



How the traditional office evolved into the digital workplace

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Abstract

Title: How the Traditional Office evolved into the Digital Workplace.

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The nature of workplaces is changing. Digital technology has constantly evolved and enabled workplaces to progress from being static in location to becoming independent of location. Digital technology enabled a digital workplace that can always be with the employee.

The objective of this dissertation is to investigate the drivers and enablers behind the evolution of the workplace from a traditional office to a digital workplace.

Through the use of expert interviews from important industries in Germany and secondary research the aim is to determine the key drivers behind the digitalization of workplaces as well as the technologies that enabled this workplace transformation. The industries are ranging from consulting, the medium-sized industry, telecommunication, digital marketing and management.

The findings of the dissertation are that the drivers for businesses to digitalize their workplaces are often work culture related. This stems from the wish for more flexible working conditions to the covid-19 pandemic and an increase in complex work as well as others. The digitalization of workplaces is especially supported and enabled through key technologies like SaaS, Cloud services, Customer analytics systems among others. Finally, current findings from the literature as well as expert interviews, certify that companies will get the most productivity and efficiency from their employees if they grant them the freedom of choice with their work environment.

Keywords: Digital Workplace, Digital Culture, Digital Technology, Driver, Enabler.

Sumário

Título: Como o Escritório Tradicional evoluiu para o Local de Trabalho Digital.

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A natureza dos locais de trabalho está a mudar. A tecnologia digital tem evoluído constantemente e permitiu que os locais de trabalho passassem de estáticos no local para independentes do local. A tecnologia digital possibilitou um local de trabalho digital que pode estar sempre com o empregado.

O objectivo desta dissertação é investigar os condutores e capacitadores por detrás da evolução do local de trabalho, de um escritório tradicional para um local de trabalho digital. Através da utilização de entrevistas de peritos de indústrias importantes na Alemanha e de investigação secundária, o objectivo é determinar os principais motores por detrás da digitalização dos locais de trabalho, bem como as tecnologias que permitiram esta transformação do local de trabalho. As indústrias vão desde a consultoria, a indústria de média dimensão, as telecomunicações, o marketing digital e a gestão.

As conclusões da dissertação são que os motores das empresas para digitalizar os seus locais de trabalho estão muitas vezes relacionados com a cultura de trabalho. Isto deriva do desejo de condições de trabalho mais flexíveis à pandemia covid-19 e de um aumento do trabalho complexo, bem como de outros. A digitalização dos locais de trabalho é especialmente apoiada e possibilitada através de tecnologias chave como SaaS, serviços Cloud, sistemas analíticos de clientes, entre outros.

Finalmente, os resultados actuais da literatura, bem como as entrevistas de peritos, certificam que as empresas obterão a maior produtividade e eficiência dos seus empregados se lhes concederem a liberdade de escolha com o seu ambiente de trabalho.

Palavras-chave: Local de Trabalho Digital, Cultura Digital, Tecnologia Digital, Driver, Enabler.

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Introduction

Are offices even needed anymore?

That is an interesting question and hard to answer. However, if it is broken down to the meaning of an office, which is a place for people to work then the answer is a definitive yes. Even though this assumption of a workplace was questioned over the last couple of years. Offices were considered an unquestioned standard in every business. But this is not the case anymore at least not how it was traditionally. That means fixed locations for employees to come to every weekday at fixed times and fulfilling their contractual working agreements. Some organizations now offer their employees workplaces that do not have to have a fixed location by making use of digital technology. This is why the change from a traditional office to a “digital workplace” is a complex and important topic of the current time. In addition, workplaces highly influence employees' work performance and productivity. Companies must understand the change that these workplaces undergo and how to use these changes to their advantage like an increase in productivity and efficiency (Kamarulzaman, Saleh, Hashim, Hashim, & Abdul-Ghani, 2011). Since these workplaces enable the same work possibilities from any location with an internet connection. It can be remote, at home, or in the office and operates by the use of digital technology with an internet connection.

1.1 Research Questions

Hence the presented dissertation aims to provide guidance to this topic by answering some questions relating to that. That will identify the key drivers and enablers behind the transformation of the workplace.

RQ1: Which are the primary drivers in the transition between a traditional office and a digital workplace?

RQ2: Which are the key enablers that support this transition?

1.2 Relevance

“The Digital Workplace enables new, more effective ways of working; raises employee engagement and agility; and exploits consumer-oriented styles and technologies“ (Gartner, 2022).

The quote by Gartner stresses that digital workplaces are enablers of more effective and agile ways of working. This is why it is imperative for businesses to know the drivers behind the development of such workplaces, as well as their key enablers of them. Companies can increase their employee’s efficiency and productivity with a digital work environment if they understand how to successfully undergo a digital transformation. Hence, this paper will offer companies the necessary insides and knowledge to understand the intricacies behind a digital transformation. By providing an analysis on these key drivers and key enablers behind a successful workplace digitalization. Which provides value for businesses trying to undergo or currently undergoing their own digital transformation. Academically, this paper will add new understanding and knowledge about the key enablers and drivers as well as their impact on a firm’s productivity and efficiency.

1.3 Dissertation structure

A literature review was conducted to show the current insides and knowledge of the topic. This was structured in three themes, the first is related to the digital culture, the second to the digital technology and lastly the intricacies of the digital workplace will be stated. Following the literature review will be the methodology. Which was split up the research design and the data collection into primary and secondary data. The primary component data builds upon the expert interviews. The secondary data is represented by the literature review. After this, an analysis of the key findings of this research was conducted and also split up into three themes. First the digital drivers were analyzed and following the digital enablers. At the end of the analysis, the effects on productivity were interpreted.

2 Literature Review

Every business no matter the size and no matter the product has one similarity and that is the office. This can be a fixed location or just a desk and a laptop or even a sunchair on the beach with a tablet or a phone. As it is apparent now, an office does not need to have a fixed location for it to be useful as a place to work. Which is why the term workplace is a better fitting descriptor of its actual functionality. Offices or workplaces are not only about the work itself, but they also play a key role in organizational culture. They are meeting points for many employees to communicate with each other which makes them an incremental part of their daily social life. As these workplaces often are the locations where employees spent most of their working day it becomes important for firms to understand the intricacies of them as well as the transformation of them over time. Since they influence employees work performance and productivity (Kamarulzaman, Saleh, Hashim, Hashim, & Abdul-Ghani, 2011). Offices as workplaces are very interesting and complex structures that deserve to be understood. Research concerning offices started a considerable debate in both the management and property literature on office flexibility (Gibson, 2003). From a managerial viewpoint property deals with the physical aspect of an office and on the other hand management deals with the human aspect. Both these aspects are needed for a dynamic business environment. The logic from that provides the reasoning that when the employees are working more flexibly, the office property has to support that by being flexible as well (Gibson, 2003). However, there are multiple different sources of flexibility for both these aspects which have to be addressed accurately. Employees or the human aspect of flexibility can be contractual, time and location elements. The property's aspect of flexibility comes from the financial contracts, physical layout and functional opportunities the physical location has. Through demand drivers, both aspects are addressed naturally through demand and can be influenced (Gibson, 2003). One such demand driver is a customer engagement strategy where a seamless omnichannel experience is created for the customer enabling him/her to easily order, inquire receive support and pay for the product in any channel at the same time (Sebastian, et al., 2017). Another example is the increase in the use of information and communications technology (ICT) in offices which had a direct impact on the underlying business processes and thus increased the backbone operations.

