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Robotic Process Automation

Robotic Process Automation and its Effects on Job Characteristics

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ABSTRACT (MAX. 200 WORDS):

The automation of work tasks has been of high interest for over a century, where different technologies have been developed to serve this purpose. Robotic Process Automation (RPA) is one of these technologies, which automates the execution of monotonous and repetitive work tasks previously performed by humans. As a consequence, the employee whose job consists of these work tasks might perceive effects on their job characteristics, since these constitute the essential attributes of a job. The use of RPA is becoming vital for organisations to remain competitive in the long run and is predicted to drastically increase during the upcoming years. In line with this, the aim of the study is to describe what effects the employee perceives on their job characteristics on an individual level, from using RPA. It is a qualitative study using semi-structured interviews with eleven participants. The study has focused on the five job characteristics: skill variety, task identity, task significance, autonomy, and feedback. Conclusively, the study identified that the employee perceives effects on all job characteristics except from feedback, due to the use of RPA. Results from this study give further insights into the employee's perceived effects from the use of RPA.

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Abbreviations

AI	Artificial Intelligence
IS	Information Systems
IT	Information Technology
RPA	Robotic Process Automation

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Definitions

Employee	Defined as the human employee whose job requires execution of time-consuming repetitive and monotonous work tasks.
Job	Defined as a collection of work tasks, unstructured as well as structured (Devi & Uthariaraj, 2016) consisting of certain job characteristics (Hackman & Oldham, 1976).
Structured Work Tasks	Defined as routine work tasks, including work tasks of a repetitive nature. Consequently, these work tasks could be accomplished by procedural solutions (Di Felice, Lochovsky, & Mosser, 1991).
Unstructured Work Tasks	Defined as complex and problem-solving work tasks, which are problematic to support procedurally due to its non-repetitive nature (Di Felice et al., 1991).

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1 Introduction

1.1 Background

For more than 200 years, new innovations have changed the way organisations and industries work (Xu, David, & Kim, 2018). Previously, there was a focus to facilitate mass production (Xu et al., 2018), but for more than a century, it has been of high interest to managers to automate work tasks, creating an organisation who use their resources in a more efficient way (Lacity & Willcocks, 2016). In 1960, information technology (IT) was used to further automate production (Xu et al., 2018). Furthermore, already in the early 1980's, it was argued that robots undoubtedly would constitute an even larger part of the job environment in the future, possibly creating new jobs but also threatening to both reduce and replace human labour (Albus, 1983; Knod et al., 1984). Moreover, in the 1990's researchers argued that automation resulted in changes in jobs and affected the human worker (Andersen & Kraemer, 1994), which subsequently caused effects on job characteristics since these constitute the essential attributes of a job (Kelloway & Barling, 1991). For the purpose of this thesis, *effect(s)* refers to possible changes in the employee's job characteristics due to his/her use of robotic process automation (RPA). Moreover, the importance of technology continues, as IRPA (2015) clearly states:

2015 is to robotic process automation (RPA) what 1994 was to the Internet – an auspicious start, but we ain't seen nothing yet! - (p. 2)

RPA is a technology and a software robot that is adapted in the context of business process automation (Asatiani & Penttinen, 2016), where Gartner (2019, online) describes business process automation as “the automation of complex business processes and functions beyond conventional data manipulation and record-keeping activities, usually through the use of advanced technologies”. RPA is a technological imitation of an employee with the aim to streamline structured work tasks (Asatiani & Penttinen, 2016), where Lacity and Willcocks (2016) argue for the importance for organisations to pay close attention to and communicate the effects RPA can have on the employee. The technology implicates immense benefits for organisations by efficiently maintaining the business' structured work tasks, hence diminishing the need for the employee to perform repetitive and monotonous work tasks, and entails cost and time savings for the organisation (Bourgouin, Leshob, & Renard, 2018; Lacity & Willcocks, 2016; Madakam, Holmukhe, & Jaiswal, 2019). Consequently, RPA is predicted to become vital for organisations to remain profitable and competitive in the long run (Shetty, 2018). Hence, the opportunities that automation and RPA provide, result in an increased pressure on organisations to utilize these opportunities in their administrative work processes (Houy, Hamberg, & Fettke, 2019). Still, according to Dilmegani, Korkmaz, and Lundqvist (2014), several organisations have a long way to go in order to take full advantage of the effects and possible benefits derived from digital adoptions.

Due to customers' increased demand for response urgency, automation has had a big impact on and transformed the service industry (Karmarkar, 2004). In a similar way, citizens and businesses now expect the public sector to enhance the full capability that the digital transformation enables, to meet their needs in a more efficient way (Dilmegani et al., 2014). Moreover, SKL (n.d.) argues that the demographic development has generated vast challenges for municipalities, due to an increased need for welfare. Subsequently, SKL (n.d.) argues for a

need to automate processes in order to meet the increased demands, which is further supported by Scheepers, Lacity, and Willcocks (2018) who argue that customer enquiries continues to radically grow in several industries, such as the utility, financial and public sector. Hence, employees whose jobs, constituted by work tasks, consist of many work tasks that are repetitive and monotonous are influenced by the increased demand of digitalisation and integration of RPA (Lhuer, 2016) since these parts of their work have been identified as suitable to replace with RPA (Bourgouin et al., 2018; IRPA, 2015; Madakam et al., 2019; van der Aalst, Bichler, & Heinzl, 2018). Consequently, these employees might perceive effects on their job characteristics, when parts of their work tasks are automated by RPA. For the purpose of this thesis, perceives refers to how an employee experiences that RPA has had effects on their job characteristics.

However, it has been argued that automation also entails certain downsides, deskilling employees and eliminating jobs as a result of computers' ability to execute work tasks that were previously performed by humans, consequently replacing them (Westerman, Bonnet, & McAfee, 2014). Yet, organisations and researchers argue that the reason behind using RPA is to relieve the employee from structured and unchallenging work tasks to allow them to put more focus on unstructured work tasks, including complex and problem-solving work tasks, to further enhance their individual skills and knowledge (Bourgouin et al., 2018; Lacity & Willcocks, 2016; Madakam et al., 2019).

1.2 Problem Area

Previous research has argued that automation and RPA brings vast opportunities for organisations in sense of cost and time savings by replacing the repetitive work tasks, leading to more complex and unstructured work tasks (Bourgouin et al., 2018; Lacity & Willcocks, 2016; Madakam et al., 2019). Additionally, Hallikainen, Bekkhus, and Pan (2018) stress that RPA can provide organisations with a noteworthy return on investment, which makes it a desirable technology to adopt. Furthermore, RPA is topical since its deployment is increasing and is predicted to further increase (IRPA, 2015; Le Clair, 2018), where Gartner predicts RPA to be deployed by 85 % of large organisations by the end of 2022 (Shetty, 2018).

Research regarding RPA have previously focused on consequences on an individual level in regards to employees experiencing a competition by RPA which consequently impacts the employees moral (Asatiani & Penttinen, 2016), even though Lacity and Willcocks (2015) argue that RPA has not been observed to have any negative consequences on employees' job losses. Other studies have looked at consequences of RPA adoption on an organisational level, studying RPA's impact on providers of business process outsourcing (Hallikainen et al., 2018). Moreover, Lacity and Willcocks (2016) conducted a study that focused on the internal adoption of RPA on an organisational level. However, when looking at literature regarding the consequences from RPA, it seems to be a lack of IS research and theory that highlights what effects the use of RPA has on job characteristics on an individual level, in the context of an employee in an office environment that perform mental rather than physical work. Even though it is not a new phenomenon that organisations replace human labour by automating work tasks (Lacity & Willcocks, 2016; Xu et al., 2018), the context in which it has been applied in organisations through RPA is new - automating structured work tasks for the employee (SKL, n.d.), by mimicking human skills (Asatiani & Penttinen, 2016; Lhuer, 2016) and therefore affect a new category of employees (Gallie, 1991; Vallor, 2015).

A similar lack of knowledge has been identified by Markus (2017) who argues that IS research on algorithmic intelligence, referring to artificial intelligence (AI) in domains such as robotics, needs to further study how decisions around this technology change over time and what consequences they bring. Moreover, Markus (2017) argues that AI is a technology that should be applied to work tasks that have repetitive characteristics and where patterns need to be identified, since these work tasks are better performed by the technology than by humans. Since AI serves as a predecessor to RPA (IRPA, 2015), it could be argued that a similar extension in the research field of RPA would be of further interest. However, even though researchers argue that several benefits derive from replacing the human execution of certain work tasks with technology such as RPA (Bourgouin et al., 2018; Lacity & Willcocks, 2016; Madakam et al., 2019; Markus, 2017), Günther et al. (2017) stress that human intelligence is required when deriving insights from data and patterns. Even though robots are becoming smarter, Xu et al. (2018) argue that they do not possess the essential capacity of moral reasoning and van der Aalst et al. (2018) further highlight the importance to extend research around the interplay between humans and RPA.

1.3 Research Question

The intended knowledge contribution of this study is to describe what effects RPA has on job characteristics on an individual level. Hence, this study aims to answer the following research question:

What effects does the employee perceive that RPA has on their job characteristics?

1.4 Purpose

It seems to be a lack of knowledge in what effects the employee perceives that RPA has on their job characteristics on an individual level, referring to the individual level as an individual's perception of something. Hence, this thesis aims to describe what effects the employee perceives that RPA has on their job characteristics on an individual level, by providing a list of these effects to subsequently contribute to close the identified gap of knowledge. This thesis aims to contribute with knowledge to the IS field by studying effects on an individual level, in a context of RPA being used as a support for the employee in an organisation to automate repetitive and monotonous work tasks.

1.5 Delimitation

RPA could have several application areas (Mendling et al., 2018). However, this thesis will focus on the term as the tool used to automate structured work tasks for the employee now having RPA as a support in their everyday work tasks. Additionally, when bringing up the interaction between humans and robots within the context of RPA, this thesis will focus on this interaction via a user interface (Aguirre & Rodriguez, 2017; Fong, Thorpe, & Baur, 2001), since this interaction equals the one between RPA and its users (Asatiani & Penttinen, 2016; van der Aalst et al., 2018).

Additionally, since this thesis focus on the interplay between RPA and the employee's job characteristics from an individual level, this thesis will refer to the employee as the human employee whose work requires execution of time-consuming repetitive and monotonous work tasks.

Moreover, as stated in Chapter 1.1, this thesis use *effect* as a term to define the employee's perceived effects from RPA, referring to effect(s) as possible changes in the employee's job characteristics due to his/her use of RPA. Hence, this thesis will exclude to identify any other effects, such as economic effects.

2 Literature Review

2.1 Automation

Automation is not a new concept and has been present for more than a century (Lacity & Willcocks, 2016), where humans always have been trying to increase the efficiency of work processes and used different tools to achieve this (Hitomi, 1994). Moreover, it has been a constant discussion during the last two decades, of whether automation and new technology will and should replace certain jobs completely or just act as a support (Autor, 2015; Markus, 2017). Cambridge Dictionary (2019b) defines automation through a general definition and outlines it as the replacement of human labour in a factory or office environment, using technology or machines instead of humans to execute a job. Hence, automation can have several application areas and definitions depending on the context (Cambridge Dictionary, 2019b; Hitomi, 1994). For instance, it depends on if it is *factory automation*, defining it as the “flow of materials” where mechanical automation or process automation is directly concerned with the production processes (Hitomi, 1994, p. 123), or *office automation*, referring to it as the “flow of information” and implicates the management and control of productive activities (Hitomi, 1994, p. 123). Moreover, Hitomi (1994) argue that the term automation was coined by D.S Harder in 1936, through a definition as the transmission of work parts between machines in a production process, exclusive of human interaction. Subsequently, this thesis will use Hitomi’s (1994) definition of office automation when using the term automation.

Researchers discuss the history of automation and argue that it has gone through several steps (Autor, 2015; Hitomi, 1994; Xu et al., 2018). Firstly, they argue that automation was done through the development and use of certain tools to increase the efficiency of manufacturing. Secondly, the researchers argue that machines replaced human labour to increase the production and manufacturing efficiency. Thirdly, they claim that machines replaced the human mental labour, referring to the use of machines to automatically operate and control machine tools rather than through skilled human workers. Finally, it could be argued that a further dimension has emerged from the third step through the rise of technologies such as AI and machine learning, enabling machines and technologies to learn from experience and execute more complex and less defined work tasks (Autor, 2015; van der Aalst et al., 2018; Xu et al., 2018). The emergence of these technologies put work tasks that are performed by humans, which have not been threatened to be replaced by technology before, in risk to be partly or fully automated, subsequently endangering certain job categories (Autor, 2015; van der Aalst et al., 2018). However, even though automation has put certain job categories and work tasks at risk to diminish or be eliminated, it has also created new work tasks and categories (Autor, 2015; Xu et al., 2018). In line with Devi and Uthariaraj (2016), this thesis argue that a job consists of multiple work tasks that are interdependent on each other.

Humans interacting with robots is not a new phenomenon, in fact it has been going on since mid-1900’s (Fong et al., 2001). However, Laengle et al. (1997) argue that the previous goal with automation, to exclude the human interaction, has changed. Instead the authors argue that the objective has evolved, and a demand for robot systems that are adaptable for uncertain environments has arisen. Hence resulting in solutions combining both the robot, being more accurate and time efficient, and the human capabilities, being more flexible (Laengle et al., 1997), leveraging the abilities from both the robot and the human (Harriott et al., 2015;

Hinds, Roberts, & Jones, 2004). For instance, Lacity and Willcocks (2016) argue that software robots were high performing when combined with humans, where the software robot were liable for the high volume of structured work tasks while humans were in charge for the work tasks including problem solving skills and customer interaction.

Conclusively, automation has developed over time and evolved from mainly executing physical work tasks through a hardware robot (such as production machines), into executing more complex and mental tasks through a software robot (such as AI and machine learning). However, in line with Laengle et al. (1997), even though the objective with automation could be argued to be changed from the prior predominant reason to replace human workforce, the reason behind automation itself might not have changed quite that much but rather the sophistication of explaining the reasons behind it (Davenport & Ronanki, 2018).

2.1.1 Automation and its Effect on Work

As we'll demonstrate, there's never been a better time to be a worker with special skills or the right education, because these people can use technology to create and capture value. However, there's never been a worse time to be a worker with only 'ordinary' skills and abilities to offer, because computers, robots, and other digital technologies are acquiring these skills and abilities at an extraordinary rate. - Brynjolfsson and McAfee (2014, p. 11)

According to Lacity and Willcocks (2016), there exists many diverse views on what effects automation will have on how work is performed. As Brynjolfsson and McAfee (2014) reason, technologies are generating both positive and negative effects due to its ability to replace employees and automate the performance of certain work tasks. The introduction of new technologies has not only brought opportunities but also entailed dilemmas regarding how the, often unprepared, employees have been affected by the changes the new technologies has introduced to their everyday work (Andersen & Kraemer, 1994). Hence, according to Andersen and Kraemer (1994), the changes introduced by automation of work processes includes, among others, *Speed-up of work* and *Control/autonomy of individuals and jobs*.

Speed-up of work is referring to the fact that technologies are enabling the employee to speed up their work by shortening the cycle time for processes, leading to an increased expectation of fast responses (Andersen & Kraemer, 1994). Consequently, workers at all levels are experiencing an increased level of stress along with enhanced time pressure (Andersen & Kraemer, 1994; Kraemer & Danziger, 1990). Furthermore, the changes in technologies have resulted in a higher stress for workers, when not trained in a sufficient manner (Andersen & Kraemer, 1994). In contrast, not all researchers agree upon this consequence of automation. For instance, Kraut, Dumais, and Koch (1989) argue that automation results in less workload which consequently leads to employees perceiving a decreasing pressure and stress related to their work tasks. Additionally, the authors argue that the automation also leads to increased mental health and happiness.

Furthermore, (Andersen & Kraemer, 1994) argue that *control/autonomy of individuals and jobs* is another change introduced by automation, referring to it as the enhancement of difficulty for the employees within the superordinate role. This since the technology constitutes a dependency for these employees, and prior skills and knowledge might be considered obsolete (Andersen & Kraemer, 1994; Kraut et al., 1989). Additionally, the automation is, according to

Andersen and Kraemer (1994), argued to result in particular administrative employees perceiving increased control over their job as a consequence of the increased time pressure. Furthermore, according to Bjørn-Andersen, Eason, and Robey (1986), employees perceived an enrichment in their view of their work tasks as a result of automation. In contrast, the authors also highlighted that the employees perceived a constraint regarding how and when they had to conduct their work tasks, because of the automation. Moreover, it could be argued that automation also can have an impact on the employee's social interaction regarding the increased interdependence among both workers and different work units (Andersen & Kraemer, 1994; Kraemer & Danziger, 1990).

Conclusively, the above-mentioned effects that automation has on a job, does not cover all effects of automation and it is important to highlight that other effects are also of relevance in relation to automation. For instance, there is *Tighter coupling of work*, where the outcome of automation relates to the aim to create unified work groups through a centralised system (Andersen & Kraemer, 1994). However, this example and other effects are outside the scope of this study and will therefore not be further discussed.

2.2 Robotic Process Automation

According to van der Aalst et al. (2018), continuous developments within AI and machine learning constantly makes authors within the engineering and IS field question what work tasks should be automated and not. Robotic Process Automation (RPA) is one of those developments and serve as a development of previous technologies, such as AI (IRPA, 2015; van der Aalst et al., 2018). As Aguirre and Rodriguez (2017) mention, even though the word robot often is associated with electromechanical machines, it is important to highlight that RPA is not a physical robot but rather a software based solution that is configured to perform repetitive operational work tasks and procedures, previously performed by humans (Aguirre & Rodriguez, 2017; Lacity & Willcocks, 2016). Hallikainen et al. (2018) have a similar definition of RPA and define it as a tool that is used to automate service tasks that were previously performed by humans. This is further supported by Madakam et al. (2019) who explain that a common application area for RPA is to replace humans with a configured software when transferring input data from multiple sources, such as e-mail or spreadsheets, to Customer Relationship Management (CRM) systems. Hence, RPA automates work tasks with deterministic outcomes, structured data and routine characteristics, consequently automating rule-based processes (Aguirre & Rodriguez, 2017). Moreover, van der Aalst et al. (2018) define RPA as an umbrella term for tools operating on the computer system's user interface in an identical way to how a human would. Consequently, RPA is a software robot that communicates with other computer systems via front-end, in contrast to traditional software that mainly manage this communication via backend (Aguirre & Rodriguez, 2017; Asatiani & Penttinen, 2016). Hence, RPA does not require any changes in the already existing IT-systems (Asatiani & Penttinen, 2016). Practically speaking, this implies that RPA mimics the human use of computer systems, by reacting to events on the computer screen, but also by repeating specific and rule-based steps, rather than interacting with application programming interfaces (API) of other systems (Asatiani & Penttinen, 2016).

The actual and intended application of RPA is to automate the service of work tasks, previously performed by humans (Madakam et al., 2019). So, what makes RPA different from previous automation tools? One way RPA differs from other automation technologies, such as

Business Process Management Systems (BPMS), is that RPA never touches the underlying programming logic of other systems, solely accessing other systems' platforms through their presentation layers, since RPA sits on the top of already existing systems (Aguirre & Rodriguez, 2017; Lacity & Willcocks, 2016). Additionally, RPA differs from BPMS since RPA aims to use existing business application while BPMS aims to create new business applications (Cewe, Koch, & Mertens, 2018; Forrester Research, 2014). Furthermore, Davenport and Ronanki (2018) argue that RPA mainly differ from other automation tools due to the software robot's ability to act as a human in its work while inputting and consuming information that comes from several IT systems. This automation enables the performance of work tasks in an easier, faster and better way, by replacing employees with technology when executing monotony and repetitive work tasks (Madakam et al., 2019). Moreover, Autor (2015) argues that automation often intends to substitute for labour. However, he further argues that automation also complements employees, which, in line with Aguirre and Rodriguez (2017) and IRPA (2015), is very much like the case for RPA. Similarly, in a study from 2018, Davenport and Ronanki (2018) found that the primary objective behind the choice to use RPA rarely was to completely replace employees.

Conclusively, this thesis will align with Aguirre and Rodriguez's (2017) definition of RPA; "a software based solution that is configured to carry out repetitive operational work tasks and procedures that are used to be done by humans." (p. 66), since this thesis focus on what effects the employee perceive that the technology has on their job characteristics on an individual level.

2.2.1 Benefits and Challenges with RPA

RPA is a technology that brings both benefits and challenges to organisations (Aguirre & Rodriguez, 2017; Asatiani & Penttinen, 2016; Madakam et al., 2019; Willcocks, Lacity, & Craig, 2015). This thesis will further discuss some of these.

Researchers argue that there are four main benefits that the use of RPA brings for organisations; cost reduction, increasing process speed, error reduction, and productivity improvement (Aguirre & Rodriguez, 2017; Madakam et al., 2019; Willcocks et al., 2015). Firstly, a major benefit is argued to be the cost savings being generated through its use (Aguirre & Rodriguez, 2017; Hallikainen et al., 2018), where Aguirre and Rodriguez (2017) mention productivity improvements as a cause for this cost reduction. Moreover, Madakam et al. (2019) mention that organisations dramatically can improve the efficiency for how they use their employees, subsequently generating a more viable workforce in regard to factors such as cost and efficiency. Secondly, increased process speed is another benefit that is generated through the use of RPA, where Willcocks et al. (2015) argue that the software robot can outperform employees on speed, quality and efficiency, which shortens the delivery time and allowing organisations to act quickly and decisively. This also brings us to the third benefit, which is error reduction, where RPA perform structured work tasks in a precise and quick way, which resulted in an increased regulatory compliance due to the robots ability to outperform an employee on factors such as error rate metrics, speed, and quality (Lacity & Willcocks, 2016). Lastly, productivity improvement is the fourth benefit that the use of RPA brings for organisations. Researchers reason that robots perform high volume, repetitive work tasks better than employees, meaning that the robots eliminates the risk for errors where the work task is vulnerable to human specific errors (Asatiani & Penttinen, 2016; Willcocks et al., 2015), such as matching numbers across several different tables (Asatiani & Penttinen, 2016).

But as well as RPA is bringing benefits for organisations, there are also challenges with the software robot (Asatiani & Penttinen, 2016). In a study from 2015, Lacity and Willcocks (2015) stated how their findings implied that the use of RPA mostly led to positive feedback and did not indicate that organisations experienced any significant job loss due to use of RPA. However, Asatiani and Penttinen (2016) argue that even though Lacity and Willcocks (2015) study did not indicate any negative feedback from the use of RPA, there is still a risk of employees considering the software robot as a direct contestant for their job. Therefore, the authors argue that a possible consequence from this could be tensions between the management and employees, subsequently influencing the employee's morale in a destructive manner.

RPA is a bad fit for work tasks that requires complex interpretation skills, creativity or subjective judgement and is therefore best suited for structured work tasks (Asatiani & Penttinen, 2016). Hence, previous research suggests that RPA's ability to only handle structured work tasks is another challenge, where it needs to become smarter to be able to handle unstructured work tasks as well, to maximise the benefits for organisations in their work (Asatiani & Penttinen, 2016; van der Aalst et al., 2018). For instance, van der Aalst et al. (2018) argue that the goal with RPA is to teach the software robot how to learn in the same way as AI and machine learning, which would enable RPA to adapt and manage unstructured work tasks that requires more complex skills. Due to this challenge, Asatiani and Penttinen (2016) reason that RPA only serves as a temporary solution in its current state, since it lacks the skills and ability to cover entire processes involving both structured and unstructured work tasks. Hence, the authors mention there is still a need for human interaction to execute these processes, since RPA does not possess all the required skills to execute unstructured work tasks, and consequently needs to be complemented by humans to execute the more complex skills.

2.3 Skills

The definition of skill differs depending on what context it is put in, and researchers argue that it is important to identify what definition that is suitable for the specific context (Gallie, 1991; Vallor, 2015; Wood, 1987). For instance, Wood (1987) argues for the need to distinguish between an individual's skill and the skills that is essential for certain jobs. This is important to distinguish since, in line with Wood (1987), skills of a specific individual do not necessarily have to be affected by technological changes even though work tasks might change due to them. Hence, this thesis defines skills as the skills that are vital for a particular job, since the main focus of this thesis is to investigate what effects the employee perceives that the use of RPA has on their job characteristics on an individual level. Subsequently, this thesis will use the terms "skill" and "skill set" as synonyms for each other since skill sets often refer to skills that are required for a specific job (Cambridge Dictionary, 2019e; MacMillan Dictionary, 2019a).

2.3.1 Deskilling

Vallor (2015) argue that "deskilling" is a concept that has been used to explain how advancements of machine automation in the twentieth century has generated a devaluation of practical knowledge and certain skills, which historically has been nurtured by highly trained workers, such as machinists. Attewell and Rule (1984) have a similar view on the concept and define deskilling as a perspective indicating that automation deprives conceptual work tasks out of

skilled jobs. Subsequently, the authors explain how computer algorithms or exceedingly smaller numbers of high-level specialists replace the conceptual, referring to the concept of automation. Both Vallor (2015) and Attewell and Rule (1984) base their explanation on Braverman's book *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*, where he discusses around deskilling and upskilling, with a focus on the historical process of occupational change and the transformation of work due to the evolution of management and technology, which subsequently influenced social life (Braverman, 1998).

