and know what goal is strived by the company. The respondent strengthens his point by mentioning that people need to know the usefulness and necessity of technology.

Another point that participants indicated regarding the goals and vision is related to when communication of the change should take place. The starting point for communicating change towards digital transformation is when the concept is clear and fully landed with employees who need to spread the word in the organization. The respondent explained this by saying: *"As soon as the change will be communicated, questions will arise… It needs fully 100% landed and agreed upon before communicating it to the organization"*.

In a company that went through a change, one respondent was not totally aware of this change, whereas he indicated not knowing why they did the change. In this particular case, there was a misunderstanding of the vision and not knowing what the current working situation was, which could emerge due to a lack of communication or interest. Some systems were introduced, where a lot of respondents mentioned that they use them because it is obligatory to use them. One of the respondents mentioned often: "*It can be a challenge in how to use the technology, so how you put the data correctly in the system… to have employees doing the right things".*

Skills/Competencies

The ownership of employees was grouped based on the individual perspective. The first-order code that often recurs was the paradigm shift that impacts the people. One of the respondents states the following: "*We just need different competencies in our portfolio to go to our customers… My story is totally different from 5 years ago".* The second element is the change in way of working which can be perceived as a threat or a challenge and most of the respondents see it as a challenge rather than a threat since they do not think that their job will get replaced in the service sector. The tasks and the story to tell are changing, and people need to take initiative to go along in this change. The respondent explained: "*We're on a higher level with our customers, where the challenge appears that we should be able to engage in strategic conversations with our client. In the past, only large ICT partners were used to do this".*

Next to that, one respondent indicated that experienced employees should step up and help motivate other people in the process. Furthermore, a lot of respondents stated that coaching and training are important to let people take responsibility and embrace new technology. Respondent number ten elaborated on this with: *"Stimulating employees is mainly by doing together, when we executed projects from management with a small group it usually didn't last long… when we did it together with some employees a lot of knowledge was shared already and the support increased as we did it together".* If the employees don't have the right skills/competences, complexity or no interest can emerge. In the accountancy company, a respondent said: "*With a Power BI tool we can do this easily, but that can be done with excel too. I don't really see the added value in Power BI yet, because it's very complex and difficult and often the systems at another company that we monitor, are not yet set up to do that".* On the contrary, someone else from that same company indicated it is an important tool to use and works intuitively and the data is integrated with other systems.

Leadership behaviour

The next second-order theme addresses that leadership could show an enabling factor for the change process. The interviews have shown the crucial role of the manager which therefore should be thought through. The theme is built upon four parts, people-related, encouragement of innovation, change-related, and spontaneous and enthusiasm. The people-related aspect can link to a culture that affects organizational change - two out of four cases are deliberately communicating their culture internally. At the digital marketing agency, a TV screen was observed with four slides and a QR code to the page about their culture which is about trust, challenge, explore and empower. The aspect of trust is affirmed by one of the managers who

stated: "*One employee with a developmental disability is sometimes difficult to deal with who only was exploring new things but didn't finish his tasks. We empowered him to also work along with the team next to exploring new things. Even though it's hard to manage him, we use new digital technologies because of him. And I think that from 9 out of 10 companies, he would have been already fired".* This quote shows leadership that is derived from the people-related aspect of a leader by taking risks and considering the ideas of the followers. Other than that, one respondent explained that employees get time to freely experiment on a subject area which gains their interest. To give this support, people continuously get stimulated in their area of expertise and keep innovating new things. Regarding change-related, one respondent (manager) pointed out that he let the employees explore the new change in the process to let them see and discover the new features and figure it out themselves. This shows the employees gain interest in the system which encourages them to use it. From all interviews, it was clear that people who show resistance have individual reasons which needs also individual treatment. The digital transformation might fail if these reasons for resistance will not be managed properly with transformational leadership by individualized consideration and motivating followers using behaviour that adds emotional quality. Furthermore, to support people, the manager should create enthusiasm for what the change would deliver. One respondent (manager) acknowledges this by saying: *"When we converted this, the employee who needs to use it gave a high five because she was so happy with the output".* Another respondent recognizes this by exciting other employees because as soon as some employees are convinced, the rest is likely to follow.

Involvement of employees

The last-second-order theme for this aggregate dimension is the involvement of employees which represents the organizational perspective of an enabling factor for change. In the interviews with managers and employees, it emerged that both parties find it important to involve the employees in the entire process. One respondent explained that he involves the employees by sending out a survey to all employees and requesting their preferences regarding which system to use. Another respondent stated: *"A team was set together which created more support and should be always needed… you always need people from several departments … some people think they get replaced but the people from that specific department can show them that it's not the case".* Such quotes were acknowledged by more interviewees, and they even see their influences back in the implementation. On the other hand, a respondent (manager) sees that they leave something there by not involving enough employees during the process by saying: *"I'm busy with improving the invoicing process with only one employee where I think*

that the others haven't seen anything yet where we even almost finished with the process… missed opportunity". To engage the people on the work floor it can be helpful to set up a competition to challenge the people who are not involved yet. One respondent (manager) mentioned about sharing a report to show the usage of the new system where some people would like to be in the top ten, especially salespeople. Another respondent (employee) acknowledged this by stating that gamification would stimulate him to push for more new ideas.

4.3 Inhibitors

The aggregate dimension of the inhibitors consists of the second-order themes of organizational reluctance, inadequate data, external market factors and limited added value. This aggregate dimension provides elements to gather input for service SMEs, inhibiting factors for employees' change towards digital transformation.