This ICT technology is one example of how the office spaces are changing progressively from the implementation of new technology (Sebastian, et al., 2017).

Through technology like ICT and SMACIT which stands for social, mobile, analytics, cloud and internet of things organizations enable employees to work more efficiently and closely connected by increasing information processing and communication speeds (Sebastian, et al., 2017).

These innovations started the so called “digital age” that shifted work from repetitive tasks to knowledge, information based adaptive tasks (Attaran, Attaran, & Kirkland, 2019). It became increasingly important for the employees to have access to the right information at the right time to increase their productivity (Igloo, 2017). This was made possible by increasingly digitizing the office from digital communication software solutions to the usage of mobile technology.

2.1 Digital culture

The usage of new digital technology in the office led to it having an increased effect on the inherent workplace culture. Mobile technology and communication software solutions, for example, influenced employees work life increasingly by changing key aspects like where work is being done and how flexible it can be done (Jarrahi, et al., 2021). As with any transformation that influences an environment the digitalization of the workplace also needed to be supported by the affected culture to be successful (BCG, 2018). It was the so-called digital office culture that resulted from the changes due to the usage of digital technology. This change is happening in offices naturally over time as the world becomes more technologically advanced. Spreading from employees to the organizational culture as they are using smartphones and computers etc. for work. This influence on the workplace by the employee’s digital technology use has direct impact on the organization’s culture which managers often target to exploit further (Girrbach P. , 2018b). To enhance the organizations technological advancement and enable an improved digital workplace that incorporates the newest technology. This is easier if the employees already have an affinity for new technology and especially for digital working environments. If that is the case a change of the organizations culture is directly targeted. Research shows that for the traditional office culture to change to the targeted digital culture there must be modifications made to the inherent

office culture of an organization (Girrbach P. , 2018a). Which includes modifications to the values, corporate vision as well as the behavior of executive managers and relating to that also proper working conditions in the company (Girrbach P. , 2018a). All this supports a change in culture which is an important driver of the transformation from a traditional office to a digital office space (BCG, 2018). This digital culture and the ongoing digital transformation of an organization adds flexibility to working conditions for employees (Jarrahi, et al., 2021). As it creates more connections and fewer barriers between employees, which makes the employees much more efficient in doing their job while working together. This makes organizations much more agile, flexible, and competitive (Igloo, 2017). And enables organizations to offer employees possibilities to work from anywhere. The only condition that must be fulfilled is that the employee has an internet connection. This counteracts the ongoing dissatisfaction of employees worldwide that wanted more flexible working conditions (Jarrahi, et al., 2021). And in general, a more digitalized office makes working in an office more productive and efficient (Attaran, Attaran, & Kirkland, 2019). Generally, a culture must be supported by the acceptance of different behaviors to function (Girrbach P. , 2018a). Which the digital office culture did by generally accepting employees working remotely as a new standard (Kaushik & Guleria, 2020). Especially as the covid-19 pandemic affected organizations worldwide during 2020 and the ongoing years. The pandemic led to breakthroughs in work culture and technology that prevented remote work in the past (BCG, 2020). With these breakthroughs employees could and had to start working from home to limit the spread of the virus and for their personal safety. This drastic change in the workplace was a challenge for most companies. On the other hand, companies with an established digital culture had it easier to make the switch to remote working possibilities for their employees (Carnevalea & Hatak, 2020).

In organizations with digital culture and a modified working environment, employees operated bolder in their decision making, wherefore there was more action than planning. This change in the behavior of employees comes from the inherent focus of the digital culture on the delegation of tasks instead of controlling them (BCG, 2018).

Which led to flatter organizational hierarchies and with that an increase in information flow that benefitted the company by increasing productivity (Papagiannidis, Harris, & Morton, 2020). The change in culture was further intensified by the Conid-19 pandemic in many ways that resulted in employees working more digital and lead most organizations to pursue their own digital culture with high priority (Papagiannidis, Harris, & Morton, 2020). As such the Covid-19 pandemic is one of the strongest drivers behind the further digitalization of

organizations to stay competitive in Europe, as well as to establish digital workplaces for their employees with the newest technology available to them (European Commission, 2020).

2.2 Technology

The digital office culture was enabled by new technologies among other things. Organizations started using those new technologies to stay competitive or even gain an edge over other competitors. Interestingly there is much research conducted on the effects new technologies have on a business. Especially in the field of digital transformation of organizations.

Already in 1978, Michael D. Zisman asked the question if new technology in offices an evolution of the office is or even a complete revolution of work in an office (Zisman, 1978)

From then on technology developed more and more and was progressively used in offices and organizations in general. The research conducted by Attaran divides the technological advancements from the last 30 years into four phases (Attaran, Attaran, & Kirkland, 2019).

These four different phases show the main technological stages of development that had the biggest impact. The first phase is about the PC revolution of the 1990's in organizations which made information processing much faster and more efficient. The second phase is about the world wide web or internet, which enabled people to build digital businesses for the first time in the 2000s. For example, by starting an e-commerce business. As this phase was all about connecting people to the internet and increasing the users of the internet. This resulted in an increase in organizations reach that they could market to. This also led to a direct increase in globalization by interconnecting people from all over the world. The third phase is about the smartphone's era from the 2010s and the resulting increase in flexibility of people accessing information and options to work. The last phase defined by the authors is the current era of digital workplaces (Attaran, Attaran, & Kirkland, 2019). Which is about the digitalization of the whole workplace and the effects it has on organizations.

The digital workplace technologies are being used and integrated into every process and task employees work on. The combined use of technology or the fusion of technologies is often more efficient than using those technologies by themselves. Those technologies range from human resource applications and core business applications to instant messaging and email as well as social media tools and virtual meeting tools (Williams & Schubert, 2018).

Other technologies used especially in digital offices today are cloud-based systems that enable access to information wherever there is an internet connection (Mydyti, Zenuni, & Ajdari, 2020).

With this access over the internet and data saved on cloud systems, the means were provided for Software as a Service or SaaS. This technology increased the efficiency and productivity of employees working digitally and especially remotely (Mydyti, Zenuni, & Ajdari, 2020).

Furthermore, companies like Audi focused on employee interconnectedness as they identified this as a critical part of their successful digital transformation. Social media was made the key technology used to establish this interconnectedness. This led to increased efficiency and productivity of their employee's team collaboration (Dery, Sebastian, & Meulen, 2017).

Digital offices can be enabled by many different digital tools. Even though there were eight categories established that comprise most of the key technologies. The following categories of different digital tools are messaging, productivity, collaboration, communication, business applications, crowdsourcing, connectivity, and mobility tools (Deloitte, 2011).

These categories are not recommended to all be focused on by a company, but it should focus on the most fitting categories regarding its business strategy (Deloitte, 2011).

2.3 Digital Workplaces

This technology evolution or revolution of the office is what made digital workplaces possible in the first place. The term digital workplace was first used by Charles Grantham and Larry Nichols in 1993 (Grantham & Nichols, 1993). It describes a workplace that makes use of digital technology and unifies the connection between the virtual with the real world.