According to Cambridge Dictionary (2019c), one definition of the term deskill implies lowering the level of skills that someone needs to execute a specific job, which aligns with both Vallor's (2015) and Adler's (1986) definition of the term. Additionally, Gallie (1991) reasons that an increased concern by the management to constrict their control over the work process, is assumed to be the underlying dynamic behind the process of deskilling. Vallor (2015), on the other hand, discusses about something that could be seen as an extension of deskilling, namely technological deskilling. The author argue that the computer revolution has deskilled workers that previously have not been affected by automation, where the rise of technologies such as robotics and AI is cultivating new work tasks in a variety of occupations. For instance, researchers mention how technologies are now freeing white collar workers (assumably referring to employees in an office environment that perform mental rather than physical work (Cambridge Dictionary, 2019f)) from repetitive work tasks such as filing and copying, to subsequently enable them to focus on more complex and knowledge-laden work tasks which cause new demands on traditional professions and their related skills (Gallie, 1991; Vallor, 2015).

2.3.2 Upskilling

The opposite of deskilling is "upskilling" (Giuliano, 1982), where the term connotes the process for improving and learning new skills, in order to make the employees better at their job (Cambridge Dictionary, 2019d; MacMillan Dictionary, 2019b). Upskilling often implies that new technologies enable an advancement of employees' skills rather than deskilling them (Attewell & Rule, 1984; Giuliano, 1982). For instance, Giuliano (1982) argues that the automation of work tasks mainly occur in work situations that are already routinized, meaning that the technology facilitates the information processing by, for instance, automating time consuming and monotonous work tasks such as filing and moving messages. Moreover, Littler and Innes (2003) mention how debates regarding issues of skill change increased in the 1990's, where an increased need for maintaining education and training consequently led to a general process of employee upskilling.

In addition to this, Carey (2007) discusses another view on upskilling in relation to different settings, where new skills were needed due to changes of work tasks. The author mentions how it has been argued that this change of work tasks has not only been seen as upskilling from the employee's perspective, where they perceived a loss of skills rather than developing new ones. Moreover, the author explains how the employees seemed to perceive that the upskilling, in relation to the new work tasks, diminished the amounts of work tasks which the employees felt constituted their profession. Subsequently, Carey (2007) explains how this resulted in the employees not experiencing upskilling and benefits from the skills that originated from the new work tasks, but rather a covert deskilling in the long run due to this change.

2.4 Job Characteristics

In the 1970's, Hackman and Oldham (1975, 1976) developed a job characteristics model, which has been used by researchers (Loher et al., 1985; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995) where some argue that it might be the best work within the area of how job dimensions are related to performance and job satisfaction (Spector, 1986). Hackman and Oldham (1976) argue that five dimensions comprises job characteristics:

- *Skill Variety* - the level of skills needed when carrying out the work, referring to different skills and talents of a person (Hackman & Oldham, 1976; Loher et al., 1985; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995).
- *Task Identity* - the level to which the job needs to be fulfilled as a “whole” piece of work, or performing a work task from the beginning to the end with an evident outcome (Hackman & Oldham, 1976; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995).
- *Task Significance* - the level of extensive impact that the job has on the lives or work of other people, both regarding the internal and external environment of the organisation (Hackman & Oldham, 1976; Loher et al., 1985; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995).
- *Autonomy* - the level of freedom, independence, and discretion that are allowed for an employee while organising the work, but also when determining the procedures for carrying it out (Hackman & Oldham, 1976; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995; Spector, 1986).
- *Feedback* - the level of information that is communicated to an employee about its work performance (Hackman & Oldham, 1976; Piccolo & Colquitt, 2006; Renn & Vandenberg, 1995). Hence, feedback refers to whether an employee has obtained clear information of the effectiveness of its performed job, or not.

This thesis defines job characteristics as a collection concept for the attributes being essential for the job itself (Kelloway & Barling, 1991), which in our study is skill variety, task identity, task significance, autonomy and feedback. However, it is worth mentioning that some researchers discuss about other job characteristics as well (Albers Mohrman, 2003; Morgeson & Humphrey, 2006; Sims, Szilagyi, & Keller, 1976). This thesis will, however, focus on the above mentioned job characteristics since they originates from the well cited researchers Hackman and Oldham (1975, 1976), whose model for job characteristics often has been used as a foundation for many other researchers' work (Loher et al., 1985; Renn & Vandenberg, 1995).

Moreover, these five job characteristics, equalling the core job dimensions in Figure 2.1, is argued to have effects on the employee's motivation for the work (Hackman & Oldham, 1975, 1976). Hackman and Oldham (1975, 1976) mean that the core job dimensions generate the level of critical psychological states. For instance, the authors reason that the level of skill variety, task identity and task significance determine the perceived meaningfulness of a job, that autonomy decide one's perceived responsibilities for the work outcomes, and where feedback implies one's knowledge of the actual results from the work activities. Furthermore, this lead to personal and work outcomes such as; high internal work motivation, high quality work performance, and low absenteeism (referring to absenteeism as when an employee is not at

work when they are supposed to be (Cambridge Dictionary, 2019a)) and turnover (Hackman & Oldham, 1976). Lastly, Hackman and Oldham (1975) refer to employee growth need strength as an individual’s desire to grow and develop within their work. The model is presented in Figure 2.1 below.

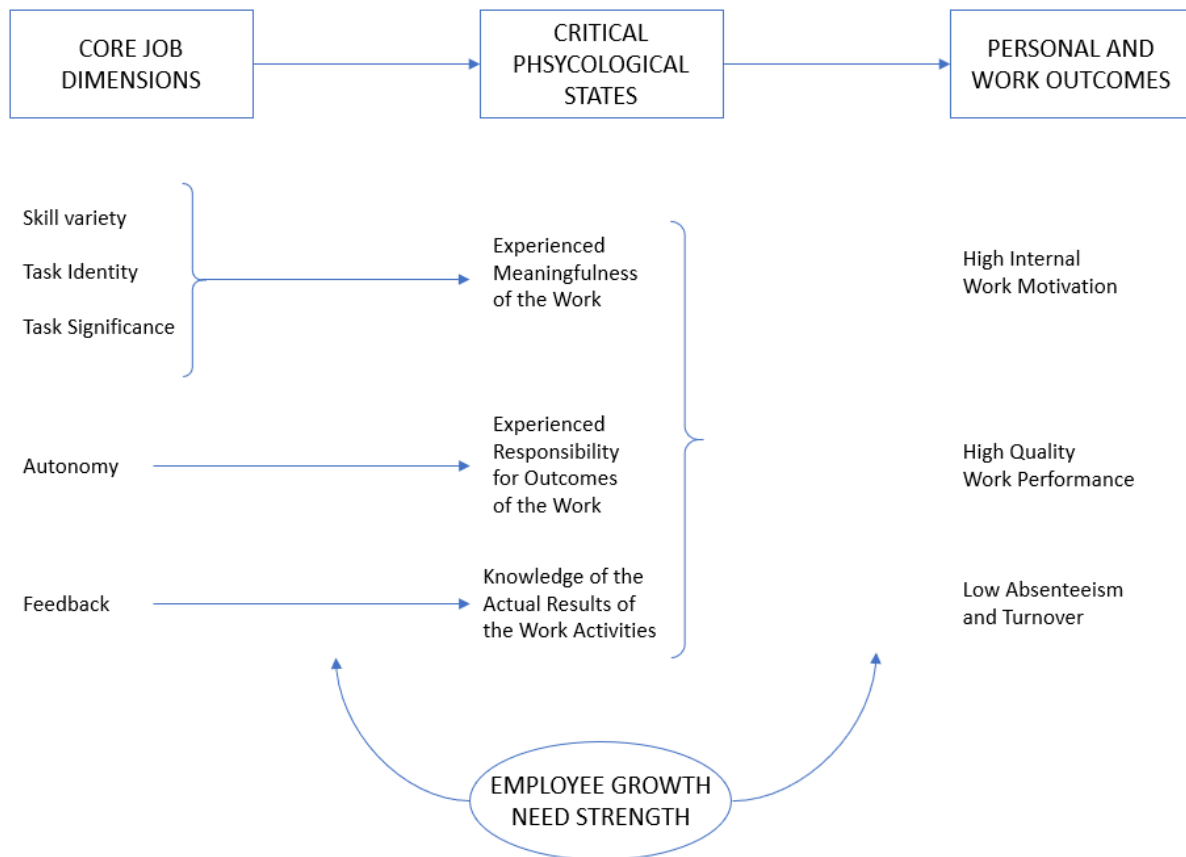


Figure 2.1: The Job Characteristics Model of Work Motivation (adapted from Hackman & Oldham, 1975, p. 161)

Moreover, researchers also define the job characteristic model (see Figure 2.1) as both job design model and job design theory. (Gerhart, 1987; Kiggundu, 1981). However, in line with the founders Hackman and Oldham (1976), this thesis will refer to it as a model.

Furthermore, there are two main categories regarding the design of a job, which “are aimed at engaging the motivational forces of workers' egoistic needs through the establishment of job characteristics that generate intrinsic reward” (Gallagher & Einhorn, 1976, pp. 359-360). This thesis will focus on one design from each of the two main categories, including *job enlargement* and *job enrichment*, and will therefore not focus on neither *job extension* nor *job rotation* from the first category. Firstly, according to Gallagher and Einhorn (1976), job extension is described to be closely related to job enlargement and will, therefore, partly be covered in the section for job enlargement (see Chapter 2.4.1) since work tasks variety is emphasized in both designs. Secondly, *job rotation* is outside the scope of this study, since this thesis focus is on the employee’s perception of RPA’s effects on their work tasks, and not how to make the employee’s job more varied by rotating the employee through different departments (Gallagher & Einhorn, 1976; Rush, 1971).

Conclusively, this thesis will mainly focus on the core job dimensions in the job characteristics model, but also touch upon the critical psychological states, and personal and work outcomes. Hence, since measuring the employee's desire to grow and develop within their job is outside of the scope for this thesis, this thesis will not focus on the part of the model regarding employee growth and strength. Furthermore, the job characteristics model is only used as a guide for this study to see the connections between the core job dimensions, the critical psychological states, and personal and work outcomes. Hence, this study will exclude the numerical measurements of the components within the model.

2.4.1 Job Enlargement

Job enlargement is by several researchers defined as “horizontal job loading” (Chung & Ross, 1977; Gallagher & Einhorn, 1976; Herzberg, 1968) and refers to when work tasks are added resulting in a greater variety among the work tasks. Consequently, in order to accomplish enlarged jobs, the attributes of a work task must include; *Task Variety*, *Meaningful Work Module* and *Performance Feedback*, *Ability Utilization*, *Worker-paced Control* (Chung & Ross, 1977).

The *task variety* refers to the reduction of monotony among work tasks (Chung & Ross, 1977; Gallagher & Einhorn, 1976) by enhancing performance and mental activation among the employees through increased stimulus variation and intensity (Chung & Ross, 1977). Moreover, this has overlapping characteristics with Hackman and Oldham's (1975, 1976) description of the job characteristic “task significance”. Another task attribute within job enlargement is the *meaningful work module* which refers to the added motivational value among the employees by making them feel appreciation for the fulfilment of a work task by increasing the job characteristic “task identity” (Chung & Ross, 1977; Hulin & Blood, 1968). Furthermore, another task attribute in job enlargement is the *performance feedback*, referring to the employee's knowledge of results from their accomplishments in their work, which can result in an increased motivational level among the employees (Chung & Ross, 1977). This task attribute could be achieved by enhancing the utilization of the job characteristic “feedback”, since this job characteristic refers to whether an employee has obtained clear information of the effectiveness of their performed job, or not (Hackman & Oldham, 1976). Additionally, *ability utilization* is a task attribute within job enlargement that refers to the employee's utilization of their skills and abilities, resulting in an increased satisfaction for the job among the employees (Chung & Ross, 1977). This task attribute has overlapping characteristic with Hackman and Oldham's (1975, 1976) definition of the job characteristic “skill variety”. Hence, it is subtle to, in accordance to Chung and Ross (1977), balance the level of skill variety, since the demand of too many new skills to accomplish the work tasks could lead to the opposite and instead create frustration among the employees. The last attribute in order to accomplish job enlargement is the *worker-paced control*, which covers that the employee have more control to desire their work-pace (Hulin & Blood, 1968), and could result in absenteeism and employee turnover being reduced (Chung & Ross, 1977).

Conclusively, researchers (Chung & Ross, 1977; Gallagher & Einhorn, 1976) argue that accomplishing job enlargement will have a positive motivational effect by increasing job satisfaction among the employees, and result in provoking inherent motivation for the employees. In contrast, Herzberg (1968) argues that job enlargement only is about structurally enlarging the job, with an embedded risk of only enlarging the meaninglessness of the job and provoking the inherent motivation for the employee.

2.4.2 Job Enrichment

Unlike job enlargement, job enrichment is defined as “vertical job loading” (Chung & Ross, 1977; Gallagher & Einhorn, 1976; Herzberg, 1968) and has the objective to “fostering intrinsic motivation through granting increased responsibility in the work situation” (Gallagher & Einhorn, 1976, p. 360). The idea originated in order to improve productivity along with increasing the satisfaction and motivation of employees at work (Hackman & Oldham, 1975; Paul, Robertson, & Herzberg, 1969), potentially providing the employees with psychological growth (Hackman & Oldham, 1976; Herzberg, 1968). Hence, this could be achieved by increasing the responsibility of employees’ work tasks, along with making them more challenging (Herzberg, 1968; Katz, 1978; Paul et al., 1969). In order to accomplish job enrichment, Chung and Ross (1977) argue for the need to include the following task attributes; *Employee Participation*, *Goal Internalization*, *Autonomy* and *Group Management*.

The *employee participation*, within the context of accomplishing job enrichment, includes enhancement of the employee’s job satisfaction and performance by allowing them to take part in the managerial decisions (Chung & Ross, 1977; Herzberg, 1968; Ugboro & Obeng, 2000). Furthermore, Chung and Ross (1977) argue *goal internalization* is another task attribute to accomplish job enrichment, which is essential in order to succeed with the job enrichment. The authors refer to the attribute as the employees being a part of their work group’s or organisational goal setting, resulting in a maximisation of the employee’s motivation. Hence, it could therefore be argued that the task attributes *employee participation* and *goal internalization* could both result in employees experiencing an enhancement of the job characteristic “task identity”, since these attributes could increase the level of impact the employees perceive that their work task has on the entire work process (Hackman & Oldham, 1976).

Moreover, the task attribute *autonomy* is defined as giving the employee increased control and autonomy over their job, in order to take greater responsibility (Chung & Ross, 1977). Hence, this task attribute has overlapping characteristics with the job characteristic “autonomy”, since autonomy as a job characteristic is defined as the level of freedom and independency the employee have to control and structure how and when to perform their work tasks (Hackman & Oldham, 1976). Furthermore, the last task attribute needed to accomplish job enrichment is, according to Chung and Ross (1977), *group management*. However, since this attribute concern employees on a group-level, it is considered to be outside the scope of this study since this study focus on the individual level. Hence, this task attribute will therefore not be further discussed.

Conclusively, enriched jobs allows employees to perform decisions and functions previously restricted to the management level, leading to an enhancement of accepting decisions being made (Chung & Ross, 1977). Consequently, job enrichment remains significant in order to design jobs that motivates the employees (Herzberg, 1968), since it does not only enhances the quality of the job but also make the employees perceive meaningfulness of their job (Hackman & Oldham, 1975).

2.4.3 Job Satisfaction

Researchers argue that job characteristics are closely related to an employee’s job satisfaction (Daly & Dee, 2006; Hackman & Lawler, 1971; Kelloway & Barling, 1991), a highly researched construct (Daly & Dee, 2006), which this thesis define as the sense of well-being

that results from one’s ability to accomplish valued goals at the job (Daly & Dee, 2006; Locke, 1969; Spector, 1986). Yet, Loher et al. (1985) argue that this relationship is moderate and reason that job satisfaction cannot be fully determined if mainly looking at aspects occurring on an individual level. The authors imply that external situational characteristics need to be considered, such as supportiveness from a work group, when determining the real incentive behind an employee’s job satisfaction. However, Kelloway and Barling (1991) argue that job characteristics are likely to influence intrinsic job satisfaction, such as job-related competence, more than extrinsic job satisfaction, such as salaries. Additionally, Hackman and Lawler (1971) reason that it is the employee’s perceived experience of the job characteristics that influences their reaction to a job rather than its actual objective. Hence, the relationship between job satisfaction and job characteristics could influence the quality of an employee’s job, but also enable organisations to understand whether behavioural or organisational “issues” originates from an employee’s relationships to their job (Hackman & Oldham, 1975). However, Hackman and Lawler (1971) highlight that the objective of job characteristics is also of importance, since it influences employee’s perception and experience for a job. Yet, the authors stress that it is not possible to assume that the employee’s perception of job characteristics is assured just because the objective of job characteristics has been measured.

2.5 Summary of the Literature Review

The chapter for the literature review is visualized below through a conceptual model, explaining the relations between the main concepts and structure. However, the model is destined to provide the reader with a general picture of the concepts and why these are relevant for this thesis. Therefore, the model visualizes their relations with a pre-required condition, that RPA is suitable for use in an organisation.

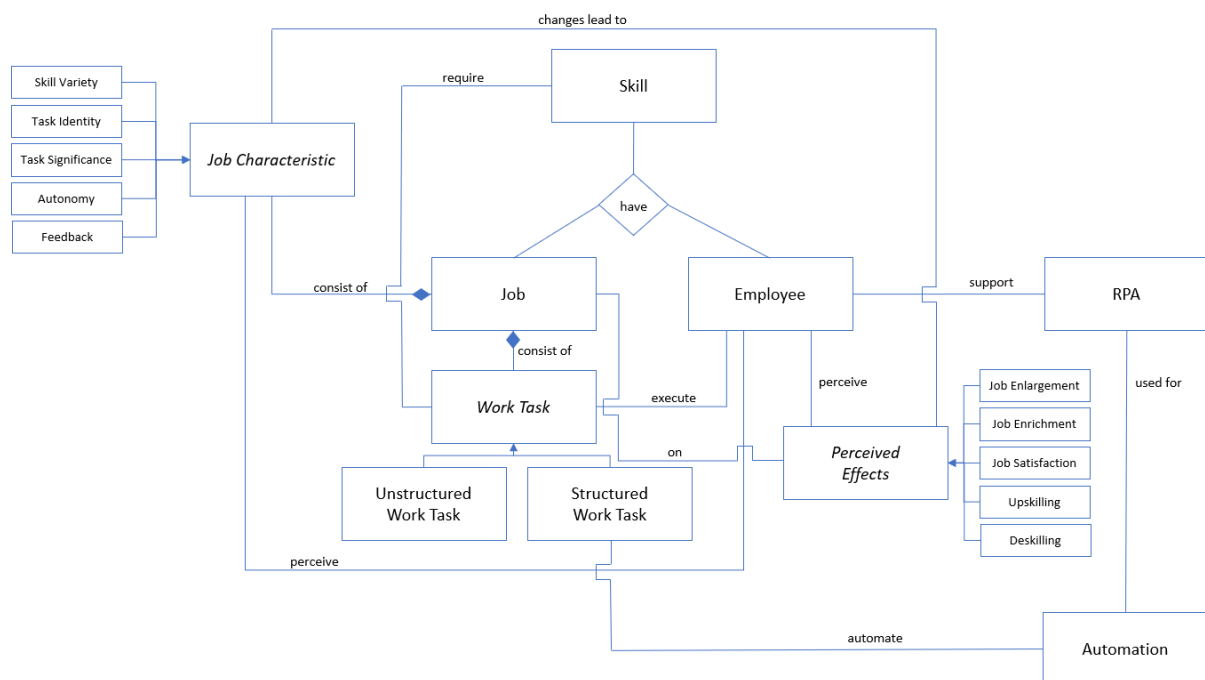


Figure 2.2: Summary of the Literature Review Chapter

To further clarify the relations between the concepts in the literature review chapter, each sub-chapter (2.X) will be summarised below.

Automation has developed since its infancy, where its main objective is argued to have advanced from simply replacing human workforce to support human in their work, subsequently generating a human-robot workforce. (see Chapter 2.1)

Moreover, new advancements in technology aims to work as automation tools to support the *employee* in their *job*, such as *RPA* - a software robot that is used in organisations today to automate *structured work tasks* that previously have been executed by the employee. A job consists of *work tasks* that are either structured or unstructured, where RPA is only able to automate the structured work tasks. However, the structured work tasks could still be executed by the employee but do not necessarily have to, since RPA is suitable for executing structured work tasks being monotonous and repetitive. Therefore, RPA can replace this type of work tasks to allow the employee to focus on *unstructured work tasks*, which cannot fully be executed by RPA itself and requires human interaction. Additionally, *skills* are required to enable the execution of work tasks. However, the execution of unstructured work tasks requires more complex skills than the execution of structured work tasks, which is the reason for RPA only being able to execute structured work tasks. (see Chapter 2.2; 2.3)

In order to be an employee, the employee needs to have a job that requires certain skills. The required skills depend on the work tasks. Additionally, when the employee use RPA as a support to automate structured work tasks, this could generate in the employee perceiving effects on their job. These *perceived effects* could be; *job satisfaction*, *job enlargement*, *job enrichment*, *job satisfaction*, *upskilling* and *deskilling*. (see Chapter 2.3; 2.4)

Furthermore, a job also consists of *job characteristics*. These job characteristics is influenced by what the job comprises and can vary in level, depending on how the employee perceive the job characteristics and the configuration of their work tasks. Hence, the level of these job characteristics can change if the work tasks undergo some kind of reconfiguration, i.e. due to the use of RPA. These changes can lead to the employee perceiving effects on their job. Consequently, these perceived effects might lead to a reduced or increased level of how the employee perceive their job characteristics. (see Chapter 2.3; 2.4)

Below is a brief example of how some relations in the model is connected:

The employee use RPA as a support. RPA is used to automate structured work tasks. If the employee perceive that the use of RPA has increased the level of skill variety (being one of the job characteristics), this change could lead to the employee perceiving upskilling (being one of the perceived effects).

3 Research Methodology

3.1 Research Strategy

In order to reach an answer to our research question, a qualitative method was applied in this study since we aim to study the employee on an individual level, where the qualitative method enabled us to access people's own subjective experiences of a certain phenomenon (Kvale, 1996; Kvale & Brinkmann, 2005). Since a qualitative method helps to provide knowledge to understand the human conditions (Kvale, 1996; Kvale & Brinkmann, 2005), the use of a qualitative method was considered suitable for our study because it allowed us to understand the phenomena studied - what effects the employee perceives that the use of RPA has on their job characteristics on an individual level. According to Goldkuhl (2012), pragmatism and interpretivism are two important and possible alternatives regarding research paradigms for qualitative research in IS and the author argues that pragmatism is appropriate to use when the researcher aims to intervene. However, since we do not intend to intervene with the respondent's work, we considered, in line with Goldkuhl (2012) and Bhattacharjee (2012), the use of an interpretive strategy to be suitable for our study. Our role as researchers, is with the objective to engage in understanding rather than engaging in the change, which further supports our choice to use an interpretive approach (Goldkuhl, 2012).

Additionally, Bhattacharjee (2012) argues that interpretive approaches are well suited when trying to describe the social reality interpreted through sense-making rather than hypothesis testing. This makes the interpretive approach appropriate for our research, since we consider our studied phenomena to be dependent on the context. Consequently, the author argues that an interpretive approach is suitable when studying events or processes that are context-specific, which applies to our study since we aim to describe the interplay between a certain technology (RPA) and the employee on an individual level. The interpretive approach is however closely related to subjectivism, referring to that the weight is put on words rather than numerical data in an interpretive research (Recker, 2013). However, Maxwell (1992) argues that generalisability could be greater in studies using quantitative methods, due to the wider range of respondents in studies using quantitative methods rather than qualitative. Nevertheless, Seale (1999a, 1999b) reasons that there are aspects of generalisability within qualitative research, which will be further discussed in Chapter 3.4.

However, Gummesson (2003) argues that all research is somehow interpretive. Recker (2013) partly supports this by highlighting that the human factor constitutes a large part of qualitative research, consequently generating subjectivity and leaving room for interpretation. Several other research paradigms exist (Bhattacharjee, 2012; Goldkuhl, 2012; Recker, 2013) but we consider interpretivism as suitable for our qualitative study due to already mentioned arguments.

Moreover, we consider that our study consists of descriptive characteristics, since we aim to present a rich description of an individual's perception of our studied phenomena (Recker, 2013). In our research, we have compared previous theoretical findings, of what effects the use of RPA has had on employees and jobs, against our data collection. Additionally, Bhattacharjee (2012) argues that research of descriptive type often aims to answer questions

such as “what”. Due to our study being of a descriptive nature, we have formulated our research question in line with this type of research. This applies to our thesis, since we aim to describe what effects the employee perceives that the use of RPA has on their job characteristics.

3.2 Progression of the Literature Review

The first step for our study was to conduct a literature review. When we conducted our study, we took Bhattacharjee’s (2012) three-folded purposes of literature reviews into account. These purposes were presented as 1) investigating what knowledge that already exists within our selected research area, 2) identifying key authors, actors and articles within our research area, and 3) performing gap-spotting to understand what focus areas that needs to be further investigated due to a lack of knowledge (Alvesson & Sandberg, 2011; Bhattacharjee, 2012). Moreover, in order to find where to contribute to close the gap of knowledge, but also since our study has an interpretive approach, we considered it to be of importance to find literature of contrary and alternative interpretations (Randolph, 2009).