Organizational reluctance

This second-order theme is about hinders the organization towards changing and sticking to the status quo. Among the first-order codes, it is grouped into external and internal. When focusing on internal aspects, one respondent pointed out that internal demands cannot be met by stating: "*My challenge is not so much in the deficiency in the technology of the technology, but more in the redundancy of internal questions. So, what we want is almost impossible to automate".* Furthermore, one respondent (employee) indicated that a step towards digital transformation is not yet relevant for the organization and its size which shows an internal mismatch of direction between the respondents. When looking at external aspects, some respondents mentioned that digital transformation would make it easier but not necessary since the work still can be done. To elaborate on this point, one respondent (manager) explained: "*We are still in the previous software version where clients are further… I need to prioritize and make an employee internally available for an optimization project, but when a customer calls and says they need that person it's often the case that the priority goes to the customer… under-prioritizing your own automation, because you are always customer-focused".* These external factors are related to organizational reluctance since it's not deliberately on an individual level but the organization itself which can be also linked to the enablers of the goals and visions.

Inadequate data

The next second-order theme is inadequate data where many respondents acknowledged the lack of data quality. One respondent pointed out that data must be accurate and most of it is still

entered by people. Some respondents addressed that there is a need for more data to get a better overview of what the organization can offer. A respondent from the accountancy sector elaborated on this, he stated: *"When we do a check, we depend on what a customer puts in the system… if the customer doesn't put all the information in the system when they sell something it's of no use to us…they also increasingly recognize the importance of data and thus started capturing more data in which we can provide more added value".* Next to the lack of information, one respondent addresses the fact that they still adjusted their data manually to serve the internal requests. He outlined that the management is asking for information which needs to be exported from the accounting software to excel to calculate and split the numbers to obtain the information on which management can look to. Otherwise, it could immediately make use of the reporting function with all graphs in the software without carrying out manual activities. Respondents from four different companies pointed out that they want more insight into data and that not all data is sufficiently in order. The data quality is lacking and needs to improve to take the next step. According to some respondents, one of the steps that are needed is to further digitalize and automate processes in which two acknowledged a client portal with an automated check and having accurate data. Especially the last one is important in all cases as it needs a better data input that leads to a better control mechanism. What can be stated is that employees are empowered to think about the possibilities that would work within their organization. As mentioned earlier, the accountancy sector is exploring and developing continuous auditing which can leverage internal audit and increase the effectiveness by IT solutions. Next to that, data analysis shows an important tool in which the data filters a particular outcome. All these activities are reconciled on the importance of accurate data.

External market factors

The third second-order theme is the external market factors based on the service SME. The first thing to consider is the hourly rate versus the deliverables. Respondents acknowledged the fact that the hourly rate is not always as worthwhile as the result they deliver to the customer. One respondent from a digital marketing agency elaborated on this by saying: *"In general, since we automate work processes, the hour work is not an hour anymore…Almost everything in the service industry is hourly based… I think we need to move towards a model where you are rewarded for your results… The hour is no longer worth an hour".* Another external factor that could play a pivotal role in the service and product portfolio that is changing. One respondent from the IT organization stated: "*It is much more the business you change towards customers… Internally your product portfolio changes what you have. Type of training and type of service*

that changes". Furthermore, customers can play an inhibiting role regarding the digital transformation change. If customers are not ready, it's hard to go faster yourself as a company. The maturity of customers is an external factor which needs to be considered. A manager of a digital marketing agency stated: "*We made a product which ran a bit of a hitch, we didn't get it sold. We thought let's invite some customers who could benefit from this… Customers didn't even know the specific terms for the data. by then, we knew they didn't understand it, so we had to go six steps back".* Another challenge is to stay up to date with all the technological developments in the market. Next to that, also the changing mindset of people, especially younger people. One respondent pointed out that younger people are more concerned about what is important for themselves rather than the organization's perspective. They won't suffer from the things they leave behind after a year and the people who take it over will suffer from it.

Limited added value

The last second-order theme is the limited added value on the employee perspective. Some respondents pointed out the importance of urgency regarding the change. Despite the urgency, one of the respondents experienced the complexity and difficulty of the system. He stated: "*With the current software it is often difficult to find the actual numbers as the package is not fully integrated enough which I find a challenge to cope with".* This does not mean that there is a lack of skills or resistance, but it is perceived as a limited added value of the technology. To further elaborate, another respondent didn't find any new or advanced solutions to the technology when comparing to the old system. Next to complexity and difficulty, some respondents did not recognized urgency for change which strongly inhibits change. One of the respondents explained: "*New technologies would be convenient, but not necessarily needed as we're still able to deliver value to our clients".* As all findings from the interviews have been compiled, it is possible to move further to the discussion.

5 Discussion

The aim of this paper was to explore which factors impact change readiness regarding digital transformation based on service SMEs. The following research question should answer this: What are the enablers and inhibitors of service SME employees' change readiness for and acceptance of base technologies for digital transformation? The findings showed enablers such as the organization should have clear goals and vision, the employees need the right skills and adapt to the competencies which are changing over time. Furthermore, the involvement of employees is important where managers should engage the employee already from the beginning and carry out the change, leadership behaviour should consist of the three elements of transformational, transactional, and instrumental leadership characteristics. Nevertheless, inhibitors occur with the change as well, namely organizational reluctance due to the demand or because the organization might be customer focused. Besides that, having inadequate data internally and external market factors externally might inhibit the change for digital transformation as well. All enablers and inhibitors will be further explained with the corresponding propositions, but first, the theoretical contribution will be outlined.