In literature, there are different views to describe a digital workplace and its aspects. One side considers the view of an organization and the benefits a digital workplace provides it. The other side considers a digital workplace from the employees' perspective and the benefits it brings him or her. These different viewpoints are important since a definition of a digital workplace from only one viewpoint is significantly different from the definition of the other viewpoint (Tubb, 2022). An organization would define a workplace as a collection of all digital tools provided by the organization to enable the employees to do their jobs (Deloitte, 2011). On the other hand, a definition from the view of an employee includes more than just the digital tools that the organization provides him with. It would include also Twitter and the world wide web, in general, to access thousands of public information as well as interfaces of

suppliers or partners and many things more. The difference is that the employee views all digital technology that helps him do his job as part of his digital workplace and not only the digital technology provided by his employer (Tubb, 2022). Those two views have significant differences but also share aspects with each other and those aspects are relating to the employee's work-life balance which is getting more and more integrated into each other by having access to digital technologies (Tubb, 2022). Since the digital workplace is a broad term that has many definitions, it is important to clarify what a digital workplace is. By providing some detailed definitions that describe the current situation of the digital workplace more accurately than Grantham & Nichols definition. For example, the definition by Dery, et al. focuses on the aspects and benefits that a digital workplace brings. They defined the digital workplace as “physical, cultural and digital arrangements that simplify working life in complex, dynamic and often unstructured working environments” (Dery, sebastian, & ross, 2015, S. 1). Another detailed definition of a digital workplace is by Dave & Shishodia. They say “It's a digital workplace that enables to share files, find answers, solve problems, locate information and expertise and tap into the collective knowledge of customers, partners and peers, virtually anywhere“ (Dave, Dave, & Shishodia, 2013).

Furthermore, a digital workplace can be put into different stages, for example, Westerman & McAfee put it into four stages regarding their digital maturity level. (Westerman & McAfee, 2012). Those four stages which are used by many researchers in the field of “Digital Workplaces” were put on a 2-dimensional graph. This graph explains the relations between culture and management and the investments in new digital technology. The first dimension is the transformative management intensity. The second dimension is the digital intensity. Together they show the transformative stages from a traditional office to an office using digital technology and the organizations digital maturity. This digital maturity was assessed by measuring the digital intensity that firms are willing to undergo (Westerman & McAfee, 2012). Digital intensity describes the level of investment a firm has in new technology enabled initiatives. That have an impact on the firm's performance (Westerman & McAfee, 2012). Transformative management intensity on the other hand measures the level of investment in the management and leadership transformation in the firm. That is needed for a successful digital transformation (Westerman & McAfee, 2012). These two measurements of digital maturity are important as simply investing in technology often does not bring the wanted improvement the organizations were after (Westerman & McAfee, 2012). It is proven to be hard to include those new technologies in an organization. As well as the consequent

management challenges which arise because of it (Fitzgerald, Kruschwitz, Bonnet, & Welch, 2013).

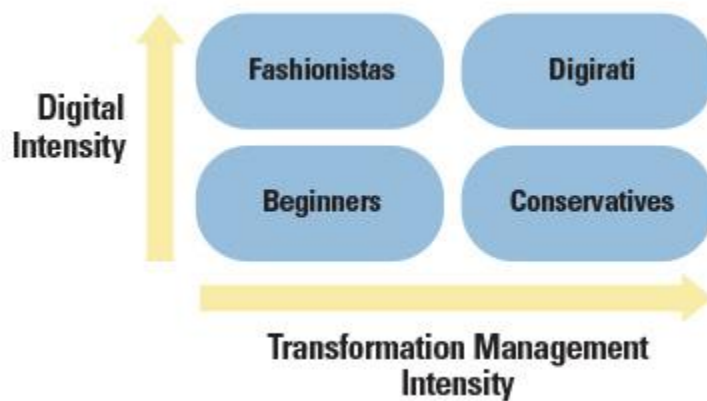


Figure 1 The Four Levels of Digital Maturity
Note: Adapted from (Westerman & McAfee, 2012)

The first and lowest digital maturity level an organization can have is the “Beginners” stage. Most organizations in the beginner stage have been slow to adopt or are skeptical of new advanced digital technology. Those kinds of organizations use email, the internet, and different kinds of enterprise software. The second stage where organizations are more focused on leadership transformation instead of technological investments is the “Conservatives” stage. Here organizations are deliberately waiting out new technologies even though their leadership has a vision and effective structures in place to facilitate new technology adoption. The third stage where organizations are more focused on technological investments instead of leadership investments is the “Fashionistas” stage. Organizations in this stage are aggressive in their new technology adoption but do not have the management capabilities in place to facilitate their adoption. As they do not have a vision in place and do not coordinate well across departments to manage this adoption. The fourth and therefore the stage with the highest digital maturity is the “Digirati” stage. Where organizations are equally focused on the investments in leadership and new technology. Digirati organizations have a leadership that has a strong vision of how this new technology can benefit their firm. As well as having an effective structure in place to manage these new digital technologies quickly and effectively. To gain the most value from their digital transformation (Westerman & McAfee, 2012).

Important to note is that not all companies can make the switch to complete remote work through their digital offices. As remote work is not related to the occupations of people but rather to the tasks and activities of the company (BCG, 2020). But tasks and activities that cannot be digitalized are more common in certain industries than others. Research by the Boston consulting group proves that remote work is more common in already highly digitalized industries like the finance sector and the professional or scientific and technical services sector. Agriculture and construction on the other hand are examples of the most sparsely digitalized industries that have nearly no remote workforce (BCG, 2020).

The best-managed firms are constantly identifying new ways to redefine the way they work in the new digital era. The challenges brought by the covid 19 pandemic were one such driver that brought new ways of working with a mostly digitalized workforce (Papagiannidis, Harris, & Morton, 2020). The increased digitalization is related to the growth of investments in digital workplaces over the last few years. The pandemic then gave those firms that already had substantial investments in their digital environment the chance to switch to work from home easily while others had to invest substantially into their digital workplace to enable a work from home culture and increasingly get used to these new technologies (Kaushik & Guleria, 2020). Research during the pandemic focuses on the optimal management techniques and the effects digitalization has on a firm's culture and its employees (BCG, 2018). Those new management techniques are important as the way work is done changed increasingly during the pandemic. Furthermore, the covid-19 pandemic is increasingly pressuring companies to digitalize at an unprecedented speed. This pressure is built up due to the need for companies to change or improve their operational capabilities. Since remote work is preferred during the pandemic many of their operations had to be made virtually accessible. This resulting pressure is increasing the gap between firms regarding their capabilities to digitalize (Iansiti & Richards, 2020). On the other hand, it also shows opportunities for innovative firms that have more flexible business models to react to market changes more quickly than others. The pandemic helped to drive further development of flexible business models and relating to that flexible working conditions (Claudia Nestler & Jane He, 2021). This change in working conditions for employees was well underway before the pandemic but through the innovation and change of operational business during the pandemic, they became increasingly more flexible which benefitted employees (Claudia Nestler & Jane He, 2021).

3 Methodology

In the following Chapter, the research methodology will be explained. First of all the research design of the present study will be clarified.

Afterward, the procedure of the data collection will be described.

To test whether the hypothesis can be confirmed, expert interviews had been held. The method generated qualitative data which was used.

All in all, the objective of the following primary research is to answer the research questions:

1. *Which are the primary drivers in the transition between a traditional office and a digital workplace?*
2. *Which are the key enablers that support this transition?*

In addition, the expert interviews will generate primary data which will be used to compare the defined enabler and driver from the literature review with the actual status quo in the respective organizations that have been interviewed.

3.1 Research design

The primary research consists of qualitative research instead for example quantitative research, since it was deduced that the answers from experts will provide the most detailed and recent answers regarding the research. As well as those answers received in an interview are more thorough and provide an understanding of the content. This was important as the literature already showed that cultural aspects play a big role in finding answers to the research question of the drivers behind a digital workplace transformation. Wherefore a qualitative assessment was more accurate than a quantitative one.