In line with Randolph (2009), certain criteria were set regarding what literature to include and exclude in our study, before commencing our data collection. These criteria focused on our study’s objective and were used to provide transparency of the study, in order to enable other researchers to replicate the study as largely as possible (Randolph, 2009). In our study, these criteria consist of several queries (constituted by keywords that were used both standalone and combined) where some of them are listed below:

- (“RPA” OR “Robotic Process Automation”) AND (“task automation” OR “automation”)
- (“skill” OR “skill set”) AND (“job characteristics”)
- (“automation”) AND (“effect” OR “employee”)
- (“job characteristics” OR “employee”) AND (“Job Enlargement” OR “Job Enrichment”)
- (“work task” OR “task” OR “structured work task” OR “structured task” OR “unstructured work task” OR “unstructured task”) AND (“upskilling” OR “upskill” OR “deskilling” OR “deskill”)
- (“employee” OR “human labour”) AND (“upskilling” OR “upskill” OR “deskilling” OR “deskill”)

The queries listed above were documented in parallel to the data collection in order to, in line with Randolph (2009), generate a study with a greater validity and subsequently making it more transferable. Furthermore, when using the queries, we included both the full notation, such as Robotic Process Automation, and its acronym, such as “RPA”. However, we firstly identified the intended context and use of RPA in each specific literature source we examined, when RPA has been used in the query. This was done to avoid misinterpretations and misconceptions of what robotic process automation is, since RPA is used as an acronym for other concepts as well, such as “replication protein A” (Chan et al., 2018; Li et al., 2019; Pokhrel et al., 2017) and “random phase approximation” (Fiddy, Alisafae, & Tsu, 2014). Furthermore, “RPAS”, the acronym of the full notation “remotely piloted aircraft systems” (Antunes, Bousson, & García-Manrique, 2018; Giordan et al., 2018), often dominated the search results

when using the query “RPA”, due to their similarities. The search engines LUBSearch, provided by Lund University, and Google Scholar has predominantly been used when searching for the literature. Furthermore, in order to ensure a high quality of the selected literature, we mainly selected literature being peer-reviewed, and when possible, articles from the basket of eight, but also other established IS associations and IS-journals such as CAIS and Scandinavian Journal of Information Systems. However, we are aware of the fact that other acronyms, queries etc. might have been foreseen by us. Nevertheless, we would argue that the selected use of acronyms and queries have provided us with qualitative content, since it originates from reliable sources.

In line with Randolph (2009), we used references in articles when trying to find new data, since the author stresses that is where 90 % of sources arise. If the secondary sources turned out to be valuable for our research, we located ourselves to the primary source to validate whether the stated information was correct and unbiased, rather than just assuming, in order to increase validity (Randolph, 2009). Even though this process were more time consuming, we argue that it helped us to increase the quality of our study, since it diminished the risks of falling into the pit hole of doing one of the most common mistakes in research - blindly relying on secondary sources without controlling the primary source and risk to use biased information in our theory (Randolph, 2009).

Recker (2013) mentions how other reference disciplines could contribute with valuable data for a research, even though it necessarily is not from a reference discipline that intuitively is associated with IS. Hence, as well as secondary sources have been one way to find and collect relevant data, we reason that other reference disciplines expanded the scope of valuable literature for our study, because of its close relation to the IS field and our research topic. For instance, we argue that research fields such as computer science is relevant for our study, since our study focus on the interplay of RPA and the employee. Conclusively, the literature review ended when the point of saturation was reached and no new articles of interest arose (Randolph, 2009).

3.3 Data Collection

3.3.1 The Design of the Interview Guide

When designing our interview guide, we decided to design a predefined interview structure of a semi-structured nature (Recker, 2013), since this type of design is argued to be one of the most used types in qualitative research in IS (Myers & Newman, 2007). Hence, we used a predefined script as a guideline for our interviews (Myers & Newman, 2007; Recker, 2013), to more efficiently receive information about what we wanted to know (Booth, Colomb, & Williams, 2008), which in our study is what effect the employee perceives that the use of RPA has on their job characteristics on an individual level. In line with Booth et al. (2008), we argue for the importance to still have a script, since it enabled us to be prepared for our interviews and diminished the risk to be unprepared and having to aimlessly ask the respondent questions. As the authors stress, it is not appropriate to keep going back to the respondents due to lack of preparation. However, in line with Myers and Newman (2007) and Recker (2013), our script was incomplete when conducting the interviews, where we had some prepared questions but not a complete and set manuscript to leave room for improvisation during

the interview. In line with the authors, we argue that the room for interpretation enabled us to ask follow-up questions on the predefined questions, which subsequently enabled us to go in depth with the respondent. Additionally, using an incomplete script was, in line with Booth et al. (2008), preferred since a complete script could have risked to freeze the respondents.

Moreover, we structured our interviews through Myers and Newman's (2007, p. 14) four steps, since they allowed us as interviewers to prepare questions and use them as guidelines in our interviews, but did not limit us to a set manuscript. The four steps we followed are listed below:

1. Preparing the opening
2. Preparing the introduction
3. Preparing the key questions
4. Preparing the close

The opening section of our interview guide included general, but important, information and questions for the respondent, representing Myers and Newman's (2007) first step - *preparing the opening*. Some details we informed the respondent about, was our role as researchers and the purpose of our study, but also privacy related questions (Myers & Newman, 2007; Recker, 2013; Walsham, 2006). Moreover, we recorded as well as transcribed all of our interviews, which Recker (2013) and Bhattacharjee (2012) stress for being key sources of evidence for the interviews. However, the authors also argue for the importance to ask the respondents for permission to record before starting the interview, but also whether they wanted to be anonymized or not throughout our study (this is further discussed in Chapter 3.6). Hence, in the opening section of our interview guide, we asked the respondents for their permission to be recorded and for their preference of being anonymized or not. For further details about the structure of the opening section of our interview guide, see Appendix 1-2.

Bhattacharjee (2012) stresses for the importance to start an interview with questions that the respondent finds non-threatening, such as an individual's name and what position he/she possesses. Hence, we decided to start the interview with very general and open-ended questions that focused on the respondent's position and how they used RPA in their everyday work. These questions constitute the introduction section of our interview guide and is where the recording of our interviews starts. Myers and Newman (2007) mention how this part should include an explanation of the purpose of the interview. However, in line with Bhattacharjee (2012), we argue for the importance to mention this even before the interview and recording starts, in order to allow the respondent to make a valid decision on whether to participate or not. Therefore, we structured this section as an introduction of the respondent, allowing them to introduce themselves and their relation to RPA. Hence, we prepared an introduction in line with Myers and Newman's (2007) second step, *preparing the introduction*, but with the interpretation of an introduction in accordance to Bhattacharjee's (2012) advice on how to start an interview. For further details about the structure of the introductory section of our interview guide, see Appendix 1-2.

In line with Kvale and Brinkmann (2009), we allowed the respondent to give their own view and general picture of the phenomena of interest (RPA and its use in the respondent's everyday work) during the introduction of the interview. The authors argue that this should be done before starting to introduce the respondent to the more direct questions, introduced in the third section of our interview guide that consists of our key question, representing Myers and Newman's (2007) third step: *preparing key questions*. In line with Recker (2013), we phrased our

questions in a way that allows follow-up questions, since we aimed to do semi structured interviews. Hence, the majority of our key questions start with a direct question, which is further expanded through follow-up questions (see “Interview Questions” in Figure 3.1). Moreover, in accordance to Kvale and Brinkmann (2009), we decided to develop two interview guides for the section of our key questions - one with the thematic questions for our study and one for the interview questions. Since we aimed to do semi-structured interviews, our interview guide included, in line with the authors, an outline of topics that we wanted to cover. Thematising was used for this part, referring to thematising as formulating interview questions and creating a theoretical clarification of our topics (Kvale & Brinkmann, 2009). In our study, the main topic was *job characteristics*, including the subtopics of *skill variety*, *task identity*, *task significance*, *autonomy* and *feedback*. This aligns with Ritchie and Lewis (2003) view on achieving both depth and breadth in the interview questions, by mapping the questions by content and thereafter formulating a variety of questions around each selected content. As mentioned, we chose to use the job characteristics as our content mapped questions for our study (see “Main Interview Questions” in Figure 3.1) since they outline the main topic of this study. Thereafter, we formulated our interview questions around each job characteristic (see “Interview Questions” in Figure 3.1) in order to obtain answers of both depth and breadth.

Consequently, the two interview guides were merged into one interview guide (see Figure 3.1) to create an intuitive overview for how we thematised our questions and why we asked them. However, only the interview questions were asked to the respondents since these questions did not include any academic terminology and were phrased in a way that aligned with the respondent’s terminology. Hence, this was done since our aim was to create a comfortable atmosphere for the respondents, to subsequently enable us to obtain more in depth information (Kvale & Brinkmann, 2009; Myers & Newman, 2007).

Main Interview Questions	Interview Questions
Does the employee perceive that the use of RPA generates effects on the <i>skill variety</i> for the employee, including deskilling or upskilling?	<ul style="list-style-type: none"> Do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA? <ul style="list-style-type: none"> If yes - What is different? How has it changed? Do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used? <ul style="list-style-type: none"> If more - What are more challenging? Why do you think so? If less - What is the reason for you perceiving it less challenging? Do you perceive that the use of RPA has freed time for you to develop new skills? <ul style="list-style-type: none"> If yes - What skills do you perceive that you have been able to develop? Was this required or voluntary? How have you developed them? Do you perceive that the use of RPA requires you to have more problem-solving and complex skills? <ul style="list-style-type: none"> If yes - What type of skills are now required compared to before using RPA?
Does the use of RPA result in the employee perceiving a higher or a lower degree of <i>task identity</i> ?	<ul style="list-style-type: none"> Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes? <ul style="list-style-type: none"> If yes - What is different from before? In what way do you feel more involved? Do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes? <ul style="list-style-type: none"> If yes - What is different from before? Why do you perceive that this has resulted in you having a larger impact on the organisational outcomes?
Does the use of RPA lead to that the employee perceive an increased <i>task significance</i> , enabling them to focus on more unstructured work tasks?	<ul style="list-style-type: none"> Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA? <ul style="list-style-type: none"> Do you perceive that RPA has enabled you to spend more time on certain work tasks, that you did not have enough time to before? <ul style="list-style-type: none"> If yes - What do you perceive that you can spend time on now and why is this enabled through RPA? If no – Do you perceive that you are still working with the exact same work tasks as before? What do you perceive are the reasons for you not perceiving to have more time than before, even though the RPA is assumed to automate monotonous and repetitive work tasks? Do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with citizens/customers/colleagues? <ul style="list-style-type: none"> If yes - What can you put more focus on today compared to before RPA was used? If no – Do you perceive that the use of RPA has freed up time for you to focus on any other work tasks? What other work tasks are these and why?
Does the employee perceive that the use of RPA enhances the <i>autonomy</i> of the employee's work tasks?	<ul style="list-style-type: none"> Do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks? <ul style="list-style-type: none"> If yes - In what way has this changed compared to how it was before using RPA? How do you perceive that the use of RPA allowed you to structure/control your work more freely than before? Do you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation? <ul style="list-style-type: none"> If yes - What are the differences and how does it differ from before using RPA?
Does the employee perceive that the use of RPA causes any effects on the employee's <i>feedback</i> of a work task?	<ul style="list-style-type: none"> Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance? <ul style="list-style-type: none"> If yes - What are the differences? How has the use of RPA enabled this? If no - Is it equal as before?

Figure 3.1: Key Questions of Our Interview Guide

Conclusively, we followed Myers and Newman's (2007) fourth step, *preparing the close*. Before ending the interview, we asked the respondents whether they felt like we had missed any important questions regarding the study and if they wanted to add anything. Moreover, we, in line with Myers and Newman (2007), asked the respondents about the possibility to get back

to them if any question was in need for clarification or if any other question would arise. Lastly, we also asked whether the respondent wanted us to send our thesis to them when it has been published.

3.3.2 Execution of Data Collection

Since we are doing a qualitative study, we will use the most predominant technique to collect data for qualitative methods, *interviewing* (Recker, 2013) – to enable the respondent and the researcher to integrate through a conversation in order to get in-depth data (Schultze & Avital, 2011). As already mentioned in Chapter 3.1, our study is of a descriptive nature since we aim to interview several individual to understand their perspectives regarding our studied phenomena, to attain an extensive and multifaceted description (Recker, 2013). Therefore, we have used descriptive interviews for our data collection since we, in line with Recker (2013, p. 90), want “to provide a rich description of a phenomenon as perceived by individuals “. Our interviews was of a semi-structured nature and we have, therefore, utilized the opportunity of our script being incomplete (Recker, 2013). In line with Myers and Newman (2007), this allowed us to improvise and further extend our key questions with follow-up questions to go more in depth with the respondents. Furthermore, this allowed us to execute the technique “mirroring” on some of their answers, in order to confirm that we understood their answers correctly from what they implied and intended to say. We did this by creating sub questions through the use of words and phrases from the respondent’s answer, which is argued to be beneficial in qualitative interviewing (Myers & Newman, 2007). For instance, one example of how we mirrored an answer from one of our respondents is: “So, if I understand you correctly, do you mean that RPA has freed up a lot of time for you to focus on more complex work tasks than before?” (Appendix 4, table row 11).

Interviews in a qualitative study could be executed in a variety of ways (Booth et al., 2008; Recker, 2013). Due to geographical circumstances, where the respondents were located in different cities and countries, we decided to do all the interviews via telephone. This allowed us to reach a wider range of respondents, which is argued to be one of the main advantages with executing the interview via telephone (Elmholdt, 2006; Kvale & Brinkmann, 2009). We decided to conduct all interviews by telephone, even though some respondents were located relatively close to where we were based, since we wanted to provide the same conditions and interview environment for all the respondents to enhance the reliability of our study (Angle, Ellinwood, & Carroll, 1978). However, there are some opportunities that we missed out on, by not conducting our interviews face-to-face (Bhattacharjee, 2012). For instance, the opportunity to interpret and judge the quality of information (provided by the respondent) by observing the respondent’s face expression and body language, vanished when having the interviews on telephone instead of having them face-to-face. Hence, this could generate in a decrease of quality since it increases the risk for a wrongful interpretation of the given answer (Bhattacharjee, 2012). Nevertheless, it was important for us to interpret the respondents’ answers as correct as possible and we will further discuss why and how we did this in Chapter 3.6, where we discuss the scientific quality and ethics of this study.

Walsham (2006) argues for the importance to respect the likelihood of the respondents having busy schedules. Since this was the case for our respondents, we therefore aimed to adapt to each of the respondent’s schedule, in order to avoid taking up too much of their time. Hence, this resulted in interviews being all between 20-40 minutes. Worth mentioning is also that RPA in many of the organisations (both private and public) we have contacted, still were in

the pilot or implementation stage or only had used it for a couple of weeks. Since our aim was to study RPA's effects on the employee already using it for their everyday work tasks, as defined in our first listed inclusion criteria for selection of respondents (see Chapter 3.4), the organisations that were in these early adoption stages did not fit into these criteria. Additionally, this also resulted in making it hard for us to reach respondents, since many of the organisations that are currently using RPA today, especially within the public sector, have already spent much time to provide other researchers, municipalities, and etcetera with information about their work. Hence, we were therefore informed that they needed to deny interviews nowadays, in order to enable the employees to have time to manage their work tasks. However, in some of these situations, we were offered to interview managers instead. This suited our second inclusion criteria, regarding our selection of respondents (see Chapter 3.4). Furthermore, it should be stressed that employees that are now using RPA in their everyday work, are experiencing a high workload due to increased demands of their services, which additionally limited our reach of respondents. Moreover, some banks that were contacted denied participation in interviews since they considered their processes, in which they used RPA, to be too confidential to talk about.

Moreover, all the interviews were offered in either Swedish or English depending on what the respondents felt more comfortable in. The reason for why the interviews were only offered to be held in these two languages was because they are the only two languages that we, as researchers, have academic knowledge within.

3.3.3 *Data Transcription*

The last step of our data collection was to transform our oral interviews into written text, in order to facilitate our data analysis. In accordance to Kvale (1996), this was done by transcribing the recorded interview right after the interviews had been held, referring to transcribing as the process of transforming the data from one shape to another (Kvale, 1996). Moreover, we used the software tool Trint when transcribing our interviews and manually corrected the text while re-listening to the recorded interviews, since we wanted to make sure that the transcription fully aligned with what was actually said. To guarantee that our respondents are anonymized throughout the entire thesis, we anonymized specific data that could be directly identified with the respondent or the organisation, as well as any mentioned name of both the employee and the organisation. The reasons for why and how this was done will be further discussed in Chapter 3.6.

Since transcribing, in line with Hancock, Ockleford, and Windridge (2007, p. 25) “is the procedure for producing a written version of an interview”, decisions must be taken for how to realize the feelings and meanings within the interview. For instance, we have followed Hancock et al.'s (2007) advice to use punctuation marks in the transcription, to clarify the meaning of what the respondent and interviewer intended to say.

3.4 The Research Context and Informant Selection

According to Recker (2013), qualitative methods have been designed to support the researcher in understanding the context of the studied phenomena. Moreover, the author reason that qual-

itative research uses purposive sampling, referring to purposive sampling as when the selection of study sites and respondents are based on whether they fit the purpose of the study. This is a non-random technique that does not require neither a specific number of respondents nor underlying theories (Etikan, Musa, & Alkassim, 2016). As mentioned in Chapter 3.1, our studied phenomenon is what effects the employee perceives that the use of RPA has on their job characteristics on an individual level. Hence, in accordance to Etikan et al. (2016), we defined two criteria of what type respondents we wanted to interview in order to obtain relevant data. The two criteria were:

- An employee working with work tasks that requires execution of time consuming repetitive and monotonous work tasks, but where these work tasks now have been replaced by RPA, meaning that they now are using RPA as a support in their everyday work tasks.
- A person working in an organisation where RPA is used and having knowledge of what effects the use of RPA has had on the employee on an individual level, even though they are not using RPA as a support in their everyday work tasks themselves.

In line with Bhattacharjee (2012), we argue that the research context for this study is where the event (use of RPA) occur, rather than, for instance, a specific organisation. This is also the reason for why the two criteria were set, in order to find respondents in the right context for our research. The criteria listed above outlines this study's *inclusion criteria*. According to Robinson (2014), both inclusion and *exclusion criteria*, referring to exclusion criteria as criteria that is disqualifying respondents from being selected, must be set in order to define a sample universe. Therefore, we also conducted the following exclusion criteria:

- A person that only had taken part of the implementation process of RPA, resulting in no or limited knowledge about what effects the use of RPA has had on the employee that is using RPA as a support in their everyday work tasks.
- A person working in organisations where RPA is used but with no or limited knowledge of what effects the use of RPA has had on the employee, using RPA as a support in their everyday work tasks.

Bhattacharjee (2012) argues that the generalisability upsurge if the number of respondents increase, since different respondents might have different experiences and opinions in certain questions. Hence, Maxwell (1992) implies that a wider range of respondents diminish the risk for creating a very context specific study, subsequently generating a study with higher generalisability than a study with a lower range of respondents. However, a qualitative method is more applicable to our study since we focus to go into depth with our respondents, more than having results being generalisable in the sense of a wide range of respondents. This choice is supported by Bhattacharjee (2012), who argues that a smaller quantity of respondents is acceptable in interpretive research if they fit the purpose of the study. Moreover, Seale (1999a) stresses for the unlikelihood to study every single possible scenario in a qualitative research and reason for the impossibility to create statistical generalisability for this type of research.

Eleven respondents were conclusively chosen for our study. Seven of the respondent represented employees that are working with RPA as a support in their everyday work tasks (E1-E7), being able to give an honest and correct picture of what effects the employee perceives that the use of RPA has on their job characteristics on an individual level, since being the ones experiencing the effects of RPA. The other four respondents are working in an organisation where RPA is used and have knowledge of what effects the employee perceives that the use

of RPA has on an individual level (M1-M4). Hence, these respondents are only able to have an idea of the employee's perception of what effects the use of RPA has on the employee's job characteristics on an individual level. We stress for the importance to differ the interview guide for these two types of respondents (E1-E7 and M1-M4), since E1-E7 are directly and individually perceive the effects by the use of RPA, while M1-M4 only can assume what effects the employee perceives that the use of RPA has on the employee's job characteristics. Lastly, even though we do not achieve statistical generalisability through this number of respondents, we argue, in line with Seale (1999a, 1999b), that this number is enough to reach some aspects of generalisability since the respondents are selected within our set criteria in order to fit the purpose of our study.

3.5 Data Analysis

In accordance to Recker (2013), we argue that the data collection and analysis of this thesis consisted of vast amount of data that are largely interwoven and dependent on each other. Hence, in line with Miles and Huberman (1984, 1994), it is important to extract and understand how the collected raw data should be prioritized to best fit our research objective. The authors explain that this is done by selecting, focusing, simplifying, abstracting and transforming the raw data and argue for this being a part of the analysis due to its ability to sharpening, sorting, focusing, discarding and organising data that facilitates conclusion drawing. Hence, we have used coding to, in line with Bhattacharjee (2012) and Recker (2013), reduce and make sense of the vast amount of data and reach the emphasis of qualitative research. By executing coding, we were able to categorize and organise the collected data (Bhattacharjee, 2012; Kvale & Brinkmann, 2009). The categorization of coding could, in line with Gibbs (2007), be done by either data-driven coding or concept-driven coding, in which we chose the concept-driven coding. According to the author, concept-driven coding mean that the codes were developed in advance. Hence, in line with Gibbs (2007), we created a list of thematic categories (see "Codes" in Table 3.1) originating from the literature before starting to code, which outlined the base for the thematising of our interview guide. These categories align with the main theme of our thesis, being the five selected dimensions of job characteristics - *skill variety*, *task identity*, *task significance*, *autonomy* and *feedback*. Moreover, we developed some sub-categories (see "Sub-Codes" in Table 3.1) for four out of five of these dimensions. *Feedback* were the only dimension that did not get expanded with sub-categories, since we only aim to understand one angle around this job characteristic - the employee's perception of whether it has changed how rapid they now obtain feedback. The sub-categories were constructed from the definition of each job characteristic (thematic categories) in order to see it from different angles and to create a comprehensive description of how the employee perceive that the use of RPA has brought effects to each of the job characteristics.

Table 3.1: Coding Scheme for This Thesis

Codes	Description of the Codes	Sub-Codes	Description of the Sub-Codes
SV	Skill Variety	SV-CS SV-CLS SV-DS	Change in Skills Complex Level of Skills Developing Skills
TI	Task Identity	TI-IP TI-R TI-TIm	Impact on Process Responsibility Task Importance
TS	Task Significance	TS-SI TS-TC	Social Interaction Task Complexity
A	Autonomy	A-SC A-TP	Structure and Control Time Pressure
F	Feedback	-	-

Moreover, we used the software tool “NVivo”, version 12, as a support when extracting and understanding which of all our collected data that was of greatest value for our research, since this is argued to be of importance (Miles & Huberman, 1984, 1994). Nevertheless, we only used NVivo as a support in the beginning of our analysis since software tools, in line with Recker (2013), might oversee some underlying patterns. Hence, in line with Gummesson (2003) and Recker (2013), we did not let Nvivo constitute our main work in interpreting the collected data, but rather assist us as researchers to structure and analyse our collected data. In line with Recker (2013), we argue that this enabled us to create basic patterns and a general understanding of our content, but also facilitating our process to organise our collected data since it simplified our process in drawing conclusions from our collected data. Conclusively, this was done since, in accordance to Gummesson (2003) and Miles and Huberman (1984, 1994), this approach was valuable for our analysing process when drawing conclusions from our research material.

3.6 The Quality and Ethics of the Study

3.6.1 Quality and Ethics of the Literature Review

In line with Klein and Myers (1999), we stress for the importance to understand the historical background of our research setting, since it enables the reader to understand the current situation. Hence, we have started the chapter of our literature review with the history of automation and how it evolved, since RPA automates structured work tasks and, therefore, is a part of automation. Moreover, in accordance to Miles and Huberman (1984), we defined certain concepts and terms already from the start of our data collection, in order to be consistent throughout the entire thesis to subsequently enable valid conclusion drawings.

When conducting our literature review, we often read articles that based their arguments on, or cited, other authors. Even though the quote or argument from the secondary source seemed reliable, we did not simply assume that it was correct. Hence, in line with Randolph (2009), we always located ourselves to the primary source if the secondary sources seemed to be of

value for our research, in order to validate whether the stated information was correct and unbiased, rather than just assuming, in order to increase validity.

3.6.2 Quality and Ethics of the Data Collection

We applied *voluntary participation* when conducting our data collection, which, according to Recker (2013) and Bhattacharjee (2012), offers the respondents to freely choose whether to participate or not without any consequences. Furthermore, in line with Walsham (2006), we offered all the respondents confidentiality, including us not stating their names or organisations in our publication. However, since there are limited with municipalities in Sweden that are using RPA, we stress for the difficulty to offer full confidentiality to these respondents. However, we aimed to follow the advice by Booth et al. (2008), to protect and not cause any harm to the respondents. This was done by offering all respondents to firstly confirm that they were okay with us recording the interview, and secondly whether to be anonymized throughout the entire study. However, it was only one respondent who wished to be anonymized, whereby the other respondents did not have any preferences on whether to be anonymized or not. Yet, in line with Bhattacharjee (2012), we conclusively chose to anonymize all respondents to diminish risks of causing any harm for the respondents. Furthermore, the author stresses for the importance to provide *disclosure*, which refers to offer the potential respondents information about the study before executing the data collection and, hence, give them the possibility to withdraw their participation based on this information. This was done by either emailing or/and calling the respondents to, in line with Bhattacharjee (2012), provide them with information about us as researchers and the objective with the study. However, in order to offer disclosure and still avoid the risk of getting biased answers from the respondents (Bhattacharjee, 2012), we did not send the entire interview guide to the respondents on beforehand but only provided them with a brief overview of our objective with the study.

In line with Seale (1999a, 1999b), we value accurate transcription of our interview results, but also for using a clear documentation of our used methods since it increases the dependability of our study, by constituting a prominent chain of evidence. We executed the transcription in a four-step process. Firstly, as already mentioned in Chapter 3.3.3, we used the software tool Trint to create the first transcription of our interviews. However, Trint was only used to transcribe the interviews that were held in English (Interview number 1-6, 8 & 9), due to the tool's inability to perform a consistent transcription of the interviews that were held in Swedish. In line with Kvale and Brinkmann (2009), we therefore performed two transcriptions for each of the Swedish interviews to enhance the reliability of our interview transcript. In accordance to the authors, these transcriptions were created by both of us, independently executing a transcription of each interview.