Theoretical contribution

This paper contributes to the literature on the applicability and adoption of digital transformation by service SMEs by exploring under-researched factors and consequences of readiness for change (Rafferty et al., 2013). Next to that, this paper highlights factors that make the process successful and could inhibit the process in the unknown Service SME setting (see Figure 2). The findings point out both organizational and individual levels regarding change readiness. Previous work emphasized several topics regarding change readiness and digital transformation but mostly overlooked in general. In the theory section the change readiness by Gfrerer et al. (2021) was highlighted, but also the Technology Acceptance Model (TAM) is a theory that predicts individual adoption. The theory states that individuals' behavioural intention to use technology is determined by perceived usefulness and perceived ease of use. The perceived usefulness is related to a person's belief that using IT will enhance their job performance. The perceived ease of use is related to the person's belief that using IT will be free of effort (Davis, 1989). Venkatesh & Davis (2000) elaborated on the TAM model which created a newly developed model defined as TAM2. TAM2 identifies the six general determinants of perceived usefulness which are the subjective norm, image, job relevance, output quality, result demonstrability and perceived ease of use. Experience and voluntariness are used as two moderators. To further refine the model, Venkatesh & Bala (2008) created

TAM3 which represents a complete network with elements of individuals' IT adoption and use. The new model does not have any cross-over effects with the perceived usefulness and perceived ease of use. In this theory, six new determinants are added which are based on anchors and adjustments. The first four elements are related as anchors which consist of computer self-efficacy, perceptions of external control, computer anxiety, and computer playfulness. The other two elements that are related to adjustments are perceived enjoyment and objective usability. These two determinants refer to the perceived ease of use after the individuals gain experience with new systems. Computer self-efficacy is the individuals believe that they can perform a specific task/ job by using a computer (Compeau & Higgins, 1995). Perception of external control is the individual's belief that organizational and technical resources exist to support the usage of a system (Venkatesh et al., 2003). Computer anxiety is determined by Venkatesh & Davis (2000) as the individual's apprehension when they are faced with the possibility of using computers. Computer playfulness is the cognitive spontaneity in microcomputer interactions (Webster & Martocchio, 1992). Venkatesh & Davis (2000) describes perceived enjoyment as "the activity of using a specific system that is perceived to be enjoyable, aside from any performance consequences resulting from system use", and objective usability as a "comparison of systems based on the actual level of effort required to completing specific tasks". The new TAM 3 can be seen as an extension of the six determinants of TAM 2.

This paper elaborated on the existing literature and contributed by introducing enablers and inhibitors on linking the organisational to the individual level regarding employees' change readiness for digital transformation. This is new in the literature, especially since the individual's perspective is quite unknown together with the service sector. Linking the organizational to the individual level is different from the theory of Gfrerer et al. (2021) and other theories. This might advance future empirical research by taking the individual level into account and focusing on service SMEs rather than only the manufacturing industry. The maturity level is an additional element which arises from the findings and shows an important contribution to the research model which is shown below. The next sections will introduce the enablers and inhibitors with corresponding propositions.