The conducted interviews were of experts of different company sizes to make sure to have differences in technology usage and company cultures. These differences were important as this qualitative assessment tries to thoroughly understand the drivers behind the digitalization of a workplace and what enabled the companies to digitalize efficiently in Germany.

In particular, the interviewees were selected since they work closely with the digital workplace technology in their respective companies and with that have expertise considering the research. These experts also cover different major industries which gives a more thorough view on Germanys workplace transformation. These industries include social media, telecommunication, consulting and a medium sized company.

The secondary research focused on the analysis and information regarding digital culture, digital technology, and the digital workplaces and herewith is represented by the literature review, which is used in the analysis to provide a comparison. That will compare the previously stated facts in the literature review with the actual answers of the interviewed experts. The goal of this comparison is to show strategies and aspects of a possible future of the digital workplace and which drivers and enablers have impacted the transformation of the workplace the most.

3.2 Pretest

In order to test the comprehensibility of the interview guideline, pretest have been carried out on 2 persons with various backgrounds. Moreover, it has been tested if the questions arouse interest and thoughtfulness from the participants. As well as if the given answers would be useable to answer the research questions or if the questions would need to be adapted. Furthermore, the technology of videoconferencing was tested to make sure it works properly. The test interviews took on average 30 minutes and were conducted via videoconference.

3.3 Data Collection

The following chapter will show how the data was collected and which methods were used for its collection. It will start with the primary qualitative data collection and then will move on to the secondary data collection part.

3.3.1 Primary qualitative research:

Five experts from different companies working with digital workplaces in distinct stages were interviewed following a semi structured question list. This list was used to have four different categories of topics to discuss, which are relevant to answer this research. All the interviews were recorded by note taking and got transcribed in the appendix.

Since the decision was made to use expert interviews as the primary research component to answer both research questions. A qualitative research method dealing with the analysis of communication (expert interviews) was the best choice. Hence, the method of qualitative content analysis by Phillip Mayring was selected (Mayring, *Qualitative Inhaltsanalyse*, 2000). As it is one of the most proven and cited methods in qualitative research analysis to date (Mayring, 2000). The method starts with selecting the research material, which will be used to answer the research questions. In this context, expert interviews will be the research material that will be used. In the next step, the form of the content analysis was selected, which in this case, was a semi structured analysis of the material. The goal of this form of analysis is to investigate the material under previously specified categories and to filter out specific aspects of the material. To conduct this form of analysis a previously defined guideline must have been used. In this case the previously defined guideline is the set of Interview questions and the main topics which were discussed in the interviews (cf. Appendix Interview Guideline). Finally, the last is the interpretation of the results, wherefore it is important that all results are valid and can be reproduced. This was achieved by following the exact procedure of the qualitative content analysis which can be seen in the following Figure (cf. Figure 2).

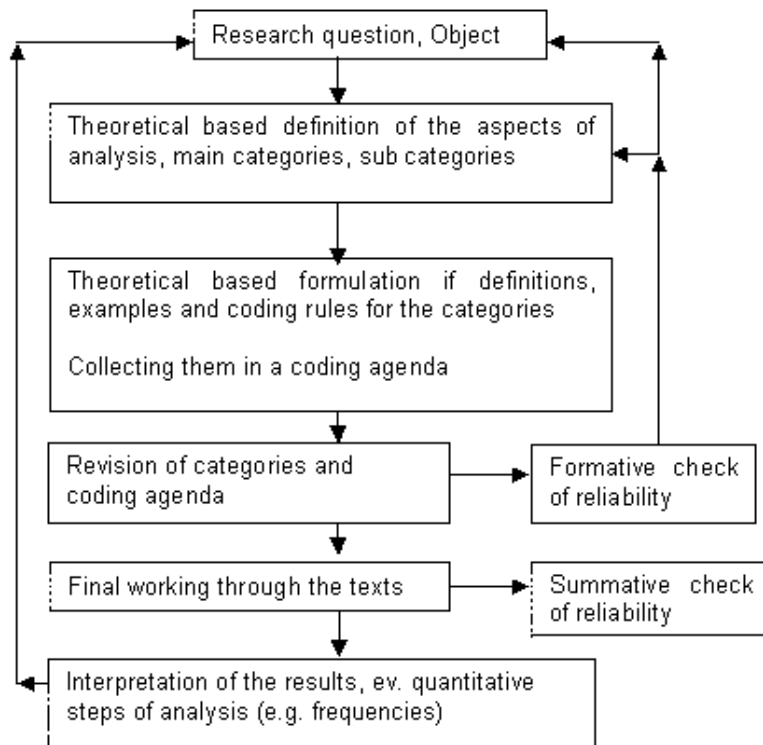


Figure 2 Process Model of inductive category formation
 Note: Adapted from (Mayring, Qualitative Content Analysis, 2000).

3.3.2 Secondary Research

Secondary research was collected from various information sources like consulting reports to scientific journals from renowned publishers. The findings in the secondary research were used to scientifically affirm or question the findings of the primary research.

The research was selected regarding topics related to the research of the transformation from a traditional workplace to a digital workplace. This includes related research about office culture, leadership, digital technology, and digital transformation in general.

3.4 Introduction of the interview partner

The selection of the interview partners was of high importance as the obtained data from these interviews represents the key data that was used for the following analysis.

For this a selection of experts that work closely with digital technology in their day-to-day work life as well as cover different important industries in the German market was contrived.

The experts are:

<i>Mr. S</i>	<i>Consultant of the Big Four</i>
<i>Mr. N</i>	<i>Digital artist management Executive</i>
<i>Mr. K</i>	<i>Marketing Executive</i>
<i>Mr. C</i>	<i>Medium-Sized Business Executive</i>
<i>Mr. B</i>	<i>Telecommunication Executive</i>

Mr. S started working at a global consulting company during the covid pandemic and was introduced to a completely digital workplace. He had to start working from home and connected with all of his new co-workers digitally. Mr. N is an executive Manager at a digital artist management one of Germanys most successful Influencer management Startups. The firm is a fully digital company that was founded 4 years ago in Cologne, Germany and opened a second office in the city of Hamburg 3 years ago where it is headquartered today. Mr. N played a key role in the decision of which technology the firm would use to overcome the covid-19 pandemic. Moreover, Mr. K is the CEO of a marketing agency which is an agency for artists in the digital media. They are marketers for artists and help them grow bigger in social media and mainstream media like TV. As the CEO Mr. K decided which technology the company would use as well as how their workplace was planned. Mr. C, the head of the management o,f a medium sized business is the key decision maker when it comes to the decision on which digital technology will be used in the company. The company is a digital signage solution provider. That means they provide strategy as well as hardware for customers digital marketing campaigns at the point of sale. In addition, the firm is a subsidiary of bigger corporation that is a point-of-sale advertisement company. All the interviews were conducted by telephone or videoconference. On average all interviews each lasted thirty minutes and fulfilled their purpose of gaining a detailed understanding of the interviewee and his views.

4 Analysis

In the following, an analysis of the expert interview results will be presented. This analysis will follow the established categories from the primary research data by the method of the qualitative content analysis by Mayring. The established three categories are Digital Drivers, Digital Enablers, and Productivity. Most interestingly the interviews have confirmed that the

category of Digital Drivers includes mostly company culture aspects, and the category of Digital enablers is focused on the technology used in the transformation from a normal workplace to a digital workplace. The Interviewees names will be abbreviated for simplicity.

