Digitization and auditors

A study on the impact of digitization on auditors work during covid-19

Frida Cavallin, Karl Sjölander

Department of Business Administration
International Business Program
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Supervisor: Jörgen Hellström
Abstract

Since the beginning of 2020 covid-19 has been declared as a public health crisis. What followed when restrictions were introduced in the world, were that many people were forced to work from home. Our study will investigate the work of auditors at the larger audit firms in Sweden. The purpose of this study is to find out how auditors work has been affected by the industry's increasing digitization during covid-19. A qualitative method has been used to answer the following research questions;

*In what way has digitization changed the way auditors work during covid-19?*

*Could some of these changes remain after covid-19 has ended?*

Five auditors have been interviewed from KPMG, PwC, and Grant Thornton. By using the study's collection of theories the responses from the interviews were analyzed. The chapter with empirical findings is where the data collection is gathered. Here it shows that covid-19 has affected the auditors work in both a positive and negative manner. The main positive side of covid-19 is that work became even more flexible than before. The negative side is that the social interactions were missing. Digital tools and equipment have overall been of great value during covid-19, though perhaps not to a larger extent than before covid-19. Further, now that the restrictions had been lifted, our respondents saw a future of working from home more continuously and being able to dictate their own working hours with the help of digital tools and equipment.

**Keywords:** audit, digitization, covid-19, technological progress, work process, and digital tools
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Frida Cavallin

Karl Sjölander
# Table of Content

1.1 BACKGROUND: THE TECHNICAL PROGRESS IN ACCOUNTING AND AUDIT INDUSTRIES ........................................ 1
1.2 PROBLEM DISCUSSION ........................................................................................................................................ 2
1.3 RESEARCH GAP .................................................................................................................................................. 4
1.4 PURPOSE ............................................................................................................................................................ 5
1.5 RESEARCH QUESTIONS ..................................................................................................................................... 5
1.6 LIMITATIONS ...................................................................................................................................................... 5
1.7 CONTRIBUTION .................................................................................................................................................. 5
1.8 DISPOSITION ....................................................................................................................................................... 6

2. METHODOLOGY ..................................................................................................................................................... 7
  2.1 PHILOSOPHICAL ASSUMPTIONS ........................................................................................................................ 7
  2.1.1 Ontological assumptions .................................................................................................................................. 7
  2.1.3 Epistemological assumptions .......................................................................................................................... 8
  2.2 QUALITATIVE CHOICE ........................................................................................................................................ 9
  2.3 RESEARCH APPROACH ...................................................................................................................................... 9
  2.4 LITERATURE SEARCH ..................................................................................................................................... 10
  2.5 SOURCE CRITICISM .......................................................................................................................................... 10
  2.6 ETHICS ................................................................................................................................................................. 11

3. THEORETICAL FRAMEWORK ............................................................................................................................... 12
  3.1 INSTITUTIONAL THEORY .................................................................................................................................. 12
  3.2 THE AUDIT PROCESS ........................................................................................................................................ 13
  3.2.1 The planning phase ....................................................................................................................................... 13
  3.2.2 The review phase ......................................................................................................................................... 14
  3.2.3 The reporting phase ................................................................................................................................... 14
  3.2.4 The follow-up .............................................................................................................................................. 14
  3.3 THE AUDIT PROCESS AND DIGITIZATION ...................................................................................................... 15
  3.4 TECHNOLOGY ACCEPTANCE MODEL (TAM) ............................................................................................... 16

4. METHOD & DATA ..................................................................................................................................................... 18
  4.1 RESEARCH DESIGN ........................................................................................................................................... 18
  4.2 SAMPLING METHOD .......................................................................................................................................... 18
  4.3 DATA COLLECTION METHOD .......................................................................................................................... 19
  4.3.1 Interviewing method ................................................................................................................................... 20
  4.3.2 Interview guide ............................................................................................................................................ 21
  4.3.3 Performing the interview .............................................................................................................................. 21
  4.4 RESPONDENTS .................................................................................................................................................. 22
  4.5 ACCESSIBILITY ................................................................................................................................................. 23
  4.6 DATA ANALYSIS ............................................................................................................................................... 23

5. EMPIRICAL FINDINGS .............................................................................................................................................. 25
  5.1 COVID-19 ......................................................................................................................................................... 25
  5.2 DIGITIZATION AND TECHNOLOGY ACCEPTANCE MODEL (TAM) ..................................................................... 28
  5.3 DIGITIZATION FOLLOWING RESTRICTIONS .................................................................................................. 31

6. ANALYSIS ................................................................................................................................................................ 34
  6.1 COVID-19 AND INSTITUTIONAL PRESSURE ...................................................................................................... 34
  6.2 COVID-19 AND THE AUDIT PROCESSES ......................................................................................................... 34
  6.2.2 The planning phase ..................................................................................................................................... 35
  6.2.3 The review phase ..................................................................................................................................... 35
  6.2.4 The reporting phase and follow up ............................................................................................................. 36
  6.3 DIGITIZATION DURING COVID-19 .................................................................................................................. 36
  6.4 TECHNOLOGY ACCEPTANCE MODEL (TAM) ............................................................................................... 37
  6.5 FUTURE IMPACTS .............................................................................................................................................. 38

7. CONCLUSIONS .......................................................................................................................................................... 40
<table>
<thead>
<tr>
<th>Glossary</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI</td>
<td>Artificiell intelligens</td>
</tr>
<tr>
<td>“Big 4”</td>
<td>The four biggest audit firms; Ernst &amp; Young, Deloitte, KPMG, and PwC</td>
</tr>
<tr>
<td>FAR</td>
<td>Föreningen för Auktoriserade Revisorer</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>PwC</td>
<td>Price Waterhouse Cooper (One of the big 4 audit firms)</td>
</tr>
<tr>
<td>RPA</td>
<td>Robotic Process Automation</td>
</tr>
<tr>
<td>TAM</td>
<td>Technology Acceptance Model</td>
</tr>
<tr>
<td>VPN</td>
<td>Virtual Private Network</td>
</tr>
</tbody>
</table>
1. Introduction

Chapter one provides a background to the technical progress which is developing fast in the audit industry. Digitization in connection with covid-19 is a current topic that concerns the audit process and covid-19 will as well be presented to get an insight into the situation and its impact on the auditors' work process. The research gap, the purpose of the study and the research questions will end the introduction along with the study's limitations, contribution, and a disposition of the study.

1.1 Background: The technical progress in accounting and audit industries

We are living in a time consisting of exceptional progress concerning digital technology. According to authors Brynjolfsson and McAfee (2014), the digital techniques existing today are at a phase where future developments could lead anywhere. The effects on society regarding these digital techniques could have as much of an innovational impact as the invention of the steam engine. The authors themselves refer to this as the entering of the second machine age (Brynjolfsson & McAfee, 2014).

One job sector that was heavily affected by the technological progression is the audit and accounting industry. According to author Derek Matthews, the greatest change in how the external audit profession was conducted was due to the technological revolution through electronic computers (Matthews, 2006). It was in the late 1960s that computers became a major factor in the audit and the auditing statements; ‘Internal control in a computer-based accounting system’ and ‘The audit of computer-based accounting systems’ were implemented. The computers in the 60s and 70s however were quite large, expensive, and not that effective. In the 80s the personal computers (PCs) were introduced which had even more of an impact on the industries digitization as they were smaller, had better storage, and could calculate more effectively. By the 90s and early 00s the IT-systems used in accounting and auditing were very reliable, consistent, and effective. Using digital programs while working with the client is as well, for the most part, normalized in the working process now (Matthews, 2006).

As we can see the progress of digitizing the audit and accounting industry has been constantly moving forward since the introduction of technological developments. In more modern days PwC (n.d.) discusses that new developed technology and digital processes creates new insights while also making future audit work more flexible and less dependent on precise locations. Another thing that PwC brings up is the development and implementation of AI in the audit industry. With AI, PwC hopes to see an improvement on work regarding; risk prioritization, identifying deviations, and the understanding of a client’s operations by way of analyses. Other research also shows that there are a lot of opportunities to incorporate AI into the accounting workplace. Some examples of how the AI could be working is by scanning bank statements and identifying transactions in various fields. The AI could also be used to analyze budgets or other data and make decisions based on the results of those analyses (Petkov, 2020).

Another topic that is discussed regarding changes in the audit and accounting industry today is ”robotic process automation” or in short ”RPA”. For example, PwC (n.d.) states that RPA can improve internal audit by increasing productivity, expand the risk coverage and help addressing the ongoing compliance. Other research also states that the automation of manual processes via the help of RPA will bring greater efficiency to the
workplace as well as reducing the need for tasks that, instead, can be handled programmatically (Harrast, 2020). The definition of RPA is a technology that mimics the way humans interact with software to perform repeated tasks at a high volume. The technology does this by creating software “bots” that are able to log into applications and enter data, calculate and complete tasks, or copy data between applications or workflow (Lawton, 2021).

These are some of the current changes that the workplaces of auditing and accounting could face soon. And although a German study on digitization in the audit work field showed that major technical progress probably won’t come for another ten years (Tiberius, Hirth) external factors could always accelerate that process.

1.2 Problem Discussion

It has now been over two years since the World Health Organization characterized covid-19 as a pandemic. In 2020 it became a public health crisis which has severely affected the global economy and financial markets. Since then, a huge number of people have become unemployed and as a result, experienced a significant reduction in income. The covid-19 pandemic has caused a huge disruption for many industries as well. Some of those consist of transportation, service, and manufacturing (Pak et al., 2020).

In the spring of 2020, the economy was suffering a huge downfall around the world. Due to a result of stimulus measures, vaccination and a reduced spread of the infection, most countries had started to recover during 2021. What came as a surprise for all of us, was the omicron variant that forced several countries to reintroduce the restrictions for a second time. Since then, the economy has begun to slow down, thus many forecast makers believe that there will be relatively good growth in 2022 due to the reduced restrictions and recent recovery in the economy (Ekonomifakta, 2022).

The digitization has evolved during covid-19, whether organizations have chosen to or not (KPMG, 2020). The meaning of digitizing an operation could be defined as moving from analogue to digital data, and thus streamlining already existing processes (Ritter, Pedersen, 2020). When the restrictions were introduced, it forced organizations to compel their employees to work from home. The Public Health Agency of Sweden recommended that all organizations should implement teleworking to slow the spread of infection. If that were not an option, all employees were urged to adjust their working hours to avoid congestion at their working place (Public Health Agency of Sweden, 2020). The audit business had already started evolving due to the emergence of new technology and growing investor expectations, thus since covid-19 took over the world, the virtual world grew even quicker (Caldwell & Krishna, 2020). The audit profession involves customer contact, which were now restricted to face-to-face contact through a screen. Several changes are still evolving and the work for an auditor is not the same anymore. As Naveen Kalia, partner-in-charge of audit innovation at KPMG in Canada, stated “Without clearly documented evidence the audit is simply not an audit anymore, it is just a conversation” (KPMG, 2020).

Considering ongoing quarterly and annually reporting, the change to a virtual world needed to be established in a really short period. Clients were waiting on their reports, social contact was restricted, and auditors were in a rush to satisfy their clients. This forced the auditors to embrace their new way of working in some kind of way, whether it was a big or small effort (Accountancy Europe, 2020). Those firms with already
established security mechanisms in place, the digitized new world would not be too challenging. For example, “sufficient VPN licenses and multifactor authentication would make the transition to work-from-home more secure and easier to connect to employees, customers, suppliers, partners and other stakeholders” (Caldwell & Krishna, 2020). For smaller firms that had not started the transition to a more virtual world, the change would be more extensive and in need of quicker knowledge and effectiveness from both managers and employees.

From an auditor's perspective, covid-19 and the accelerated digitization has meant a more challenging work environment consisting of several processes being digitized. For instance, “previously paper-based transactions, in-person meeting, business travel and other “normal” day-to-day operations” are now supposed to be digitized (Caldwell & Krishna, 2020). This puts a pressure on auditors to learn a new way of working and to learn fast, for audit firms to stay relevant. Covid-19 has forced businesses to become digitized and even though this happened in a short period of time, it was important for auditors to manage the change in a controlled way. This means that qualified professionals should transform the old processes to new ones, with help of technology and make sure that the new virtual way of working will benefit both auditors and their clients (Caldwell & Krishna, 2020).

The work for an auditor can be described by the following way: the auditor collects information from a business where they are trying to identify areas where significant inaccuracies may arise (Deloitte, 2020). Which areas that are considered particularly significant are made on an assessment by the auditor. Following, the auditor provides this information in the auditors’ report (Eklund, 2020). What has been difficult since the time covid-19 started is the assessment about the future for businesses. The managers of a business are responsible for making estimations about the future of the company. This then becomes a question for the auditor to answer how they are supposed to be able to make those estimations during a time like this. As an auditor you can give advice for how the company could make those estimations, though it is up to them to make them. When the year has come to an end, the auditor should sign the audit report based on the assumptions made about the future, which can be very difficult in a time like the present (Eklund, 2020).

The digitization of the audit role has made the audit more relevant since decisions can be made based on real-time information (Karlsson, 2022). Not working at the office makes the audit more flexible and location independent. The challenge for audit firms and their management is to learn all the new technologies that are evolving at a rapid speed. Further, this new knowledge must be transformed to their employees so they can feel confident in delivering audits at a high level (PwC, 2022). KPMG started a program for their employees, when they noticed there was a skills gap concerning technology. The aim is not to replace people, it is simply to teach auditors how to “utilize their new data analytics skills to drive critical insights and strategic business recommendations” (KPMG, 2020).