Secondly, the interviews that had been transcribed by Trint were equally divided between the two of us to complete, by filling in where the tool had missed words or misinterpreted the recording. In this step, the Swedish interviews, that had resulted in two different transcriptions of each interview, was compared to provide a quantified reliability check (Kvale & Brinkmann, 2009) and conclusively merged into one transcription. Moreover, we translated the Swedish transcriptions into English, to increase readability for the readers of this thesis (since the rest of the thesis is written in English). Consequently, in line with Nikander (2008), we argue that this improved the transparency of our study, since it enables the readers of our thesis to examine the data on which our analysis is based on. Moreover, we have presented

both the Swedish and English transcription next to each other in the tables for the translated transcription, in order to provide the original data to the readers. We stress for the importance to not hide the original data from our readers since, in line with Nikander (2008), this could violate the validity of the transcript's transparency. Moreover, in line with Kvale and Brinkmann (2009) and Poland (2003), we rendered all of our transcriptions in a more fluent written style, since verbatim might appear as unclear and scattered speech. Hence, we excluded sounds like mumbling, laughter or break words, such as "ehm", in our transcriptions to provide a fair picture of the respondents. Thirdly, each of the English transcriptions was cross-checked by the research partner and then verified (see Table 3.2), which allowed us to increase the credibility of our study due to our use of independent confirmations by the research partner (Bhattacharjee, 2012). Moreover, we took notes every time we found disagreements in the transcription while cross-checking each other's transcripts, to compare our interpretations and reach a mutual agreement. Between three to nine disagreements were identified in the majority of the transcripts. For these disagreements, we listened to that part of the interview recording one more time independently and once again compared our results. If disagreements still occurred, the same process was repeated until we could reach an agreement of what the respondent said. The Swedish transcriptions had already been verified in the second step through the same comparison between our two different versions. However, a further verification of the translated transcriptions (from Swedish to English) was done through the same process for cross-checking as described above.

Table 3.2: Summary of the Data Transcription

Appendix	Interview Number	Respondent	Interview Language	Transcription Tool	Transcribed by	Verified by
3	1	E1- Employee	English	Trint	Therése	Sandra
4	2	E2- Employee	English	Trint	Sandra	Therése
5	3	E3- Employee	English	Trint	Therése	Sandra
6	4	E4- Employee	English	Trint	Sandra	Therése
7	5	E5- Employee	English	Trint	Therése	Sandra
8	6	E6- Employee	English	Trint	Sandra	Therése
9	7	E7- Employee	Swedish	-	Therése	Sandra
10	8	M1- Manager/ Specialist	English	Trint	Sandra	Therése
11	9	M2- Manager/ Specialist	English	Trint	Therése	Sandra
12	10	M3- Manager	Swedish	-	Sandra	Therése
13	11	M4- Manager	Swedish	-	Therése	Sandra

Lastly, Maxwell (1992) argues that mishearing and misinterpretation are main concerns for qualitative studies. In line with Ritchie and Lewis (2003) and Seale (1999b), we wanted to avoid these by increasing the validity of our transcriptions through the use of *membership or respondent validation*. This was done by sending the transcriptions back to the corresponding respondent, in order to perform a final verification. The respondents performed an independent confirmation of the interpretations and meanings in the transcription, which consequently enhanced the credibility of our research (Bhattacharjee, 2012). At this step, some changes were made in some of the transcriptions, where i.e. the respondent felt like the message was not clear. For instance, words like “it” were in some occasions (more exactly referring to “some occasions” as a total of ten separate changes across all transcriptions) replaced by the specific thing they were actually talking about, such as “RPA”. We took additional ethical actions regarding the transcriptions by sending them to the respondents. This was done since ethical issues associated with transcription relates to how the interview is transferred from oral language to written language, along with the respondents’ confidentiality (Kvale & Brinkmann, 2009). Yet, even though some modification of the transcriptions occurred in this

step, the initial meaning and context did not change due to the modifications. In line with Kvale and Brinkmann (2009), we argue that these four steps improved the validity of our research, since it enabled us to perform checks on whether any invalidity occurred, conclusively diminishing the risks for mistranscription and misinterpretation of our data collection. However, as the authors stress, there is no universal and objective transformation from oral data to written data, since the transformal of a conversation into a literary style exclude important aspects, such as tone of voice. Hence, the authors argue for the impossibility to answer to what “correct valid transcription” is and how to fully achieve it.

Conclusively, Poland (1995) argues that one of the most frequent occurring, and potentially preventable errors, of transcriptions originates from the tape recording having poor quality. Since all our interviews were executed over phone, we considered this risk of low audio quality to be relatively high. Hence, we recorded the interviews on two different devices in order to increase the possibility to identify all that was said during the recordings. This could, in line with Kvale (2007), be argued to ensure the quality of our audios, and subsequently lead to enhanced reliability of the transcriptions.

3.6.3 Quality and Ethics of the Data Analysis/Conclusion

In line with Gummesson (2003), we have provided arguments that are both for and against the possible interpretations that can occur from our collected data, to provide high scientific quality and enhance the credibility of our research. Hence, we have kept our conclusions lightly from the start to, in accordance to Miles and Huberman (1984), maintain openness and scepticism of what we study in order to generate explicit conclusions from what have been vague at first.

Moreover, in line with Klein and Myers (1999), we have questioned the shallow meaning of what our respondents have said, in order to understand the deeper meaning of our collected data. This is the reason for why we asked our respondents to answer our interview questions from an employee’s viewpoint, since we wanted to obtain answers from one single standpoint. However, we have considered the risk that prejudice can occur depending on whether the respondent is mixing professional and individual standpoints when answering our questions. Hence, we have followed Recker’s (2013) recommendation to pay close attention to whether connotations occur, in order to ensure as much objectivity as possible for our thesis.

4 Empirical Results

4.1 Skill Variety

As mentioned in the literature review of this thesis (see Chapter 2.4), skill variety is defined as; the level of skills needed when carrying out the work, referring to different skills and talents of a person. To enable the creation of a comprehensive description of how the employee perceives the effects on this job characteristic, it has been divided into the three sub-categories - *Change in Skills*, *Complexity Level* and *Developing Skills* - which are described below:

Change in Skills

Referring to whether the employee perceives the use of RPA has resulted in any changes of the skills being required to be able to execute their everyday work tasks.

Complexity Level of Skills

Referring to whether the employee perceives the use of RPA has resulted in an increased or decreased complexity level of the skills being required to be able to execute their everyday work tasks.

Developing Skills

Referring to whether the employee perceives the use of RPA has resulted in them now having more time to, or need to, develop new skills to execute their everyday work tasks.

4.1.1 *Change in Skills*

Six of the respondents perceive a change in the skills being required to execute their everyday work tasks (E2:10; E3:14; E5:8; E5:10; E6:8; M1:12; M3:4). However, there are respondents who mention that the only reason for why a change has occurred, is due to the technical skills now being required to understand and use RPA. Independently on whether the respondent perceived a change for the required skills or not, four of all the respondents perceive that some change in skills have happened due to the need to understand the technology (E4:6; E5:8; E7:10; M4:6). Among these respondents, two express that RPA has created a different process for him/her when working (E5:8; E6:8). For instance, E5 mentions that he/she perceives a change in required skills to execute everyday work tasks, since E5 is not used to work with the new processes that RPA has created. Hence, E5 perceives this to be a change in skill for him/her, but mentions that the change in skills is only related to the software robot, and that no additional skills are needed due to the use of RPA (E5:10).

Well of course it has changed because all the process was redesigned regarding what the robot could do. - E6:8

On the other hand, five of the respondents answer that they do not perceive any changes in the skills being required for executing their everyday work tasks (E1:8; E1:12; E4:6; E7:10; E7:22; M2:8; M2:14; M4:6). For instance, E1 perceives that no new skills are required for him/her as an employee if they are working with RPA as a support, and that new skills only are required if the employee are creating the actual software robot (E1:12). Moreover, M2 mentions that some new skills are required from the employee since they started using RPA,

but that these skills are fulfilled by other employees, referring to other employees as i.e. IT personnel (M2:14). Hence, M2 highlights his/her beliefs that the employee who is using RPA as a support when executing his/her everyday work tasks, does not perceive any change in the requirements of skills.

However, it is important to stress that even though the majority of the respondents perceive a change in the skills being required to execute their everyday work tasks, the respondents mention that these are skills they also had before RPA was used. RPA only freed up time for the employee to put more focus on the work tasks that require the use of these skills. Moreover, eight out of all the participating respondents highlights that the employee perceives an increased possibility in utilizing their skills better now, compared to before RPA was used (E1:20; E2:10; E2:14; E3:14; E4:34; E6:28; M1:12; M3:4; M4:14). For instance, M1 mention that the skills required for executing the employee's everyday work tasks has changed due to the use of RPA, but indicates that the skills now being required, are skills the employee had even before RPA was used (M1:12).

...the tasks that they are working on at the moment is more challenging. But I mean, it's more challenging compared to the tasks that the robot is doing. But it's not more challenging in terms of the skill set that they have. - M1:12

4.1.2 Complexity Level of Skills

Six of the respondents perceive an increased complexity level in the skills required from them in their everyday work tasks (E1:16; E2:10; E4:32; E5:26; M1:28; M3:8). However, four out of these respondents stress that more complex skills is not required specifically for the use of RPA as a technology, but rather due to the time it frees up for work tasks requiring more complex skills (E1:16; E2:10; E4:32; M1:28).

Yes, I do believe that it has definitely changed. Because the robot can actually eliminate the part of the manual work so we can concentrate on doing the work where we have to think and analyse and need to decide and advice. - E2:10

Moreover, only one respondent mentions that he/she are not sure whether RPA has had any effects on the skills' complexity level (E3:36). Nevertheless, the respondent mentions that this is hard for him/her to judge since the respondent is relatively new in the organisation and therefore cannot give a fair answer (E3:30).

On the contrary, four out of all the respondents perceive that the use of RPA has not generated an increased complexity level of the employee's skills (E6:18; E7:12; E7:20; M2:16; M4:12). For instance, E6 perceives that his/her job is still the same as before RPA was used, meaning that RPA only has replaced simple work tasks and, therefore, does not require any more complex skills to execute his/her job (E6:18).

...no that are skills we were supposed to possess even before. – E7:22

Conclusively, out of all respondents, either considering an increased or a decreased complexity level, two were under the impression that the complexity level of skills possibly have increased, due to the need for technological knowledge related to RPA (E5:26; M4:12). However, even though the two respondents agree on the need for technological knowledge that

RPA requires has increased, their overall perception differ for whether the complexity level of skills being required to execute their everyday work tasks has increased. While one of these respondents perceives that the complexity level of skills have increased in general, but also due to a need for technological knowledge related to RPA (E5:26; E5:38), the other respondent perceives that the need for technological knowledge related to RPA is the only reason to why the required complexity level of skills has increased (M4:12).

Problem solving because sometimes there's some problem with robot. So you need to understand what is the problem. And you might have to figure out how to fix it. - E5:26

4.1.3 *Developing Skills*

Six of the respondents perceive that the use of RPA has freed up time for them to develop new skills (E1:18; E1:20; E2:14; E3:26; E4:6; E5:16; E5:22; E6:20). For instance, E4 perceives that RPA has freed up time for him/her to develop new skills, but express that he/she is still quite new at his/her job and that he/she is constantly developing new skills because of this reason (E4:14). However, E4 further mentions that due to RPA, there is now more time for him/her to develop himself/herself and skills that he/she is required to have, but also other of his/her own professional interest (E4:14; E4:26). E3 and E6 further support this, by highlighting that they now can develop new skills in regards to their own interests and requirements (E6:20; E3:26).

I'm still quite new at *anonymized* so I develop skills constantly and I really need that extra time to develop those skills. I would definitely say it is a time saver. - E4:14

Because I can now learn new stuff depending on my own requirements, what I need, what I am interested in and so on. - E6:20

One respondent does not perceive that RPA has enabled the employee to develop new skills due to it freeing up time (E7:16; E7:22). However, the respondent agrees that RPA has freed up time to do other additional things, such as coming up with ideas on how to improve the organisation (E7:16). Nevertheless, the respondent perceives that he/she already possessed the skills required for these work tasks (E7:22).

Four out of the respondents said neither yes nor no (M1:14, M2:28; M3:8; M4:14). M1 believes that it is hard for him/her to answer whether the employee perceives to have more time freed up to focus on the development of new skills. However, M1 highlights that the type of work that RPA has replaced, is work where it is not possible to specifically say that the employee is developing their skills (M1:14). Moreover, the respondent mentions that if RPA frees up time, it is therefore more time for the employee to focus on work tasks that can increase their skills (M1:14). Hence, M1 mentions that he/she hopes that the employee perceives that RPA has enabled them to develop their skills and focus on more value or skill adding work (M1:14). This is further supported by M2, M3 and M4, who perceive that the use of RPA has freed up time for the employee, which possibly could make the employee perceive to now have extra time for more creative and complex work tasks (M2:28; M3:8; M4:14).

4.2 Task Identity

As mentioned in the literature review of this thesis (see Chapter 2.4), task identity is defined as; the level to which the job needs to be fulfilled as a “whole” piece of work, or performing a work task from the beginning to the end with an evident outcome. To enable the creation of a comprehensive description of how the employee perceive the effects on this job characteristic, it has been divided into the three sub-categories - *Impact on Process*, *Responsibility* and *Task Importance* - which are described below:

Impact on Process

Referring to whether the employee perceives the use of RPA has resulted in any changes of the impact the employee’s work tasks has on the entire work process within the organisation.

Responsibility

Referring to whether the employee perceives the use of RPA has resulted in an increased or decreased level of responsibility the employee has throughout the entire work process within the organisation.

Task Importance

Referring to whether the employee perceives the use of RPA has resulted in any changes in how important the employee’s work tasks are in regards to organisational outcomes.

4.2.1 *Impact on Process*

Eight out of the respondents perceive that the use of RPA has effects on the impact that their work tasks has for the entire work process (E2:16; E4:26; E4:30; E6:26; E7:24; M1:28; M2:20; M3:22; M4:18). E2 perceives that the gained experience he/she has obtained from being involved in the creation of the robot, has led to an enhanced creation of value for the whole organisation (E2:16). For instance, E2 explains how he/she perceives that “...you create more value for the company” as an employee, now when using RPA in the organisation and mentions that this is a result from him/her developing new skills due to the use of RPA (E2:16). Additionally, E7 highlights his/her perception of how the use of RPA has enabled the employee to have a bigger influence in managerial decisions, by taking part in discussions of how the organisation can work with and utilize the software robot (E7:24). Moreover, three out of these eight respondents express their belief that the employee perceives an increased impact of the entire work process, in regards to the organisational outcomes. This due to the employee now being able to focus on more business critical work tasks that require more complex skills, now when RPA has replaced most of the repetitive work tasks (M1:28; M2:20; M4:18). For instance, M4 believes that the employee now can see their role in the bigger picture of the organisation, since the employee now can concentrate their time on work tasks where they can utilize their competence, in order to make a larger impact on the organisational outcomes (M4:18).

Definitely yes. Because, I mean, for the specific departments and teams where RPA has, taken over the majority of the manual tasks, they are focusing more on, business critical tasks that require more of the human brain to work to be creative and make decisions based on several data points or information points. So that, in practice then means that that type of work that requires those skills is more important for the business. - M1:28

Lastly, three out of all respondents did not perceive that RPA has any effects on the impact that the employee's work tasks have for the entire work process (E1:30; E3:46; E5:34). For instance, E5 mentions that he/she does not feel any difference in this compared to how it was before RPA was used (E5:34). However, the respondent mentions that he/she has not worked with the software robot for a very long time (E5:34). Hence, more time with the software robot might result in a different answer.

4.2.2 Responsibility

Four respondents perceive that the use of RPA has increased the responsibility the employee has throughout the entire work process (E3:22; E3:42; E3:44; E5:30; E5:32; E6:24; E7:24). For instance, E3 mentions that he/she now has additional responsibility since the use of RPA has freed up time for other work tasks, which has enabled him/her to also be the leader of the scripting from his/her team (E3:42; E3:44). Furthermore, E6 explains that even though RPA takes over most of the repetitive work, it is still the employee who prepare these cases and decide the rules the software robot should follow (E6:24). Hence, E6 perceives that the final responsibility still lies on the employee, regarding the assurance of whether the robot's suggestions are correctly or not.

So when we start using the robot, we have more responsible for our work. - E5:30

Six out of all the respondents perceive that the use of RPA has neither increased nor decreased the responsibility that the employee has throughout the entire work process (E1:30; E2:18; M1:24; M2:18; M3:16; M4:16). For instance, E2 mentions that RPA has had effects on the responsibility since the software robot has taken over some work tasks, but that the responsibility neither has increased nor decreased (E2:18).

I still feel very responsible for what I do and how I do it. And if the robot does some kind of mistakes, I still feel as it is mine because it should have been seen. - E2:18

Lastly, one respondent does not directly answer to the responsibility aspect of our question (E4:24). However, the respondent mentions that if the software robot fails, it is still the employee's responsibility to investigate the failure and ensure that the robot's suggestions are correctly (E4:10; E4:12; E4:22). This opinion aligns with the perceptions of two other employees, who mention they perceive that RPA has had effects on their responsibility, regarding the execution of certain work tasks, but still consider themselves having the final say and therefore being fully responsible for any suggestions and possible mistakes that the software robot might do (E2:18; E6:24). Moreover, both M1 and M3 do not believe that the use of RPA has neither increased or decreased the employee's perceived responsibility due to the use of RPA, but rather that the use of RPA has enabled the employee to free up time to focus more on their primary responsibility that the employee initially was hired for (M1:24; M3:16).

I mean, I would say that it hasn't affected their responsibility. [...] But what it has done is that it has freed up time for them so that they can focus more on their primary responsibility that they are hired to actually do. - M1:24

4.2.3 Task Importance

Five of the respondents perceive that the use of RPA has increased the importance of their work tasks in regards to organisational outcomes (E6:24; E6:26; E7:36; M1:28; M2:20; M4:14; M4:18). For instance, E6 perceives that he/she is able to focus on work tasks that require more complex skills, since the use of RPA has resulted in less manual intervention for simple and monotonous work tasks, consequently resulting in less mistakes (E6:24; E6:26; E6:28). Hence, E6 express his/her perception of an increased task importance, since he/she now can focus on work tasks that are more complex (E6:28). Moreover, M4 perceives that the employee sees the advantages of working with RPA and that the employee perceives an increased task importance since the software robot has taken over simpler work tasks and enabled the employee to use their competence and time to perform work tasks where they make a bigger impact each day (M4:14; M4:18).

...they can utilize their competence and time to do things where they can make a bigger impact each day. - M4:18

On the contrary, four out of all the respondents were under the impression that the importance of his/her work tasks, in regards to the organisational outcomes, has not increased compared to how it was before RPA was used (E1:32; E2:20; E3:46; E5:34). However one of these respondents stresses the fact that his/her answer could be due to that he/she has not worked with RPA for a long time (E5:34).

Probably not. The tasks are the same important as they were before. - E1:32

No. I don't know, it hasn't affected me. - E3:46

Finally, two of the respondents did not answer whether the employee perceives that the importance of his/her work tasks, in regards to the organisational outcomes, has increased or decreased compared to how it was before RPA was used (E4:26; E4:30; M3:20; M3:22). For instance, E4 express his/her beliefs of the importance to understand and use RPA, since this will benefit the employee itself but also the organisation in the future (E4:26). Moreover, M3 mentions that he/she is under the impression that the employee, now having the administrative work eliminated due to the use of RPA, perceives a positive change in their work tasks but without explicitly saying that the importance of the work tasks has changed in regards to organisational outcomes (M3:22). However, neither of the two respondents do explicitly mention how he/she perceives that RPA has changed the importance of the employee's work tasks, and if there is any differences compared to before RPA was used (E4:26; E4:30; M3:22).

4.3 Task Significance

As mentioned in the literature review of this thesis (see Chapter 2.4), task significance is defined as; the level of extensive impact that the job has on the lives or work of other people, both regarding the internal and external environment of the organisation. To enable the creation of a comprehensive description of how the employee perceive the effects on this job characteristic, it has been divided into the two sub-categories - *Social Interaction* and *Task Complexity* - which are described below:

Social Interaction

Referring to whether the employee perceives the use of RPA has resulted in the employee being able to focus more or less on work tasks involving interaction with customers, citizens, or colleagues.

Task complexity

Referring to whether the employee perceives the use of RPA has resulted in the employee being able to focus on more complex work tasks.

4.3.1 *Social Interaction*

Eight of the respondents perceive that the use of RPA has enabled the employee to focus more on work tasks involving social interaction (E1:40; E2:10; E2:28; E3:54; E3:56; E7:46; E7:50; M1:32; M2:26; M2:28; M2:36; M3:6; M3:8; M4:20; M4:22). For instance, E7 strongly perceives that the use of RPA has enabled him/her to focus more on work tasks including social interaction, since he/she now can put more time on work tasks including social interaction with the citizens (E7:46; E7:50). Moreover, E1 perceives that the use of RPA has enabled him/her to focus more on work tasks involving interaction with customers. However, E1 also stresses that the freed up time in regards to the use of RPA has enabled him/her to spend more time on all types of work tasks, and not solely on the work tasks including social interaction (E1:40). This opinion somewhat aligns with M2's perception of how the employee perceives RPA's effects on the work tasks. M2 mentions that the employee probably perceives to have more time for social interaction, such as cooperation with their colleagues, since their use of RPA takes away simple work tasks for the employee and frees up time (M2:28). However, the respondent mentions that RPA only takes away smaller work tasks in their organisation that does not occur every day (M2:36). Hence, M2 does not believe the employee perceives that the use of RPA results in a big change for whether the employee has more time for social interactions or not, but rather frees up time for the employee to focus on more complex work tasks (M2:26; M2:28; M2:30; M2:36).

So, now we have much more time freed up on our hands and also, with this robot we can actually do more. Such as give more time to our customers. - E2:10

Yes, if you take away a simple task of typing numbers in a system. If you take that away, yes then you have more time for other things including cooperation with colleagues. - M2:28

On the other hand, two out of the respondents did not perceive that the use of RPA has enabled them to put more focus on work tasks involving social interaction, neither with customers nor colleagues (E5:52; E6:32). For instance, E6 mentions that he/she do not have any direct interaction with customers and, therefore, does not perceive any differences compared to how it was before RPA was used (E6:32). Moreover, E6 mentions the use of RPA has not changed how he/she can interact with colleagues and perceives to have just as much time for this interaction as before (E6:32).

Finally, one respondent perceives the answer to this question depends on the day, implying that the amount of social interaction differ each day and depends on what work tasks that RPA can handle (E4:36). However, the respondent does not explicitly express whether the use

of RPA has freed up time for him/her to focus more on work tasks that involve social interaction. However, he/she implies to perceive that RPA has freed up time for the employee to put more focus on other things than just administrative work tasks (E4:36; E4:38).

It depends on the day, how much you have communication with the client and how many of the tasks that the robotics can handle. - E4:36

4.3.2 Task Complexity

Ten of the respondents perceive that the use of RPA has effects on the work tasks and enabled the employee to work with more complex and challenging work tasks (E1: 36; E2:24; E2:28; E3:22; E3:24; E4:32; E5:38; E6:14; E6:16; E7:44; M1:6; M1:12; M2:26; M4:14; M4:20). For instance, E7 perceives that he/she now have time to execute some work tasks that are more complex, which he/she did not have time to execute before RPA was used (E7:44). Furthermore, E2 mentions that the use of RPA has freed up time from repetitive work tasks and enabled the respondent to spend more time on both their actual activities along with connecting and collaborating with colleagues (E2:28). In contrast to E2, M2 express that RPA only has had an effect on a small work task in his/her situation. However, in line with E2, M2 believes that it is possible to argue that the employee perceives an increased complexity level of their work tasks since RPA takes away simple work tasks (M2:26). Moreover, M1 stresses for the fact that he/she believes the employee perceives their work tasks to only be more challenging compared to before using RPA, but not challenging in regards to any new requirements for enhanced skills from the employee (M1:12). Therefore, M1 argues that the employee's skills still fits in the scope of work tasks the employee were employed to perform (M1:6), but that the employee might perceive that RPA has enabled him/her to focus on work tasks with a higher complexity level than the work tasks the software robot has taken over (M1:6; M1:12; M1:30).

...the robot does the same tasks that we did manually, so now, as I said before, all of us have more time for other tasks. Additional things that usually requires a lot of time, effort and of course, your involvement. - E1:36

So I would say that the employees have primarily been able to focus on the work that they were employed to specifically do, rather than doing a lot of tasks manual. - M1:6

Yes, on average. It is only a small task in our situation. But I think you could argue that, because simple tasks are taken away. On average, his tasks have increased in level or in complexity. - M2:26

However, one of the respondents mentions that he/she does not believe that the employee perceives the use of RPA to have resulted in their work tasks being neither more nor less challenging, but rather stress for the fact that the employee now have more time to focus on the work tasks the employee was hired to execute (M3:10; M3:12). Nevertheless, the respondent mentions that the employee indeed is likely to perceive that the use of RPA has affected their work tasks, since the employee now can focus on work tasks requiring more complex skills that consist of more social interaction with citizens (M3:10; M3:12).

Conclusively, no respondents perceive that the use of RPA resulted in no effects on work tasks, nor in less complex and challenging work tasks.