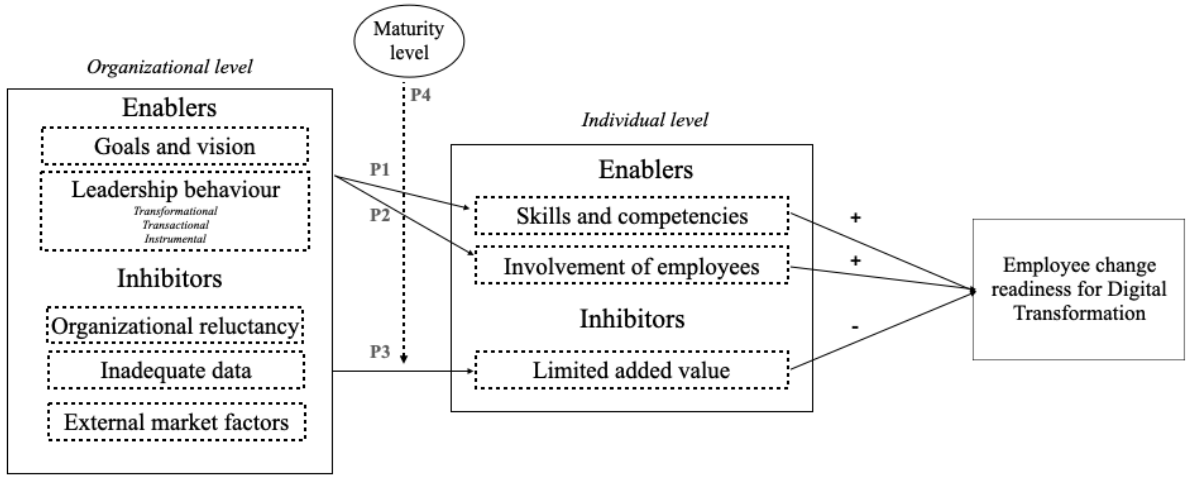

Figure 2 Research model

5.1 Enablers

This paper found various results regarding enablers on an organizational level and individual level. On an organizational level, the results show the goals and vision and leadership behaviour of service SMEs. According to the literature, having clear goals and vision together with a strategy is important (Nair et al., 2019). When initiating a change, it should create a sense of urgency where the vision evokes commitment in employees. Next to that, it should consist of obtainable realistic goals, and communicating with a simple understanding (Earley, 2014). However, the results indicated that it's often not carried out well due to a lack of clarity and timing. An interesting finding was the employee that designed a roadmap for future projects regarding new technologies for the upcoming three years whereas management was making decisions and initiatives by the day rather than from a vision. Moreover, the findings showed that it is important to share the urgency and especially the usefulness and necessity with employees. Also, communication timing is important to consider because when people feel high work pressure, engagement might be lower. Next to the goals and vision, leadership behaviour is strongly related to the change readiness of employees on an organizational level. Prior research suggests that transformational leadership has a positive effect on change processes (Bass, 1990; Bednall et al., 2018). This paper confirms that transformational leadership has a positive effect, however also the other two leadership styles – transactional and instrumental – can be used complementary to engage employees. All aspects of transformational leadership are reflected in practice whereas with transactional leadership the contingent reward and management by exception in a passive form are observed, and with instrumental leadership, the outcome monitoring shows positive results (Aga, 2016; Goodwin et al., 2001). The contingent reward will be short-term related where the gamification and target form bonus support the

employee. The management by exception in a passive form is related to the degree of giving training to employees who don't meet the standard of the system usage. And lastly, the outcome monitoring of instrumental leadership is considered as giving feedback to improve performance whereas the employee gets aware of the limited usage of the system and receives support for improvement. These organizational enablers relate to a positive relationship from an individual perspective according to change readiness. Firstly, the employees need the right skill set. This relates to competencies of analytical skills, data management, digital technology expertise (Osmundsen, 2020) and innovation cognition and social capital (Li et al., 2018). Our findings showed that due to change, competencies are changing, and complexity arises. Next to that, misunderstanding of the current way of working can emerge due to lack of communication from management whereas the experienced employees should step up and motivate others to go along in the change. Falling behind has an impact on the employees' ability to adapt to new technologies in which affinity could play a pivotal role to keep up. Therefore, the following proposition is suggested:

> *Proposition 1 (P1): Enablers on an organizational level enhances the skills and competencies of the employee, which will then enhance employee change readiness for digital transformation*

The second element is the involvement of employees. Managers play an important role to embrace the change themselves but also empower and involve the employees in digital transformation projects. They must be aware that their perception might differ from the employee (Gfrerer et al., 2021). Findings showed that it's important to set up a team and involve different departments within the organization to create more support among employees. Next to that, it creates more impact to engage the employees from the beginning instead of delivering a load of information with the goal and vision in the end as people will not recall the urgency. Thus, we propose the following proposition:

> *Proposition 2 (P2): Enablers on an organizational level enhances the involvement of the employee, which will then enhance employee change readiness for digital transformation*

5.2 Inhibitors

This research finds support in the book of Matt et al. (2020) which relates to the standardization of smart manufacturing systems for SMEs. Whereas the book focuses more on the industry sector, standardization plays a role in the service industry too. Our findings showed on an organizational level that when internal demands from the organization cannot be standardized

or automated due to specific requests, this relates to organizational reluctance. The organization is deliberately not willing to standardize and keep executing manual activities to carry out operational management. Other reluctances are related to being externally customer-focused rather than internally focused and having fewer resources available in comparison to larger organizations. However, this differs within the service sector as the findings showed one case that is behind with base technologies toward their customer whereas, on the contrary, another case is ahead of the customer. Even though the findings are polarized, they both confirm that there is a lack of resources since the organizations are more relying on billable hours rather than internal hours. Regarding these two specific cases, it needs to be considered that the work pressure is perceived as higher in the case that is ahead of the customer compared to the other where the work pressure was perceived as lower according to the interviews. Another interesting finding is the accuracy of the data. Most of the organizations indicated the need for adequate data whereas one case does not even have insight into some data points such as whether everything has been properly invoiced and if it does not miss any revenue. Next to the lack of information also manual activities and the quality of data as mentioned in the results section are factors that are related to adequate data. On the other hand, the available data exploded from different sources which enable organizations to derive insights internally but also externally about their customers. However, to retrieve this data, it needs to be in order and currently, not everything is configured yet correctly to derive the insights. Interviews showed that every case is focused on accurate data to be able to take the next step. Lastly, the external market factors are an important theme as the interviews indicated the challenge of hourly rate versus deliverables and the maturity of the customers. For some organizations, the hourly rate can be a challenge in the long term as it punishes efficiency and stunts growth. It is demotivated if the deliverables are significantly higher than the hourly rate that is invoiced as digital base technologies are supposed to increase productivity (Frank et al., 2019). Organizations have more control over this phenomenon than the maturity of the customer. The findings showed that the case with a maturity level 1 is ahead of their customers which can be an inhibiting factor towards digital transformation. With all three elements, we suggest the following proposition:

> *Proposition 3: Inhibitors on an organizational level increases the limited added value for an employee, which in turn decreases the employee change readiness for digital transformation.*

This proposition relates to a negative relationship from an individual perspective according to change readiness, as the employee sees the limited added value. Findings showed that the employee experiences complexity or difficulty with the usage which withholds the ease of ease.

However, the findings showed more inhibitors on an organizational level rather than an individual level. This might state that the organizational level is important to control when facing change towards digital transformation.