As a result of the digitization in the audit profession, several positive effects have been indicated between the audit role and the audit process according to previous studies. For instance, digitization has led to more efficient analysis tools and algorithms that allow for a larger amount of data to exist and be analyzed (Li & Chen, 2015). This means that data can be analyzed relative to specific and that they do not need to rely on random samples. Several studies have been made on the big 4 audit firms investigating how their work environment has changed since the digitization evolved. One of those studies shows an
increase in the efficiency (Bierstaker et al, 2001). Raphael (2017) has in addition concluded that the auditing firms that apply new technologies in their auditing processes will be rewarded with huge gains in efficiency. Further, the possibility to analyze risk and detect fraud becomes easier for auditors (Lombardi et al, 2015). Because of the new usage of advanced technology, the everyday tasks will be completed more efficiently and frees up more time for auditors to spend in more complex areas.

1.3 Research Gap

Since covid-19 was declared a pandemic in 2020, many studies have been made on this particular topic, e.g., Vogel & Johansson (2021) and Andersson & Kyrk (2021). The link between covid-19 and digitization in the audit business has been an interesting topic for many. Studies have investigated how audit quality has been affected by covid-19 and how the work process has changed for auditors since the covid-19 pandemic, to name a few. Almost all studies that we have come across considering covid-19 have connected it to digitization in some way. Since covid-19 forced people to work from home, it meant that connections were suddenly made through a screen. The technology was then bound to evolve so that people could manage their work in the best possible way, sitting at home.

One thing we found that is missing at this moment, after an extensive literature search, is newer research from 2022. What happened in the audit business when people started getting vaccinated and going back to work? And above all, what happened when the restrictions were lifted? All the mentioned studies above are from spring 2021 the latest and since these last years have been very unpredictable, what is happening in the audit world and their processes could have changed overnight. The research gap, looking back from when covid-19 restrictions began, concerning how auditors work has been affected by covid-19 with regards to new technology and a new “normal” is something this study will investigate. Now that the restrictions have been removed, future remains of the digitized audit world will be investigated as well.

Johan Brun is a medical advisor who has followed the research about the covid-19 pandemic since it started. In a chronicle he stated that “Pandemic always ends, sooner or later” (Brun, 2021). The question he receives the most is when the covid-19 pandemic will be over and since the beginning researchers have thought that when the summer came, it would be. Clearly, it is impossible to predict what will happen in the future and when we are finally able to say; it is over (Brun, 2021). The restrictions were removed 9th of February 2022 in Sweden (The Swedish Government, 2022). This indicates that people are going back to normal. Auditors will be back at their work and how their working days ahead will develop into, could be clearer now that we are in the final stages of restrictions due to covid-19. We realize that covid-19 is not over yet, but with the restrictions being removed, making conclusions considering a more digitized world after the covid-19 pandemic is over, will be possible based on assumptions from experienced auditors.
1.4 Purpose

The purpose of this study is to create an understanding of how auditors work has been affected by the industry’s increasing digitization during covid-19. The aim is to investigate how covid-19 has changed the way auditors work during the pandemic and in what way this change will remain despite the ending of state restrictions. In order to fulfill this purpose, we have developed two research questions.

1.5 Research questions

In what way has digitization changed the way auditors work during covid-19?

Could some of these changes remain after covid-19 has ended?

1.6 Limitations

We have limited our study to Swedish workplaces. This decision is based on two major factors, the first being that we want to differentiate ourselves against earlier studies made in other countries, and the second being time limitations and simplicity.

We have limited our study to focus on bigger audit firms in Sweden, such as the “big 4”. Those consist of Ernst & Young, PwC, KPMG, and Deloitte. According to Revisionsinspektionen (n.d.) The big 4 accounted for 91% of the assignments related to companies of general interests in Sweden during the year of 2020. According to an industry report done by FAR (2021), the 5th biggest audit firm in Sweden is Grand Thornton with a net sale relatively close to the big 4. Because of this, we have also decided to include Grand Thornton to the list of firms we chose to investigate. We view these firms as market leaders, and thus the results should reflect a fair view of reality in the market.

1.7 Contribution

This study will investigate how digitization has affected the auditors work during covid-19 and if this change will remain when covid-19 is over. Similar studies have been made (e.g., Abu-Tour & Iskandarani, 2021), thus what will be a contribution from our side is the change that has occurred in Swedish workplaces, if results from earlier studies still are relevant, and how that change may impact future audit work. The result from other studies based on auditors’ responses a year ago can be entirely different now. Different periods of covid-19 have affected businesses in different ways, so managers and their auditors must consider how it affects their business and review them regularly (Accountancy Europe, 2020). The importance of this study is finding out how the work of auditors have been affected during the development of digitization connected to covid-19, to be able to adapt to the new ways of working or perhaps go back to some old ways. How the work process of the audit will progress in the future is important as well, for being able to adjust and prepare.
1.8 Disposition

In chapter one the reader is introduced to the background and the problematization of the chosen topic. The research gap, purpose, research questions and contribution will as well be presented.

In chapter two the methodology is presented. Which philosophical assumptions have been made, along with the research approach, literature search and ethics.

Chapter three consist of the theory of the study and presents relevant information for the study, being highly connected to the empirical findings and analysis of the research.

In chapter four the reader can follow the method and data that has been used in the study. The research design and the performance of the interviews is presented, among others.

Chapter five is where the empirical findings is presented. Here all the interviews with our participants are gathered.

In chapter six the presentation of the analysis in accordance with our theoretical framework can be found

In chapter seven our final conclusions and results can be found, as well as research contributions, future research suggestions, truth criteria discussions, and discussions on ethical considerations.
2. Methodology

Chapter two is where the methodology is presented and all the methodological assumptions that have been made for this study can be found. Philosophical, ontological, and epistemological assumptions are being presented, along with assumptions on the qualitative choice, research approach and literature search. At the end of this chapter source criticism and ethics is found.

2.1 Philosophical assumptions

Philosophy can be described as a set or system of beliefs deriving from studies of the fundamental nature of knowledge, reality, and existence (Collis & Hussey, 2014). To conduct scientific research, different philosophical frameworks called research paradigms can be used. The main two paradigms, which are called positivism and interpretivism, could be viewed as contrasts when determining the nature of knowledge (Collis & Hussey, 2014). To make sure that the right orientation is followed when performing the research project process, assumptions as well as active choices about different paradigms becomes important. These choices and assumptions will be made based on the two main paradigms.

Positivism assumes that social reality is independent of us, and that the goal therefore is to discover theories based on empirical research. Knowledge can be scientifically verified by presenting logical or mathematical proof for every rationally justifiable assertion (Walliman, 2011, referred to in Collis & Hussey, 2014). Interpretivism however assumes that social reality is not objective but subjective and shaped by our perceptions. In other words, you could say that social reality exists in our minds, as the researcher interacts with what is being researched. Therefore, it is impossible to make one scientifically verified assumption on social reality, as it's impossible to separate what exists in the social world and what is in the researcher’s mind (Smith 1983; Cresswell, 2014, referred to in Collis & Hussey, 2014). Since the results of this study will be based on the perceptions of a small group of people, we choose to mainly assume an interpretive view.

2.1.2 Ontological assumptions

The ontological assumption is concerned with the nature of reality. For instance, positivists believe that social reality is objective and external to the researcher. There is only one reality, which is the same for everyone regardless of personal opinions and thoughts. Interpretivists instead believe that social reality is subjective because it is socially constructed. Each person has their own sense of reality and multiple amounts of realities exist at the same time (Collis & Hussey, 2014). The ontological assumption can be divided into two different positions, objectivism, and constructionism, depending on whether social entities should be considered as objective entities or social constructions. Objective entities have e reality external to social reactors and social constructions are built up from the perceptions and actions of social actors (Bryman & Bell, 2011).

The constructionist position challenges the suggestion that, for example, an organization has a pre given culture. Authors Bryman and Bell give an example from a study carried out in a psychiatric hospital that explains this. The social order in the hospital was at a constant state of change due to agreements that were being terminated, forgotten, renewed,
reviewed, revised etc. The rules were also far less extensive and more like general understandings, which also lead to continual changes in the social order (Bryman & Bell, 2011). We believe that this position resembles the activities made at the auditor’s workplace during the covid-19 pandemic, due to the constant change of social order that the restrictions lead to. Changes at the workplace due to restrictions also changed the perceptions of the workplace from the actor’s approach, as the business had to adapt to the new situation, although the rules may still have been more extensive than, for example, at a hospital. We therefore assume, mainly, a constructionist position view during our research process.

The objective position could be viewed as a contrast to the constructionist position and implies that social phenomena confront us as external facts that are beyond our reach and influence. An organization has rules and regulations, adopts standardized procedures for getting things done, people are appointed to different jobs within divisions of labor and work under a hierarchy etc. (Bryman & Bell, 2011). This view has similarities to the auditor’s workplace in that it is rigorous and extensive. It does not take social changes, due to restrictions and a more digitized workplace, into account, however. Therefore, it is not as appropriate as the constructionist position to this study.

2.1.3 Epistemological assumptions

The epistemological assumption is concerned with what we accept as valid knowledge. For instance, positivists believe that only phenomena that are observable and measurable can be regarded as knowledge. Interpretivists however try to reduce the distance between the researcher and what is being researched (for example by being involved in different forms of participative inquiry) (Collis & Hussey, 2014). Since this study will use the interpretivist approach, we will also investigate the epistemological assumption through the interpretivist approach. Since interpretivism is underpinned by the belief that social reality is highly subjective and shaped by our perceptions (Collis & Hussey, 2014) valid knowledge in this study should also be explored through subjective experiences.

Since we want to investigate personal experiences from people working in auditing during the covid-19 pandemic and how covid-19 has affected digitization, the exploration of subjective experiences becomes fundamental. Different people could have different takes on how the audit workplace has been affected by digitization during covid-19, and different people could as well have different opinions regarding these changes. Since our research question is based on how the covid-19 pandemic has affected digitization in the audit work environment, it becomes necessary to seek to describe and translate the meaning of these changes, rather than just stating that they have happened.

Arguments for why the positivist view is not as effective when investigating this phenomenon is partly because it is impossible to understand the examination of separate people’s perceptions of their own activities without using qualitative data. The results can also be misleading if we were, for example, trying to capture complex phenomena in a single measure by assigning numerical values. A highly structured research design could also impose constraints on the results and thus raise the risk of ignoring other relevant findings (Collis & Hussey, 2014).
2.2 Qualitative choice

According to authors Bell et al., the choices made from methodological assumptions should reflect one's choice of methods later in the research (Bell et al., 2019). The main epistemological and ontological assumption we chose in chapter two was interpretivism and constructionism, which according to Bell et al., is interrelated with the qualitative method. For instance, these assumptions focus on the understanding of the social world through an examination of the interpretation of that world by its participants, as well as it suggests that social properties are outcomes from interactions between individuals (Bell et al., 2019).

These assumptions synchronize well with the kind of research we ought to perform, since our goal is to gather data via personal experiences and investigate individual perceptions. We therefore assume a qualitative position while designing our research methods.

2.3 Research approach

Deductive research describes a study where a conceptual and theoretical structure is developed, and then tested by empirical observation. Particular instances are therefore deduced from general inferences. Inductive research describes a study where theory is developed from the observation of empirical reality. General inferences are therefore induced from particular instances (Collis & Hussey, 2014). The inductive approach helps the researcher to make sense of data by focusing on the importance of informal social relationships (Bryman & Bell, 2011).

A general strategy that is normal to use when working with an inductive essay is the iterative strategy. It involves weaving back and forth between data and theory and is useful if the researcher wants to collect further data to make sure that the condition of a theory holds or not (Bryman & Bell, 2011). Since our study will focus on qualitative data by investigating personal experiences, we believe that the inductive approach fits the most to our research process and we will assume an inductive view when performing the research. We also believe that the iterative strategy could be useful since it's hard to know exactly what qualitative data we will be able to gather during the research process.

The deductive research approach is more of a linear process where the researchers establish a theory regarding the subject, deduces a hypothesis, collects data, and thereafter works through the findings to find out if the hypothesis was confirmed or rejected (Bryman & Bell, 2011). This method interrelates more with a qualitative study, and since our goal is to find out how the covid-19 pandemic restrictions has affected digitization in the audit workplace via qualitative data we choose not to use this approach during the research process.

2.4 Literature search

Primary, secondary, and tertiary sources are the categories that the literature search could be divided into, according to Saunders et al. (2009). Primary sources are for example reports, government publications, letters, and interviews. These are referred to as “gray literature” since it can be more difficult to trace in the beginning of the study. “These sources have not been modified by interpretation and offer original thought or new information” (Delozier, 2022) since they are created as a time or event is occurring. Secondary sources are on the other hand easier to trace and examples of these are articles,
books, and reports. The third literature source is the tertiary, which is often referred to as “search tools” (Saunders et al., 2009). Examples of these types of sources are dictionaries and textbooks (Delozier, 2022).

This study has used both primary, secondary, and tertiary sources. The main source for this study is our interviews that have been performed with our selected participants. Further, course literature and academic articles from Umea University database as well as Google Scholar has helped us with a thorough interpretation and understanding of the different theories used. Previous studies have been found on DiVA as well, which has been helpful in gathering ideas and guidance.