4.4 Autonomy

As mentioned in the literature review of this thesis (see Chapter 2.4), autonomy is defined as; the level of freedom, independence, and discretion that are allowed for an employee while organising the work, but also when determining the procedures for carrying it out. To enable the creation of a comprehensive description of how the employee perceive the effects on this job characteristic, it has been divided into the two sub-categories - *Structure and Control* and *Time Pressure* - which are described below:

Structure and Control

Referring to whether the employee perceives the use of RPA has resulted in changes regarding how freely the employee can structure and control their everyday work tasks.

Time Pressure

Referring to whether the employee perceives the use of RPA has increased or decreased the time pressure for the employee, regarding the completion of their work tasks.

4.4.1 *Structure and Control*

Six of the respondents perceive that the use of RPA has allowed the employee to more freely structure and control their work tasks (E4:38; E5:54; E5:56; E6:10; E6:34; E6:36; E7:56; M1:34; M1:36; M4:26; M4:28). For instance, E7 explains that he/she feels that RPA has made it easier to plan and structure his/her work, since RPA shows how many customer related cases the software robot have prepared for the employee, along with the proposals of each case (E7:56). Consequently, the respondent perceives this enables him/her to estimate how long time these cases will take (E7:56). Hence, E7 explains that he/she perceives that RPA facilitates the process to plan and structure work tasks (E7:56).

...to manually do one task, that took me like five minutes, now takes less than one minute to prepare, for the robot to do it. So yeah, it means a difference for me and I can save up to four minutes per case. - E6:10

Furthermore, E4 perceives that the use of RPA has made it easier for him/her to spend more time on work tasks not being repetitive and monotonous (E4:38). Hence, E4 perceives the freed up time, due to the use of RPA, has made it easier to control his/her work tasks. While three out of all respondents answered either yes or no to whether the use of RPA has allowed the employee to more freely structure and control their work tasks (E1:44; E1:46; E2:22; E2:28; E2:32; M3:24), some of the answers from these respondents are very similar to E4's perception of what effects RPA has on his/her ability to structure and control work tasks. For instance, even though E1 not explicitly say that the use of RPA has allowed him/her to more freely structure and control his/her work tasks, he/she mentions that the use of RPA has freed up time for him/her that now can be spent on work tasks not being repetitive and monotonous (E1:46). Moreover, E2 explains that he/she perceives that RPA has not contributed to anything more than simply freeing up time from repetitive work tasks (E2:32). E2 does however mention that the software robot has changed how he/she work and manage the job (E2:22), which saves him/her up to ten hours each month to put on his/her actual work tasks instead (E2:28). Additionally, M3 believes that the employee probably perceives the use of RPA has partially enabled the employee to more freely structure and control their work tasks (M3:24).

For instance, M3 explains that the employee might perceive more flexibility in how to structure their work tasks, since M3 believes that RPA has enabled the employee to be more creative and have more room to discuss certain things that they did not have time to before (M3:24). However, M3 explains that their organisation have certain deadlines that are independent on RPA and that the situation, therefore, also plays a big role on whether RPA has enabled the employee to more freely structure and control the work tasks (M3:24).

I mean, the robot is just another tool, but it definitely does not change how you work and how you think, how you do and how you manage stuff. - E2:22

Yeah, I would say it helped me control my work tasks. I'd say you can still perform work tasks without using robotic but it's easier because you know how much time you can spend on those other tasks for doing refunds. So, it's definitely easier because you just have more time. - E4:38

Lastly, two out of the respondents did not perceived the use of RPA has allowed the employee to structure and control its work tasks more freely (E3:50; M2:32). M2 stresses for the fact that he/she perceives that the use of RPA has only had an effect on the employee by taking away simple work tasks and does not see how this can change the structure and control of the employee's daily work tasks (M2:32). Moreover, E3 perceives to be more guided by certain deadlines that the software robot sets up, which results in a need for the employee to now structure their work a bit more than before RPA was used (E3:50).

Yes I know it has. We only have those hours that the robot works, so you need to finish up a task before it starts running. Because if you do not finish it you will need to wait for next run. So, it is maybe a little more structure than before, but you need to get used to it. So, it wasn't easy at the beginning. - E3:50

4.4.2 Time Pressure

Out of all respondents, six perceive that the time pressure to execute the employee's work tasks has decreased, due to the use of RPA (E1:36; E1:40; E1:50; E2:28; E2:34; E2:36; E4:40; E7:58; E7:60; M2:34; M2:36; M3:28). For instance, E1 mentions how the use of RPA has resulted in him/her feeling more relaxed, since now having more time to focus on other important work tasks that require more time, effort and involvement (E1:36; E1:40; E1:50). Moreover, E2 perceives that the use of RPA has decreased the time pressure to execute his/her work tasks, by not having to perform the repetitive work tasks that RPA has replaced (E2:28; E2:36). Hence, E2 explains that he/she perceives a lower time pressure, since RPA has resulted in him/her now feeling that the deadline is achievable and possible to work around (E2:34). However, E2 mentions that this is only applicable for the work tasks that RPA replaces and not for any other work tasks (E2:34; E2:36). Additionally, M2 believes that the employee in his/her organisation perceives similar effects from RPA, since the software robot takes away some time consuming work tasks and, therefore, affecting the time pressure for the employee (M2:34). However, M2 highlights his/her opinion of RPA only generating a slight benefit for the employee, in regards to time pressure, since the software robot only replaces a very small work task for the employee in their organisation (M2:36).

Maybe that particular task that the robot does, has led to that I now feel that the deadline is achievable and actually possible to work around. But otherwise, regarding all the

other tasks, these are with the same pressure. Nothing has changed in the other places.
- E2:34

After I learned how to use the robot, after being thought, I definitely felt how much time I had saved. - E4:40

Four out of the respondents perceive that the time pressure to execute the employee's work tasks has neither increased nor decreased due to the use of RPA (E5:42; E5:44; E5:46; E5:62; E6:10; E6:40; M1:38; M1:40; M4:20; M4:26; M4:32; M4:34). For instance, E6 perceives he/she always have been able to execute his/her work tasks fast and, for that reason, never felt any specific pressure to execute his/her work tasks in time (E6:10; E6:40). E6 does, however, mention that RPA has enabled him/her to save time on each case and perceives that RPA has had effects on his/her work because of that reason, but not in regards of increasing or decreasing time pressure (E6:10; E6:40). Furthermore, M4 mentions that RPA has freed up time for the employee to focus on other work tasks or to put extra time on a specific case (M4:26). However, M4 further explains that the use of RPA also has resulted in the organisation lowering the number of employees that handle these type of cases (M4:20) and therefore resulted in an increased need for each employee to be more efficient, since the employee has to handle a larger volume of cases now compared to before RPA was used (M4:26; M4:34). M4 does not explicitly mention that their use of RPA has neither increased nor decreased the time pressure the employee perceives for executing their everyday work tasks, since some deadlines are independent on the use of RPA (M4:32), but rather implies that the use of RPA has had effects on how the employee work in their organisation (M4:20; M4:26; M4:32; M4:34).

...to manually do one task, that took me like five minutes, now takes less than one minute to prepare, for the robot to do it. So yeah, it means a difference for me and I can save up to four minutes per case. - E6:10

Conclusively, only one of the employee perceives an increased time pressure when executing his/her work tasks, since using RPA (E3:64). For instance, the respondent stresses that the software robot puts more pressure on him/her when it does not work, since the customers has got used to the earlier deliveries that RPA now has enabled (E3:64). Because the respondent perceives that the customers now expect to receive their money earlier than planned, the respondent explains that he/she expects a reaction from the customer when the delivery is not earlier, but simply just on time. Subsequently, the respondent explains that he/she perceives an increased time pressure when the software robot is not working (E3:64).

4.5 Feedback

Ten of the respondents do not perceive that RPA's automation of processes has an impact on how rapidly the employee obtains feedback about their work performance (E1:54; E2:38; E2:40; E3:74; E4:42; E5:64; E5:66; E6:52; E7:66; E7:70; M2:46; M3:38; M4:42). For instance, E2 mentions that his/her organisation has a strong feedback culture in itself and that RPA has not had any effects on how rapidly he/she obtains feedback about his/her work performance (E2:40). M4 aligns with this perception and explain that he/she does not believe the employee perceives any change in how rapidly they obtain feedback, since starting to use RPA. Moreover, M4 rather stresses how this has to do with the relationship the employee has with his/her boss and, hence, has nothing to do with the use of RPA (M4:42). Furthermore, E7

does not perceive and M2 does not believe the employee perceives any change in how rapidly the employee obtains feedback since starting to use RPA (E7:66; M2:46). However, both respondents also mention the employee might perceive to obtain the feedback more rapidly in some cases, since the use of RPA has enabled the employee to speed up their work performance (E7:70; M2:46).

However, M3 does not explicitly mention if the use of RPA has had effects on the employee in how rapidly they obtain feedback, but rather implies that RPA has not generated any changes in this. M3 base this belief on the difficulty to measure work performance of the employees, since they work closely with people (M3:38). However, M3 mentions his/her organisation is currently considering to implement a robot in the organisation, which is able to measure the employee's work performance in a fair and correct way to subsequently allow more informative and correct feedback to the employee (M3:38).

I don't agree with this. Because you receive feedback for your work, it doesn't matter if you have a robot or not. So, people want to give you feedback, it has no connection to whether using a robot or not. - E1:54

No, I do not think that has changed a lot. It might have occurred sometime that his work was not finished. And now he is sooner the ready with his work. And therefore the change in feedback. But no, I do not think so, that there is any influence on the feedback from colleagues etcetera. - M2:46

Lastly, one of all respondents does however believe that the use of RPA has resulted in the employee perceiving to obtain feedback about their work performance less frequently (M1:48). For instance, the respondent believes that the employee perceives a slower feedback loop since starting to use RPA, for the reason that RPA enables the employee to now focus on long term work tasks that takes a longer time to complete (M1:48). Hence, the respondent reasons that the employee would obtain feedback less frequently in that sense, but believes that the employee would understand that their job is more valuable now and, therefore, be okay with obtaining feedback a bit less frequent than before RPA was used (M1:48).

I would say that the majority of the tasks that they're working on after RPA is implementation, is more long term tasks that take longer to complete. So the feedback in that sense would be obtained less frequently. But I think that the employee understand that the work that they're doing is more valuable. Hence, it's okay that this feedback or the appraisals comes a bit later. - M1:48

5 Discussion

5.1 Skill Variety

As Asatiani and Penttinen (2016) argue, RPA is useful to replace repetitive and structured work tasks but can however not replace unstructured work tasks that require complex and problem-solving skills. In a similar fashion, the empirical findings indicate that the employee perceives that RPA has taken over the work of repetitive and monotonous work tasks to subsequently enable the employee to focus on work tasks requiring subjective judgement and skills that are more complex. This empirical finding aligns with Gallie (1991) and Vallor (2015) who argue how technologies are freeing employees from repetitive work tasks, consequently enabling them to focus on more complex and knowledge-laden work tasks.

Even though the empirical findings showed differences in whether the employee did or did not perceive changes in the required skills, changes in the complexity level of skills, or changes in their ability to develop new skills, the underlying reasoning was almost identical. The employee seemed to perceive that even though the work tasks they can focus on now are more challenging, and hence requiring more complex skills, these work tasks are not new to the employee. Therefore, the employee perceived that the use of RPA has enabled them to utilize their already existing skills more and highlighted that these are not skills they have developed due to the use of RPA. Hence, for this study, it could be argued that the use of RPA has fulfilled one of the task attributes (ability utilization) that a work task should attain in order to accomplish job enlargement (Chung & Ross, 1977), since the employee perceives that they can utilize their skills and abilities, consequently increasing the job satisfaction.

Although the employee did not perceive that the use of RPA has required them to use or develop skills they did not have before, the empirical findings showed that the employee perceived that RPA freed up time for them. Consequently, the majority of the employees perceived that this time now partly could be used to develop new skills, such as technological or personal development. However, it was also stressed that the freed-up time did not necessarily result in the development of new skills, but simply just had freed up time to dedicate to whatever is of interest or necessary for the individual employee in the organisation. Hence, the empirical findings indicated that most of the employees perceived freed-up time, generated due to the use of RPA, has enabled the employee to advance their skills to some extent. Therefore, in line with Attewell and Rule (1984) and Giuliano's (1982) view of upskilling, this study shows that the employee perceives upskilling rather than deskilling when using RPA, since they experience an advancement of their skills rather than a degradation (Adler, 1986; Vallor, 2015).

Conclusively, the empirical findings show that the use of RPA has generated effects for the job characteristic "skill variety" and, in line with the literature, suggest an upskilling and that the employee perceive an increased level of job enlargement and job satisfaction due to these effects. Even though the empirical findings indicates that the use of RPA has not changed the level of skills needed to carry out the employee's work tasks, there are still effects on this job characteristic since employee now perceives that they have more time to focus on work tasks requiring more complex skills, but also developing new skills to some extent. Hence, resulting

in a contribution of both job enlargement, job satisfaction and upskilling of the employee's work tasks.

5.2 Task Identity

Researchers have argued that the use of RPA can result in productivity improvements, by diminishing the risk for errors where the work task is vulnerable to human specific errors, often occurring for high volume and repetitive work tasks (Aguirre & Rodriguez, 2017; Willcocks et al., 2015). Additionally, RPA has also been argued to increase regulatory compliance, due to the software robots ability to outperform an employee on factors, such as process speed and quality (Lacity & Willcocks, 2016; Willcocks et al., 2015). Since RPA takes over the execution of structured work tasks, the empirical findings suggest that the employee perceives to now be able to put more focus on work tasks that have a bigger impact on the entire work process. In line with previous research (Aguirre & Rodriguez, 2017; Asatiani & Penttinen, 2016; Madakam et al., 2019), these findings show that the use of RPA have resulted in the employee perceiving an increased task identity. Hence, as previous research indicate (Chung & Ross, 1977; Hulin & Blood, 1968), we argue that this could increase the employee's perception of the level of appreciation for accomplishing their work tasks. Consequently, resulting in the fulfilment of "meaningful work module", being one essential task attribute for achieving job enlargement. It could be argued that this task attribute is fulfilled, by the employee's perception of the increased level of appreciation for accomplishing their work tasks, due to them perceiving their work tasks to have a bigger impact on the entire work process.

The empirical findings suggest that the employee perceives an equal or increased responsibility due to the use of RPA. In some cases, this has led to the employee perceiving an increased importance of their work tasks regarding organisational outcomes. Even though RPA replaces the structured tasks, the findings of this thesis indicates that the employee still perceives to retain the primary and final responsibility of any suggestions and possible mistakes that RPA might make, regarding these work tasks. Nevertheless, the empirical findings indicates that the employee seems to perceive the use of RPA has enabled them to concentrate their time and put more focus on their primary responsibility, such as unstructured work tasks. Consequently, this could enable the employee to make a larger impact on the organisational outcomes, since these work tasks enables the employee to further utilize their competence. One evident example of this in the empirical findings is that the employee now perceives to have a bigger influence in managerial decisions, since the employee started to use RPA in the organisation. This empirical finding appears to boost the reasoning of several researchers (Chung & Ross, 1977; Herzberg, 1968; Ugboro & Obeng, 2000), that the inclusion of the employee in managerial decisions fulfils two task attributes of job enrichment, "goal internalization" and "employee participation", where the attribute for employee participation is the most evident. The inclusion of an employee in managerial decisions could foster job enrichment, due to the increased responsibility and, hence, enhanced impact on the work process that the employee might perceive. Consequently, an increased job satisfaction and motivational growth for the employee could occur if they feel more involved from the beginning to the end, also generating an increased level of task identity. However, as it is only a vast minority in the empirical findings that explicitly stresses a perception of increased influence in managerial decisions, it is not feasible to generalise this conclusion, since the connection to one of the task attributes of job enrichment (goal internalization) cannot clearly be drawn to the rest of the empirical

findings. In contrast, a majority in the empirical findings indicates the perception of an increased impact on the organisational outcomes, since their use of RPA has enabled them to utilize competence required for work tasks that are more complex. Hence it could be argued that the job enrichment's task attribute "employee participation" is fulfilled.

Conclusively, the empirical findings show that the use of RPA has generated effects for the job characteristic "task identity" and, in line with the literature, suggest that the employee perceives an increased level of job enlargement, job enrichment, and job satisfaction, due to these effects. The findings suggests that the employee perceives that their work tasks now generate a more evidential outcome, since the use of RPA has enabled the employee to put more effort in work tasks that have a bigger impact on the organisational outcomes.

5.3 Task Significance

According to the literature, RPA is argued to enhance the performance of work tasks by automating repetitive and monotonous work tasks with deterministic outcomes, previously done by humans, which does not require complex interpretation skills, creativity or subjective judgement (Aguirre & Rodriguez, 2017; Asatiani & Penttinen, 2016; Madakam et al., 2019). The empirical findings of this thesis support this assertion, where a substantial majority perceive a reduction of repetitive and monotonous work tasks for the employee, now enabling them to focus on work tasks with an increased complexity level due to the use of RPA. Consequently, basing the conclusion on the literature (Hackman & Oldham, 1975; Herzberg, 1968; Katz, 1978; Paul et al., 1969), it could be argued that the employee perceives an enrichment of their job, since the work tasks could be perceived to have an enhanced quality and meaningfulness compared to before RPA was used, due to the possibility to now focus on work tasks being more challenging and having an increased complexity level.

In some occasions, the empirical findings did however indicate that the employee did not perceive that RPA has generated either more or less challenging work tasks, but simply enabled the employee to focus more on the primary work tasks they are hired to execute. In this sense, it could be argued that the use of RPA has not generated any effects on the job characteristic "task significance" for the employee. However, even though the empirical findings in some occasions do not indicate any change in how challenging the employee perceives their work tasks, it could still be argued that they now perceive an enhanced quality and meaningfulness of their work, since not needing to execute repetitive and monotonous work tasks that does not require any complex skills. Hence, in line with the literature (Hackman & Oldham, 1975), this could possibly result in the employee now perceiving that their job is being enriched.

Nevertheless, it is only a small minority of the empirical findings that indicates no change regarding task complexity, which makes it reasonable to conclude that the use of RPA has enabled the employee to focus on work tasks with an increased complexity level. Hence, this study argues for this conclusion to be more generalisable, since it gives a unified answer for a clear majority of the empirical findings. Consequently, the empirical finding appears to fulfil two of the task attributes of job enlargement, "task variety" and "ability utilization", since the use of RPA seems to enable an enhanced performance and mental activation for the employee. As a result of this, an employee could make full use of their skills and abilities, when executing work tasks that requires more social interaction than before RPA was used. We base this conclusion on previous research's description of how the two task attributes should

be fulfilled (Chung & Ross, 1977; Gallagher & Einhorn, 1976). Subsequently, supporting our argument from previous research (Chung & Ross, 1977; Gallagher & Einhorn, 1976), this could generate an increased job satisfaction for the employee, since the meaningfulness of the job likely is perceived higher when working with unstructured work tasks.

As mentioned in the literature review of this thesis, previous research indicates that the employee might perceive a covert deskilling if their work tasks change (Carey, 2007). This could be applicable within the context of RPA, since the empirical findings indicate that the software robot affects how the employee carries out work tasks, taking away the work including repetitive and monotonous work tasks. Consequently, the employee must perceive a loss of skills rather than the development of new ones to generate a covert deskilling as an effect of RPA (Carey, 2007). The empirical findings do however show that the employee perceives an upskilling rather than a covert deskilling, since the employee seems to perceive an appreciation for the change of work tasks. The findings of this thesis indicate that the employee is happy to get rid of the monotonous tasks, since now being able to focus on work tasks with a higher complexity level, including social interaction with and more analytical thinking, which they were initially hired to execute. Finally, according to the empirical findings, the employee seems to perceive an upskilling due to the use of RPA since they can now put more focus on work tasks that is perceived to have an increased level of impact, both internally and externally of the organisation.

Conclusively, the empirical findings show that the use of RPA has generated effects for the job characteristic “task significance” and, in line with the literature, suggest that the employee perceive an upskilling and an increased level of job enlargement, job enrichment, and job satisfaction, due to these effects. The findings indicate that the perceived effects are rather clear for this job characteristic, where the employee perceives that RPA has diminished their job with time-consuming and monotonous work tasks, subsequently enabling them to put more focus on work tasks with a higher level of impact on other people.

5.4 Autonomy

As mentioned in Chapter 2.2, previous research argues that the use of RPA has resulted in an increased process speed, since the software robot can outperform the employee on speed, efficiency, and quality (Lacity & Willcocks, 2016; Willcocks et al., 2015). The empirical findings of this thesis suggest that the employee now perceives an increased freedom in how to structure and control their work tasks, since RPA has taken over the structured work tasks and, hence, freeing up time for the employee. The findings indicate that the employee now perceives their deadlines are easier to reach, due to this freed up time, subsequently facilitating the employee’s process for organising the work. Hence, it could be argued that a fulfilment of the task attribute “autonomy” within job enrichment has occurred, since the findings of this thesis indicate that the employee perceives that RPA has enabled them to have more control and autonomy over their job (Chung & Ross, 1977). In a similar fashion, these findings have overlapping characteristics with the definition of one out of job enlargement’s task attribute “worker-paced control”, referring to that the employee perceive that they have more control to desire their work-pace (Hulin & Blood, 1968). Consequently, the empirical findings indicate that the majority agreed upon the fact that the employee now perceived a reduced time pressure, compared to before RPA was used. These findings align with the one made by Kraut et

al. (1989); that automation contributes to the employee perceiving decreased stress and pressure related to their work tasks, due to the lowered workload.

However, some contradictory findings have been identified for a minority in the empirical findings, where the employee seems to perceive an increased time pressure due to the use of RPA. This finding falls in line with the findings of Karmarkar (2004) and Andersen and Kraemer (1994), who argues that there is an increased demand for response urgency among customers, which has generated an increased need for automation in order to meet the demands. As other researchers also mention, RPA can outperform humans in process speed and decrease delivery times (Lacity & Willcocks, 2016; Willcocks et al., 2015). The empirical finding confirms this, by indicating that the employee now perceives it to be essential to deliver customer enquiries before set deadlines, since the customers expect deliveries before the set delivery date due to RPA's rapid working pace. Hence, in line with the literature (Andersen & Kraemer, 1994; Kraemer & Danziger, 1990), the empirical finding indicates that the employee perceives an increased time pressure, as the process speed has increased since RPA has taken over the work with structured work tasks. However, this study concludes that the employee seems to perceive an increased level of job enlargement due to the use of RPA, since a majority of the empirical findings indicates that the employee perceives an increased control of their desired work-pace. Therefore, it could be argued that the task attribute "worker-paced-control" for job enlargement is achieved.

Furthermore, a minority of the empirical findings also stressed that the use of RPA has made the job more structured. Since the software robot only runs on specific times, they now need consider these times and structure their work around them. Additionally, this empirical finding aligns with the research made by Bjørn-Andersen et al. (1986), which highlights that automation could lead to the employee perceiving a constraint in how to structure their work tasks. However, a contradictory finding shows that the employee perceives the use of RPA has increased the flexibility in how to structure their work tasks, since certain deadlines in the organisation are independent of the use of RPA. Moreover, these findings indicate that RPA might have introduced some deadlines, but that most deadlines were already established within the organisations before they used RPA and, therefore, did not cause any major effects. Moreover, even though the majority felt that the use of RPA has freed time from repetitive and monotonous work tasks, not all perceived that the freed up time necessarily resulted in them having more flexibility in how to structure and control their work tasks.

Conclusively, the empirical findings show that the use of RPA has generated effects for the job characteristic "autonomy" and, in line with the literature, suggest that the employee perceives an increased level of job enlargement and job enrichment, due to these effects. The findings points to that the employee perceives that using RPA has enabled them to organise their job more freely and independently.

5.5 Feedback

From what has been identified in this thesis, the literature lacks a clear connection between the use of RPA and how the employee obtains feedback. The lack of an evident connection between RPA and how the employee obtains feedback is further reflected in the empirical findings where all cases, except from one, stressed that the employee's perception regarding how they obtain feedback not has been changed due to the use of RPA.

As already stressed, a vast minority perceived that the use of RPA has resulted in the employee obtaining feedback about their work performance less frequently. This perception is based on the likelihood of the employee now perceiving their feedback loop to be slower, since RPA has taken over the structured work tasks and enabled the employee to focus on long term work tasks that require more time from the employee in order to be completed. This finding does however indicate that the employee is most likely satisfied with obtaining the feedback a more slowly than before, since they perceive that RPA has enabled them to focus on work tasks with a bigger impact. Since feedback reflects upon the employee's work performance, this study argue for the likelihood of an employee perceiving to obtain more informative feedback when performing work tasks that are considered to be more valuable for the employee. Hence, in line with the literature (Hackman & Oldham, 1975), we therefore argue that the employee could perceive an increased job satisfaction due to the use of RPA.

Moreover, since a clear majority in the empirical findings does not perceive any effects on the feedback from the use of RPA, no conclusions could be drawn in regards to whether the employee's knowledge of results from their accomplishments in their work, has either increased or decreased due to the use of RPA. Hence, the empirical findings could not be used in order to draw inferences and connections to what has been stated in the literature (Chung & Ross, 1977) for whether the "performance feedback", one of the task attributes of job enlargement, has increased or decreased due to the use of RPA.

Conclusively, since a clear majority of the empirical findings show that the use of RPA has not generated any explicit effects for the job characteristic "feedback", this thesis concludes that the employee perceives that the use of RPA has not caused any effects for how rapidly the employee can obtain informative feedback about their work performance. Hence, the empirical findings rather indicate that the employee perceives the feedback as vastly independent from RPA.