4.1 Digital Drivers

The first category is dealing with the drivers behind the digitalization of German company offices. After clarifying in the interview what a digital driver could mean. The first question asked the interviewees about their key drivers behind their company's successful digitalization in the office to create a digital workplace for their employees (cf. interview guideline):

Mr. C answered the question of which drivers were behind his company's choice of digitalizing by stating that his employees demand and want to work with the newest technology to enable flexible working conditions and locations where work can be done. Which the firm's digital workplace environment now offered their employees to do (cf. Appendix MR. C).

He explains that the work culture in Germany changed a lot over the last 5 years as other firms offered more flexible working conditions for their employees which quickly became the new standard that companies had to offer to acquire top talent on the job market (cf. Appendix Mr. C). This proves that the change in culture and the wish for flexible working conditions is a key driver behind the digitalization of working environments (cf. 3.1 Digital Culture). Additionally, another key driver to the first three interviewees agreed on was the global market and with that the global competition that is increasing every year and increases the difficulty to keep profit margins. They each explained that through the use of digital technology their employees and themselves could connect and reach their customers and coworkers more efficiently (cf. Appendix Mr. C). All interviewees agreed to that and said that without cloud technology their digital workplaces would not have worked (cf. Appendix Interviewee's). Mr. S from the consultancy agreed on the point that globalization and competition from other countries played a large role in his company to have the requirement of the newest digital technology. Especially for a global company like his firm, this importance was a key driver to having state of the art digital workplaces that enable collaboration of their employees from other locations or different countries (cf. Appendix Mr. S). On the other hand, the creative industry where Mr. N and Mr. K are situated which is dealing with Influencer management and marketing was already highly digitalized and used

the newest software and technology even before the pandemic started. Even though, they also followed the flexible working culture that their employees demanded from them. Mainly providing employees with a digital workplace that made it easy for them to work at the same standard in their offices or remotely. Mr. K stemming from the creative industry must keep close relations with his customers wherefore he also needed to have the most flexible working conditions to support him and his team. This flexibility was used for the fastest communication and to full fill last minute jobs even when working remotely (cf. Appendix Mr. K). Both Mr. N and Mr. K stated that the increase in the competition was their biggest driver next to the flexible working conditions for their employees to have the state of the art technology for their digital workplaces. Those statements confirm that globalization and the already stated consequences were another key driver behind digitalization (cf. 3.1 Digital Culture). The other key driver that all interviewees agreed upon was the covid-19 pandemic and the resulting abrupt transformation of their daily work or even work culture (cf. 11.1 Interview Transcripts). Mr. S said that his work in the consulting industry always had two separate conditions to it before the pandemic. First, the work was done in a fixed location namely the company offices. Secondly, he would spend a considerable amount of his workweek traveling to customers. Mr. S explained in detail that before the possibility to work completely virtual and remotely by using a digital workplace. Consultants were expected to be in their office in the company if they were not with customers. Traveling to customers was the other standard in the consulting industry since it was expected to work face to face with the customers and to show them in person how to make improvements. This was the accepted work culture standard that Mr. S was used to. Similarly, Mr. B from the German telecommunications firm explained that his day-to-day work was also largely following these two aspects of being at the office and traveling to the customers. Both said that this style of work enabled them to connect with many co-workers as well as customers on a social and deeper level than they do now. Mainly influenced by the pandemic of covid-19 their work culture changed significantly, as it arose the need to protect the employees from the virus, which introduced work from home to everybody in Germany. This change was not only a drastic change for all employees in the country but also had big influences on the established work culture which had to change to support this transition (cf. 3.1 Digital Culture). The change was that both work conditions of Mr. S and Mr. B completely transitioned to a virtual work environment. This had the positive aspects that less time got wasted on the way to work and the convenience of staying at home protected from the virus. Even though, both agreed that the networking and deeper connection to people were missing and that for young people

like Mr. S, this could have a big career impact. Mr. B agreed with that especially as he said that in the early career networking plays a key role to set up for future career moves as it did for him (cf. Appendix Mr. B). Mr. S also added that this switch to work at home was considered a privilege for employees before the pandemic and that with this change in work culture the emotional benefit of getting this privilege was lost (cf. Appendix Mr. S). These influences from the covid-19 pandemic resulted therefore in an increase in digitalization by companies. This is also shown in the secondary research and with this can be stated as a proven driver behind the office transformation (cf. 3.1 Digital Culture).

The fourth interviewee Mr. C on the other hand said that there are significant benefits to a digital workplace as his medium-sized company has to full fill complex orders that require many bureaucratic steps from receiving the order to the production and the logistics of delivery. Most benefits come from the ease of tracking each step digitally on a hybrid customer relations management (CRM) tool and enterprise resource planning (ERP) tool. As well as changing data digitally once instead of doing it manually for every step of the order, which increased the work efficiency a lot by decreasing the complexity of work (cf. Appendix MR. C). Furthermore, the change in work culture to be more focused on customers drove Deloitte to invest more in their digital workplaces made this focus easier and more efficient and less complex (cf. Appendix Mr. S).

Additionally, the secondary research showed that companies communicate and market to their customers by using an Omnichannel strategy (cf. 3. Literature Review). This strategy increased the complexity of these tasks by a lot and was only possible by using customer analytics software.

This shows that the complexity of work can be another driver behind the digitalization of a workplace.

4.2 Digital Enablers

In order to answer the second research questions as well as to draw a comparison, the interviewees were asked what the key enablers behind their company's digital workplaces were (cf. Appendix Interview Guideline).

The answers to this question showed significant differences within the various industries that were assessed in the interviews. For example, the interviewee from the consulting industry, Mr. S, used Microsoft office and the company intranet for administrative work and Microsoft

Teams as the key SaaS technology for collaborative work with co-workers as well as the video call function of Microsoft teams as a communication tool with customers. He emphasized that the cloud storage capabilities and the stable video conferencing of Microsoft teams were the most important enablers for his digital work. Other than that, he used mobile technology like a secured laptop and a company smartphone to work while traveling. The important enablers for him using these mobile work solutions are the compatibility with the office technologies that are being used at the company. This means having access to the same applications on the phone and laptop as in the office. Which enabled an unhindered mobile and flexible work environment for Mr. S.

Additionally, Mr. B from the telecommunication company said that, especially the previous work culture and focus on more flexibility through the usage of digital technology eased the transition for his company to a virtual and flexible work environment. Mr. S agreed on that point as he said that the switch to virtual work due to the covid-19 pandemic was especially quick for his firm as the infrastructure was established before and that the employees were used to having a mobile work culture. The infrastructure in question is the usage of digital technology like smartphones and laptops with access to company software supported by a cloud system from Amazon web services (AWS). Similar digital technology was used by Mr. C from the medium-sized business. His work also used Microsoft teams instead of other SaaS technology with similar mobile technology set up as Mr. S and Mr. B. The key difference was that Mr. C's company uses a tailor-made CRM and ERP tool that was developed by a German software developer in partnership with the company. This was necessary for them as their competitive advantage lies in being able to finish complex and short notice jobs. Wherefore, mainstream CRM and ERP solutions were not flexible enough for them or too costly in the long run.