Using the combined keywords, a large number of relevant scientific articles were found. The keywords audit, digitization, covid-19, technological progress, AI, work process, and digital tools have been the keywords for the study. Using the keywords, significant and useful sources have been found. As the subject in the study is quite fresh, the previous research is limited in similar topic areas. In addition to this, articles in the study have been used as a source for the different concepts.

2.5 Source criticism

Source criticism is mainly about the four source-critical principles of authenticity, time, dependence, and tendency as tools to determine the reliability of a specific source (Thurén & Werner, 2019). This is an important part of the literature search for relevant articles and printed literature to strengthen their arguments and create credibility in the study (Thurén & Werner, 2019). The meaning behind these four principles is as follows, authenticity means that the source must be real. Can you believe that the author of the source is real or is the source perhaps a fabrication? (Thurén & Werner, 2019). In this study we have used Umea University database and Google scholar, to make sure that our sources are reviewed before published and therefore considered reliable. We have used a ton of different articles and compared them to each other to make sure that the information that we collect is reliable as it repeats itself in all the articles. The course books that we have used are as well considered reliable sources as the authors are professional researchers and teachers.

The principle of time means that a newer source is considered more trustworthy than an old one (Thurén & Werner, 2019). We have tried to use sources that are most up to date, in our best capacity. Since this area of topic has not been researched on and published as much yet, we have in addition to newer research, been forced to use older research. With that said, we have made sure that the sources are still relevant to this day. Further, dependency is about whether the source depends on another source or if the source is independent. The source should be independent and not be affected by other additional factors (Thurén & Werner, 2019). In our case, we have had our interviews as our primary source, as well as peer-per-view articles. In the cases we have used secondary sources, we have searched for the primary source and compared if the information given is the same in both cases. The last one, tendency, is about whether the source is objective or subjective. The source should not be suspected of giving a falsified picture of reality, based on the authors’ various areas of interest. Those interests can be both personal, economic, and political for example (Thurén & Werner, 2019). What we have done here is making sure that the sources we have used are reviewed by various independent parties who have researched in the same area. The selection of articles has been limited to those being peer reviewed to make sure that the dependency criteria is met.
2.6 Ethics

The term ethics refers to the moral values or principles that form the basis of a code of conduct (Collis & Hussey, 2014). As the study will involve interactions with people by way of interviews, we think it is necessary to discuss some ethical principles and how they can be used in the research process.

First, we realize the importance of voluntary participation. The eventual participants will be asked to willingly take part in the study, and if they were to decline, we will accept that decision and move on to the other potential participants. We will as well make sure that eventual participants will be given as much information as might be needed to make an informed decision regarding if they want to take part in the study or not. This is to prevent the issue that is lack of informed consent (Bryan & Bell, 2011). We will also not offer any rewards to participants for participating, since this kind of inducement could potentially lead to biased results in the study (Collis & Hussey, 2014).

Secondly, we will offer all participants confidentiality and anonymity while taking part in the study. This means that we offer assurance to the participants that no opinion or assertion expressed during the interview will be identifiable. No names or other retracement information, other than working title, number of years in the industry, and company of employment, will be shown in the final publication of the study.

By working with this ethical guideline, we hope to get a higher response rate as well as increased honesty, since anonymity and confidentiality in interviews encourages greater freedom of expression and more open responses (Collis & Hussey, 2014). The material gathered from the interviews will also only be used in this particular study.
3. Theoretical framework

The third chapter consists of the theories in this study. It starts with presenting the institutional theory followed by the four steps in the audit process. The last part in this chapter is where we discuss the connection between Digitization and the Audit process and then present the theory that is called Technology Acceptance Model (TAM).

3.1 Institutional theory

The environment has a central role for institutional theory. DiMaggio and Powell (1983) mean that there are forces that cause organizations to assume a homogeneous form and that these forces come primarily from society. Organizations will act in line with the environment, follow familiar patterns and what is relevant for the moment. Institutional isomorphism is a central part and tries to explain how organizations change towards their surroundings and begin to resemble each other over time (DiMaggio & Powell, 1983). If an organization would change the pattern and go in a different direction it could cause a legitimacy problem (Deegan & Unerman, 2011). The theory treats the development of adopted rules, norms, values, and beliefs of the organization’s characteristics.

The process of institutional isomorphism can be divided into three parts, coercive, imitative, and normative (DiMaggio & Powell, 1983). Coercive isomorphism arises from power relations. Organizations are forced to play by certain types of rules, for instance the laws that an auditor must follow (Revisionslag (1999:1079)) and the audit standards, e.g., international standards on auditing (FAR, 2022). These laws and standards are crucial for an auditor to follow and cannot be changed overnight. Pressure from stakeholders, who the organization depends on, can as well be an indication that the organization needs to change its methods (DiMaggio & Powell, 1983).

Imitative isomorphism consists of trying to resemble other organizations to stay relevant. There exists an insecurity of not being taken seriously and by taking after other organizations who appear legitimate, your organization will have the opportunity to compete at the top (DiMaggio & Powell, 1983). New technology in the audit business can create a certain insecurity and auditors might have difficulties to adapt. By seeing how other successful auditors have taken on the challenge of the new digitized world it is difficult not trying to do the same. Organizations tend to imitate each other to stay relevant by seeing how other successful organizations have taken on new technology (DiMaggio & Powell, 1983).

Normative isomorphism has its roots in professionalism. There is an urge to find solutions for the common problems that may exist in a particular industry. The solutions show a way of how an organization will appear legitimate and how to act within a particular industry. This indicates that smaller industries will follow the lead of larger authorities who will speak up and find those solutions that everyone will eventually follow (DiMaggio & Powell, 1983). Experienced auditors are a good example here since their opinions and actions matter and they have the advantages of being able to impact other auditors. This will then develop into all auditors taking action and achieve legitimacy.

For auditors, the evolving digitization connected to the covid-19 pandemic, has meant a lot of changes in the way they work. New experiences and knowledge have been developed to the new normal for auditors, in the form of digital adaptations. When time changes auditors need to re-learn a new system of standards and having to learn a new
system can lead auditors to oppose change (Tagesson, & Eriksson, 2011). There is an institutional pressure existing and the institutional theory will be used in this study to explain and understand that pressure. The theory will as well provide explanation to why these changes have occurred, which in turn have given rise to these new digital changes that the study will examine in relation to the auditors’ experience.

3.2 The audit process

The purpose of an audit is to increase the degree of trust in the financial statements to external stakeholders such as investors and customers (PwC, 2017). The auditor examines the accounting and management of an organization. In its audit, the auditor makes assessments whether the audited financial statements give a true and fair view of the organization's results and position and whether it is in accordance with existing audit laws (FAR, 2022). Based on the auditors’ observations, the auditor can then advise the organization on improved routines and financial issues. It is crucial that the auditor maintains an impartial and independent role to make sure that the advice given is not jeopardized (FAR, 2022). The audit process consists overall of four steps that will be further explained below. This is to give a picture of how the audit process is performed and how these different phases of the audit may have changed during covid-19 and the evolving digitization that came with it. These steps include the planning phase, the review/fieldwork phase, the reporting phase, and the follow-up (UVU, 2022).

Figure 1. A description of the audit process (UVU, 2022)

3.2.1 The planning phase

In the first phase the auditor creates a plan and strategy for the audit (ISA 300). The process begins with a pre-planning stage where the auditor gathers information about the organization's activities and goes through which areas are to be examined (Zimbelman, 1977). How much information is gathered varies from case to case and it is the auditor’s responsibility to make the assessment regarding the quantity. It is however important that there is enough information to be able to cover the parts of the financial statements that have the highest risks (Johansson et al., 2005; FAR, 2019). The auditor must as well consider what has been done in previous years and which experiences has been learned in order to make the audit process more effective (Carrington, 2014). By making a strategy for the audit, it will provide support for the audit plan and clarify the extent and timeline for the mission. The audit plan will show a more detailed picture and report the different dates of the audit and the audits character (Eklov Alander, 2019). The planning phase will continue throughout the audit since the audit plan may need some adjustment over time in some cases. It is necessary with careful planning for the audit performance in order to achieve high quality, reduce audit risk and follow good audit practice (FAR, 2022).
3.2.2 The review phase

Step two of the audit process is the review phase. According to Eklov, A. (2019) there are two methods of review, control review and substance review, and the auditor often uses a combination of both when performing the audit. Control reviews means that the auditor controls that all the internal controls work, and this method is most common in larger organizations, since an internal control is more efficient and well-designed (Eklov Alander, 2019). Substance review consists of a review that is made of the content of items from the current accounts, income statement, balance sheet and financial statements. The substance review is more informal and focused on the trust between employees in an organization, which suits smaller organizations better (Carrington, 2014). The review is used by the auditor to collect evidence in the purpose of performing the audit the best way possible. There are different audit measures that are performed during the review. These consist of inspection, observation, external confirmations, recalculation, repetition of activities, analytical review, and inquiry (Eklov Alander, 2019). The auditor performs a general review which consists of budget- and activity follow-up. The in-depth review is important for the auditor to examine the entire organization thoroughly and the organization shall be analyzed and assessed regarding quality, efficiency, goal fulfillment and productivity (Carrington, 2014).

3.2.3 The reporting phase

Before the actual reporting of the audit takes place, there is a subsequent audit carried out after the end of the financial year. This is because the auditor needs to provide information regarding events that may have occurred, after the end of the year, and having the opportunity to adjust the annual accounts (Carrington, 2014). If no events have occurred or when they have been adjusted the reporting is carried on by the auditor submitting the audit report to the Annual General Meeting. For the audit to be complete the board and the CEO first need to approve the audit by signing it. At last, it is signed by the auditor (Eklov Alander, 2019), who in addition states whether the annual report has been prepared in accordance with the law of annual reporting (SFS 1995:1554), comments on the proposal for the disposition of the potential profit and whether the board and CEO should be granted discharge (Carrington, 2014). The auditor may provide comments in the audit report if necessary. There may perhaps be specific information on discrepancies that have emerged during the review process, or the auditor disagrees with the management in some matter. In those cases, the auditor may need to deviate from the standard design of the auditor’s report. The management should have the opportunity to make changes and improvements during the year considering the auditors’ observations that are less relevant for the audit outcome. Therefore, it is important for the auditor to communicate those observations from time to time. Sometimes the auditor is obliged to participate at the clients annual general meeting to comment on the statements made in the report and sometimes it is enough to meet with the clients at another time, after the audit is completed (PCAOB, 2007).

3.2.4 The follow-up

The last phase of the audit report is the follow-up, which consists of the auditor going through the performed work and evaluating strengths and weaknesses. This is to gather experience and knowledge from the year's audit and be able to streamline and improve the
The auditor can perform appropriate verification to make sure that management has listened to the auditor and acted on the recommendations that have been given. These verifications can consist of testing, discussion, and evaluation. The audit findings should be addressed in an appropriate time frame and when the management have done the adjustments the audit is considered closed (Internal Audit, 2022).

3.3 The Audit Process and Digitization

For some auditors, the daily work process has become more of a challenge. A normal week for an auditor can usually mean being at their clients’ office daily. With the ongoing covid-19 pandemic happening in the world, the client’s office changed to the auditors’ home office instead (Murphy, 2020). The consequences of this, means less client contact and more planning ahead (Albitar et al., 2020). If the auditor has a question for the client they cannot ask right away, instead they must make a phone call or schedule a meeting to get an answer. “An auditor relies on physical in-person evidence collection procedures. These include inventory observations, inventory verification, document collection, PPE (property, plant, and equipment) assessment, interviews, discussions, and observations. The relationship between the auditor and client can be broken when the change of going more digital occurs. Some clients might not be prepared at all, and not having their auditor closeby can create some sort of insecurity (Appelbaum et al.. 2020). There is as well the risk of errors in the financial statements collected by the auditor. There is a chance that auditors need to give more time to reviewing statements, when the increasing use of digital aids could mean an increasing risk of errors in the statements (Castka et al., 2020).

What has become evident, since the covid-19 pandemic started, is that it is crucial for audit firms to have meetings online with their employees, to inform them of new digital tools and make sure that everyone is aware of the importance of their work being done correctly and thoroughly. Accountability has increased during this time, since everyone is working from home these days (Murphy, 2020). According to Jen Haskell, chief auditor at Deloitte, “It has become more important than ever to remind people of the foundational principles of documenting judgements and conversations, gathering and evaluating audit evidence, and exercising professional skepticism” Many firms are issuing online training for their employees to keep them up to date (Murphy, 2020).

New transformation tools and innovation technologies have been invested in by several firms since covid-19 started. This has pushed many clients to become more digital since the auditors cannot come by their offices and collect their financial statements, though instead the clients need to send them digitally to their auditor. For some clients this has been really challenging. “Some clients have sophisticated systems and professionals, though others have not” according to Jeff Kovacs, assurance partner at Cohen and Company (Murphy, 2020). For auditors this can be challenging to adapt to different clients’ systems and being able to perform an audit of high quality even though the client does not have the best tools (Murphy, 2020). Since many audit firms already worked digital before covid-19 the change to a more digital work environment was not that challenging, according to an auditor working at Green Hasson Janks (Murphy, 2020). The use of Zoom, Google Meet and Teams had already been established when covid-19 started, so even though some auditors were working in those programs already, it was not at the same level as of now (Appelbaum et al., 2020). The increased technology has in addition made it easier to perform the audit at distance. For example, when there is a need of reviewing the
inventory, a live streaming can be performed to connect the auditor with the clients and their staff (Dohrer & Mayes, 2020).