5.6 Discussion Summary

Based on the empirical findings discussed above, we argue that the use of RPA has resulted in the employee perceiving effects on all job characteristics, being presented as the "Core Job Dimensions" in the "Job Characteristics Model of Work Motivation" (see Figure 2.1), except from feedback. Being guided by the model, conclusions could be drawn that the employee perceives an increased meaningfulness of their work, but also an increased responsibility for the outcomes of their work, since the empirical findings indicate that the employee perceive an increased level of; skill variety, task identity, task significance, and autonomy. Subsequently generating higher internal work motivation, and higher quality work performance for the employee.

Lastly, we argue that no major conclusions can be drawn regarding effects on feedback, since the empirical findings suggest that the employee does not perceive that the purpose behind using RPA is to influence this job characteristic. Hence, we reason that not much could be concluded for whether the employee perceive that the use of RPA has had any effects on neither their knowledge of the actual results of the work activities, nor absenteeism and turnover.

6 Conclusion

6.1 Research Question and Purpose

The purpose of this thesis was to describe what effects the employee perceives that the use of RPA has on their job characteristics, by comparing the relation between what is already said in similar contexts in existing theory and the empirical findings from this thesis. We aimed to reach a conclusion, by attempting to answer the following research question:

What effects does the employee perceive that RPA has on their job characteristics?

Based on our study, we provide a list of the identified effects on the employee's job characteristics on an individual level.

6.2 Key Findings

By comparing our empirical findings with existing theory of what is already said in similar contexts, this study supports some of the findings of previous research that have been done regarding the use of RPA. In the light of previous research, it has been argued that the reason behind the use of RPA has been to free the employee from structured work tasks, to subsequently enable a larger focus on unstructured work tasks to further enhance the employee's individual skills and knowledge. The findings of this thesis aligns with this argument, where the employee seems to perceive an enhanced ability to work with more complex work tasks and, hence, better utilize their skills compared to before RPA was used. Due to the increased ability to put more focus on complex work tasks, the empirical findings showed that the employee now perceives an enhanced impact on the organisational outcome.

Moreover, previous research argue that RPA could outperform humans in process speed for structured work tasks, and therefore complement the employee in their work. In a similar fashion, our empirical results indicated that the employee perceived RPA as a valuable support for their everyday work tasks, making the work process more efficient by RPA taking over structured work tasks. Consequently, diminished the employee's job with time-consuming structured work tasks, enabling the employee to more freely structure and control their work and additionally put more focus on work tasks with a higher level of impact on other people.

Summarised, the identified effects that the employee perceives on their job characteristics, due to the use of RPA, are presented in the list below:

- **Skill Variety - enhanced utilization of more complex skills**
Even though the use of RPA has not changed the level of skills needed to carry out the employee's work tasks, the employee perceives that RPA has freed up time for them to focus on work tasks requiring more complex skills, but also developing new skills to some extent. Hence, resulting in a contribution of both job enlargement and upskilling of the employee's work tasks.

- **Task Identity - enhanced impact on the organisational outcomes**
Due to the use of RPA, the employee now perceives that their work tasks generate a more evident outcome, since RPA has enabled the employee to put more effort in work tasks that has a bigger impact on the organisational outcomes. Hence, resulting in a contribution of both job enlargement, job enrichment and job satisfaction of the employee's work tasks.
- **Task Significance - enhanced impact on other people**
The use of RPA has generated effects for the employee, who now perceives that RPA has diminished their job with time-consuming and monotonous work tasks, subsequently enabling them to put more focus on work tasks with a higher level of impact on other people. Hence, resulting in a contribution of job enlargement, job enrichment, job satisfaction, and upskilling of the employee's work tasks.
- **Autonomy - enhanced freedom in organising the work**
The employee perceives that the use of RPA has enabled them to organise their job more freely and independently, for how and when to perform their work tasks. Hence, resulting in a contribution of job enlargement and job enrichment, of the employee's work tasks.
- **Feedback - no changes in the rapidity of obtaining feedback**
The employee perceives that the use of RPA has not caused any effects for how rapidly the employee can obtain informative feedback about their work performance. Hence, the empirical findings rather indicate that the employee perceive the feedback as vastly independent from RPA.

Conclusively and more significantly, the comparison between the theory and our empirical results show that the employee perceives that the use of RPA has effects on all job characteristics except from "feedback".

6.3 Further Research

Considering RPA to have the same abilities as presented in this study (automating structured work tasks), a study where conclusions could be more generalisable, in the sense of respondent range, could be considered. Therefore, we invite researchers to continue contributing to the knowledge of what effects the use of RPA has on employee's job characteristics, by encouraging a quantitative study to be made on this topic.

As previous researchers discuss (van der Aalst et al., 2018), one of the main goals with RPA is to make it smarter by enabling it to learn in the same way as AI, to subsequently be able to handle unstructured work tasks. Continuous development of technologies are constantly happening (van der Aalst, 2018). We argue for a similar study as ours to be of value if RPA continues to be developed in this direction, since RPA would then have the ability to automate unstructured work tasks as well. Hence, there is a possibility for the employee then perceiving other effects on their job characteristics if RPA becomes smarter. Moreover, researchers have argued for a need to further study the consequences of technology changes (Markus, 2017), which supports our reasoning for the interest of further research within this area, since developments of RPA might generate different consequences for job characteristics, compared to

what it does today. Additionally, as Lacity and Willcocks (2016) outlines, it is important for organisations to pay close attention to and communicate what effects RPA can have on the employee. Hence, we argue that the identified effects in this study can serve as a starting point for describing and understanding how RPA impacts the employee and, consequently, organisations on a larger scale.

Appendix 1: Interview Guide for Employee

Opening

- Introducing ourselves as researchers.
- Confirming that the respondent is ok with us recording the interview and explain the purpose for why we are doing it.
- Explaining the purpose with our study.
- Explain for the respondent that we will transcribe the interview and inform the respondent that he/she has the possibility to be anonymized throughout the entire thesis.
- Inform the respondent that we will send the transcription to him/her, to enable them to give their consent to that the transcription is in line with what they intended to answer.
- Addressing whether the respondent has any further question about the interview or our study before starting.

Introduction

- Can you please introduce what position you possess in your organisation and what you do?
- Can you please explain how you use RPA in your organisation and the objective for its use?
- In what form are you involved in the process to which RPA has been applied?

Key Questions

Main Interview Questions	Interview Questions
Does the employee perceive that the use of RPA generates effects on the <i>skill variety</i> for the employee, including de-skilling or upskilling?	<ul style="list-style-type: none"> • Do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA? <ul style="list-style-type: none"> • If yes - What is different? How has it changed? • Do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used? <ul style="list-style-type: none"> • If more - What are more challenging? Why do you think so? • If less - What is the reason for you perceiving it less challenging? • Do you perceive that the use of RPA has freed time for you to develop new skills? <ul style="list-style-type: none"> • If yes - What skills do you perceive that you have been able to develop? Was this required or voluntary? How have you developed them? • Do you perceive that the use of RPA requires you to have more problem-solving and complex skills? <ul style="list-style-type: none"> • If yes - What type of skills are now required compared to before using RPA?
Does the use of RPA result in the employee perceiving a higher or a lower degree of <i>task identity</i> ?	<ul style="list-style-type: none"> • Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes? <ul style="list-style-type: none"> • If yes - What is different from before? In what way do you feel more involved? • Do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes? <ul style="list-style-type: none"> • If yes - What is different from before? Why do you perceive that this has resulted in you having a larger impact on the organisational outcomes?
Does the use of RPA lead to that the employee perceive an increased <i>task significance</i> , enabling them to focus on more unstructured work tasks?	<ul style="list-style-type: none"> • Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA? <ul style="list-style-type: none"> • Do you perceive that RPA has enabled you to spend more time on certain work tasks, that you did not have enough time to before?

	<ul style="list-style-type: none"> • If yes - What do you perceive that you can spend time on now and why is this enabled through RPA? • If no – Do you perceive that you are still working with the exact same work tasks as before? What do you perceive are the reasons for you not perceiving to have more time than before, even though the RPA is assumed to automate monotonous and repetitive work tasks? • Do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with citizens/customers/colleagues? <ul style="list-style-type: none"> • If yes - What can you put more focus on today compared to before RPA was used? • If no – Do you perceive that the use of RPA has freed up time for you to focus on any other work tasks? What other work tasks are these and why?
<p>Does the employee perceive that the use of RPA enhances the <i>autonomy</i> of the employee’s work tasks?</p>	<ul style="list-style-type: none"> • Do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks? <ul style="list-style-type: none"> • If yes - In what way has this changed compared to how it was before using RPA? How do you perceive that the use of RPA allowed you to structure/control your work more freely than before? • Do you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation? <ul style="list-style-type: none"> • If yes - What are the differences and how does it differ from before using RPA?
<p>Does the employee perceive that the use of RPA causes any effects on the employee’s <i>feedback</i> of a work task?</p>	<ul style="list-style-type: none"> • Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA’s automation of processes has had an impact on how rapidly you obtain feedback about your work performance? <ul style="list-style-type: none"> • If yes - What are the differences? How has the use of RPA enabled this? • If no - Is it equal as before?

Closing

- Is there anything else you want to add before ending the interview?
- Is it okay if we get back to you if anything is in need for clarification or if any other question arise?
- Thank you for taking the time to participate in our study, would you like us to send a copy of the study when it has been published?

Appendix 2: Interview Guide for Manager/Specialist

Opening

- Introducing ourselves as researchers.
- Confirming that the respondent is ok with us recording the interview and explain the purpose for why we are doing it.
- Explaining the purpose with our study.
- Explain for the respondent that we will transcribe the interview and inform the respondent that he/she has the possibility to be anonymized throughout the entire thesis.
- Inform the respondent that we will send the transcription to him/her, to enable them to give their consent to that the transcription is in line with what they intended to answer.
- Addressing whether the respondent has any further question about the interview or our study before starting.

Introduction

- Can you please introduce what position you possess in your organisation and what you do?
- Can you please explain how you use RPA in your organisation and the objective for its use?
- In what form are you involved in the process to which RPA has been applied?

Key Questions

Main Interview Questions	Interview Questions
Does the employee perceive that the use of RPA generates effects on the <i>skill variety</i> for the employee, including de-skilling or upskilling?	<ul style="list-style-type: none"> • Do you believe that the employee perceives that the skills required for him/her in executing his/her everyday work tasks, has changed due to the use of RPA? <ul style="list-style-type: none"> • If yes - What is different? How has it changed? • Do you believe that the employee perceives the tasks that he/she have now to be equally, more, or less challenging compared to how they were before RPA was used? <ul style="list-style-type: none"> • If more - What are more challenging? Why do you believe they think so? • If less - What is the reason for them perceiving it less challenging? • Do you believe that the employee perceives that the use of RPA has freed time for him/her to develop new skills? <ul style="list-style-type: none"> • If yes - What skills do you believe that employee perceives that he/she has been able to develop? Was this required or voluntary? How do you think the employee have developed them? • Do you believe that the employee perceives that the use of RPA requires him/her to have more problem-solving and complex skills? <ul style="list-style-type: none"> • If yes - What type of skills are now required compared to before using RPA?
Does the use of RPA result in the employee perceiving a higher or a lower degree of <i>task identity</i> ?	<ul style="list-style-type: none"> • Do you believe the employee perceives that the use of RPA has influenced the impact and responsibility he/she has, throughout the entire work processes? <ul style="list-style-type: none"> • If yes - What is different from before? In what way do they feel more involved? • Do you believe the employee perceives that the use of RPA has influenced the importance of his/her work tasks, in regards to the organisational outcomes? <ul style="list-style-type: none"> • If yes - What is different from before? Why do you believe that this result in the employee perceiving to have a larger impact on the organisational outcomes?

<p>Does the use of RPA lead to that the employee perceive an increased <i>task significance</i>, enabling them to focus on more unstructured tasks?</p>	<ul style="list-style-type: none"> • Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging tasks - what is your opinion to this statement based on your own experience with RPA? <ul style="list-style-type: none"> • Do you believe the employee perceive that RPA has enabled the employee to spend more time on certain work tasks, that he/she did not have enough time to before? <ul style="list-style-type: none"> • If yes - What do you believe the employee perceives that he/she can spend time on now and why is this enabled through RPA? • If no – Do you believe the employee perceives that he/she is still working with the exact same tasks as before? What do you believe are the reasons for the employee not perceiving to have more time than before, even though the RPA is assumed to automate monotonous and repetitive tasks? • Do you believe that the employee perceives that the use of RPA has enabled him/her to focus more on tasks involving interactions with citizens/customers/colleagues? <ul style="list-style-type: none"> • If yes - What can the employee put more focus on today compared to before RPA was used? • If no – Do you believe the employee perceives that the use of RPA has freed up time for the employee to focus on any other work tasks? What other work tasks are these and why?
<p>Does the employee perceive that the use of RPA enhances the <i>autonomy</i> of the employee's work tasks?</p>	<ul style="list-style-type: none"> • Do you believe that the employee perceives that the use of RPA has allowed him/her to more freely structure and control his/her work tasks? <ul style="list-style-type: none"> • If yes - In what way has this changed compared to how it was before using RPA? How do you believe the employee perceives that the use of RPA enabled the employee to structure/control his/her work more freely than before? • Do you believe the employee perceives any differences regarding time pressure on his/her work tasks, since using RPA in the organisation? <ul style="list-style-type: none"> • If yes - What are the differences and how does it differ from before using RPA?
<p>Does the employee perceive that the use of RPA causes any effects on the employee's <i>feedback</i> of a work task?</p>	<ul style="list-style-type: none"> • Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you believe employee perceives, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly he/she obtain feedback about his/her work performance? <ul style="list-style-type: none"> • If yes - What are the differences? How has the use of RPA enabled this? • If no - Is it equal as before?

Closing

- Is there anything else you want to add before ending the interview?
- Is it okay if we get back to you if anything is in need for clarification or if any other question arise?
- Thank you for taking the time to participate in our study, would you like us to send a copy of the study when it has been published?

Appendix 3: Interview Transcript (E1)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	E1	I am a bank operations specialist working with factoring as a product. Do you need any more detail?	
3	I	No, that's fine. That's totally fine. So, can you please explain how you use RPA in your organisation and the objective for its use?	
4	E1	Well. We have, at the moment, one robot that we use of our skills specifically. That is closing of a task that we did previously manually. I'm not sure how much time this robot saved, but at least for me it's few hours per month.	
5	I	Okay perfect. So, in what form are you involved in the process to which RPA has been applied? Have you been involved in that process?	
6	E1	During the preparation stage, no. I would say. We were only asked at the end when the robot was already made. The team was asked to double check if... because the robot had left some exceptions that he didn't close so our colleague that was responsible for the robot asked us to check if that is correct and don't leave that exception. So, that is basically it.	
7	I	Okay perfect. Okay, so now we will start the more specific questions about RPA and your everyday work. So, do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
8	E1	No, they haven't. I have not created the robot myself. No. It did not change the tasks for us.	SV-CS
9	I	Okay. Perfect. So, you feel like it's the same? Just that you save time due to the robots?	
10	E1	Sorry could you repeat?	
11	I	So, do you think it's the same skills required just that you save time? Is that what you said before?	
12	E1	For this specific robot, yes. We don't need any special skills. If you're the one that helping to create the robot, then yes. You need to know a bit deeper. But if you just use it as the end user, no.	SV-CS
13	I	Okay, perfect. And do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used?	
14	E1	Well, as I said it's only done the manual job which was previously for us. So, we save time and we can do other additional things that we usually didn't have that much time for.	
15	I	So, what kind of things are these, that you have more time for now?	
16	E1	Specifically, for me, it is helping our newcomers, since I have a robot helping our newcomers, so I have more time. And these tasks of course, sometimes need the more specific knowledge.	SV-CLS
17	I	Okay perfect. Do you perceive that the use of RPA has freed time for you to develop new skills?	
18	E1	Yes. Of course.	SV-DS
19	I	So, what skills do you perceive that you have been able to develop	
20	E1	Working with people. As I mentioned just before, I am working with newcomers. Also helping our team with their learning plan for training. So that	SV-CS SV-DS

		kind of skills I have more time to develop. I also have more time to participate in specific meetings and workshops and even go to do some learning.	
21	I	Okay, perfect. And, was this something required by the organisation that you develop these new skills? Or was it voluntary from you that you had the interest in developing them?	
22	E1	Talking about our newcomers, so this I have volunteered in this part. I don't have to do it. I mean, anyone can participate if they want.	
23	I	Okay, yeah. Perfect, thank you. And, do you perceive that the use of RPA requires you to have more problem-solving and complex skills? You said that you are more in contact with customers now?	
24	E1	I'm not sure.	
25	I	No worries.	
26	E1	Can you repeat once again the question?	
27	I	Yeah. So, do you perceive that the use of RPA requires you as an employee to have more problem solving and complex skills? Compared to before?	
28	E1	Talking specifically about our robot, probably not. Since I don't use it that much. In fact not all that much. But if I would be creating the robot, then yes. It would definitely need some more complex skills and problem solving.	
29	I	Okay, thank you. So, do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
30	E1	Probably not. It is not that big robot, I would say.	TI-IP TI-R
31	I	Okay. So, do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
32	E1	Probably not. The tasks are the same important as they were before.	T1-TIm
33	I	Okay. So, like, that goes kind of hand-in-hand with the question before perhaps?	
34	E1	Mhm.	
35	I	Yeah, okay. So many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
36	E1	Well, I agree. Because at least in our work, the robot does the same tasks that we did manually, so now, as I said before, all of us have more time for other tasks. Additional things that usually requires a lot of time, effort and of course, your involvement.	TS-TC A-TP
37	I	Yeah. Okay perfect. And, do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with citizens/customers/colleagues? You mentioned something before about this, right?	
38	E1	Well, probably not I would say. We have worked with the customer the same way as we do now, before the robots. So, I wouldn't say that it has affected them. That it has anything to do with the connection with the robot.	
39	I	So, but the experience, like the use of RPA has enabled you to spend more time on the customers?	
40	E1	In general, we have more time. So yes, we can spend more time on customers as on the other stuff that we have. Yeah.	TS-SI A-TP
41	I	Okay perfect. So, like, what kind of tasks can you now spend more time on? And how do you believe that RPA has enabled this?	

42	E1	Well as I said, it just saved some time. So, if you have any kind of additional tasks that, like, long term problems, you can spend time on that. And you have like, I don't know, something for the plan that also required more time so you can spend this saved time here. You can also interact more with your colleague and with another team. Spend more time on like learning, workshops or so.	
43	I	Okay perfect. So, do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
44	E1	It's really hard to say. More structured, I wouldn't say. Probably not. A little bit it is connected but...	A-SC
45	I	Yeah, I see. I was just thinking about what you mentioned before about the workshops. Like that you now could spend more time, maybe that could be seen as freely structuring the work? Like since you don't spend the time on autonomous tasks?	
46	E1	Yeah well in this kind of way, yes. Since you have more time, you can spend it on additional things. Your self-development and etc.	A-SC
47	I	Yeah, okay perfect. Have you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation?	
48	E1	Well when you have more free time you are not that stressed. That is true.	
49	I	Yes. So, it's basically that you have more time now that you... That makes you feel that you are not that stressed?	
50	E1	Yeah, it makes me feel more relaxed because you now that you have a few extra hours to do other really important things or just tasks.	A-TP
51	I	Okay perfect. So, many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance? I know it's a long question and please, I can repeat it again if you want to.	
52	E1	Yes, please.	
53	I	What we're trying to say here is that many believe that RPA streamline processes due to its ability to automate work tasks. We just want to know if you perceive that RPAs automation of processes had an impact on how rapidly you obtain feedback about your work performance?	
54	E1	I think probably... I don't agree with this. Because you receive feedback for your work, it doesn't matter if you have a robot or not. So, people want to give you feedback, it has no connection to whether using a robot or not	F
55	I	Okay perfect. So, you believe it hasn't changed since the use of RPA?	
56	E1	No.	
57	I	Okay. Just before ending the interview, do you have anything else you want to add?	
58	E1	No. I think I have said everything when answering the question.	
59	I	Yeah, perfect. And is it okay for you if we get back to you if anything needs clarification or if any other question arises?	
60	E1	Yes, of course.	
61	I	Yeah. So, we just want to thank you so much for participating in the study. And would you like us to send a copy of the study when it's published?	

62	E1	Yeah, that would be nice to read. Sure.	
63	I	Perfect. Okay. Thank you so much for your time and have a great rest of the day.	
64	E1	Thank you. You're welcome.	

Appendix 4: Interview Transcript (E2)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	E2	So, I am currently working as a bank operation specialist for factoring large corporate international institutions. I do work with all the *anonymized* countries, I work with *anonymized*, and also with the customers.	
3	I	Thank you. Can you please explain how you use RPA in your organisation and the objective for its use?	
4	E2	Currently, we have this very... I would say boring tasks which takes a lot of time, but which necessarily do not need a lot of brain to do, so more of the manual work. So, we use most of our robots to do the manual work tasks.	
5	I	Okay, thank you. So, in what form are you involved in the process to which RPA has been applied?	
6	E2	You mean like creating the robot, or actually interacting with it?	
7	I	It is more about how you are interacting with it, now afterwards in the process?	
8	E2	So, the robot that we currently have in our department, I mean in our team, is not very interactive. We just prepare the excel sheets and then the robot just filters it through. And the ones with the okay status have to be closed or the payments have to be checked. But more or less, this is the one part. And then we have, we are now creating another one for gathering the traditional report. In that form, it would all be triggered by the excel sheet and not touched by the human. So almost no interaction is needed.	
9	I	Okay perfect. So, now we are going into more the more detailed questions about RPA. Do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
10	E2	Yes, I do believe that it has definitely changed. Because the robot can actually eliminate the part of the manual work so we can concentrate on doing the work where we have to think and analyse and need to decide and advice. So, now we have much more time freed up on our hands and also, with this robot we can actually do more. Such as give more time to our customers. Because now we have much more time on our hands and we can actually do something with it. And in case of preparing the material for the customer, or just present stuff with the new solution. So yes, it has been very good.	SV-CS SV-CLS TS-SI
11	I	Okay. So, if I understand you correctly, do you mean that RPA has freed up a lot of time for you to focus on more complex work tasks than before?	
12	E2	Yes. Yes, definitely.	
13	I	Okay perfect, thank you. Do you believe that the... Or do you perceive that the tasks... Sorry, I just answered this myself now. So, do you perceive that the use of RPA has freed time for you to develop new skills?	
14	E2	You might say so. I think, not particularly the robot freed up, but when we created this continuous improvement idea, which helps us build the robot, I think while creating it and while searching for new opportunities. It is not the robot that creates it and made us now more intelligence or the ability to learn new skills. But definitely, at least, give us more time and a bit more	SV-CS SV-DS

		knowledge, like how to work with it. But it is not about the robot, it is still about the person whether to develop.	
15	I	So, is it more because it has freed time that you have had the ability to develop new skills you mean?	
16	E2	Yeah. And also, it is when you are actually given a possibility. Because first you need to create a robot and to define it in the big company as *anonymized* is. You firstly need a really good idea and you need to defend it, why this robot should have the priority in your list. And then even in the whole department. So, by these also additional tasks while creating it, you definitely learn a lot. And then, from that experience you just bring it up more and more and more, and the you create more value for the company. Definitely.	TI-IP
17	I	Okay perfect, thank you. Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
18	E2	Not for me. I think that is... since we do work with portfolio and I have my set of customers, I still feel very responsible for what I do and how I do it. And if the robot does some kind of mistakes, I still feel as it is mine because it should have been seen and it should have been... Yes, we should have seen it previously so it is not about the robot doing the mistakes but it is still us at *anonymized*, me as a person, me as a manager of these customers. I still feel the responsibility.	TI-R
19	I	Okay. So, do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
20	E2	No, I do not think so.	TI-TIm
21	I	Okay.	
22	E2	I mean, the robot is just another tool, but it definitely does not change how you work and how you think, how you do and how you manage stuff. So, it is just at tool for you to do things something a bit faster. But it is definitely not changing anything.	A-SC
23	I	Okay. So, many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
24	E2	I agree to that, hundred percent.	TS-TC
25	I	Okay.	
26	E2	And I hope in the future, we can have a more complex robot but for now that is exactly what the robot does.	
27	I	Yeah okay, can you give me any example of what you can spend more time on now and why this has been enabled through the use of RPA?	
28	E2	I had this one very boring task for which I had to spend at least 10 hours every month, on the repetitive task. And now I can spend that time on my actual activities in my work field where I try to impact the whole department of the actual change that we have created and that we think will be of better use in the future. So, now I can focus a bit more on that part and also, maybe connecting and collaborating with your colleagues because if you have a lot more time on your hands to speak with them and actually collaborate, actually think of new solutions and better ideas.	TS-SI TS-TC A-SC A-TP
29	I	Okay. So, do I understand you right that you can interact more with your colleagues and to customers in general in the organisation?	
30	E2	And also, definitely, the additional activities for the department to take. So that we would develop our skills in the future. This is also one of my own personal tasks that I work on.	