The theory of Ramaswamy (2009) shows the co-creation of value with employees migrating towards clients. When working closely with clients to co-create innovative complex products and solutions. The co-creation among employees and clients has the power to energize the whole organization. However, our findings are contradicting the literature as the co-creation with clients can counteract the acceleration towards digital transformation. Especially the case that has a maturity level 1 where the transformation is starting and tends to use the base technologies. Their customers are not aware or unknown of the concepts where the company is working on the services to deliver, and they cannot keep up with the velocity towards digital technologies. Therefore, the following proposition can be advanced:

> *Proposition 4 (P4): The maturity level of the organization negatively moderates the relationship between inhibitors on an organizational and individual level to employee change readiness for digital transformation*

With these propositions, this paper sets a novel base for the development of this unknown topic of change readiness in service industries, which must be further investigated in future empirical research. From the findings and observations, it can be noted that especially the managers who were interviewed were cheerful and enthusiastic to talk with, whereas the interviews took generally longer and had more awareness and understanding of the concept of digital transformation. From the paper by Schneider & Sting (2020), they could be assigned to the playful frame with positive perception and emotion resonance type. They desire to use new technologies at work which they assume make their work more fun or attractive. Others may feel more anxious about the replacement of the job or working more standardized which can be linked to a more traditional frame where they are proud of their craft skills, practical know-how, and experience-based knowledge. When managers are aware of their type of employee, it can be relevant when communicating on strategic initiatives where it could need an individual approach or targets teams, departments, or divisions. For the more traditional frame, the communication strategy would be expressing management's awareness and empathy for employees. The playful frame needs exciting elements and needs fun along the path. By exploring all facets of digital transformation for service SMEs and investigating the enablers and inhibitors, the next chapter highlights the practical contributions of this paper.

5.3 Practical implications

This paper provides implications for accelerating digital transformation in service SMEs and identifies aspects of managing employee change readiness. First, the results indicated forming a guiding coalition, consisting of a clear goal and vision, and continuously following this rather than taking strategic decisions by the day. It is highly recommended to communicate why there are such objectives of change through storytelling rather than giving technical instructions. The communication channels can vary from the mail, intranet posts, monthly drinks, podcasts, training, and team session depending on the importance of change. Before the implementation or communication, a roadmap can be created where the goals are prioritized and the timing of each aspect to gain clear insight (Osmundsen et al., 2018).

To realize the goal and vision, employees should possess a range of skills and competencies to adapt to the new era. To foster the willingness to change, management should involve the employees by setting up a team from several departments and engaging them from the beginning. A point to consider is involving employees with non-technical skills or more experienced employees to create more support and guide them through the process, demanding their feedback and avoid them from dropping out (Piccinini et al., 2015). Furthermore, the need for interactive training arises from employees due to the disruptive technologies and to stay up to date. Employees can fall easily back to old habits, where a dynamic exchange of knowledge could ensure the acceptance of technology and the readiness for change. This training should be either in small groups or individually to assure the quality of learning and commitment (Petrikina et al., 2017).

Although transformational leadership show a positive result on change readiness, findings show that a mix of all three leadership styles increases the impact. Instrumental and transactional leadership can help in the beginning for the acceptance with short-term incentives and support along the way. Whereas transformational leadership will be important with inspiration for the future and create organizational improvement. Instrumental leaders are adaptable and turn complex long-term goals into small approachable tasks while keeping external and internal factors in mind. Transactional leaders focus primarily on task completion which might frustrate employees by feeling not heard. The transformational style applies to leaders that inspire employees to be innovative and strive to transform their organization. Instrumental leadership combines the two latter styles which tend to get things done and keep everyone in the same direction which is essential for small organizations. Transformational leaders need a specific set of skills such as charisma, communication skills, high ethical

standards, and address authenticity. Transactional leadership is the counterpart, where it focuses on core values and offering employees rewards and punishments which can be effective when emphasizing quantitative results (Ahmed, 2020). Lancefield & Rangen (2021) shows that business transformations are rarely successful as you need to be able to drive a sense of urgency and make the purpose come alive through storytelling. Furthermore, to be able to balance between a wider perspective and being immersed in the details when required it might be useful to use your 'wise advocate'. This term refers to adopting a third-person perspective of your own experience, which gives a positive signal to others. Stakeholders from the company have high expectations, whereas leaders need to move away from the status quo and change their approach to how they are leading the transformation.

Finally, the use of co-creation with employees and customers can make it difficult to go through digital transformation as a service SME due to the maturity of the customer. To make the next step it is strongly advised to take this into account and try to involve and lead the customer through the process.

5.4 Limitations and future research

There are some limitations to this research. Firstly, having fifteen interviews at four organizations makes it unlikely to extend the results to the whole service sector in the category of SMEs. Some degree of generalizability lies in the fact that there were different areas within the service sector were investigated which offer extensive insights. However, further research could extend the sample of organizations.

This research conducted only interviews with Dutch companies. To gain further understanding, other studies can investigate the enablers and inhibitors of digital transformation in different countries and see whether these might differ from each other.

Another limitation was that the research was only carried out by one individual, which could result in an interview bias with the coding of the interviews where some nuances might not have been noticed. Future research could use more interviewers and coders to omit bias, however, the data might be less equivalent.