3.4 Technology Acceptance Model (TAM)

Davis (1989) was the first one to introduce the technology acceptance model, also known as TAM. This model is what this study will be based on and is one of the most used research models for investigating the usage and acceptance of information systems and technology (Bagozzi, et al., 1989).

![Technology Acceptance Model Diagram](image)

*Figure 2. A description of the Technology Acceptance Model (Khera & Miller, 2010.)*

TAM is a theory that describes how and why new technological tools as well as new software are adopted and used more frequently among individuals and organizations (Sheetz & Wallace, 2013). How organizations receive and use new technology and how individuals embrace the new technology is as well included in the model. According to Bagozzi (2007), the main statement for TAM is that organizations and individuals that will benefit the most from new technological innovations will be the ones who will have the highest acceptance and fastest adoption. There are in addition other factors that will have an important role for accepting the new digitized world, for example, cultures, internal groupings, and different occupations within the organization. Leonard-Barton (1998) stated that attitude strongly correlates with usage behavior, in mandatory environments, which the pandemic of covid-19 would be classified as. Experts within the area who are the ones innovating and developing the new technology, will in fact not be the ones using the technology. Instead, individuals in other areas will be forced to learn these, sometimes difficult, new innovations with perhaps too little training. This can result in too complicated innovations that cannot be used in an appropriate way since there is lack of knowledge and understanding (Iveroth, Lindvall, & Magnusson, 2018). If auditors have difficulties understanding the new technological tools it can be problematic for their work in the sense that systematic errors can occur, and the audit quality may decrease (Krafft & Kempe, 2013).

Perceived usefulness and perceived ease of use are two beliefs that guide and determine an individual’s intention to adopt new technological tools in their life (Thong et al., 2002). The first one, perceived usefulness, means that taking on a new technology in your life
will improve the quality of life in the sense that the performance of an employee, for example, will be better with new quality tools. Perceived ease of use means that the perception of new technological tools is not that challenging, instead the notion is that new technology will not be that difficult and easy to use (Thong et al., 2002).

According to the Swedish Inspectorate of Auditors (2022), the future audit will develop even further within digitalization. As of now, compared with other industries, the audit industry is lagging. “Possible reasons for this may be resistance to trying new ways of working, the fear of failure, the innovative climate and lack of incentives to invest large sums in new technology where the result is uncertain”. As of January 2022, the industry is trying their best to catch up in the new digital world. What needs to be done is making sure that the new technology is a good working tool for the auditors and that the new equipment and tools are suitable and developed according to what the auditors will benefit from most.

What will occur, when auditors have accepted the new technology and adapted to it, will be higher quality of the audit and greater benefit for the client. The audit profession will in addition have a chance of becoming more attractive since the digitization will mean the elimination of monotonous and simpler tasks. Both new auditors and the ones who have been working for some years, should be trained in the most advanced and best tools that are available as of today. The transition and acceptance of new technology should not be as high of an obstacle in the future if the training starts right away. Looking for new employees with a broader competence profile, deeper knowledge in technology, IT, information, and innovation will benefit your company. That in connection to taking great care in creating and assembling audit teams that possess the right knowledge and skills will prepare the audit industry for the increasing development in the audit (Swedish Inspectorate of Auditors 2022).
4. Method & Data

In chapter four methods and data are presented. It begins with the chosen research design, and then the sampling method and data collection methods can be read. Some other topics are descriptions of the respondents participating in the interviews as well as mentions on accessibility from the participants. The data analysis method will also be discussed in this chapter.

4.1 Research design

One important thing when constructing a research design is to find a compound between your theoretical questions and the real world you are investigating (Lee & Lings, 2008, p. 182). You could therefore say that the objective is to find the most effective and realistic plan on how to gather the data needed from the ‘real world’ in order to answer your research questions.

One method frequently used during research is the cross-sectional design. The definition of this method is, according to authors Bell et al.; the collection of data in more than one case and at a single point in time in order to collect quantitative or quantifiable data in connection with two or more variables which are then examined to detect patterns of association (Bell et al., 2019, p. 59). This method is mostly used in quantitative studies due to the necessity to collect quantitative or quantifiable data, and thus we can't assume a total cross sectional research design in this study since we are collecting qualitative data. However, according to Bell et al. implies that qualitative research often entails a form of cross-sectional design, for example when a researcher performs semi-structured interviewing with a number of people (Bell et al., 2019, p. 61). Since our goal is to interview different people (different cases) during the same time period, a lot of characteristics from the cross-sectional design can be found in our research design, nonetheless.

Another method that can be used is the longitudinal design. The longitudinal design is similar to the cross-sectional design in many aspects; however, it is differentiated in the case that the sample is measured at multiple points in time (Lee & Lings, 2008, p. 198). We acknowledge that this method would suit our study better than the cross-sectional design since our goal is to study the digitization process in the audit industry both during covid-19 but also after the restrictions have ended. However, this sort of study would be impossible to perform on a student level since it is way too time consuming. Some other arguments against this sort of design are that it can be quite expensive, and that it is viewed as fairly difficult to execute (Lee & Lings, 2008, p. 198).

4.2 Sampling method

The purpose of a study is usually to investigate how a particular group of people or organizations perceives a certain phenomenon. If the group of people is very large it is important for researchers to make a smaller selection from the target population. The larger group will otherwise be too large to hear everyone and needs to be narrower to be able to draw conclusions about the target population's perception of the researcher’s topic (McLeod, 2019).

According to Denscombe (2016) there are two approaches for making your choice considering the sample of your study. The two consist of either probability sampling or
non-probability sampling. When the respondents are selected at random the choice of probability sampling has been chosen. When instead the respondents are decided through a certain decision-making power within the selection process, a non-probability sampling method is being used (Denscombe, 2016). Since this study is investigating auditors that have worked during covid-19 within the audit industry, the sampling method will be non-probability sampling. The selection of which non-probability sampling method to choose, is decided from different types, for example, convenience sample, purposive sample, snowball sample and quota sample (Williamsson, 2018). Purposive sample sorts participants according to pre-selected criteria relevant to a particular research question, which suits this research well since we only want to interview auditors about their work during the ongoing digitization and covid-19. The snowball sample on the other hand, is based on already contacted participants helping the researcher getting in contact with other people who could potentially participate in or contribute to the study (Williamsson, 2018). We have contacted different audit firms, mainly from the ‘big 4’ but also smaller firms, and thereafter received the email addresses to additional auditors to contact in a second step.

Two different sample methods have though been used in combination to implement this study, the purposive sample, and the snowball sample. Since the research question is dependent on auditors with some experience, the sample only consists of auditors who have the knowledge about the audit process that non-auditors normally lack. We chose to contact several different audit firms in different cities in the hope of approaching auditors with different experiences and views on the research questions. We have also tried to contact auditors with more or less experience in the industry in order to investigate how different generations have reacted to the research questions.

4.3 Data collection method

Depending on the type of data the researcher wants to obtain, there are different types of methods that can be used. As the data we want to collect will be qualitative data, we will investigate some of the qualitative methods that exist and evaluate which one is most effective for this particular study. The goal is to collect data in a methodical and systematic way, as well as applying a method that will retrain the integrity of the data (Collis & Hussey, 2014).

One method that can be used is observation. In the context of research this means to watch or observe an action, activity, or phenomenon, and at the same time record it (Quinlan, 2011). We believe that this method would be ineffective to our research as the goal of our study is to explore peoples own subjective perceptions and perspectives. It would be almost impossible to assemble this kind of data by just observing a person at work. Observation is also field research, which would require the researchers to gain access to the people who are carrying out the activity, as well as having enough time to perform the observations. This is seen as unrealistic for this type of study.

Another method that can be used when assembling qualitative data is by sending out questionnaires. Although mostly used in quantitative studies, questionnaires can be used in a qualitative study as well, by using open questions (Quinlan, 2011). This would let us investigate the respondents’ own subjective perception and perspective through written answers. Another advantage with questionnaires that we acknowledge is that it is quick and effective to send out and answer (Bryan & Bell, 2011). Some disadvantages however is that it is hard to gather additional information, for example via supplementary
questions. You can't ask too many questions in a questionnaire either, as respondents may lose interest and give answers that are short or ill thought through (Bryan & Bell, 2011).

One of the more popular methods when conducting qualitative research is to perform interviews. By performing an interview, the interviewer can engage the respondent during the interview process. This calls for a confidential, formal, and honest transmission between the respondent and the researcher (Quinlan, 2011). The researcher also has the opportunity to observe the respondent’s reaction to certain questions as well as giving the respondent the option to elaborate or give more clarification on certain questions (Quinlan, 2011). This method helps the researcher to get a full understanding of the respondents’ subjective perceptions and perspective regarding the research subject. We consider interviews to be the best method at collecting legitimate data compared to questionnaires as well, as the researcher can influence and impact the data collection to a greater extent.

Due to this reasoning, we conclude that interviews are the method that benefits this study the most and will thus be the method used when collecting the data.

4.3.1 Interviewing method

There are many different types of interviews, and each type is useful for different kinds of goals and objectives. Author Alsaawi lists three separate methods that can be used when performing an interview. The methods described are structured interviews, unstructured interviews, and semi-structured interviews (Alsaawi, 2014).

Structured interviews are when the researcher writes down the questions in advance before performing the interview. The interview is then performed in a controlled way with little deviation from the main topic. Thus, the interview format is very strict and therefore suitable for researchers who know exactly what kind of information they seek (Dörnyei 2007, referred to in Alsaawi, 2014). Unstructured interviews are the opposite of structured interviews in that they're very flexible. There are few main questions pre-prepared, and the respondents can elaborate freely on all questions and supplementary questions. This often leads to digress directions in the interview and thus, the results often vary to a great extent depending on who is interviewed (Bryman 2008, referred to in Alsaawi, 2014). Further, semi-structured interviews are a kind of a combination between structured and unstructured interviews. On one hand the questions are pre-planned prior to the interview to keep structure in the interview, but on the other hand respondents are free to elaborate and explain certain issues by using open-ended questions if necessary (Bryman 2008, referred to in Alsaawi, 2014).

Since the authors will retrieve qualitative data based on each respondents own social reality, and compare different experiences and conceptions with each other, it becomes necessary to perform a somewhat unstructured interview. If the interview is too structured and pre-prepared, there is a risk that every respondent answers the questions too similarly which will have a negative effect on the final results. If the interview becomes too unstructured however, the risk is that each respondent digresses too much from the original purpose of this study. Thus, it becomes necessary for the authors to somewhat prepare and structure the interviews as well beforehand.

The final conclusion is to perform the interviews via a semi-structured method. This allows the authors to explore each respondent’s own interpretation of their social reality in the research field, via supplementary questions or elaboration of already existing questions. The authors can also pre-prepare and structure the interviews enough so that the
results don't become too widespread, in order to effectively answer the studies research questions.

4.3.2 Interview guide

In order to structure the interview and make sure that relevant data to the study is gathered during the interview, an interview guide was produced. The purpose of producing an interview guide is not to structure a schedule that decides exactly how the interview will be performed, but more to mark which topics are to be covered during the interview. This helps the researcher in a semi-structured interview to stay within the limits of the research area and thus collect relevant data to the study (Bryan & Bell, 2011).

We decided to divide the interview guide into four separate parts. This was deemed necessary in order to create structure regarding the themes we wanted to explore. We also found it important to structure the parts in such a way that the interview could be performed smoothly (Bryan & Bell, 2011).

The first part consists of an opening part, where the respondent gets the chance to answer some questions about themselves and their role at work. It is important to record some background information on the respondents, in order to better understand their situation (Bryam & Bell, 2011). The second part consists of questions about the respondents’ experiences with the covid-19 restrictions at work, and how these restrictions have affected both the respondent’s working environment and tasks. The reasoning behind this part was mostly to gain a bigger understanding of how covid-19 restrictions affected each respondent at their respective workplace. Depending on, for example, if two of the respondent's workplaces responded variously to the restrictions, their opinions on later more profound questions might vary as well, since their social reality differs.

The third part consists of more profound questions about digitization and how covid-19 restrictions have affected digitization in the respondents’ respective work environment. This part is seen as the most essential part in the interview guide, as it explores questions that relate directly to our research questions. The last part can be seen as a conclusion of the interview, where the respondent gets the chance to express some of their own thoughts and ideas regarding the subject. Each part, except for the last part, contained around 5-10 questions. We tried to make the questions as open and nonspecific as possible, in order to invite the respondent for discussion. As the interviews were performed in a semi-structured way, we wanted to avoid having too definite or leading questions in the interview guide as well, to make sure the respondent did not feel the need to answer in a certain way (Bryman & bell, 2011).

4.3.3 Performing the interview

A total of five interviews have been performed between 4th and 30th of April 2022. Since many companies, including audit firms, have had restrictions and employees have been working from home, the interviews could not be conducted physically. Instead, all interviews have been performed through communication programs such as Zoom or Teams. Before the interviews we sent out an email to the participants with all the information about the research purpose and all the questions that we would ask (Appendix 2). In the email we included information about their anonymity, the recording of the interview and ethical aspects.
Once the interview started, we began with presenting the purpose of our study. Further we clarified that participation is voluntary and that all participants will stay anonymous. Finally, we asked if it was okay that we recorded the interview and if the respondent had any questions before the interview started.