31	I	Okay perfect, thank you very much. So, do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
32	E2	I would not say it is because of that. I think in general, the more you work with some of the tasks the more you get familiar to it. And then it is not, as I mentioned before about the robot... maybe it is because we have only one robot and then we have few of the script and then a few other coming up. But for me, now at this stage, the robot did not do much more than freed up time from the repetitive tasks.	A-SC
33	I	Okay. Do you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation?	
34	E2	Maybe that particular task that the robot does has led to that I now feel that the deadline is achievable and actually possible to work around. But otherwise, regarding all the other tasks, these are with the same pressure. Nothing has changed in the other places.	A-TP
35	I	Yeah. So, you feel that RPA has allowed you to more easily reach the time limit than it was before using RPA?	
36	E2	Yeah. Yes, definitely for that task. Because otherwise I was always late for that certain part, I was always late for at least more than a week because I had a lot of those agreements that had to be checked. And now. the robot has erased around 90 percent of my work that I get for all of those agreements.	A-TP
37	I	Okay. Thank you. So, many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance?	
38	E2	No, I would not say that this is because of the RPA, regarding feedback about the work. I would not say so. I would not agree with that.	F
39	I	Okay. So, you believe that it is not much different from how you get feedback from how it was before you used RPA?	
40	E2	Yes, we always have this very open and mostly honest communication. We have a strong feedback culture. So whatever we do, we do definitely receive the feedback straightforward. So, the robot did not change anything for that part.	F
41	I	Okay, perfect. Thank you very much.	
42	E2	Thank you.	
43	I	So, we are basically done now with the main questions here. Is there anything else that you feel that you want to add before we are ending the interview?	
44	E2	No, I do hope that I answered your question but if I did not then you can also hit me up with an e-mail if you have any other questions.	
45	I	Okay. Thank you very much. So, thank you for taking the time to participate in our study. And would you like us to send a copy of the study when it has been published?	
46	E2	I think I would actually like to see what you did. That would be very nice.	
47	I	Okay perfect. We will send it to you then.	
48	E2	Thank you. Thank you for that.	
49	I	Thank you very much.	

Appendix 5: Interview Transcript (E3)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	E3	My position?	
3	I	Yes.	
4	E3	So, I work in banking. Mostly working with payments and doing like everyday payments, and doing refunds. And most of my work is on computer or some of the other time just spending in meetings discussing about our improvements that can be done and implemented in the system.	
5	I	Okay perfect. So, can you please explain how you use RPA in your organisation and the objective for its use?	
6	E3	Can you repeat the question?	
7	I	Yes. Can you please explain how you use RPA in your organisation and the objective for its use?	
8	E3	So, with RPA you mean the robot?	
9	I	Exactly, the robot.	
10	E3	Yeah, okay. So, we only have one robot that I work with, it is a refund robot. So, we had to do refund manually before it. But now there is a time limit, actually two times during the day. It is from 10.30 to 12.30 and from 3 to 5 p.m. Then the robot runs. So, now it's much easier because we only need to write a comment, like a short script for our robot and it does not take so much time as it used to be. Have I answered the question?	
11	I	Yes. It is perfect. So, in what form are you involved in the process to which RPA has been applied?	
12	E3	Like, the refunds are our everyday tasks. I have only worked here for a half of a year. So, when I started working, the robot was in the developing stage. So mostly what I took part in was just a little bit of testing. Like every day I just tested, did comments and watched how it was going to work and if my refund will be completed. And say my opinion about it, how we can improve it and how we can change routines.	
13	I	Okay perfect. I will go into the more key questions now. Do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
14	E3	Yes I think it has changed. It is now simply... our work now is a little bit shorter. So, we have more time for other tasks, for additional responsibilities.	SV-CS
15	I	So, what additional skills do you see is required now?	
16	E3	Because of the RPA?	
17	I	Yes I exactly, if it has freed you time, do you think it has required some additional skills?	
18	E3	Yes, every day you learn some new skills, but nothing in specific I think. Not really. It is a really simple robot. You don't need very specific skills.	
19	I	Okay, perfect. Do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used?	
20	E3	It may be more challenging now, but I don't know if it is due to the robot or not. Because our work is changing a lot. It is a lot of our improvement made.	

		A lot of new things made. Because of the robot, it really helped us make. Because of the robot, I would say everything is more easier now.	
21	I	Okay. So, do you perceive that some work tasks are more challenging now due to that it has freed up time from the monotonous tasks?	
22	E3	Not because of that it has freed up time, but because we have additional responsibilities. So, that is why it is harder now.	TI-R TS-TC
23	I	Okay, so is it more that you have to focus on a bit more complex tasks now that makes it more challenging?	
24	E3	Yes. Yes.	TS-TC
25	I	Do you perceive that the use of RPA has freed time for you to develop new skills?	
26	E3	Yes. Yes, I am learning new things, new processes. So, yes.	SV-DS
27	I	So, these new skills, were that required by the organisation that you had to learn this? Or was it voluntary, that you wished to expand on these skills?	
28	E3	Some of them are voluntary skills. Like, I'm learning scripting because I have more freed up time. But some of them are mandatory.	
29	I	So, what kind of skills is now mandatory to expand on? Do you have any example?	
30	E3	It's like really specific type of things like, doing new processes like *anonymized* matches. Or we are just doing *anonymized*. It's a little bit like new process for me but not for all the team members. Because I have not worked here for a long time so it is a new skill for me.	SV-CLS
31	I	Oh I see. And these new skills, how did you develop them? Was it through workshops or how is it working?	
32	E3	Yes. Like work shadows, or most of the time just workshops. Or just colleagues trying to explain new. Or just reading the instructions and so on	
33	I	Yeah, I see. Perfect. Do you think that the use of RPA requires you as an employee to have more problem solving and complex skills now?	
34	E3	Can you repeat the question?	
35	I	Yeah, do you perceive that the use of RPA requires you to have more problem-solving and complex skills?	
36	E3	Hm. Hard to say. I do not know about this question?	SV-CLS
37	I	You just quickly mentioned before that you now can put more time on more complex skills. Maybe this is the way it works for you?	
38	E3	So, yeah. Basically, I can just repeat the same as I said before I have nothing more to add.	
39	I	Okay, Perfect. Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
40	E3	Yes, we have been affected a little bit. I would say again, the same like, because it saves a lot of the time and we can use that time for other things.	
41	I	Yeah. So how have you experienced an increased responsibility? Do you have any examples?	
42	E3	Yeah. Like now, I am delegated from the team to the scripting community. So I have the time to go to the scripting community, for example for me. I do not know?	TI-R
43	I	No, it is perfectly fine. So, basically it has freed up time for you now to develop more skills and that has also led to increased responsibility, have I understood you correctly?	
44	E3	Yes, so that my responsibility now is to be the leader of the scripting in our team.	TI-R
45	I	Yeah, okay perfect.	

		Do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
46	E3	No. I don't know, it hasn't affected me.	TI-IP TI-TIm
47	I	Okay. Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
48	E3	Yes, I agree that it frees up the time. Definitely. The main thing is it did not serve the time as good as here for us. We have tried to do as many tasks as we can because we have always deadlines. Then you work for *anonymized*, so it is really important for us to have the time to finish the process on time. And it has helped. Because you can concentrate on one process. Now you do not need to look at the refunds all the time and just go from one process to another. Because it changes so quickly. Now we can just look at one process at the time.	
49	I	Okay perfect. So, do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
50	E3	Yes I know it has. We only have those hours that the robot works, so you need to finish up a task before it starts running. Because if you do not finish it you will need to wait for next run. So, it is maybe a little more structure than before, but you need to get used to it. So, it wasn't easy at the beginning.	A-SC
51	I	Okay, so now you need to structure work more because you have these specific times that the RPA is running?	
52	E3	Yes.	
53	I	Perfect. So, do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with customers/colleagues?	
54	E3	In our work we don't talk to the customer a lot. Mostly we connect via emails, so not so much. It has not affected me so much.	TS-SI
55	I	Okay, perfect. But if I modify it a bit and we change it to colleagues. Do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with colleagues?	
56	E3	I would say yes, if we are talking about colleagues.	TS-SI
57	I	Okay. You have kind of answered this, but do you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation?	
58	E3	Time pressure?	
59	I	Yes, time pressure on the tasks.	
60	E3	Can you repeat that question?	
61	I	Yes of course. Have you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation?	
62	E3	Not so much no. I did not experience this, as I understand the question.	
63	I	We just basically wanted to know if you perceive like more time pressure or less time pressure now on the tasks that you are expected to perform in the organisation?	
64	E3	Just sometimes it puts a little bit more pressure when the robot does not work. Because sometimes, you know, there are some issues with the robot. Then we have some more pressure from the clients. And when the robot does not work properly, and you don't check it. Because not every time you get a chance to check if it is really working or not so. You deliver the process on	A-TP

		time, but sometimes the robot delivers it much earlier. So, they are used to have their money earlier and then you deliver it a little later, and then we have a reaction. But it is still on time.	
65	I	So, it is more about that the customers now expect it to be quicker and therefore, when the robot does not work, you experience more pressure?	
66	E3	Yeah.	
67	I	Yeah okay perfect. Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance?	
68	E3	So yeah. Automation has lot of effect on our daily tasks. And I still see there can be another one robot in our daily routine, and another one. I think it is going to affect the type of job that I am doing.	
69	I	Yeah. So, do you feel that the feedback somehow has been affected by this? How rapidly you obtain the feedback?	
70	E3	So, of course we have a lot of feedback and we try to obtain it as rapidly as we can. Because the number one priority for us is our customer and their opinion. We tried to make that process as smooth as we can.	
71	I	Yeah I see. So do you feel it has changed since the use of RPA?	
72	E3	The feedback?	
73	I	Yeah, how rapidly you obtain the feedback now compared to before?	
74	E3	In my station it has not changed.	F
75	I	Okay, perfect. Before ending the interview, because we are actually heading in that direction now, do you have anything else to add?	
76	E3	No, I am fine.	
77	I	Okay, and we just wanted to double check if it is okay for you that we get back if we need to clarify anything from the interview? Or if any questions arise?	
78	E3	Sure, it is okay. You can email me or call me.	
79	I	Yeah. Thank you so much.	
80	E3	No problem.	
81	I	Then I just want to say thank you so much for participating in our study, it will really help us. And just last question, do you want a copy of our study when it's published?	
82	E3	Yeah, sure.	
83	I	Okay, perfect. Then we will email it to you then.	
84	E3	Okay.	
85	I	Thank you so much.	
86	E3	Thank you.	

Appendix 6: Interview Transcript (E4)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	E4	Yeah I'm at bank operations specialist. Here I do all sorts of different operations for capturing clients. Both small and bigger. Both of them clients. Yeah that's pretty much it, I don't know if you want me to get more into detail of what kind of operations.	
3	I	No that's absolutely fine thank you. So can you please explain how you use RPA in your organisation and the objective for its use?	
4	E4	Yeah. Well we have a few robots that I use. But. I've never really, I haven't been here when they were developed and started to be used here in *anonymized*. But once I came I mainly used the refund robot. Probably the one you heard most about. I use it every day, every workday pretty much. And it really depends on the day whether it is more or less. I would say, the refund robot I use definitely daily... But also a payments robot, I think if that is what it is called. But I'm not really sure but, yeah. Which helps with our paying all the inpayments. But it doesn't really save us as much time as refunds robot but it still does. It still helps. But these two robots I use in my daily work.	
5	I	Yeah okay, perfect. So, do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
6	E4	I would say a bit, but when I started I had to learn to do the processes manually and after learning to do the manually you get clear how everything works and how to do things. And I didn't really need to develop any new skills to use RPA. So, I'd say no. But for someone who doesn't know how the processes work in general, then they would need to develop some new skills.	SV-CS SV-DS
7	I	Okay so if I understand it correctly, for you the required skills are pretty much equal to how they were before RPA was used? Is that correct?	
8	E4	Yes. That is correct.	
9	I	Okay. So, do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used?	
10	E4	It seems like they are less challenging. But it is also, still depends in some cases. Because, it sometimes happen that the robot failed to do some tasks and you actually need to investigate what actually caused... What was the reason for failure. So, I don't know.	TI-R
11	I	Yeah okay. But if you said, because, if it is less challenging, do you have any example on what exactly has become less challenging than before?	
12	E4	Well first of all you don't really need to do as many tasks. But way less tasks with the robot so you don't really need to collect the things you need to collect to view of refund manually. Because the robot does the most of the job for you. But other said, in occasions failed, it still is a bit of a challenge. Because, it doesn't happen too often, but if it fails you'll have to go... You have some information that you have from robot. But you still have to gather extra information that robot was supposed to do. You have to go back and do that manually, and you have to remember what the case was about. That is a challenge. But overall I would say definitely less challenging.	TI-R
13	I	Okay, thank you.	

		Do you perceive that the use of RPA has freed time for you to develop new skills?	
14	E4	Yes definitely. I wouldn't say it's definitely a yes for every day. But for most of the time it is. Bu not everyday we have that many refunds. But still quite a few of them and it helps me. Definitely me, it helped to save at least half an hour/an hour a day I would say. I am still... I'm still quite new at *anonymized* so I develop skills constantly and I really need that extra time to develop those skills. I would definitely say it is a time saver.	SV-DS
15	I	Yeah okay, perfect. Do you have any examples of what type of skills you have enabled thanks to RPA?	
16	E4	Well, not completely. Well actually, yeah I could say that I'm learning a new process. It's not a new process for *anonymized* but for me it is like the on boarding process. The other day I had quite a few refunds which would have taken me quite a lot of time to do manually. But I should gather all the information I needed through a robot and let it do its work and I continued to learn that new process. I am learning now, I am still learning it but it definitely helps.	
17	I	Okay perfect. Is there's something that was decided for you to do voluntarily? Was it your decision or is this something that *anonymized* as an organisation required from you to develop?	
18	E4	No I would say it's definitely up to everyone themselves whether to use it or not. If you have time you can definitely go ahead and do everything manually. It is not mandatory to use it. But I think it's better to do so. But it's definitely not mandatory now.	
19	I	Okay, yeah. So is it's something then that you believe is beneficial for you and *anonymized* as an organisation, but still up to you if you want to develop those skills or not?	
20	E4	Yeah exactly.	
21	I	Okay, thank you. Do you perceive that the use of RPA requires you to have more problem-solving and complex skills?	
22	E4	Well in fact you say so, unless, as I've already mentioned cases where it failed so you have to investigate the reasoning for that. But, it does not happen that often and the reasons are more or less the same. So once you have done it once, it's easier to do it the second time. You know the reason and if you know what to look for.	TI-R
23	I	Yeah, okay. Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
24	E4	I do not know actually. I can't really answer that question, can you repeat that question?	TI-R
25	I	Yes that is fine. So do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
26	E4	Yeah I would say so, because it is better for you to use RPA. Because in the future the more attentive it is, the better it will be. The more time you will be able to save. And you will have more time to develop yourself as well. So definitely. I believe you have to learn how to use it because it is important in the future. It is important now and the development of it as well.	SV-DS TI-IP TI-TIm
27	I	Yes. So, why do you perceive that this results in you having a larger impact on the organisational outcomes?	
28	E4	Can you repeat that question?	
29	I	So why do you experience that the use of RPA has resulted in you having a larger impact on the organisational outcomes?	

30	E4	I believe if you are willing to learn how to use robotics and you are willing to understand it, you will in the future be more... How do I say it, it will be easier for you for a *anonymized* employee to use new robotics as well.	TI-IP TI-TIm
31	I	Okay perfect. Yeah, thank you. So, many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
32	E4	I definitely agree with that statement. Especially, some days you really have a lot of refunds for examples. Especially when you have the same refunds to do and to do them all one by one. Half of a day and very much like that. And you can't really concentrate on the extra tasks. What is challenging that robotics can't handle yet.	SV-CLS TS-TC
33	I	Yeah, so do I understand you correctly if you think that RPA has enabled you to spend more time on certain work tasks that you didn't have enough time to spend on before?	
34	E4	Yeah I would say so. I mean it is difficult, sort of difficult for me to judge because I don't really do all the processes yet. So some of the more challenging processes are still yet to come to me that I need to learn. But still, when I first came every process was difficult for me. Every new process was challenging; in learning how to use the robotics was a lot of help to concentrate on the most difficult tasks that I have.	SV-CS
35	I	Yeah perfect, thank you. Do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with customers/colleagues?	
36	E4	I would say no probably to that question because we do not have a lot of interactions with the customers. But I would say it is partly yes and partly no. It really depends how much you communicate. It depends on the day, how much you have communication with the client and how many of the tasks that the robotics can handle. But you still prioritize the customers. So, in any way, even if you had to do the tasks manually, still go to the customer task.	TS-SI
37	I	Yeah, okay. So, do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
38	E4	Yeah, I would say it helped me control my work tasks. I'd say you can still perform work tasks without using robotic but it's easier because you know how much time you can spend on those other tasks for doing refunds. So, it's definitely easier because you just have more time.	TS-SI A-SC
39	I	Yeah I see. Perfect. So, have you perceive any differences regarding time pressure on your work tasks, since using RPA in in *anonymized*?	
40	E4	Yes, me personally definitely. When I started at *anonymized*, when I learned all the processes, how to do them manually. As a newbie, it definitely did take a long time. After I learned how to use the robot, after being thought, I definitely felt how much time I had saved.	A-TP
41	I	Yeah okay. So perfect, thank you. Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance?	
42	E4	I don't know. It is also difficult for me to answer this question because I haven't personally felt that yet.	F
43	I	No worries, that is absolutely fine.	

		So, we are heading to the end of the interview and I just want to ask you if there's anything that you feel that I missed out and if there is anything you want to add before we are ending the interview?	
44	E4	No, I would honestly say that I believe that I have shared all I know. Maybe someday in the future I could be able to answer more but for now that is what I can say.	
45	I	Yeah perfect. Would you be okay if we get back to you if anything is in need for clarification or if any other questions arise?	
46	E4	Yes, sure that is fine.	
47	I	Thank you. Well, thank you then for taking your time to participate in our study and the last question is only if you would like us to send a copy of the study when it has been published?	
48	E4	Yes I would love to have a read that.	
49	I	Okay perfect. We will send it then when it is published. And thank you very much for helping us out with this study. It means a lot to us.	
50	E4	Yeah, thank you so much.	

Appendix 7: Interview Transcript (E5)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	E5	I am a bank operation specialist. Working with payments and we are working with refund robot. So it is the first time for me to be working with a robot. It was unusual for me. So that's the first question.	
3	I	Yeah perfect. Can you please explain how you use RPA in your organisation and the objective of its use?	
4	E5	So we do things for refunds. So we find like a wrongly paid or double payments. And yes, as I told, this is the first time for me using that robot. For me it's saving time and it is fast.	
5	I	Yeah of course. In what form are you involved in the process to which RPA has been applied?	
6	E5	So I am applying the form. Like VAT refunds. So the robot refund in Excel sheet. So I fill all information about the refund and that's it.	
7	I	Okay perfect. We will start with the key questions now. Do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
8	E5	The skills will be like; it's like a new thing for me. And, you must be on a time check if robot is all the time working. And if he is not working you should do that refund manually. So it's a different process.	SV-CS
9	I	So, if I understand you correctly it's more skills regarding the robot and not any additional skills required except from the robot? Like any new skills?	
10	E5	Yeah. It is, at least it is for me.	SV-CS
11	I	Yeah okay, perfect. So do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used?	
12	E5	So for now I work faster. I like that they routine the robot, that works faster. I like that they routine the robot, so for me it is better when the robot is working.	
13	I	Yeah. So, the work tasks themselves, do you perceive any change in how challenging they are for you?	
14	E5	I don't know. I don't see that now. I need more time to see that.	
15	I	Yeah, perfect. Do you perceive that the use of RPA has freed time for you to develop new skills?	
16	E5	Yes of course.	SV-DS
17	I	So what kind of skills? Do you have any examples of what kind of skills you have developed?	
18	E5	To be more concentrated. To do the work in time.	
19	I	So there's no like specific skills that the organisation wanted you to learn due to the use of RPA?	
20	E5	So if I understand good so, that any of the skills that I learned in organisation using the robot?	
21	I	Yes and basically the question is about if you perceive that the RPA has freed you time to develop new skills?	

22	E5	So I have free time, more free time to develop another skills. So, it is kind of.	SV-DS
23	I	Okay, so was that the skill set you talked about before? Did I understand it correct then?	
24	E5	Yes.	
25	I	Yeah. Okay perfect. Do you perceive that the use of RPA requires you to have more problem-solving and complex skills?	
26	E5	Yeah. Problem solving because sometimes there's some problem with robot. So you need to understand what is the problem. And you might have to figure out how to fix it.	SV-CLS
27	I	Yeah, perfect. So basically it's like the problem solving skills in relation to when the robot doesn't work?	
28	E5	Yes.	
29	I	Yeah. Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
30	E5	Yes we have like more like responsible of the work because there is another team who is checking the refunds. So when we start using the robot, we have more responsibility for our work.	TI-R
31	I	So, you believe that the responsibility has increased since using the RPA? Have I understood you correctly then?	
32	E5	Yes.	TI-R
33	I	Yeah. And, do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
34	E5	I don't think so. I don't see it now, because I have not worked a long time with the robot.	TI-IP TI-TIm
35	I	Mhm. That's okay. So, many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
36	E5	Can you repeat that a little bit?	
37	I	Yeah of course. So, when we have read a lot about RPA, we have seen that many believe that the objective with it is to free time from monotonous and repetitive work tasks and now enable the employees to work with more complex and challenging tasks. What do you perceive, or what is your opinion to this statement? Do you agree or not?	
38	E5	I think that I agree of that. Some of. Like, I agree for this position because it is a little bit true. Yeah, there is more challenges.	SV-CLS TS-TC
39	I	Yeah okay. So have RPA enabled you to spend more time on certain work tasks that you didn't have enough time to before?	
40	E5	Before we had like... what you mean?	
41	I	Yeah, before using RPA, do you think that you now, when using RPA, have more time to spend on certain work tasks that you didn't have time to before?	
42	E5	Yes. Now we have more time.	A-TP
43	I	Yeah okay, so now you have more time? So do you experience that you have the same amount of monotonous and repetitive work tasks as before or do you see any changes here?	

44	E5	I think that this save like more time and I see more changes now, It is like different routine in our work.	A-TP
45	I	Okay perfect. I think I understood you correctly when. You have more time now, but it's not like specifically because of that you don't have the repetitive tasks. But more like in general that the robot is implemented?	
46	E5	Yes.	A-TP
47	I	Okay. Do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with citizens/customers/colleagues?	
48	E5	I don't hear like anything, like respond from the customers for now. But they don't say anything negative. So for me it seems that for them it's okay. And it has changed nothing for customers. I think maybe that it is changed for us. Maybe for customers change that you get money faster. And regarding from colleague; I hear that it's like easy and also faster to work.	
49	I	So RPA has enabled you to focus more on tasks involving the customers?	
50	E5	I don't think that they involve customers.	
51	I	Okay, so then it hasn't changed anything? Like from your position?	
52	E5	Yes, exactly.	TS-SI
53	I	Perfect. Do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
54	E5	Yes.	A-SC
55	I	Can you give me an example or how has it changed?	
56	E5	So it has changed like I always have to check robot refund, the report that the refunds are made. So we do that when we get the robot report. And also, if robot done that we can't make a refund, I should go back and check that refund and do it again. So it is more like to check the quality and everything is working.	A-SC
57	I	Okay so do you believe it's more structured or more freely structured than before?	
58	E5	I think it is more structured.	
59	I	More structured, okay perfect. So does it makes you need to control your work tasks more than before you were using RPA? Do I understand it correctly then?	
60	E5	Yeah. You should check like the report that everything is good.	
61	I	Okay, perfect. Have you perceived any differences regarding time pressure on your work tasks since using RPA in the organisation?	
62	E5	No, the same I think.	A-TP
63	I	It is the same, okay. Many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance?	
64	E5	No.	F
65	I	No. So how rapidly you obtain feedback is the same as before?	
66	E5	Yes.	F
67	I	Yes okay, perfect. That was actually the last question. So, before ending the interview, is there anything else you want to add?	
68	E5	There is no question.	
69	I	Okay perfect.	
70	E5	Thank you.	

71	I	Is it okay for you if we get back to you if anything needs clarifications or if other questions arise?	
72	E5	Yeah sure, for me it is okay.	
73	I	Yeah okay, thank you. Then we just want to thank you for participating in our study. And would you like us to send a copy of the study when it's been published?	
74	E5	Yes.	
75	I	Yeah okay. Thank you so much for your time.	
76	E5	Okay, see you.	
77	I	See you.	

Appendix 8: Interview Transcript (E6)

Section	Person	Text	Code
1	I	So can you please introduce what position you possess in your organisation and what you do?	
2	E6	Well basically I'm bank operations specialist in factoring unit. And yeah, we are working with payments, contacting the clients, introducing our services to our clients, keeping that all operations which would affect the clients is done responsibly. So basically that is it.	
3	I	Yeah okay, thank you. Can you please explain how you use RPA in your organisation and the objective for its use?	
4	E6	I'm sorry, the second part of the question?	
5	I	So if you can first explain how you use RPA in your organisation and then the objective for using RPA?	
6	E6	Oh okay. So basically we are using it for different processes. Well basically I helped to develop the robot in our team. I was writing the instruction for it and I was testing that by developer. So basically it did the process faster than the human can and it helps us to do our own job faster. And the objective is to deliver work that was probably to the client that they would not notice that something changed. And they will deliver some kind of process like in this case works faster.	
7	I	Okay, perfect. So, do you perceive that the skills required from you in executing your everyday work tasks, has changed due to the use of RPA?	
8	E6	Well of course it has changed because all the process was redesigned regarding what the robot could do.	SV-CS
9	I	Yeah, okay. Do you have an example about what is different? Like on a specific tasks or skills that are required now?	
10	E6	If you need the time it saves you the time. So like manually, like to manually do one task, that took me like five minutes, now takes less than one minute to prepare, for the robot to do it. So yeah, it means a difference for me and I can save up to four minutes per case.	A-SC A-TP
11	I	Okay. So you feel that the use of RPA has freed up time for you to spend on other work tasks that you didn't have time to spend as much time on before?	
12	E6	Yeah of course it is. I mean it depends how many cases where you use robot. But I mean if you have a lot of... It saves a lot of time to do them.	
13	I	Okay. Yes. Do you perceive the work tasks you have now to be equally, more, or less challenging compared to how they were before RPA was used?	
14	E6	I mean it's not challenging at all, it is even easier to do it so. I mean the RPA is making process simpler. I mean before developing the robot you would be the one to do them. So you discussed what is the best way to do it. So, like, to make it more easier to use for people. So that is why it is like easier to use. In development stage where you decide how it will be used, nobody will make it harder to use it than to do it manually. So RPA helps to do it but it includes a lot of planning in the process, redesigning of course.	TS-TC
15	I	Yeah. So do I understand you correctly that the use of RPA has made the entire process of working easier?	
16	E6	Yes it is.	TS-TC
17	I	Yeah okay.	