Next to that, three out of four organizations were at maturity level 0 and one was at maturity level 1. Therefore, the deviations could be explored less. Future studies could focus on a more variety of maturity levels which enlarged the gap and extensive results can be retrieved. Other than that, it might also be interesting to conduct a qualitative study with service

industries and manufacturing industries to see what the differences are for digital transformation (Newman, 2017).

This research did not find a direct link between the moderating role of maturity and the relationship between organizational reluctance and change readiness. We think that future research might find a relationship to this phenomenon. It might be the case that the maturity level impacts the relationship between organizational reluctance and change readiness.

Furthermore, this paper used maturity level as a moderator whereas future research can check whether it might play a mediating role regarding digital transformation. Next to that, it might be interesting to assess whether the maturity level plays a moderating role on the enablers instead of the inhibitors which arose from the findings.

Lastly, the research only focused on base technologies – cloud, AI, IoT and big data – from the research of Frank et al. (2019) where future research can elaborate on other parts of digital transformation as it is a broad concept with different facets. In addition to that, this work was primarily qualitative and explorative whereas future studies might consider a quantitative approach and a longitudinal study to follow the process of digital transformation of an organization.

5.5 Conclusions

The purpose of this research was to investigate the enablers and inhibitors for the employees' change readiness regarding digital transformation. This study highlighted multiple aspects that influence the change process. As the paper is focusing on SMEs, the smaller amount of people enables the fact that support needs to emerge from the bottom as well to create support and accept the change. Furthermore, digital transformation enables firms to collaborate with all stakeholders for value co-creation, taking into consideration that the firm is needed to take the lead and educate their customers, if maturity is lower, on what the future will bring with new technologies to accelerate their businesses. Findings showed that the organizations were mainly still digitalizing instead of starting with a digital transformation project. Especially the base technologies were still quite unknown or not applicable to use yet. However, the COVID-19 pandemic has accelerated the digitalization of the service industry even though face-to-face still plays a crucial role. It is necessary to carry out research on digital technologies and service innovations that can create new value and competitive advantage in this new era. Whereas today, technology is not so much changing, but more the impact on the people makes the difference in the service industry.

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Appendices

Appendix 1 – Interview guide employee

Do you give permission that this interview will be audio-recorded? All the interviews will be safely recorded and will be destroyed after the study, but the anonymized transcriptions will be stored on a secured UT server for max 10 years. This is required by the UT. Your anonymity is guaranteed, just like the confidentiality of this interview.

Introduction

1. Introduction myself and research topic

Organization

2. What is your current role in the organization?
3. To what extent are digital technologies used at your company
    a. Could you name some examples and how they affect the work processes?
4. What were the most significant changes regarding digital technologies in recent years?
5. Which barriers did you experience when adopting this technology/transformation?
6. Which enablers did you experience when adopting this technology/transformation?

Individual / Leadership

7. What do you think of digital transformation within your company?
8. How have you been involved in the shift towards digital transformation in your company?
    a. What do you think about it? What would be the ideal situation?
9. How are the processes/new technologies communicated to you?
    a. Channels
    b. What could be better/Ideal situation?
10. What challenges or opportunities do you experience in the current way of working and the technologies you use?
    a. What is your ideal situation?
11. Could you describe the work atmosphere/culture on the work floor?
12. How would you describe the style of leadership of your direct supervisor?
    a. How does (s)he act toward your colleagues
    b. What are the characteristics? Do you have examples?

Additional question if the time allows it.

13. What is your company's future challenge regarding the shift toward digital transformation?

Closing

.. Is there anything you would like to comment or mention to this interview and what we didn't touch on upon?

Appendix 2 - Interview guide manager

Do you give permission that this interview will be audio-recorded? All the interviews will be safely recorded and will be destroyed after the study, but the anonymized transcriptions will be stored on a secured UT server for max 10 years. This is required by the UT. Your anonymity is guaranteed, just like the confidentiality of this interview.

Introduction

1. Introduction myself and research topic

Organization

2. What is your current role in the organization?
3. To what extent are digital technologies used at your company
    a. Could you name some examples and how they affect the work processes?
4. What were the most significant changes regarding digital technologies at your company in recent years?
5. Which barriers did your company experience when adopting this technology/transformation?
6. Which enablers did your company experience when adopting this technology/transformation?

Individual / Leadership

7. What do you think of digital transformation within your company?
8. How have you been involved in the shift towards digital transformation in your company?
    a. What do you think about this? What is the ideal situation?
9. How did the employees experience the change regarding digital transformation?
10. How did you communicate the new technologies to your employees?
    a. Channels
    b. How did you deal with employee resistance in the digital transformation process?
11. What challenges or opportunities do you experience in the current way of working and the technologies you use?
    a. What is the ideal situation?
12. Could you describe the work atmosphere/culture on the work floor?
13. How would you describe your leadership style?
    a. How do you act toward your employees?
    b. What are the characteristics? Do you have some examples?

Additional question if the time allows it.

14. What is your company's future challenge regarding the shift toward digital transformation?

Closing

.. Is there anything you would like to comment or mention to this interview and what we didn't touch on upon?