We have divided the interviews between us two so that one of us has performed two interviews and the other one has performed three. This is because it would be a more natural conversation and easier for the respondent to answer our questions if there were only one person to focus on. Performing interviews one to one is also the most common form to use when collecting data via interviews (Collis & Hussey, 2014). In our experience the interviews have been conducted without errors and we have gotten the answers that were needed to be able to perform our study and answer our research questions. Our respondents have been generous in explaining their side of their experience at their work during and after covid-19. Depending on the respondents answers we have been able to skip some questions from the interview guide, when we have felt that the respondent already had given an answer. At the end of the interviews, we made sure to ask if there were something our participants wanted to add that we had not asked them or if they felt that they wanted to change their answer for any question.

4.4 Respondents

We have interviewed a total of five people, all from different workplaces (although three respondents are from the same companies). All respondents work in the audit industry. three of the respondents have worked both before and during the covid-19 restrictions while two respondents started their employment during the covid-19 restrictions. Two respondents are employed in Stockholm, while two respondents are employed in Gothenburg. One respondent is employed in Skellefteå. In order to keep the respondents anonymous, we will refer to them as ‘respondent A-E’. This method is interrelated with our ethical assumptions mentioned earlier and will be used throughout the study. The interviews have taken place mainly during the month of April.

In table 1 we present some information on each of the respondents to give the reader a small insight of who has been interviewed.

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Workplace</th>
<th>Experience (years)</th>
<th>Role</th>
<th>Interview length (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>PWC</td>
<td>5</td>
<td>Audit manager</td>
<td>30</td>
</tr>
<tr>
<td>B</td>
<td>KMPG</td>
<td>2</td>
<td>Audit associate</td>
<td>25</td>
</tr>
<tr>
<td>C</td>
<td>KPMG</td>
<td>1</td>
<td>Audit associate</td>
<td>35</td>
</tr>
<tr>
<td>D</td>
<td>Grant Thornton</td>
<td>10</td>
<td>Audit manager</td>
<td>35</td>
</tr>
<tr>
<td>E</td>
<td>KPMG</td>
<td>4</td>
<td>Audit manager</td>
<td>45</td>
</tr>
</tbody>
</table>
4.5 Accessibility

Although we contacted auditors from all the “big 4” audit firms in search of participants for our study, we only managed to find five people who had the time and willingness to take part in the study and be interviewed. According to Galvin (2015) an amount of 6-10 interviews is one of the most common amounts to perform when doing interviews. Galvin also suggests that 6 interviews was enough to collect 73% of the total amount of data, gathered from a total amount of 30 interviews. We acknowledge that additional interviews would improve the legitimacy of the results. We do also assume, however, that the number of interviews performed in this study is enough to provide reliable data, considering Galvings (2015) findings, as well as aspects such as time limitations (Bryman & Bell, 2011). The average age of the participants was 31 years old and the average experience in the audit industry (years) was 4 and a half years. We acknowledge that the lack of older participants with more work experience in the industry could influence the final results. For instance, two of the participants started their employment during covid-19 restrictions, which made it hard for them to answer some questions, for example about how the work environments changed from before covid-19 restrictions.

A popular excuse for why auditors found it hard to participate in interviews was because of heavy work schedules during March and April, and since the deadline for this study is in May, we could not wait for the work schedules to lighten. One study shows that ego depletion occurs as a more severe phenomenon during busy periods in the audit industry (Hurley, 2017, p. 32) which could explain why the eagerness to participate in interviews was so low. This could also explain why mostly younger people agreed to being interviewed, since older and more experienced people most likely also had a larger workload which had to be prioritized.

Despite these factors we still found that every participating respondent could bring relevant and reliable information to the study. All respondents showed positive signs of professionalism and interest while being interviewed, as well as a desire to be as helpful as possible. We also chose to send out the interview guide beforehand to the respondents, so that they could study and discuss the questions with co-workers before the interview was performed. This was a big help, especially to the younger respondents, who therefore could discuss certain topics with more experienced co-workers. In conclusion we do not believe that the lack of older and more experienced participants in the study will damage the legitimacy of the final results. We do however recognize that it could influence the analysis and conclusion section in this study, and consequently we found it important to mention.

4.6 Data analysis

To perform the analysis of collected data, a thematic analysis was chosen. “Thematic analysis should be seen as a foundational method for qualitative analysis. It is the first qualitative method of analysis that researchers should learn, as it provides core skills that will be useful for conducting many other forms of qualitative analysis. Through its theoretical freedom thematic analysis provides a flexible and useful research tool, which can potentially provide a rich and detailed, yet complex, account of data.” (Braun & Clarke, 2006, p 78). The analysis was conducted by first getting acquainted with the material. This was performed by writing down all the material during and after the interviews. After the interviews were completed, the material was read through carefully multiple times to be able to select the parts that were most useful for the results of the
study. If there arose any uncertainty, the recorded interviews were listened to again to make sure that the transcripted notes were correctly interpreted.

The next step of the analysis was to produce initial codes in a systematic way throughout the material (Braun & Clarke, 2006). The codes characterize features of the data material that will be of interest to the one analyzing the data. All interviews were manually coded and processed systematically to ensure that all data in the material had received attention. Further, specific themes were found which constituted three main themes of the coding: Covid-19, Digitization and Technology Acceptance Model (TAM), and Digitization following restrictions. These themes were then reviewed, refined, and revised if necessary (Braun & Clarke, 2006). The data in the themes that have emerged must belong together at the same time as there should be an identifiable difference between the themes (Braun & Clarke, 2006). For the analysis section of the study, the subheadings have been created by the clearest themes emerging from the empiric. The theoretical frame of reference is together with data collection being analyzed.
5. Empirical findings

This chapter highlights the study's empirical data collection that has been conducted through interviews. The respondents’ answers in this chapter will have their connection to the model in study theory use. Since the interviews are anonymous, respondents are, as mentioned in the earlier chapter, named A, B, C, D and E.

5.1 Covid-19

The main change for our respondents during covid-19, were the working from home aspect. They all share the same experience of offices shutting down and being forced to work from home. The respondents were asked the question of how covid-19 had affected their work as auditors. Respondent A points out that the biggest change is not having the same physical contact with clients and colleagues. Working from home, instead of working at the office or at clients’ offices, means not having the social daily encounter. Since many auditors work in teams, not being able to shout out questions to a colleague working right beside you and get an answer right away is something that has been affected during this time as well. Respondent B believes that the difference has been quite extensive, in the form of going through documents online or via digital programs instead of reading real documents, which were the case before covid-19. The industry is heavily client related and includes a lot of interactions in person and not only through a screen. Now conversations have been made through the phone and not face to face since everyone is working from home. Respondent C started their job during the covid-19 pandemic and points out that, according to their colleagues, the work has become much more digital than pre covid-19. Before covid-19 the engagements took place physically at the client’s office, while now they take place in a digital manner. According to respondent D the work has become more effective, since working from home. There has been a challenge not meeting clients, though facilitating. Further, respondent D states that the quality of the audit perhaps deteriorates somewhat in general, since you do not hear and understand everything as well as in the office, and you cannot show different things quite as easily. On the other hand, it has been good for the clients since they have been forced to digitize somewhat further, which potentially raises the quality of the accounting. Respondent E feels like working from home has been both a blessing and a curse. The positive side of it is that the work has become more flexible, and you become more efficient when you are sitting at home by yourself. The downside is that you lose regular contact with your clients and colleagues.

“The great effect of covid-19 was that we could no longer meet either clients or colleagues because everyone was sitting at home and working”.
-Respondent A

Three of the respondents point out that their company has had restrictions all along. Some in more degrees than others. When the restrictions were lifted a bit, respondent A and E said that their manager asked all employees about which days they wanted to be at the office, and then made a schedule, which was important so that everyone would not be at the office on the same days. In our team, we discussed and agreed on different days when we wanted to work at the office, so it would not be crowded. There was no requirement
from the management about working from the office, we got to decide where we wanted to work, according to respondent E. However, respondent B states that the work became much more flexible, and you could decide where you wanted to work during different times of the day, either at the office or at home. Respondent C even points out that their office was open all the time and people could come and work at the office whenever they felt like. Though, most people choose to work from home and office events were cut back as well. Respondent D makes a point about the working environment not being the best for some people working from home, for example in cases when you cannot fit an office chair in your apartment. In those cases, a few people have been granted permission to work at the office to a greater extent than others.

“That office has been somewhat deserted, we have been a few who have been granted permission to be in the office, because it does not work to sit at home for example”.
-Respondent D

The support from the management has generally been good during covid-19, according to the respondents of these interviews. The management has been good at providing information about the current situation on an ongoing basis and letting the employees know how to manage the audit work in the best possible way during this time. For those employees who did not manage to bring home equipment themselves, the company drove home equipment and made sure that everyone had everything they needed, for example, tables, chairs, and screens, respondent A states. They bought a lot of extra screens so that everyone could have two screens each at home and the management has been good at tuning in asking how everyone is feeling and how the employees have adapted to working from home on a regular basis. Respondent A continues by explaining that the ones having the most difficulty during covid-19 would be the new employees. The difficulties of entering a new workplace and never meeting your colleagues and then after two years, everyone is back at the office, and you do not recognize a single person. It is difficult for these new employees to know what to do, which makes it important for the rest of us to clearly inform them of their tasks. Normally, you would have started a new employment by attending training sessions with your colleagues and sitting in the same room as them or nearby. Then it is easy to ask questions that arise. But sitting at home as a newly employed person must have been extremely tough. For the rest of us, it has been tough as well. These new employees have not learned as fast as they otherwise would have done, which is stressful for both them and for us. Respondent A points out that this of course is completely natural. When working from home, by yourself, you have thousands of questions but do not know who to ask or perhaps do not dare to call a colleague. It is usually easier to just ask a question to a colleague sitting next to you instead of having to call someone.

“It is difficult for these new employees to know what to do, which makes it important for the rest of us to clearly inform them of their tasks”.
-Respondent A

Respondent B and C emphasizes that their management has been great at making sure that all employees are having the right tools and equipment needed to perform their work. You
have either been offered to loan what you need or to buy the equipment at discounted prices. To maintain good relations with the work team the management has made sure that everyone has taken their time for coffee breaks with each other through Teams and talked about other things than work, respondent B replied. Since covid-19 came, several IT supports have been received, from our own choosing, according to respondent D. The management has tried to help and uplift in many ways, for example with goodie bags or similar. Once the restrictions were lifted a bit, it came with activities, mostly outdoor, to raise the mood and morale to some extent. The ingenuity from the management has not been lacking. For example, digital AW with chocolate tasting to create a common community, where we can see each other, though only through a screen and not physically. Respondent E has the same experience as the other respondents in the form of a management giving good support with daily check-ins and being generous with providing everyone the equipment and tools needed for a work environment at home. During the interview respondent E describes their internal homepage in the following way:

“Our company has uploaded many guides on our internal homepage where we have been able to find information about how to keep up the spirit working from home, some workout routines, meditation platform and a lot of IT support if something is not working the right way”.

-Respondent E

The question about whether there had been any covid-19 related changes, that had either had a positive or a negative impact on the auditors’ daily work, were brought to light. Respondent A pointed out that the positive side would be that the work has become even more flexible than before. The work as an auditor had, in their experience, always been very flexible, though now even more. You could be at the office one day and the other day work from home, and no one really notices as long as you are getting the work done and your clients are happy. The negative side of covid-19 is not having the social interaction, which for certain exceeds the positive side of it, respondent A continues. It easily becomes inefficient when you do not have the same contact with colleagues and clients that you are used to having.

“I would say that the negative aspects exceed the positive. There is really nothing positive about covid-19”.

-Respondent A

The flexibility is mentioned during all the interviews as a positive change because of covid-19. Respondent C emphasizes that the work processes have become more efficient since their clients have started to work more digitally during this time, and that the communication with colleagues can be handled more effectively which can benefit their engagement margins. Travelling has become less needed compared to before covid-19, according to respondent D. The management has now realized that the need to travel for shorter meetings has decreased. To travel these days means having more meetings put together in that timeframe and if it comes down to only one meeting you can be there through, for example, Teams. The company now adds a link to the meeting so everyone
can participate from wherever, for meetings. It gives the possibility to sit at home, in the office or another place chosen. Both respondent D and E mentions that the important thing is that it works for both clients and for the employees. If a client is very analog and has binders the management cannot approve that the audit is run remotely, since it obviously does not work. On the other hand, material can always be transformed digitally, and then it is no problem for an employee to sit at home for a couple of days. Instead of always doing what has been done before, now since covid-19 started, there has been a switch in changing things in the way an auditor can work. Which means that the work will not necessarily be done the same way in the future.

All the respondents interviewed lifted the social interaction that has the far most negative impact that covid-19 has had on their work as an auditor. Respondent B said that the lack of social contact somewhat affected both cooperation and working morale to some limits. The team atmosphere is not the same as when everyone was at the office simultaneously, according to respondent C. When people sit alone at home and working, it is much harder to recognize if someone is not feeling well and/or working too much. When everyone is at the same place, it is easier to set boundaries on working time for example. Both respondent D and E mentions that it is not a good feeling sitting at home all by yourself for long periods. You need the stimulation of colleagues and meeting new people. There is in addition the fact that you can miss details when you sit at home, which are the things that make the work fun at the end.