Mr. C explicitly said that this software and hardware solution helped his company to overcome the first difficulties of having an industrial company during the covid-19 pandemic. It enabled the company to have faster more flexible and efficient communication with more transparency internally and externally. Furthermore, it being digital it resulted in better control and faster decision making through the usage of digital signage solutions. This enabled the company to overcome the first two years of the pandemic successfully and making a profit while doing so. The secondary research supports this increase in flexible work environments in businesses through the usage of digital technology like cloud services and SaaS solutions (cf. 3.2 Technology). On the other hand, the creative industry where Mr. N and Mr. B are situated was already highly digitalized and used the newest software and

technology even before the pandemic started as they were following the digital culture that their employees demanded from them. The technology Mr. N company used every day was all big social media's like Facebook, Instagram, Tiktok and YouTube. He used mobile technology like the other interviewee's for communication with customers and co-workers. The difference lies in the applications and software that he used, which are WhatsApp and Slack. As well as a smaller CRM tool called TeamLeader that can be connected to the google workspaces that his company uses for video conferencing as well as collaborative work between employees (cf. Appendix Mr. N). He said that the company made the switch to Google workspaces during the pandemic as it was less costly than their previous SaaS system (cf. Appendix Mr. N). Additionally, it offers all their needed interfaces or add-ons for other software that they need to work. For example, Teamleader and Streak for Google mail which was used for project management. Regarding the complex problem of using an omnichannel strategy, the companies of Mr. K and Mr. N used Omnisend and Google Analytics software to overcome this. This software enabled them to communicate with their customer more efficiently (cf. Appendix Mr. C & Mr. K).

All experts that were interviewed were in consensus that cloud-based storage like AWS and SaaS technology like Microsoft teams and Google workspaces were the most important to them. That enabled the companies to successfully transform their workplaces into a digital workplace which had a clear increase in efficiency and flexibility of work as an outcome. This was proven by the two interviewees Mr. K and Mr. C that stated a decrease in costs of 15% for Mr. K and 6% for MR. C's company in the year 2020 compared to 2019. The decrease in costs was stated from both as the saved energy and heating expenditures of their offices which weren't needed as employees worked remotely. However, for Mr. C the decrease in costs was lower as he still had his production of goods running and therefor more energy and heating expenditures compared to Mr. K (cf. Appendix Mr. C & Mr. K).

4.3 Productivity

Regarding the category of productivity, the experts were asked the question of how their productivity changed through the use of digital technology in their workplace (cf. Appendix Interview Guideline) The experts that were of an older generation and in the age group of 40-60 years old, answered that their productivity increased a lot since it decreased redundant work. That they had to do, like redoing a document completely instead of opening it digitally

and editing it (cf. Appendix Mr. C and Mr. B). This was also proven by the previous research as digitalization not only increased efficiency but also the productivity of employees by simplifying tasks (cf. 3.1 Digital Culture).

The other interviewees were all from a younger generation of 20-35 years old, which resulted in them not having experienced the age of work without today's standard tools like Microsoft's Excel and the Office suite. Which Mr. C and Mr. B accredited for their increase in productivity. The next question of this category was if a completely digital workplace or virtual work environment had an impact on their productivity (cf. Appendix Interview Guideline).

Referring to this question, Mr. N and Mr. K, who both work in the creative industry, said that through the virtual work environment much of their daily inspirations were missing. Mr. K emphasized that oftentimes just driving to work and seeing either new advertisements or new things on the street and how people behaved gave him inspiration for new ideas to try with his company (cf. Appendix Mr. K). Additionally, he mentioned that he had to spend considerably more time communicating with employees digitally to understand their emotions and inspirations compared to face-to-face communication. However, with this method, he managed to keep his daily productivity stable (cf. Appendix Mr. K). Mr. N made the point that especially in a company that is focused on creativity it is important to have physical contact with coworkers (cf. Appendix Mr. N). Since most of the key creative ideas they had, came up when they talked while on a coffee break or on other occasions in which they weren't directly working on a task (cf. Appendix Mr. N). Additionally, he made the point that his work life balance was impacted by the work change to work remotely or from home during the covid-19 pandemic. As he had the problem of concentrating on work as he didn't have a fixed location that he associated with work (cf. Appendix Mr. N). On the other hand, Mr. S did not have the problem of having to have a fixed location but rather enjoyed the flexibility that applications like Microsoft Teams gave him to work remotely. He said his productivity stayed the same when comparing working remotely and working in a fixed workplace (cf. Appendix Mr. S). In contrast to that, the older generation namely Mr. B and Mr. C said that especially through the virtual work environment and no face-to-face communication or traveling times, they worked more efficiently but their productivity did not change as expected. Mr. B made the point that his productivity per day stayed at the same number of hours. But instead of being spread apart over the day, he now had video meetings and digital communications all concentrated in a short time. He noticed that his productive hours were used up quicker, and he had less energy at the end of the day compared to before

(cf. Appendix Mr. B). Mr. C came to the same conclusion but made the point that he has less consistency in working productively from a remote location like his home. He argued that since his home is not only a workplace but also a space for his family to live, he often gets distracted there and so his productivity suffers. He thinks that with the inclusion of virtual office technology namely, SaaS and cloud-based services, in the physical office space as a digital workplace he could increase his productiveness consistently (cf. Appendix Mr. C). Lastly, Mr. S answered to that question that his productivity increased since he had more flexibility to choose when to work in his virtual work environment at home, than in the office where he felt the need to work just to keep up appearances without doing productive work. (cf. Appendix Mr. S) Finally, it can be said that work life balance and productivity are higher for employees if they have the freedom of choice to either work digitally in a fixed location or remotely with complete independency (cf. Appendix Interview Transcripts)

5 Conclusion

This dissertation aspired to present the key aspects behind a successful digital transformation to a digital work environment, for companies striving for or currently undergoing a digital transformation. These aspects are the drivers and enablers that were derived from answering the research questions.

The results of the analysis are that the average employee of the companies that were interviewed preferred to have flexible working conditions. This developed the drive for companies to make this possible. Supported by an increasingly digital culture in companies, they addressed this problem by creating digital work environments. Those environments enabled through technologies like Microsoft Teams or Google Workspaces as key SaaS technologies, created a virtual workspace for the employees. With which employees now had the choice of working in the office or working mobile with the same setup that they were used to. The increase in competition by the globalization of businesses and the increased trade was another driver for companies to digitalize their employees to stay competitive. Again, through the use of SaaS technology and especially shared remote storage capabilities provided by cloud technology like AWS this was made possible for businesses. The interviewee's stated that digital communication software like video conferencing became increasingly important

during the covid-19 pandemic. Which in it itself was another driver behind the further digitalization of companies. Since they had to find new ways of communicating and providing work environments to their employees without risking their safety. This meant for most during the start of the pandemic that employees worked from home. Remote working from home on the other hand could already be addressed by the trend of flexible working conditions. Since most companies had started to set up digital workplaces which could be used remotely for that. Moreover, the covid-19 pandemic increased the development of digital workplaces to a new level. This increased level of employees working in a digital workplace led companies to reconsider some of their technology expenditures, like SaaS systems. As some companies suddenly had a very steep increase in costs, that resulted in a switch to cheaper options like Google Workspaces.

Most interestingly was the result that complexity can be a driver behind digitalization and in the case of one interviewee a tailor-made CRM + ERP hybrid system has to be used to enable the company to run digitally in the most efficient way. Furthermore, complexity also played a role in the culture change that companies try to be increasingly customer focused and often use an omnichannel communication strategy with their customers. This new complexity of communicating and marketing to customers also through new channels like social media increased the need for a digital solution like Omnisend and Google Analytics. Which enabled their companies to efficiently communicate with their customers.