Appendix 3 – 25 item change readiness by Holt et al. (p. 238 – 239), 2007

1. *My past experiences make me confident I will be able to perform successfully after this change is made.*
2. *There are some tasks that will be required when we change; I don't think I can do well.*
3. *When we implement this change, I feel I can handle it with ease*
4. *I have the skills that are needed to make this change work.*
5. *When I set my mind to it, I can learn everything that will be required when this change is adopted.*
6. *I do not anticipate any problems adjusting to the work I will have when this change is adopted.*

7. *I think the organization will benefit from this change*
8. *It doesn't make much sense for us to initiate this change.*
9. *There are legitimate reasons for us to make this change.*
10. *This change will improve our organization's overall efficiency.*
11. *In the long run, I feel it will be worthwhile for me if the organization adopts this change.*
12. *This change makes my job easier.*
13. *When this change is implemented, I don't believe there is anything for me to gain.*
14. *The time we are spending on this change should be spent on something else.*
15. *This change matches the priorities of our organization.*

16. *This change will disrupt many of the personal relationships I have developed.*
17. The prospective change will give me new career opportunities.
18. *My future in this job will be limited because of this change.*
19. *I am worried I will lose some of my status in the organization when this change is implemented.*

20. *Management has sent a clear signal this organization is going to change*
21. *Our organization's top decision makers have put all their support behind this change effort.*
22. *This organization's most senior leader is committed to this change.*
23. *Every senior manager has stressed the importance of this change.*
24. *Our senior leaders have encouraged all of us to embrace this change.*

25. *I think we are spending a lot of time on this change when the senior managers don't even want it implemented.*

Appendix 4 – 1st order codes with quotes

1st order code	Organization	Quote
Simple language	1	*"When we buy a new software, we tell them to carry it out without showing them why we do it and what the* benefit *is for the employee and company… We let it slip through"*
	2	*"Be very concrete, communicate in easy language what the goals consists of and what you want to achieve"*
	3	*"It can be a challenge in how to use the technology, so how you put the data correctly in the system… to get employees to do the right things"*
Clear purpose	2	*"Technology could help with the goal, but if you push technology for technology's sake, you get resistance"*
	4	*"I find it important to know the purpose when new technologies get introduced, and if the new technology is relevant"*
Communication timing	1	*"Going along with the change costs time, and we have a dynamic working environment with a high workload which could hold me back in the change… a hands-on session on a Friday afternoon would stimulate me more"*
	3	*"People need to get the right instructions, the preparations ahead should be sufficient, and it should be on right timing. Our workload is high during spring and autumn, so it would make more sense to execute the change in the summer"*
	4	*"Communicate only if clear and fully landed with the people who must spread the word in the organization. Because as soon as you communicate, questions arise"*
	4	*"I think we should take more time for the implementation of new technology or systems… We normally have only three slides"*
Paradigm shift	2	*"An employee that did 30 years routine work and now must manage by exception, would find it exhausting to solve problems… The type of work is changing but you must get the right people"* *"We just need different competencies in our portfolio to go to customers… My story is totally different from 5 years ago"*

Change in way of working by technology	4	*"We make a lot of internet campaigns in Google Ads and this program is automatically adjusting data. So, we are more consulting rather than executing. All algorithms from Google take over the work which changes the way in work"*
Experienced employees should motivate others	1	*"The people that are already longer at the company should approach and motivate the people that are new or have some trouble with using the system"*
	2	*"Our IT department supported the consultants really well to do the job for the customer"*
	3	*"We work on a yearly basis in about 20 different teams which also create short lines of communication among the people. When there is something revolutionary, smart, or nice tool most of the team picks it up and applies it within a couple months as we work with different teams set up"*
People focused (leadership behaviour)	1	*"Coaching is the best way to let people embrace the system. One-on-one is quite intensive, but has the most impact"*
	4	*"One employee with a developmental disability is sometimes difficult to deal with who only was exploring new things but didn't finish his tasks. We empowered him to also work along with the team next to explore. Even though it's hard to manage him, we use new digital technologies because of him. And I think that from 9 out of 10 companies, he would have been already fired"*
Encouragement of innovation	4	*"Every employee has 10% of the time the freedom to immerse themselves in a field of interest in which it might be applied to the customer"*
	4	*"Stimulate people for smart techniques and campaigns, pushing for a step ahead"*
Change focused (leadership behaviour)	2	*"If the system fails, you'll be technologically vulnerable, and people can get anxious about being dependent where the risk of falling in old habit will increase"*
	3	*"If a new technology will be introduced, I would like to get a sort of education about what I can do with it and how to use it in the right way"*
	4	*"When a change occurs, I try to involve the employee and let them explore the change themselves what works best for them… We influence the people to let*

		them explore and figure out what makes the work easier"
Spontaneous and enthusiasm	1	*"The manager made everyone enthusiast by walking spontaneous by or asked me to join quickly where we exchanged some ideas, I really appreciated this"*
	1	*"When we converted this, the employee who needs to use it gave a high five because she was so happy with the output"*
Set up a team with several departments	1	*"Currently, we're in the process of implementing the new CRM and I'm, together with other colleagues, assigned as "champion" to support and give feedback to the IT manager to make the system successful"*
	2	*"After the project kick off, our key users going to enroll the project and take the end-users through the change by training, instructions, and giving support when needed"*
	3	*"They assigned a team for the modern workplace, and they put a lot of time and effort to run the change well and for an easily as possible landing with all employees"*
	4	*"When we had a change on a company level, people from different departments were put together and set up a plan about the best way to get it through the organization and create support"*
Engaging people from the beginning	1	*"I'm busy with improving the invoicing process with only one employee where I think that the others haven't seen anything yet where we even almost finished with the process… missed opportunity"*
	1	*"We're now implementing a new CRM system, where we involve some employees from different departments by giving them the responsibility to carry it out through the organization and appointing them as "champions" to create support and embrace the new system/technology"*
	2	*"When we have a new project, we have a kick-off where all employees get involved and informed about what we're going to do, what the roles are and why we are doing it"*
	3	*"No, I didn't experience any complications with the change as we already got training and courses in the beginning phase about what it means, and we received good support where we could ask questions"*
	4	*"We send out a survey to all employees and ask them which program they prefer"*