“Interactions with colleagues on a day-to-day basis has reduced because everyone has been working from home, this has somewhat affected both cooperation and working morale to some limits”.

-Respondent B

5.2 Digitization and Technology Acceptance Model (TAM)

During the interview, the respondents stated which digital tools and programs that had been used during covid-19. Respondent A points out that digital tools have also been used before covid-19 since they wanted to digitize the process both for the auditors but also for the clients to be able to streamline work and spend more time on more important tasks such as human thinking. Respondent A stated the following:

“For communication we use Google Meet. Now to an even greater extent than before covid-19. We have internal auditing tools as well, where we share documents with our clients”.

-Respondent A

There are different communication tools used among the respondents, either Teams which respondent B, C and D are using and then there is Google Meet which respondents A and E are using at their companies, when communicating with both clients and colleagues. All five respondents are mentioning using some other internally processed programs to help ease client interactions. Respondent C points out that their auditing platform includes ways for our clients to upload documents in a safe manner and that the physical audit is
handled by Microsoft Excel and a PDF editor. Further, respondent D do not use any program themselves. They write on some annual reports physically but otherwise use everything digitally, such as Verify or DocuSign to sign an annual report.

When questioned whether there are any certain parts in the audit process where digitization has benefited, such as the planning, the reviewing, the reporting and follow-up phases, respondents A and E say that they have not experienced any. An older generation comes up and respondent A believes that for those who experienced a time when auditor work was less digital, might have seen a change. The digital world has always been a part of respondent A’s work life. Perhaps in the reporting phase and follow-up phase, it has become a little more digital towards clients, though if it is better or worse than before they could not say. For respondents B and C there was another aspect of the question in mind. Since they work as audit associates their work is a little bit different than from the audit managers. Respondent B points out that it is now easier to find the information that you need, instead of for example going through folders manually, all in all its time spent more efficiently. The same goes for respondent C who states that the parts where the client provides us with documents and other materials have become better. There are very few clients that provide physical evidence which makes it easier for us to sort out big piles of documents. Another part is in the final stage when the financial statements are to be signed. More and more clients are using digital signing tools which makes that part of the process more efficient.

“I would say the parts where the client provides us with documents and other materials. There are very few customers that provide physical evidence which makes it easier for us to sort out big piles of documents”.

-Respondent C

Respondent D response is that they enjoy meeting the clients to show clearly what it is they do and to be able to explain in a slightly different way. To the extent that they have certain shareholders or meetings in another place or where they have owners from other places, it has certainly become easier to do this at a distance. Especially when they have large companies that sit on different sites around, they can then take a team meeting and take an hour meeting instead of having to go there. When they make inventories in other places, they can even see if it is possible to do it digitally instead of physically going there. Seeing with a camera is almost like walking around a warehouse.

According to all respondents, they have always worked digitally, even before covid-19. Both respondent B and E points out that the audit industry was quite prepared digitally already when covid-19 occurred. The usage of digital tools/programs has, though, increased in the auditors’ work, especially in communication, as mentioned by all the respondents. Respondent D says that they got Teams at the same time as covid-19 started and it has made it much easier to be able to take the short reconciliations. Instead of calling, they use Teams for about 85% of the cases when it is internal meetings. Respondent E provide the similar kind of answer;

“We used Google Meet before the pandemic as well, but not in the same instance as now. The typical way of asking a client or colleague a question, before covid-19, was to call them or to just ask them, since
Respondent A points out that the digital tools/programs have neither improved nor evolved during covid-19. They were already very digital before covid-19, which means that they were ready when covid-19 came. The larger clients were, in general, more digital than the smaller clients. Some of the small clients had all their accounting material in binders, which required that the auditors came to their office. Since covid-19 they were no longer allowed to visit their clients, which forced them to scan all their material and send it to their auditor. It was thus probably a bigger change for those clients then for the auditors. The result has though been positive for auditors, since all clients have been forced to go digital, which has made the work for auditors easier. On the contrary, respondent B states that the digital tools have improved during covid-19 since the industry was somewhat forced to adapt to the new working environment. Which means, as always when implementing new digital tools, complications occurred. Especially in the beginning of covid-19.

What has improved is rather that we have become accustomed to how the tools and programs should be used, according to respondent D. That everyone is arriving on time and that the meetings are held based on the time they are supposed to take. "Is the mic on?" "Is the camera on?" These kinds of issues have been learned and adapted to. There has probably been resistance and there is still resistance to auditors not meeting their clients and colleagues. There should not be an obligation to meet every time, we can instead meet when needed and that makes us ready for the future. Respondent E says that there has not been an involvement in the tools/programs during covid-19. Perhaps for other companies that had not come as far digitally. It is probably more about the auditors learning how to use them, that has improved.

If there are any digital tools/programs that have made the audit process easier during covid-19, respondent A stated that they are using the same tools as they did before covid-19, and that they are using the same tools now that the restrictions have been lifted. Meanwhile, respondent B says that it is easy to get accustomed with new and more efficient ways of working and they are open to work more digitally in the future as well. Teams and the possibility of group chats, both meetings and writing chats, have made it easier to keep status updates in teams, respondent D points out. To continuously say how far you have come in a week, maybe ask questions, continuously get feedback, which they think is the most important part.

“It is easier to write in teams instead of writing an email to ask a short question and receive a short answer”.

-Respondent D
Respondent E mentions that the fact that Google Meet and all the similar platforms that exist has made the audit easier in the sense that auditors can get a hold of clients and colleagues easier, without being physically there.

There has been less contact with clients and colleagues, respondent A points out when asked if there are any digitized working methods that have been negatively impacted due to covid-19. By only working digitally, as the auditor you are limited to only hearing and seeing what the client is sharing with you. If the auditor on the other hand is at the client’s office, they might happen to overhear something at the coffee machine for example, which would not have come up if the auditor had not been there. Respondent B says that most of the programs used during covid-19 in the working process have been used during covid-19 as well. They believe that some programs have been changed or replaced by better options, though these changes would probably have happened anyway and do not correlate with covid-19. Auditing of internal controls has been negatively impacted; respondent C points out. This kind of audit involves interviews, discussions and so forth which can be harder to pull off behind a computer screen. Another thing is inventory which still can be done but is much harder when clients are not as interested in auditors coming to their offices or warehouses. When these types of knowledge about the clients’ processes get harder to understand, more emphasis is put on doing substantive testing (bigger samples etc.). Respondent D believes that some employees have received less feedback, that auditors do not meet and go through the work. The transfer of knowledge is another thing. It does not take place at the same level as when the auditors sit in a landscape and hear things in the periphery and not necessarily that you encounter all questions yourself. Respondent E perspective is as follows;

“You do not get to interact with your colleagues and clients the same way through a screen. Meetings work well online, but I think the feeling of being part of a community decreases when you do not work at the office and see each other”.

-Respondent E

5.3 Digitization following restrictions

Since the restrictions lifted there has been more work at home and less at clients, respondent A points out. In addition, there has been more digital meetings occurring, both with clients and with colleagues. Both the auditors and their clients have noticed that it works. Before the covid-19 pandemic the auditors could be sitting at their client’s office all day everyday, but now they might sit in the office for two days, at home one day and with the client two days a week. Even though they used to sit at the clients’ office daily, there was not always the need to talk to the client, but they still sat there in their conference room. There is an old saying among clients that “If the auditor is not in place, the auditor does not do their job”. Now it feels like even the clients understand that this new way of the auditors not being there all the time works. The clients know that the job gets done and perhaps believes it is nice not always having their auditor around all the time. Now the auditors can gather their questions for the clients and sit at their office one day a week and be efficient that day.
“If the auditor is not in place, the auditor does not do their job”.

-Respondent A

Respondent B states that the choice of working from home and the more digital work with clients has remained after the restrictions were lifted. Now they are having more meetings on Teams and sharing documents digitally, more than pre covid-19. Another aspect from respondent C is that the client engagements are more and more full-digital-audit. This means that they do not have to travel to their client’s office as much as before, which is advantageous. Since their office did not close during covid-19 there has not been much of a change at their office. What respondent C adds is that even though the office did not close, they must book desks every day to be guaranteed a desk with a monitor, both during and after the restrictions. This was put in to regulate the space between desks. Parts of courses are now held physically and parts at a distance, respondent D replied. With planning, it may be easier that then instead of sitting for a week on a course, you take it two days, two days, one day, because it does not accumulate as much in terms of workload when you are away for two days, as opposed to you being gone for a week. Then it can create a better condition for both the company and the employees. Now the traveling aspect is not that extensive, working from home can be managed as well. Respondent E states that since the restrictions lifted, they have still been able to work from home. The work has been more flexible and as long as they perform the work and everyone has approved, client and colleagues, the work can be done from wherever. Their internal meetings have as well been more flexible, they can be there digitally since there is always a link to click on to join, meaning they do not always have to be at the office.

At the end of the interview the question about the respondents’ thoughts on the future audit role, based on the increasing digitization in the industry, were asked. Respondent A believes that there will always be some form of audit. In recent years more robots have been applied to do simpler audit tasks that, a few years ago, were the tasks that a new working auditor started with. The work respondent A did at their first company is now performed by a robot. Digitization has both a positive and negative side. The positive side is that no one needs to do the unexcited routine job. The negative side is that beginners in auditing now miss a lot in the learning phase because they do not get to do the tasks that robots now do instead. The new auditors miss the easier steps and jump to more difficult tasks immediately. Robots will probably handle even more of the auditing in the future. Respondents B, C, D and E are all in coherence that the audit industry will become even more digitized the following years. Respondent B thinks that more and more working processes will probably be digitized, some sectors may even be automated in the future. All in all, these changes could lead to a more flexible and adjusted work environment, which may even be necessary for the industry to attract new workers. Respondent C believes that digitalization has and will improve the audit process, from an auditor standpoint and that clients in time will benefit from this as well. The challenge is to maintain good relationships with the client when you do not meet in person as often, which could potentially change the roles of more senior auditors and partners, into a more relationship-building role.

Respondent D takes up another perspective of the question, the local dependence. The local dependence is so much less influential. If the auditor has a customer who needs the help of a person who is in a different place or country than they, there is a possibility to set up an initial team meeting and start from there. It is not necessary to go to each other every time. Instead, it is much easier to simply throw in the right skills to the right
question, it is enough for one person to participate for ten minutes and answer a question and then another person can jump in and answer the next question.

“This is very positive and will help the role of auditors for the future. We had not come that far before covid-19”
-Respondent D

Respondent E thoughts about the future is that the audit will become even more digitized. Many companies have been forced to become more digital during this time and in a few years, probably all firms will be digital altogether. The digitization was bound to happen, even without covid-19, but the covid-19 pandemic made the transition happen even faster.

Respondent A thought that this subject was of importance to the audit industry, in the sense that covid-19 has forced many companies to become more digital and work more efficiently. In general, they believe that auditing had already come a long way in digitalization before covid-19 compared to other types of companies. It was probably less of a change in the audit business than it was for other types of businesses. Respondent B points out that as customers work more digitally the audit industry must as well adapt and prevent effective solutions to these changes if firms are to be competitive on the market.

The relationship between the auditor and client are brought up by both respondent C, D and E. The key is to get the clients on the same pace, so that relationships are not hurt, according to respondent C. The auditors must adapt to what clients’ demand, respondent D states. The auditing industry has probably been a bit backward in that they are not the one driving the process forward, but they are probably a bit conservative by nature. It is a part of the role of the auditor with a basic precautionary principle in general, which will probably exist in the future as well. The auditors are cautiously changing; they do not jump on all new trends; they rather weigh whether it will be better for them and for their clients. It is the client who will have the control and what the client demands is what the auditors will deliver. However, the clients do not always know what they want, since they do not have the competence to understand it themselves all the time. Then it is important that the auditors are there and can support. Respondent E said that since more companies have become more digital in recent years, the client-auditor relationship is what needs to be taken care of. The clients need to be sure that the audit quality and the contact with the auditor will remain the same even when digitization is evolving.

The interviews ended with the respondents being asked if they would like to add something that has not been addressed before. All respondents said ”No”, except for respondent C who left with some final thoughts;

“I think there is a difference in willingness to “digitize” depending on your age/generation. My experience is that colleagues in their 40-50s are more prone to be less “digitized”.

-Respondent C
6. Analysis

In this chapter we present our analysis for this study. The analysis will be presented as per the theoretical framework, in order to compare our results with the investigated theories, relevant to this study. The theories are as mentioned: Institutional pressure, the audit process, and technology acceptance model. Digitization in the audit industry during covid-19 restrictions and future impacts will also be discussed.

6.1 Covid-19 and institutional pressure

According to all respondents, one of the biggest changes at work during covid-19 restrictions was the inability to meet the client at their workplace to discuss important questions regarding the audit engagement. At the same time most of the respondents had their offices shut down during work hours. This made the process of adapting just how to work, both with clients, but also internal with the work team a task of great significance.

Coercive isomorphism builds on the pressure from other organizations or laws to follow certain rules (DiMaggio & Powell, 1983). For example, in Sweden we have the law of auditing (Revisionslag (1999:1079)) that must be followed no matter the circumstances. Thus, institutional pressure to carry out job requirements can be found at the audit firms, despite the newly arisen working conditions. One example of this can be found in how respondent C talks about the final stage in the audit process. The respondent describes how signing the financial statements has become a more digitized process during covid-19 restrictions, instead of signing the statements by hand. This job is of course mandatory in the form of institutional pressure, and because of new working conditions, the industry had to adapt to new ways of performing the task.