Finally, there is evidence for a definitive increase in productivity through the usage of enabling technology like Microsoft Teams, customer analytics software, Cloud systems and all the other named technologies in this paper. However, there were also decreases in productivity and especially in the creative industry. Since they mostly rely on new inspirations for their work, which they get from their daily life in and outside the office. This was missing while working only in a virtual environment and decreased productivity for most. On the other hand, Mr. K gave the example of increasing the communication with every team member personally he could make up for the missing inspiration and therefore keep his daily level of productivity. This had the cost of more work hours he had to put in to get the same results compared to face to face communication. All in all, it can be summarized that the best solution for an increase in productivity of employees is to give them the freedom of choice. This means providing the means that they can choose to work either completely virtual or in the office with their co-workers.

6 Limitations

Nevertheless, the research is not without its limitations. Firstly, the interviews did only take place in Germany and therefore the geographical restriction is a noticeable limitation. However, the validity is guaranteed by a focus on key industries in Germany that are relevant to the topic of this thesis. As well as the consistency between the questionnaires which is why the research is replicable and reliable in Germany.

Secondly, the number of interviews is not high which was tried to be compensated by only interviewing the key figures of companies that had management power over the digitalization of their respective companies. Furthermore, the selected companies represent key major industries of the German market. Lastly, the usage of only qualitative and no quantitative data can be another limitation. Since additional statistical data would provide an increase in the results accuracy. Even though this was considered and decided to not be very helpful. As the intricacies of the decisions taken by executive managers behind their company's digital transformation were believed to be better represented by qualitative data.

Further research should be undertaken to gain more accurate information and deeper insights in this interesting transformation of the workplace. Especially interesting would be new research showing how the digitalization of workplaces was affected by the pandemic after the it is officially declared to be over around the world.

Despite its limitations, it is hoped that this thesis will inspire future studies on this most interesting topic.

7 Appendix

7.1 Interview Guideline

Interview Questions:

Hello,

Thank you for making yourself available for this interview on the digitization of your company.

I am conducting this interview for my master thesis on digitalization.

My topic is the Digital Workplace, which means it is about the evolution from a traditional office environment to a working environment mainly influenced by digital technologies.

Please introduce yourself briefly.

Employer/Company Questions:

What industry is your company in?

What exactly does your company do?

Could you tell me approximately how much revenue on average your company has made over the last years?

Job Questions:

What is your job at this company?

Technology:

What digital technologies do you deal with on a daily basis?

How has your office changed within the last 4 years?

A: Something has changed.

B: Company founded in the digital age -> has anything changed because of corona?

Enabler:

Please describe which aspects have facilitated the digital transformation of your company. This can be technologies as well as management measures.

How did the different enablers support you in the transformation?

Which one has supported you the most?

Which one has challenged them the most?

Driver:

Digital drivers in relation to a digital workplace can be motivations or beliefs why the transformation to a digital workplace occurred.

This includes economic factors such as productivity increases or improved communication possibilities with customers. Social factors such as enabling work-life balance can also be one of the drivers. Basically, I want to know what influenced your company the most to set up a digital workplace.

Please tell me your top 3-5 digital drivers that influenced your digital transformation.

Covid-19 - Introduction Digital Workplace:

Would you say you were well prepared for the changes brought about by the pandemic thanks to your digital workplace?

If so, why?

What technologies, management actions, or digital culture helped them?

If no:

What technologies, management actions, or digital culture would have helped them?

Digital culture:

How would you describe your digital culture in 2-3 sentences?

Please name the most important components of your digital culture in your opinion.

Efficiency:

Has your work efficiency changed as a result of digital technologies and the digital workplace?

Productivity:

Has their productivity changed as a result of their digitalization?

If so, how exactly and how did it happen?

Do you have percentages or exact figures of cost savings or increased revenue due to your digitization that you can present to me?

Leadership questions:

Have you had to change your leadership or leadership skills as a result of the digital workspace?

What has changed?

How did these changes come about?

7.2 Interview transcripts

7.2.1 Mr. S

Consultant at one of the big four / 2021 1.55b, 2020 1.69b revenue

Daily Technologies: Laptop, outlook, Microsoft office, communication software TEAM and Zoom, Teams cloud storage, company mobile phone.

Intranet administrative management is possible on browsers.

Important to have the same apps on mobile phone and on PC for flexible work.

What changed:

Before the job had an office culture and it was expected to work at a fixed location so people could control how work is being done. Since pandemic everything became digital and more flexible to finish work in own time management.

Before it was a privilege to work at home for a day for some people and now it became the new standard especially in consulting. He thinks it will change after the pandemic slightly again but that a hybrid model will be established.

Technology that changed: The internet got much better Mobile and Lan (made Flexible working much easier).

Did the use of communication software like zoom and teams change only because of the pandemic?

No there were already in use and discussions about the right to a more flexible job approach in Germany for family and work life balance. But the pandemic accelerated it.

He also found out through his job that the public services became much more digital due to the pandemic in Germany since they were one of the slowest in digitalizing their services before.

There are differences of digital technology use in different industries and with that some industries were better prepared for the need of a digital workplace because of the pandemic in Germany than other industries.

One example the Consulting Industry.

Enabler:

1st. The Culture Change:

More young people which have an affinity for digitalization in leadership positions now than before. And less leaders that prefer an office culture where people have to be controlled

Change from hierarchical top down to Flat hierarchy or participative leadership!

There is more Customer focus which is easier with digital technology and in Germany employee focus to enable them a more flexible work condition.

2nd New communication software like zoom and MS Teams enabled to work mobile and outside the office.

3rd New Apps like cloud enabled Microsoft teams that enable collaborative work online. Good teamwork in a digital workplace no matter where the members are.

Driver:

Globalization and the need for addressing the global market

And the increased competition from abroad which is in different time zones. The need to work across borders with co-workers especially in a global company. That the employee is at all times ready to help customers or co-workers everywhere around the world

Pandemic strengthened the need for a digital workplace not location bound or bound to an office space that is risky for the employees to work in.

The culture change to an increase in flexibility to finish work at different times and locations.

Past now and Future of office work:

Before it was controlling by superiors and working in offices. Also that the consultant was 4 days of the week with the customer and only on Friday in the office for administrative work.

Now its more customer orientated so in regard to consulting. The company gives the customer the choice if the consultant has to visit personally or they can save the travel expenses and do it via a communication app like Microsoft Teams or Zoom.

In the future he thinks there will be a hybrid model that digital mobile work will be an integral part of the job but also teambuilding days at the office where all team members come together.

Limitations for a digital workplace:

On average he said that most elderly which are mostly in upper management positions or partners like to keep the office culture and the controlling part of it.

The younger partners on average prefer the participative leadership where all team members take on some responsibility.

He says that digital technology definite increased productiveness in the job thru flexible and mobile work.

Especially through different cloud-based software's and automation from Ai and robotics.

He says there are some co-workers that sometimes use the home office time to work less and have more free time. But he sees it as fulfilling the need of work-life balance and that the co-workers after that oftentimes are more productive again so that there still is an increase of productivity in total.

He says: Work where people often feel less fulfilled with their work are more likely to have cases of people using the home office to work less in total. There can be some relations to the wage since most minimum wage jobs tend to have less fulfilled workforce than higher wage jobs. -> not

7.2.2 Mr. N

Executive Manager at a Digital Artist Management firm.