More knowledge and support with employees	4	*"Stimulating employees is mainly by doing together, when we did it from management with a small group it usually didn't last long… when you do it with some employees a lot of knowledge has been shared already and there is much more support because you did it together"*
	1	*"The manager involved me from the beginning of the progress which I liked as I saw some influences that came from me because she asked me for my experience"*
Internal demands cannot be met	1	*"Our software package is overall quite good; however, management want to know information at the end of the month to lean, whereby it's impossible to automate"* *"My challenge is not so much in the deficiency in the technology of the technology, but more in the redundancy of internal questions. So, what we want is almost impossible to automate"*
	2	*"It's also the culture on the sales side which affects the way towards digital transformation. You need a certain minimum of leads to invest in new technologies.*
Internal mismatch of direction	2	*"I made a roadmap for the upcoming three years to look forward with projects and ideas, however I notice that decisions were taken by the day rather than from a collaborative vision and strategy"*
	3	*"I find the developments rather slow internally whereas we're dealing with a fast-moving market in the field of technology. Act quickly with a faster deliberate decision-making"*
Externally customer focused	1	*"Sometimes our clients don't want, or cannot work in our systems and prefer their own system. Then I'm completely disregarding our own system"*
	2	*"We are still in the previous software version where clients are further… I need to prioritize and make an employee internally available for an optimization project, but when a customer calls and says they need that person it's often the case that the priority goes to the customer… under-prioritizing your own automation, because you are always customer-focused"*

Lack of information	1	*"Our data points are incorrect. In theory, we could get surprised with a purchase invoice and now knowing if the products on the invoice delivered"*
	3	*"I see often at our customers that several data points are not captured, in which it gets useless for use to analyze the financial records"*
Manual handling	1	*"To provide the information, calculations must be made, data needs to split and converted again.*
	1	*"It's a lot of copy paste work of emails which is not automated with our current system"*
	3	*"Engagement letters are not changing much every year despite some updates of terms and conditions but a tool to automate this work would be more convenient. It's a manual activity where we must fill out the information almost from scratch"*
Data quality	1	*"A lot of things must put in manually which demands a lot of time. Therefore, I must admit that some things are not 100 percent logged"*
	2	*"When we're looking at the service SME, the most important step is getting wise with your data as most SMEs have the data not in order"*
	2	*"With standardization of the work procedure it's easier to control if something is carried out in the right way or if it's executed correctly"*
	3	*"When we do a check, we depend on what a customer puts in the system… if the customer doesn't put all the information in the system when they sell something it's of no use to us…they also increasingly recognize the importance of data and thus started capturing data more which brings more added value"*
	4	*"Data is not yet sufficiently in order, which is a condition for digital transformation. The data has to be accurate, and humans still putting in the data"*
Hourly rate vs deliverables	1	*"I noticed that we have more technological features which saves time and workload and are able to deliver more to the customer in the same time as a couple years ago"*
	2	*"During COVID-19, our clients didn't like sitting behind their screen the whole day and they quitted after half a day. This was a challenge as we couldn't invoice half of the hours"*
	4	*"In general, since we automate work processes, the hour work is not an hour anymore…Almost everything in the service industry is hourly based… I think we need to move towards a model where you are rewarded for your results… The hour is no longer worth an hour"*

Maturity of customers	2	*"I visited a customer to train them on the software and we were supposed to go to a new version in which it had possibilities for IoT and AI. But the employees were saying that they wanted to go back to the old system… They don't see the story behind it, they find it complex… Storytelling is important and the proven technology*
	3	*"The difference for us when comparing with a big 4 company, might be the complexity we face with our customers. The most complex client for us regarding information provision is an easy client at a big 4 company"*
	4	*"Customers sometimes telling us that they heard something about AI and models and are interesting in it, however when we ask which product category is generating the most revenue it remains quiet. So, we plot our customers in which maturity level they are and go step by step towards digital transformation"* *"We made a product which ran a bit of a hitch, we didn't get it sold. We thought let's invite some customers who could benefit from this… Customers didn't even know the specific terms for the data, by then we knew they don't understand it, so we had to go six steps back"*
Experience complexity and difficulty	3	*"With a Power BI tool we can do this easily, but that can be done with excel too. I don't really see the added value in Power BI yet, because it's very complex and difficult and often the systems at another company that we monitor are not yet set up to do that"*
	1	*"With the current software it is often difficult to find the actual numbers as the package is not fully integrated enough which I find a challenge to cope with"*
No urgency	3	*"New technologies would be convenient, but not necessarily needed as we're still able to deliver value to our clients"*
	1	*"We choose to let people work with Syncing files, whereas this makes it harder to convince them to use Sharepoint because we allow both styles… this creates no urgency for the employee to change their way of working"*

	4	*"In our team we need relevance for doing stuff. We like to build things, but it has to deliver value and consist of a purpose. When there is no goal or purpose I don't see the logic for changing something"*