Imitative and normative isomorphism talks about finding solutions to problems in the industry, as well as staying competitive against other companies in the industry by adopting the most effective solutions produced (DiMaggio & Powell, 1983). Examples of this can be found in the respondents’ answers about company support during covid-19 restrictions. Almost all of the respondents mentioned similar support from their respective companies in the form of office equipment such as work desks, office chairs and extra computer screens. Assistance in the form of IT-support, and online meetings was also mentioned by most of the respondents. We believe that the fact that all respondents mentioned similar support factors, despite working for different companies or in different cities, could show signs of imitative and normative isomorphism. Thus, another factor of institutional pressure could explain some changes in the audit industry during covid-19 restrictions.

6.2 Covid-19 and the audit processes

In order to make sure that a client's financial statements show a fair and accurate description, as well as all making sure audit laws have been followed, the audit process becomes an important work tool (FAR, 2022). Because of covid-19 restrictions, some sections in the audit process have been affected more than others. As respondent C mentions for instance, the audit engagement as a whole, has taken place in a more digital manner during covid-19 restrictions. Before the audit engagement took place mostly physically at the clients’ office.
6.2.2 The planning phase

The process of planning and gathering information about the clients’ activities (Zimbelman, 1977) has changed quite a bit, now that auditors can’t visit the client physically, according to many of our respondents. The opinions on these changes are not always negative however, as respondents state that the work process has become more efficient, for example now that travels for shorter meetings with the client are ruled out. This opens space for better time management, and thus the result is better work conditions for both employees but also the company as a whole. This could be seen as an important advantage, as respondent C acknowledges the importance of not overworking yourself, especially during busy seasons. If auditors are able to manage time better, the usage of the communication program ‘teams’ has worked well for both client and auditor, which means that the opportunity to work from home, or wherever suits best, is available.

Many documents that the auditor had to work with via paper or binders, have now become digital as well as clients also had to adapt to new ways of work, according to the respondents. Thus, an activity such as going through the client's earlier activities via documents (Carrington, 2014) has become more efficient, as respondents claim that working with digital documents is much more time efficient.

Our take on the planning phase therefore is that the audit industry has adapted quite well to the phase being more digitally performed.

6.2.3 The review phase

Reviewing internal control is the process of overseeing that the client's internal control works efficiently (Eklov Alander, 2019). Respondent A talks about how you, as an auditor that works from home/from the office, are limited to the information that the client provides. Before covid-19 restrictions, the auditor spent a lot more time at the client’s workplace, although it may not always have been necessary. This could give the auditor the chance to intercept further information, perhaps at the coffee machine during break, that the client did not provide. This is something that covid-19 restrictions have had a negative impact on.

Respondent C also states that internal control has been affected negatively due to covid-19 restrictions. Tasks such as interviewing or discussing relevant issues with the client are harder to perform behind a computer screen. Another task that has been difficult to execute is the inventory check. Observing inventory is a measure used to find out that the inventory mentioned in the financial statements corresponds to the actual inventory (Eklov Alander, 2019). According to respondent C, this observation could be performed, but not nearly as efficient as before covid-19 restrictions. Respondent D however, mentions the same example, but with a more positive view on the solution. By the help of cameras, it becomes just as efficient to observe the inventories, as it was beforehand when you performed the observation physically. This kind of solution has also been explored in studies done during covid-19 restrictions, and some of the results showed that, just as respondent D mentioned, live streaming inventories could be a method used when observing (Dohrer & Mayes, 2020). This contrast in opinions could depend on different aspects. Perhaps Respondent D’s workplace has come up with more effective methods to perform the observations, such as mentioned from the study. Or perhaps the two respondents differ in preferences on how they like the work to get done. Respondent C also emphasizes that one consequence to these internal control tasks being more difficult
to perform, is that methods such as substantive testing is being used more. Substantive testing could be seen as a more informal method (Carrington, 2014).

In conclusion the benefits mentioned in the planning phase may not apply as much to the review phase, as the tasks performed could be seen as more complex or more dependent on witnessed information. Although most of the respondents have recognized meetings on teams, or working from home, as positive additions to work, it may not apply to all aspects of an audit. If this depends on different preferences in how people like to work, or inequalities in how different workplaces have adapted to new changes, it’s hard to answer.

6.2.4 The reporting phase and follow up

The changes in the process of reporting and submitting the audit report to the annual general meeting and having the report signed by the clients CEO, as well as the auditor (Eklov Alander, 2019) can be likened much to the planning phase during covid-19 restrictions. Sometimes the auditor is requested to participate at the annual general meeting, in order to answer questions and communicate the results of the audit (PCAOB, 2007). With everyone working from home, this process likely took place online, via digital programs. For the same reasons as mentioned in the planning phase, the ability to join a meeting online and only when you are needed saves a lot of time. This time can instead be put to other tasks, and thus work becomes more efficient. Some results show however, that some of these processes, especially with bigger clients, were handled digitally even before covid-19 restrictions. To what extent the reporting phase has become more digitally is unclear exactly.

The follow up process, where the auditors go through last year's performed work, analyzing strengths and weaknesses in order to improve coming work (Riksrevisionen, 2020) differs in that it focuses more on the internal work with the audit work team. Every respondent expressed disadvantages during covid-19 restrictions due to a lack of social interactions with co-workers. Meetings with your work group where co-workers could brainstorm ideas and get answers quickly had to be handled via digital communication programs instead. When you don't meet your co-workers on a daily basis, standard communication on how work is going and what could be done more efficiently disappears as well. The whole process of improving your workday by day is converted to weekly or monthly check ups, as our respondents described it, via digital communication. Thus, there may be a lot of unreviewed factors and opinions that have accumulated during the audit year and must now be evaluated all at once at the end.

6.3 Digitization during covid-19

When asked what digital tools the respondents used during the covid-19 restrictions, the answers consisted mainly of communication tools. Digital programs such as Microsoft Teams, Google meet, and Zoom were used by all the respondents. These answers were expected since the new working environment of working from home, forced auditors to adapt to a more digitized way of communicating. When asked how this differed from digitized audit work before covid-19 restrictions, the answers were that, although the work has become much more digitized during the restrictions, the audit industry was pretty well prepared already. Most of the digital programs mentioned earlier had already been implemented in the work process, although perhaps not used as much as during the restrictions. All in all, the respondents are quite united in the opinion that the audit
industry as a whole, probably was more prepared for covid-19 restrictions than many other industries. These answers resemble the results from a study that author Appelbaum published in 2020. The study suggested that, although digital tools such as Zoom or Google meet was used more during covid-19 restrictions, the digital programmes were already established in the audit industry, prior to the restrictions (Appelbaum et al., 2020).

Apart from the communication programs mentioned earlier, none of the respondents felt that any more digitized tools of significant impact were implemented during covid-19. One respondent mentioned how some digital programs had been upgraded or replaced by better programs. This however was seen as customary procedures and had nothing to do with the covid-19 restrictions but more to do with the firm trying to streamline work procedures as much as possible. The absence of more advanced digitization procedures in the audit industry follows what a German study released in 2019 concluded. According to the study, major technical progress will not happen for at least another 10 years (Tiberius, Hirth, 2019). It seems that covid-19 restrictions have not fastened the process of implementing automated programs for instance, as this is something our respondents don't mention in their answers. Automated systems such as the RPA is a factor mentioned earlier in this study, that would greatly improve the audit industry in almost every sector if implemented accurately (Harrast, 2020). With the audit work becoming more digitized during the restrictions, it would seem plausible that methods of digitization, other than communication programs, could be implemented at the same time to push the industry forward towards a more digitized place overall. The Swedish Inspectorate of Auditors (2022) mentions that the audit industry is lagging other industries in the digitized process. This indication contradicts what the respondents have answered, as almost all the respondents mentioned that the audit industry was far ahead in its digitized process and well prepared to handle work more digitized. This could signify that the digitized process in the audit industry is uneven, in that some aspects are far ahead in its digitization, and some aspects are lagging (such as more automated methods).

6.4 Technology Acceptance Model (TAM)

The adaptation to a more digitized way of working has looked quite alike, but with some differences from the respondents. Some of the respondents, for example respondent A, mentions that the process to working more digitally has been pretty smooth since many of the changes already existed before covid-19 restrictions. Respondent B however mentioned that implications, especially at the beginning of the restrictions, was pretty occurrent. Respondent D mentions the same thing. Respondent D also discussed how there has been resistance at the workplace because meetings with co-workers and clients have reduced. Respondent D is not totally against the resistance either, implying that although a more digitized way of work may be efficient there are still times when a physical meeting is needed. Research has shown that difficulty understanding new technology and adapting to new tools in the audit industry could prove to be problematic. Consequences could be a decrease in audit quality (Krafft & Kempe, 2013). And although some implications with implementing new digitized systems could be found, mostly in the beginning, all the respondents expressed that the process of working more digitally during restrictions has gone rather smoothly. In the TAM model, something that is discussed is the perceived usefulness and perceived ease of use. Perceived usefulness talks about how new technology will improve worker quality. Perceived ease of use talks about how the perception of new technology is not that challenging, and that new technology thus should be quite easy to adapt to (Thong et al., 2002). When adding these views to our respondents' answers we find a lot of similarities. All the respondents mention how new
more digitized ways of working have improved efficiency at work. Worker quality can thus be said to also have been improved. And according to our respondents, the adaptation to these changes has not been too challenging either, which therefore could be linked to perceived ease of use. In conclusion this could serve as proof that innovative digitized implementations in the audit industry should have a high demand, as it will most probably improve efficiency for clients in the industry.

One important factor to remember here however, is that all the respondents in this study still are at quite a young age. Some respondents have even expressed that older people in the industry might have found it more difficult to adapt to the new more digitized way of work. One respondent mentioned how the willingness to digitize might vary depending on age and assumed that people in their 40s-50s might not be as positive to large changes in the industry as less experienced auditors. In response to this we also concluded that the respondents that were most for a more digitized way of working, also in the future, were one of the audit associates. The possibility to work more flexibly is seen as very positive from their perspective. The more experienced respondents (although still young) were more positive toward working with people physically, and even expressed how work had gotten a lot more boring while working more digitized. Research shows that the more a person benefits from technological innovations the easier they will also have to adapt (Bagozzi, 2007). One of the more experienced respondents also expressed how difficult it must be for newly hired employees to adapt to their new job, and how newly hired personnel learned the job slower since they couldn't receive help from more experienced personnel as effortlessly as before the restrictions. But there is a difference in learning how to perform work tasks, and learning to work more digitized, and our less experienced respondents did not mention any larger complaints with learning the job via a more digitized way. Since the more experienced respondent may feel that working more digitally affects overall work in the company negatively, since new personnel take longer to educate, their attitude towards working more digitally (at home for instance) may be low. Research suggests that attitude strongly correlates with user behavior (Leonard-Barton, 1998). Less experienced people, eager to show their worth at work, could be more positive to working more digitally, partly because they don't know any other way, but also to show their worth, even though it may impact their learning curve negatively. The less experienced person's attitude towards learning new technology could therefore be higher.

We thus acknowledge that experience could be an important factor when it comes to accepting new technology but won't investigate it any further since we don't have the relevant data for it.

Worth mentioning is also that all the respondents deemed the question of increased digitization in the audit industry an important question for the industry. Living up to customer demands is important for the industry, and as mentioned before, working more digitized has proven to be more efficient and favorable for the client. If auditors acknowledge this their attitude towards working more digitized may improve.

### 6.5 Future impacts

When the respondents were asked what they thought the future audit role would look like, all but one believed that it would be more digitized. Examples such as a more flexible working environment or moving away from local dependence to a more globalized market were brought up. When asked if any changes at work remained after covid-19 restrictions,
examples such as less physical contact with clients or more options to work from home were brought up.

Our impression is that all these changes that seem to remain after the restrictions are based on digitized efficiency. The auditors also seem to believe that digitization is the future of the audit industry. And since clients also have been made to adapt to covid-19 restrictions and new ways of working, you could say that both auditor and client are sort of at the same place in the digitization process. This suggests that they could help each other become more digitized and thus bring the industry forward in efficiency.
7. Conclusions

This chapter concludes the study. Here we will discuss final conclusions made from the analysis, and thus answer the study’s research questions. We will also discuss some research contributions and options for future studies on the subject. The chapter ends with some discussions on truth criteria and ethical considerations.

7.1 Final conclusions

In order to finalize our conclusions, we will have to look at the research questions, and see how they connect with the analyses from chapter 6. Chapter 6 enlightened us in how institutional theories challenged the audit industry into adapting to the new working climate that covid-19 restrictions brought. The industry was forced to adapt to the new working climate and institutional pressure to still get the job done. However, this does not confirm that these adaptations were effective and would remain after the restrictions were removed and society went back to a more normal society again. Furthermore, we learned that all the stages in the audit process had been affected to some part, due to the changes that the restrictions brought. New digital tools were mainly brought in to improve communication between clients and co-workers. Some of these more digitized tools had already existed in the audit industry, prior to the restrictions. The general perception from the respondents was that this new way of working had been positive and led to better audit quality, as well as a more efficient and flexible way of performing work tasks. The acceptance for new technology is considered to be pretty high, although factors such as experience or age could have an influence. The future of the audit role is, and should, also move further towards a more digitized working climate since covid-19 restrictions have ended, according to the respondents themselves.