Social media artist management

Founded in Cologne 3.5 years ago and now has it's headquarter in Hamburg.

And an office in Cologne.

Revenue 6 million euro

Technology he is around every day:

All big Social media's like Facebook, Instagram, Tiktok and Youtube

Mobile technology for communication and on the road work

Whatsapp and Slack communication.

TeamLeader Customer relationship management

Email Google mail and Streak add on gmail for projectmanagement

Omnichannel customer analytics software: Omnisend and Google analytics

Corona changed a lot for an already digital company in how they communicate with each other.

Google meets for video communication and team meetings.

Less travel to customers and more digital communication via google meets or Microsoft teams.

Completely reliant on Google Workspace as their Paas.

Enabler:

Google Workspace (also add-on like Streak)

Team Leader

Mobile Technology

Difficulties: Switch of different software's in covid times

Driver:

Culture change, so digital working became the standard.

Productivity increase through automation possibilities.

Limitations to the Culture change and digitalization of his company:

He noticed that especially in a company that is focused on creativity it is important to have physical contact with the coworkers as most of the key creative ideas they had, came up when they talked while on a coffee break or on other occasions in which they weren't working.

Work-life balance better for creatives like Hendrik if work and home is separated.

He asked his co-workers and 80% preferred at least 50% of the week to come to the office to work together with their coworkers.

They have an open office structure with no walls in between desks.

Besides some privacy booths where phone calls can be had, or other things can be done without disturbing others.

Leadership stayed the same during covid and more digitalization as they always had a skill based open leadership structure.

7.2.3 Mr. K

Interview:

Marketing agency with project management.

In corona founded company

Culture:

His office is an open workplace with only one singular glass box where he sits.

He has his separate space since he mostly has calls during his work hours.

They strive to have a completely digital workforce which is mobile and flexible as there are many last minute jobs that come up during a campaign.

Digital enabler:

Microsoft Office cloud-based service

Teams und excel

Mobile technology

Digitale Driver:

Increase of productivity

Decrease costs

And efficiency

Covid pandemic

Technology he is around every day:

All big Social medias like Facebook, Instagram, Tiktok and Youtube

Microsoft office

Smartphone

Research tools for influencers

Infludata, Omnisend and Google analytics.

He agrees that for creative industries the interpersonal relationship between co-workers is essential.

Since creativity comes from outside inspirations/influences like smth that u see on the way to work or even going out to eat with customers/colleages

His leadership style changed in the way that he took more time for personal meetings before and after team meetings to get to know his team members personal thoughts better. This was done to understand their inspirations and why those could be interesting for the firm.

This was more time intensive for him than before where he could just look them in the eye and know how they feel. But resulted in him keeping the same daily productivity that he had before with face to face communication.

He added that considering the money he saved from not having to pay the bills for heating and the high energy consumption of his office and studio which amounted to 15%

7.2.4 Mr. C

Medium sized business. Subsidiary of industrial corporation in point of sale.

Company sector: Advertising and POS positioning.

Head of Management

Revenue 55 million.

Most importantly for the company to have state of the art technology is to stay competitive in the international market and strive to be ahead of competition.

Different time zones (always reachable)

The company has an extremely innovative and productivity focused company culture.

State of the art Software and hardware to enable the best digital workplace for our employees

All important employees have a company mobile phone

Access to remote computing

High security standards thru best hardware and software.

Cloud services that enable data processing and virtual meetings.

Biggest obstacle:

Trying to always have state of the art software and hardware brings problems when switching to another provider. Adjustment time and costs especially when it is tailor made.

(Customizing, introduction, schooling, interfaces to other software or hardware) Standard CRM and ERP software not applicable and customizable enough for flexible and complex company → need for tailor made software.

Digital Drivers:

International market (reach and competition)

employees wish for flexible working conditions and locations

very Strong digital culture, they want to work with the newest hardware and IT infrastructure.

Which drove the digitalization of the company further along.

Culture:

Employees demand more flexible work conditions.

easier to full fill those with a digital work environment than without

Strong digital culture imbedded into the company by its employees and the CEO.

All Managers have mobile tech to work flexible and remote if needed.

All software is accessible through intranet and with that it is possible to work with co-workers no matter the location. Management methods that helped with covid pandemic:

Performance orientated employees

The existing innovative, open and flexible work culture

State of the art software and Hardware.

Time saving through the use of new digital technology and more flexible meetings. Spatial requirements are met for employees on site. Problems that some employees didn't have the spatial requirements at home to work Problems through remote work is that the work contracts have to be adjusted to include this new workplace and how work has to be done accordingly to company regulations in that workplace. Since the controlling in private property is not legal in Germany.

Technology:

Mobile tech
Remote computing with intranet access
Cloud system AWS
Microsoft Teams platform
Tailor made CRM+ERP software

Productivity:

Productivity increased through the use of today's standard technology like emails and especially Microsoft office applications like excel and PowerPoint. Especially in remote working condition, some employees use the new remote working trend to work less and are not as productive as they are in the office. Other employees are the opposite and are more productive by using the digital technologies provided by them even when working remotely. He thinks that through the inclusion of the virtual office technology namely, SaaS and cloud-based services, in the physical office space as a digital workplace he could increase his productiveness consistently

Efficiency:

The covid-19 pandemic was the driver behind an increased digitalization of the company and with the help of technology like Microsoft Teams and their own CRM + ERP the usage efficiency of those systems increased. As now all work was reliant on them much more than before and helped the company to further improve their digital workplace. In general, the efficiency of work increased with the digitalization but also increased the stress levels of employees as the tasks are more focused and detailed than before. The company saved costs of energy and heating on the employees offices, when those were not needed during the pandemic. This was around 6 % for the company in 2020. and still 4% in 2021 with half of the employees working remotely.

Leadership:

Faster and more efficient communication through digital communication. All data is digitalized and accessible on cloud technology. More transparency through digital communication and better controlling as everything is recorded or written down.

7.2.5 Mr. B

German Telecommunication Company

Head of Partner Sales /Business Customer

Technology he is around every day: Mobile phone and laptop, as well as his cisco video conference infrastructure

The digital transformation enablers:

Digital transformation Drivers:

The Purchasing department
the image that the company wants to portray
(showing competence by having the newest technology)

The customers and competition.

Employees demand flexible work conditions

Digital Culture:

They have a strong digital culture and want to be modern and the best
Fear of being left behind by competition
people come to work there for their digital culture so they have to provide that.

Efficiency/Productivity:

Efficiency stayed the same for office work

Productivity stayed the same but it became more stressful. Traveling was decreased significantly by the use of video conferencing. Connected with that the stress increased as the time between meetings decreased and there less time to relax during the day. He emphasizes that there is only a limited amount of time you can be perfectly focused and with that also a limited number of meetings that can be done productively a day.

Work-Life balance: While working a significant decrease of time to relax, more time at home and with that more time to relax at home. He calls it a zero equation as there is only a shift of time but stressful work stays the same. No gains!

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8.1 Bibliography of Figures

FIGURE 1 THE FOUR LEVELS OF DIGITAL MATURITY NOTE: ADAPTED FROM (WESTERMAN & MCAFEE, 2012) 13

FIGURE 2 PROCESS MODEL OF INDUCTIVE CATEGORY FORMATION NOTE: ADAPTED FROM (MAYRING, QUALITATIVE CONTENT ANALYSIS, 2000)..... 18