7.1.2 In what way has digitization changed the way auditors work during covid-19

When concluding just how digitization has changed the way auditors work during covid-19 we first have to look at how the audit process was affected. The work with the client has become more digitized during all phases. Instead of going to physical meetings or working at the client’s workplace, digital meetings via communication tools such as zoom, or teams have been used. This has made the auditors work more time efficient, but also more dependent on direct information from the client. Tasks such as finding relevant information in documents has also become digital, as smaller clients that normally worked with paper or folders now also had to adapt. Observation of inventory has changed from observing the inventory in place to observing digitally via camera. The industry has not improved in other digitized sectors, however. The absence of improved automatization during the restrictions is clear. When asked about improved digital tools used during the restrictions, none of the respondents mentioned any increased work with RPA, or AI to further improve the industry digitally.

The internal work amongst audit co-workers has been affected since most people have been working from home. Weekly or monthly meetings where information and check ups have been provided, has replaced physical meetings or simple small chatting at work. This has, to some extent, affected the auditors’ working morale negatively, as working alone without clients or co-workers nearby is boring and risks being too repetitive.
7.1.3 Could some of these changes remain after covid-19 has ended

Both perceived usefulness and perceived ease of use could be found in the respondents' answers, regarding their general acceptance of new technology in the audit industry. This result tells us that employed auditors have adapted to new more digitized ways of working with quite ease. This suggests that future implementations of more innovative ways to work in the audit industry have a good chance of being adapted with ease as well. Results also show that less experienced auditors that are relatively new to the industry have a positive attitude against new technology. This furthermore suggests that future audit work could be even more digitized, as the tolerance for change in the industry could be higher with a new generation of labor entering the market.

The respondents indicated that most of the new digitized ways of working were efficient and led to better time management. The cooperation between auditor and client has worked well during the restrictions, by working more digitized, which also suggests that some aspects of working more digitized could very well remain after the restrictions fully end. The ultimate goal for the auditor is to provide good service for the client, and a more digitized working environment seems necessary to move the industry forward, pursuing this goal. Working overly digitally seems to have a negative effect however, as most respondents mentioned that the social aspect at work is still needed to maintain working morale. This suggests that although some audit work may be more digitized during the future, a step back from how things were during the worst days of restrictions is likely.

7.1.4 How has the digitization of auditors' work been affected by covid-19 restrictions

To conclude the effects have been clear and the audit industry has been a subject to many changes, due to the covid-19 restrictions. We consider these changes too big and too impactful to not affect the audit industry also after the restrictions will end. However, it is likely that these changes would have happened in any case since results from the study points to that the audit industry was pretty well prepared against covid-19 restrictions. The covid-19 restrictions have more likely fastened the process, rather than leading the industry into completely new ways of working. Many of the changes in the industry that we found, such as more digital documents, less business travels to clients, and more digitized work tasks overall, resemble the results of earlier studies. A study done by Caldwell & Krishna (2020) showed similar results for instance, which tells us that our results resemble much of the industry's market today.

7.2 Research contribution

This study has discussed and investigated the digitized effects on the audit industry in larger firms in Sweden.

The practical findings that this study can contribute with is the digitized effect that the covid-19 restrictions have had on the audit process. The study also contributes with information on how different firms in Sweden have responded, with digitized solutions, to the problems that emerged from the covid-19 restrictions in the audit process. This contribution can lead to a greater understanding of how the audit tasks have changed during the covid-19 restrictions. It can also give today's auditors or auditor students a better understanding of what skills the industry will seek in the future, as well as information to clients on how their audit will be performed in the future.
This study also contributes with social findings, such as general opinions on acceptance of new technology in the audit industry. Different opinions on how the digitized adaptation of the audit process should remain, or be manufactured in the future, has also been contributed with this study. General opinions overall from employers in an industry that is undergoing change is valuable to get an understanding of what ways of work the employers find most desirable, and also if the industry will be coveted in the future (for instance from future students). The opinions provided also contribute information to the clients on how they best can cooperate with the auditors, in order to perform the best overall results from both parts.

7.3 Future research

This study has investigated auditors’ perceptions of digitized changes during covid-19. The results provided from the study have also gained some insight into how these changes may affect the audit industry in the future. However, since this study is taking place too close to the actual ending of covid-19 restrictions, we can only provide guesses on what we think the future might look like. Future studies could investigate how digitized impacts during the restrictions may develop after our world has regained its more normal state.

Due to limitations, we have also only been able to investigate employee perceptions from bigger audit firms, such as the big 4. Future research could investigate how results from our study correlates with a similar study made on smaller audit, or accounting firms. Exploring imitative and normative isomorphism regarding digitization in the audit industry could provide answers on the effect of institutional theory in the audit industry, as well as smaller audit companies' abilities to compete with bigger firms.

Future research could also investigate the correlation between the technology acceptance model and age/experience regarding the audit theory. This study indicates that the two variables might have an effect on each other, but due to limited data, this could not be explored further. Further research on the subject could lead to answers on why the audit industry is lagging in some aspects of digitization, as well as provide forecasts on what the attitude towards new technologies in the audit industry might look like, with newer generations entering the market.

7.4 Reliability

Reliability refers to the accuracy and precision of the measurement, as well as the absence of differences in the results if the research were to be repeated (Collis & Hussey, 2014). This means that if we, or somebody else were to perform the same kind of study as the one we have performed here, the results should be relatively similar. The object is to make sure that the data we have used in this study is credible enough to provide realistic results that reflect reality (Collis & Hussey, 2014). Since the data was provided via a purposive sample, the respondents have not been selected totally unbiased. However, this was deemed necessary to investigate our proposed research questions. Beyond the choice to investigate auditors, all respondents were chosen at random, without any earlier connections to the authors of this study. Thus, the respondents have not been affected in some way previous to the data collection, or provided biased answers for the sake of the study.
We acknowledge however that the choice of using semi-constructed interviews may have provided some unreliable answers, as every respondent could lead the interview to different discussions or conclusions, based on factors such as experience or personal opinions. A similar study with respondents from other companies or countries could provide totally different answers compared to ours. We also acknowledge that limitations in finding varying respondents, regarding age and experience, also could impact the reliability of the study. A similar study with older or more experienced respondents could have resulted in completely different analyses and conclusions.

Reasons for why the data from this study could lack a certain degree of accuracy and precision of the measurement is mostly due to the fact that this is a study with interpretivist assumptions. Under an interpretivist paradigm, reliability is often of little importance since qualitative measures do not have to be reliable in a positivist sense (Collis & Hussey, 2014). Importance is instead focused on if observations and interpretations made on different occasions or made by different observers can be explained and understood (Collis & Hussey, 2014). We believe that this study follows those criteria enough to be deemed reliable.

7.5 Validity

Validity is the extent to which a test measures what the researcher wants it to measure, and the results thus reflect the phenomena under the study (Collis & Hussey, 2014). This means that the sample method, data gathering, and measurement must be in line with the goals of the research, to not prevent irrelevant or inaccurate results to the study.

The most common way to assess validity is to use the face validity method. The goal with this method is to establish that the tests or measures used during the study actually represent what they are supposed to represent (Collis & Hussey, 2014). This interrelates more with quantitative studies where statistical tests are used to obtain data, but creating our interview guide, we could structure and organize our interviews (tests) and make sure that the data gathered actually represents the information valid to investigate our research questions.

Another important form of validity is construct validity. This relates to the problem that some phenomena, such as motivation, ambition, our anxiety, are not directly observable. These phenomena are known as hypothetical constructs (Collis & Hussey, 2014) and are assumed to exist as factors that explain observable phenomena. Related to this study, it is important to make sure that our findings can be related by the construct of our respondent’s actual social reality (Collis & Hussey, 2014). As an example, if our respondents expressed that they enjoyed working more digitized during covid-19 restrictions, we must make sure that this is because it simplifies and streamlines the work process, and not because our respondents enjoy challenging themselves with harder tasks. To make sure that these phenomena were not interpreted wrongfully, the semi-structured interview was a great help. It helped us deepen our understanding of the respondents’ answers by asking supplementary questions, or letting the respondent develop their answers more thoroughly. Performing the interviews online with face cams also helped us interpret our respondents' reactions to various questions, so that we could match the respondents answer with their reaction to the question and develop a more precise answer.
7.6 Ethical considerations

In accordance with Bryman and Bell (2011) ethical assumptions were made in order for the study to follow ethical and moral guidelines. Authors Bryman and Bell list four main considerations that we have accounted for during our investigation, Lack of informed consent, Harm to participants, Invasion of privacy, and Deception.

Lack of informed consent can shortly be described as the participants rights to as much information that is needed to make an informed decision about whether they wish to participate in the study (Bryman & Bell, 2011). To meet this principle, we have chosen to present potential participants, in our case the interview respondents, with an elaborated email (can be found in appendix 9.2) that explains our research purpose as well as who the authors of the study are. Some information on how the interviews will be performed was explained as well so that the participants would have a clear understanding of what exactly they agreed upon doing.

Harm to participants can include several different aspects, such as physical harm, harm to participants development of self esteem, stress, or harm to participants reputation or future employments (Bryman & Bell, 2011). Since our participants were contacted and interviewed digitally, no sort of physical harm occurred during the investigation. In order to prevent participants from performing the interview under stressful conditions, the participant was given the right to choose what time they wanted the interview to be performed and choose which digital program they preferred to use during the interview (zoom, teams etc.). In order to prevent participants' development of self esteem, questions in the interview guide were produced so that participants would discuss their own social reality and perceptions, rather than compare it with other auditors' social reality and perceptions. We did not present the respondent with earlier respondents' answers or thoughts as well, to prevent the respondent from feeling that their response wasn't good, or professional enough. All respondents participated anonymously as well, in order to prevent harm to the respondent’s reputation or future employment implications.

Invasion of privacy can be described as the participants rights to privacy during the investigation, and a lot of responsibility falls on the authors to not intrude on the respondents privacy or abandon normal respect for the respondents values (Bryman & Bell, 2011). The interview guide was thus produced to first of all only include questions that would help answer the research questions. Although some of the questions in the interview guide can be linked directly to the research questions, all of the questions were deemed necessary to provide relevant data to the study (no irrelevant questions were asked). Secondly the respondents were made well aware of their rights to stop discussing a topic, or not answer a question at all, if they felt uncomfortable with the answer.

Deception occurs when researchers represent their research as something it in reality is not (Bryman & Bell 2011). To prevent this, we have been very clear to our respondents on what the purpose of the study is, as well as explaining to the respondents how they will help us achieve the purpose. This was all made before the interview was performed as well. We also chose to send out the questions from the interview guide to the respondents in advance. This was to show the respondents which topics would be discussed during the interview, for instance if the respondent would misunderstand what the research topic was actually about.
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Appendix

9.1 Interview guide

Introduction
· How old are you?
· How long have you worked in the audit industry?
· What is your role at the company?
· What are your assigned tasks at work?

Covid-19 restrictions at work
· How has covid-19 affected your work as an auditor? (*Work from home, contact with clients, digital meetings etc.*)
· How has covid-19 affected your workplace as a whole?
· What support have you received from your company during covid-19? (*Equipment, IT-support, psychological support etc*)
· Are there any covid-19 related changes at work that you would say has had a positive impact on your day-to-day work?
· Are there any covid-19 related changes at work that you would say has had a negative impact on your day-to-day work?
· Are there any covid-19 related changes at work that have remained after the restrictions were lifted?

Digitization and covid-19
· What digital tools/programs do you use as an auditor?
· Are there any certain parts in the audit process where digitization has benefited more or less?
· How has your experience with digitization at work been before covid-19?
· Has the usage of digital tools/programs increased during covid-19? If yes, in which areas?
· Have the used digital tools/programs improved/evolved during covid-19? If yes. Has It been difficult to adapt?
· Are there any digital tools/programs that have made the audit process easier during covid-19? If yes, are they still relevant after the restrictions have been lifted?
· Are there any digitized working methods that have been negatively impacted due to covid-19? If yes, was it solvable, and how? *(Different working methods etc.)*

· What are your thoughts on the future audit role, based on the increasing digitization in the industry, and has covid-19 changes affected these thoughts?

**Conclusion**

· Would you say that the discussed subject is of importance to the audit industry?

· Is there anything you would like to add, that we have not discussed yet?

**9.2 Interview information sheet**

Our names are Frida Cavallin and Karl Sjölander and we are two students at Umeå University. Frida is studying the International Business Program and Karl is studying the Master of Business Administration program, both with a focus on accounting.

We are looking for candidates to interview as part of our degree project. The purpose of the interview is to investigate how the ongoing development of digitization has affected the auditor's tasks and work routines during and after covid-19.

Our starting point for this interview will be the questions that we will send to you before the interview and attached in this email. This means that there is plenty of time for you to think about your answers and discuss the questions with others if you want. On certain questions, there is a possibility that we ask follow-up questions to get a broader point of view. You have the right to pause or cancel the interview at any time, for any reason.

We write our study in english, but the interviews will be held in swedish. We will use Zoom / Teams when we conduct the interviews, and with your permission we will record an audio file that will be deleted as soon as the study is completed. Everyone who participates in this interview will be anonymous and all material from the interview will only be used for our study.

We hope that you are able to help us with our study by participating in this interview and we look forward to your response.

Have a nice day!

Sincerely,
Frida & Karl