		So then, do you perceive that the use of RPA requires you to have more problem-solving and complex skills?	
18	E6	Not really. Well, because, first of all. That process you designed to use RPA in, it was done before manually. And you took all these cases manually. In these cases, like then you use RPA you just do it manually where there are exceptions. Which the robot couldn't. But it is the same job as it is before, so it doesn't really make it any more challenging.	SV-CLS
19	I	Mm okay. Do you perceive that the use of RPA has freed time for you to develop new skills?	
20	E6	Yeah I think so. Because I can now learn new stuff depending on my own requirements, what I need, what I am interested in and so on.	SV-DS
21	I	Yeah. Do you have any examples of what type of skills that you've developed?	
22	E6	Well I have not developed but I can I put my efforts in more like different tasks. For example.... Because as I didn't have that time before because I did manual things that is automatized now. But I could do more, helping other team members with other stuff or work to do.	
23	I	Okay yeah. Do you perceive that the use of RPA has influenced the impact and responsibility you have, throughout the entire work processes?	
24	E6	Well, yeah because you need to prepare correctly the cases that the robot would not understand. I mean the RPAs would understand. Because the RPA tool is only applicable to rule based things. So if it is not, like I mean rule based things... What I mean is, a person is thinking, right? The robot is not thinking. So, you need to prepare that case where the robot would understand other steps. And all other job would still be done by the person. So, yeah. I hope I responded the question.	TI-R TI-TIm
25	I	Yeah, yeah that is good. So, do you perceive that the use of RPA has influenced the importance of your work tasks, in regards to the organisational outcomes?	
26	E6	I think so. The mistakes it reduced. Because with less manual intervention approach. It be the main intervention in company.	TI-IP TI-TIm
27	I	Yeah, okay. And so, moving on. Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging work tasks - what is your opinion to this statement based on your own experience with RPA?	
28	E6	Well, if the process can be done by a robot it should be automatized. Because we are human, we are not supposed to do that stupid job which I done step by step every single day. It will get redeemed that people get bored with it so, it's better to spend more time on other tasks, such as include thinking and stuff like that. So my opinion is that, if the process can be automatized, it should be used to create RPA for that process.	SV-CS TI-TIm
29	I	Yeah, okay. So do I understand you correctly that you are under the impression, or that you feel that RPA has enabled you to spend more time on more complex work tasks that you didn't have enough time to spend on before?	
30	E6	Yes.	
31	I	Okay, thank you. So, do you perceive that the use of RPA has enabled you to focus more on work tasks involving interactions with customers/colleagues?	

32	E6	Well, I don't really notice that big difference because you still have time to talk to your colleagues or something. Because you're not talking to customers in here. So basically, we always time to talk to each other. So I don't think I can answer that question.	TS-SI
33	I	Okay, that's fine. Thank you. Do you perceive that the use of RPA has allowed you to more freely structure and control your work tasks?	
34	E6	Well you're getting the report from the RPA, so which then helping the task that are done and how many exceptions that was. So you can have a bit statistics on that. So, yeah.	A-SC
35	I	So, do you believe now with RPA, like that the work tasks are more structured and controlled? Is that what you're saying?	
36	E6	Statistically yes. But it is not that controlled for me. I mean, if RPA is supposed to change my, how to say, the working or something like that. It just helps me to make it easier.	A-SC
37	I	Okay I see.	
38	E6	I mean, I don't know.	
39	I	No, but it's perfectly fine. So, have you perceive any differences regarding time pressure on your work tasks, since using RPA in the organisation?	
40	E6	No. I mean, I'm a hard worker, so I am used to be brought up for a job to do it fast. So it wasn't a big problem it just freed up time for me more than it have before. So I didn't have the pressure of, I mean not doing stuff in the work.	A-TP
41	I	Yeah okay. Then you said it freed up more time for you, do I understand then that, thanks to RPA, it is easier for you to reach deadlines? Or do you feel that you have less time pressure on you since RPA frees up time for you?	
42	E6	Well, basically, RPA is still cancelling the payments as we did when we did the process manually. So it doesn't like, counts at this point. So yeah, it saved up more time as I said previously that I didn't really need to do it manually. So it saves up time for me. As I can go to, I don't know, play table tennis during the work time for a relaxation. So, the life is easier with automation in work process. So it's easier if you have a lot of cases and in this case it have quite a few. And it helps for us as a team.	
43	I	Okay, I understand. Thank you. So many believe that the use of RPA streamline processes due to its ability to automate work tasks - do you perceive, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly you obtain feedback about your work performance? I can repeat it if you didn't get it, is really long.	
44	E6	Yeah, can you please repeat it?	
45	I	Yeah of course. So, many people believe that using RPA allows you to streamline processes since it can automate work tasks. Do you perceive from your own experience that the automation that RPA is doing for the processes, has had an impact on how rapidly that you can obtain feedback from your own work performance?	
46	E6	Feedback?	
47	I	Feedback, yes.	
48	E6	Okay. Well, I didn't notice that. Probably. I don't know how to answer this question. I don't know. I get that feedback if like, I did a great job while testing the robot. But not, like working with feedback.	
49	I	So the feedback, the speed of you obtaining feedback back from what you've done is basically equal as before after using RPA?	

50	E6	Oh, I mean maybe I didn't give that word right. Is it feedback, like giving the person that feedback?	
51	I	Exactly, yes.	
52	E6	Oh okay. So I think that it should be the same. I mean it shouldn't like, the RPA doesn't change the delivery of process, right? So it should be the same as it was before, just quicker with less mistakes. So, just the work that should be improved. But regarding the feedback, so I don't really know.	F
53	I	Okay. But you can say like, if the work is now faster to complete the processes, is this also the case for the feedback?	
54	E6	Yeah, so basically it completes the work and it is good.	
55	I	Yeah okay. So we are coming to the end of the interview. So I don't have any more questions. But I want to ask you if there's anything that you feel like I have left out or if there's anything that you want to add for the interview?	
56	E6	Well I don't know. I think is a lot of people who are afraid of RPA right now in society. Because they think that the robot, which work in factories like building a car, they are going to change their place. That RPA tool, for example a lower position. But it is vital I think, because like me a banker operations specialist work less on operations and will do more on the customer service thing. I think so. So, that is the thing I wanted to add. But it shouldn't be, like people and like a worker, the employee shouldn't be afraid of RPA tools and should encourage it just try and see how it helps in working with operations.	
57	I	Yeah, okay. Thank you. So is it okay for you that we get back to you if anything is in need for clarification or if any other questions arise?	
58	E6	Yes of course you can.	
59	I	Okay thanks. And yes, thank you for taking your time to participate in our study. Just, lastly would you like us to send a copy of the study when it has been published?	
60	E6	Yes please.	
61	I	Oh okay perfect. We'll do that then. Thank you one more time for participating. It really means a lot for us.	
62	E6	No worries, thank you.	

Appendix 9: Interview Transcript (E7)

Section	Person	English Text (Translated Text)	Swedish Text (Original Text)	Code
1	I	Would you like to start by explaining what position in your organisation you possess and what this includes?	Skulle du vilja börja med att förklara vilken position i er organisation som du besitter och vad denna innefattar?	
2	E7	Yes, I am a social secretary, basically worked since *anonymized* with economic aid. We are a total of eight social secretaries at this department right now, and then it is an administrator, a coordinator, a customer coordinator, a group manager and a unit manager.	Ja, jag är socialsekreterare i grunden, jobbat sen *anonymized* med ekonomiskt bistånd. Vi är totalt åtta socialsekreterare hos oss just nu, och sen är det en administratör, en koordinator, en kundkoordinator, en gruppschef och en enhetschef.	
3	I	Okay, great. Would you like to explain how to use RPA in your organisation and what the purpose of using RPA is?	Okej, toppen. Skulle du vilja förklara hur du använder RPA i er organisation och vad avsikten med användningen av RPA är?	
4	E7	We use it for the monotonous, the administrative that takes so much time. We then mapped and automated the part that can be automated so that it will support us, so that we have more time for administration otherwise. So it has been a way, more preparatory. I know that many municipalities had, and also the municipality of *anonymized*, were administrators or investigating assistants, that they can also be called for, but we do not have that here. This means that the social secretaries should do everything when an application arrives. Then the application also came in paper form, which we had back then, and then you had to type in everything in the system, then make a calculation and then make a decision. With RPA now, after we have received a digital application, it can then read off the application that comes in and fill in all the parts that were previously entered manually, into the system, produce a calculation, proposal for a decision and then let one know when it is finished. When it does, we go in and look for it to be correct, sign and make a payment.	Vi använder den för det monotona, det administrativa som tar så mycket tid. Den delen som går att automatisera har vi då kartlagt och automatiserat så att det ska stötta oss, så att vi har mer tid till administration annars. Så det har varit ett sätt, mer förberedande. Jag vet att många kommuner, och som också *anonymized* kommun hade, det var ju administratörer eller utredningsbiträden som de också kan kallas för, men det har inte vi här. Det innebär att socialsekreterarna ska göra allt när en ansökan inkommer. Då kom också en ansökan in i pappersform, som vi hade då, och då fick man knappa in allting i systemet, sedan göra en beräkning och sedan fatta ett beslut. I och med RPA nu, efter att vi har fått in en digital ansökan, så kan den då läsa av den ansökan som inkommer och fylla i alla de delar, som tidigare knappades in manuellt, in i systemet, ta fram en beräkning, förslag till beslut och sen plingar den till när den är klar. När den gör det går vi in och tittar så att det är korrekt, signerar och gör en utbetalning.	
5	I	Do I understand you correctly, that it makes proposals for decisions, but it is still you as a social secretaries who approves the decisions?	Förstår jag dig rätt, att den ger förslag till beslut men det är ni som socialsekreterare som godkänner besluten?	
6	E7	Exactly.	Precis.	
7	I	Okay, great.	Okej toppen.	

		Then we have some main questions. Do you perceive the skills required from you, regarding the performance of your everyday tasks, have changed due to the use of RPA?	Då har vi några huvudfrågor. Anser du att de färdigheter som krävs från dig, gällande utförandet av dina vardagliga arbetsuppgifter, har förändrats på grund av användandet av RPA?	
8	E7	Sorry, can you repeat the beginning of the question?	Förlåt, kan du repetera början av frågan?	
9	I	Absolutely. Do you consider that the skills, or "skills" in English, required of you as an employee have changed... Regarding your everyday work tasks have changed due to the use of RPA?	Absolut. Anser du att de färdigheter, eller "skills" på engelska, som krävs från dig som anställd har förändrats... Gällande dina vardagliga arbetsuppgifter har förändrats på grund av användandet av RPA?	
10	E7	No, not for my part but I can imagine that the only thing that could change, in that case, is to understand the technical. But from my perspective it was no major problem.	Nej, inte för min del men jag kan tänka mig att det enda som skulle kunna förändras, det är i så fall att förstå det tekniska. Men för min del var det inga större problem.	SV-CS
11	I	Okay, great. Do you believe that the work tasks you have now are equal, more, or less challenging, compared to how they were before using RPA?	Okej, toppen. Anser du att de arbetsuppgifter som du har nu är likvärdiga, mer, eller mindre utmanande, jämfört med hur dem var innan RPA användes?	
12	E7	No, I don't think it's a difference.	Nej, jag tycker inte att det är någon skillnad.	SV-CLS
13	I	So you believe they're as challenging now as they were before the introduction?	Så du anser att de är lika utmanande nu som de var innan införandet?	
14	E7	Yes.	Ja.	
15	I	Awesome. Do you perceive that the use of RPA has freed up time for you to develop new skills?	Toppen. Anser du att användandet av RPA har frigjort tid för dig att utveckla nya färdigheter?	
16	E7	Yes. It was a good question. Develop new skills. There has been more time for other things. There has been much more time to come up with suggestions for new ideas on how to improve the business. It has been more for our citizens, in order to be able to support them. For a certain period when it didn't really work, then it was a lot that one sat with the administrative and one barely had time to meet the customers. It becomes vulnerable for the customers, because they are the ones we are for. So with RPA, we have had more time for meetings that can be used to clarify things or whether it is general questions or just information about economic support. So more time for such. Then we also have in the group, other social secretaries who then have, on the basis of being released so much time, they have been able to work more with residence issues being very topical. We have a lot of homeless	Ja. Det var en bra fråga. Utveckla nya färdigheter. Det har varit mer tid till annat. Det har varit mycket mer tid till att komma med förslag på nya idéer på hur vi ska förbättra verksamheten. Det har varit mer till för våra medborgare, att kunna stötta dem. För en viss period när det inte riktigt fungerade, då var det mycket att man satt med det administrativa och man hann knappt träffa kunderna. Det blir sårbart för kunderna, för det är de vi är till för. Så med RPA har vi fått mer tid för möten som kan va till för att klargöra saker eller om det är allmänna frågor eller bara information om ekonomiskt bistånd. Så mer tid för sådant. Sen har vi också i gruppen, andra socialsekreterare som då har, utifrån att de frigjorts så mycket tid, så har de kunnat arbeta mer med bostadsfrågorna som är väldigt aktuellt. Vi har en hel del bostadslösa	SV-DS

		people in the municipality of *anonymized* and it becomes incredibly prolix to just keep booking them in hotels, let them stay in hotels day in and day out, without actually working more forward with it together with them. We now have 1,5 full-time jobs for just that part and we didn't have that before the use of RPA.	personer i *anonymized* kommun och det blir otroligt omständligt att bara hålla på att boka in de på hotell, låter de bo på hotell dag in och dag ut, utan att egentligen att jobba mer framåt med det tillsammans med dem. Vi har 1,5-heltidstjänst för bara den delen och det hade vi inte innan användningen av RPA.	
17	I	Okay. So one might say that you now perceive that you can do the work tasks you are supposed to do instead of just working administratively, now that RPA is introduced?	Okej. Så skulle man kunna säga att du nu upplever att du kan göra de arbetsuppgifter du är tänkt att utföra istället för att bara jobba administrativt, nu när RPA införts?	
18	E7	Exactly, exactly.	Precis, precis.	
19	I	Great. As an extension of that question, do you perceive that the use of RPA requires that you now have more skills in problem solving and complexity?	Toppen. Som en påbyggnad av den frågan, upplever du att användningen av RPA kräver att du nu har mer färdigheter kring problemlösning och komplexitet?	
20	E7	No more than it was before.	Inte mer än vad det var innan.	SV-CLS
21	I	Okay, I was thinking since you now are more in touch with the citizens?	Okej, jag tänker på i och med ni nu är mer i kontakt med invånarna?	
22	E7	I understand, but no that are skills we were supposed to possess even before. But since we made a reorganisation and became fewer, based on the fact that we do not have the investigator assistants or the administrators, it lead to that we had to work with everything ourselves. So then we still did everything.	Jag förstår, men nej det är redan färdigheter vi skulle ha haft innan. Men i och med att vi gjorde en omorganisation och blev färre, utifrån att vi inte har utredningsbiträdena eller administratörerna, så blev det att vi fick arbeta med allt själva. Så då gjorde vi ändå allting.	SV-CS SV-CLS SV-DS
23	I	Okay. So if we move on. Do you feel that the use of RPA has affected your opportunity for influence and responsibility throughout the work process?	Okej. Så om vi går vidare. Upplever du att användandet av RPA har påverkat din möjlighet för inflytande och ansvar genom hela arbetsprocessen?	
24	E7	Yes really, it has.	Ja verkligen, det har det.	TI-IP TI-R
25	I	Could you give an example?	Skulle du kunna ge ett exempel?	
26	E7	Yes. Because I have also been involved in developing our RPA that we have in the municipality and also regarding the further development of our RPA. For example, that we also have come up with "would not the robot be able to do this as well? Could we not be able to automate this part to make it easier for us?" Because when we discover things during the meantime in the group, we bring it to the project manager and the management and depending on what it will cost and what it will give, we decide different solutions to improve and develop. So then we are all participating in that.	Ja. För jag har också fått vara med och utveckla vår RPA som vi har i kommunen och även gällande vidareutvecklingen av vår RPA. Till exempel att vi också kommit på "skulle inte roboten också kunna göra såhär? Skulle vi inte kunna automatisera den här delen för att underlätta för oss?" För när vi upptäcker saker i gruppen under tiden, så lyfter vi det till projektledaren och ledningen och utifrån vad det ska kosta och vad det ska ge så bestämmer vi olika lösningar för att förbättra och utveckla. Så då är vi alla med där.	

27	I	So you feel that you all can participate in suggestions for what RPA could be used for?	Så du känner att ni alla kan vara delaktiga i förslag till vad RPA skulle kunna användas till?	
28	E7	Exactly, yes. Even in the municipality as a whole. The municipality has bought the license for the entire RPA so we can use the robot in other parts as well. We also usually have common workshop-similar events, just to be able to inform what we use the robot for, to be able to suggest ideas within other units regarding what they could use the robot for. So we work with it in general. Then I also want to add that another colleague to me handles the statistics. We have split the work a little. Everyone writes down statistics regarding how well it works or when an error occurs. This is then reported to my colleague who then compiles, and then we go through the compilation weekly, in large group.	Precis, ja. Även i kommunen i stort. Kommunen har ju köpt licensen till hela RPA så vi kan använda roboten i andra delar också. Vi brukar också ha gemensamma workshops-liknande bara för att kunna informera vad vi använder roboten för, för att kunna väcka idéer inom andra enheter för vad de skulle kunna använda roboten för. Så vi jobbar med det i stort. Sen vill jag också tillägga att en annan kollega till mig för statistiken. Vi har delat upp lite. Alla skriver ner statistik gällande hur bra den jobbar eller när det sker ett fel. Detta rapporteras då till min kollega som då sammanställer, och sen går vi igenom sammanställningen veckovis, i stor grupp.	
29	I	Okay. Is your colleague also a social secretary? Just to clarify.	Okej. Är din kollega också socialsekreterare? Bara för att förtydliga.	
30	E7	Yes, my colleague is also a social secretary.	Ja, min kollega är också socialsekreterare.	
31	I	Okay, does it then happen that you also go to workshops regarding how other parts of the municipality have used the RPA?	Okej, händer det då att ni också går på workshops gällande hur andra delar av kommunen har använt RPA?	
32	E7	We are actually the first in the house, so it is usually us who get to present. And then it is then the adult group that is also in the same authority as us, who have also begun. So it is usually our two units that gets to present, but the idea is that more and more people will enter. We know, for example, that building permits want to enter and that invoice handling currently has entered.	Vi är faktiskt först i huset, så det är oftast vi som får presentera. Och sen är det då vuxengruppen som också är i samma nämnd som oss, som också har påbörjat. Så det är oftast vi två enheter som får gå och presentera, men tanken är att fler och fler ska in. Vi vet till exempel att bygglov vill in och att fakturahantering är inne just nu.	
33	I	How exiting.	Vad spännande.	
34	E7	Yes.	Ja.	
35	I	This is also an extension of the previous question. Do you perceive that the use of RPA has affected the importance of your work tasks in relation to organisational outcomes?	Detta är också en påbyggnad på förra frågan. Upplever du att användandet av RPA har påverkat betydelsen av dina arbetsuppgifter i förhållande till organisatoriska resultat?	
36	E7	Well, based on that... We have a lot of goals within our unit, and it is primarily to get people to become self-sufficient, and we do so in connection with our colleagues who sit at the unit next to us, the career leaders who They call themselves are divided into *anonymized*. Social secretaries here do not do the whole work, so a career supervi-	Jo, utifrån att... Vi har ju en hel del mål i vår enhet, och det är ju först och främst att få ut människor till att bli självförsörjande, och det gör vi i samband med våra kollegor som sitter på enheten bredvid oss, karriärledarna som de kallar sig är uppdelat i *anonymized*. Socialsekreterare här gör nämligen inte hela bi-	TI-TIm

		<p>sor does the planning but the aid decision itself is then taken by a social secretary. So we work very closely and synchronised with that unit and, as I said before, it was very messy before we had this support, the administrative support, that it really is produced. And then it leads to me being able to focus more on the customer by also then, it is scientifically proven that one then faster can motivate people to become self-sufficient, or find another solution to become self-sufficient.</p>	<p>ten, så planeringen hålls av en karriärhandledare men själva biståndsbeslutet fattas då av en socialsekreterare. Så vi jobbar väldigt tätt och synkat ihop med den enheten och som jag sa tidigare så var det väldigt rörigt innan vi hade detta stödet, administrativa stödet, att det verkligen tas fram. Och då leder ju det till att jag kan fokusera mer på kunden genom också då, det är vetenskapligt bevisat man då snabbare kan motivera människor till att bli självförsörjande, eller hitta en annan lösning till att bli självförsörjande.</p>	
37	I	<p>Exactly, because I also think about how it has affected the importance of your work tasks. For example, you might now perceive a greater responsibility now... I mean since you now can make suggestions on how RPA can work, so perhaps these suggestions, if implemented, can also show in organisational outcomes?</p>	<p>Precis, för jag tänker också på hur det har påverkat betydelsen av dina arbetsuppgifter. Till exempel du kanske nu känner ett större ansvar nu... Jag tänker mer att i och med att ni nu kan lägga förslag på hur RPA kan jobba så kanske dessa förslag, om de genomförs, också kan visa sig i organisatoriska resultat?</p>	
38	E7	<p>Well, oh sorry. I probably misinterpreted the question then.</p>	<p>Jaha, oj förlåt. Jag misstolkade nog frågan då.</p>	
39	I	<p>No worries at all, I just thought I could see if I could angle it from another perspective.</p>	<p>Verkligen ingen fara, jag tänkte bara jag skulle kunna se om jag kunde vinkla den ur ett annat perspektiv.</p>	
40	E7	<p>Yes, but exactly. We have worked very much together with both the management and the development managers, who have been project managers in the robot part. And much of that cooperation has led to changes being made primarily because it facilitates our work. And actually it is not just our work that should be facilitated but at the same time the National Board of Health and Welfare require statistic, so there are a lot of things that one should consider in order for it to work in the entire organisation. But the management has actively listening to us who know the job, since our management team has not worked as social secretaries in the first place. So it has been a very good and close contact with the management, welcoming discussions and suggestions, and a very flat organisation I would say.</p>	<p>Jo men precis. Vi har ju jobbat väldigt mycket tillsammans med både ledningen och utvecklingsledarna, som varit projektledare i robotdelen. Och mycket av det samarbetet har ju lett till att det har blivit förändringar just för att det underlättar vårt arbete. Och egentligen är det inte bara vårt arbete som ska underlättas utan samtidigt så kräver ju socialstyrelsen statistik, så det är en hel del grejer som man bör tänka på så att det fungerar för hela organisationen. Men ledningen har varit väldigt aktiva i att lyssna på oss som kan jobbet, utifrån att ledningsgruppen hos oss inte har jobbat som socialsekreterare i grund och botten. Så det har varit en väldigt bra och tät kontakt med ledningen, högt i tak och en väldigt platt organisation skulle jag vilja säga.</p>	
41	I	<p>That is nice.</p>	<p>Så skönt.</p>	
42	E7	<p>Yes, we are very dynamic so we can make changes quite quickly since no strict limitations are being outlined. So if it in reality does not work, then we revise or improve in another way.</p>	<p>Ja, vi är väldigt dynamiska så att vi kan göra förändringar ganska snabbt då ingenting är ristat i sten. För om det i verkligheten inte fungerar, då går vi tillbaka eller förbättrar på ett annat sätt.</p>	

43	I	<p>Okay, but great.</p> <p>The next question is a little longer so please let me know if you want me to repeat it. Many believe that RPA is used with the intention of freeing time from repetitive and monotonous tasks, in order to allow the employee to work with more complex and challenging tasks. What is your opinion on this statement, based on your own experience with RPA?</p>	<p>Okej, men toppen.</p> <p>Nästa fråga är lite längre så be mig gärna upprepa den. Många anser att RPA används med avsikt för att frigöra tid från repetitiva och monotona arbetsuppgifter, för att istället låta den anställda kunna arbeta med mer komplexa och utmanande arbetsuppgifter. Vad är din åsikt kring detta påstående, baserat på din egen erfarenhet av RPA?</p>	
44	E7	<p>Well, I totally agree. It really our initial idea when we were to introduce RPA here, for the reason that we did not cope with the other parts that we would like to and want to do because it is part of the mission we have. So I totally agree with the assertion, it is true.</p>	<p>Jo, jag håller fullständigt med. Det är verkligen vad vår tanke också var från början när vi skulle införa RPA här, just för att vi inte hann med de andra delarna som vi gärna vill och ska göra för det ingår i uppdraget. Så jag håller fullständigt med det påståendet, det stämmer.</p>	TS-TC
45	I	<p>Do you have any example... You mentioned that you now could spend more time on complex tasks, would you mind to clarify which ones these work tasks are?</p>	<p>Har du något exempel... Du sa att du nu kan lägga mer tid på komplexa arbetsuppgifter, skulle du bara vilja förtydliga vilka dessa är?</p>	
46	E7	<p>Yes, it can for example be a family that has an autistic child and really wants to discuss this with us and maybe want to arrange a larger apartment, an accommodation. The municipality is not obliged to do so in the first instance, for certain cases. For example, it can be such a thing, and then it is so that instead of just rejecting the application, you can meet the customer and go through exactly what the difficulties are behind, and what the need really is. Is it just about an apartment or are there other initiatives that we could offer as a municipality, and then I refer to other units within the social services. But that option did not exist, but one only rejected this before because economic aid has nothing with it to do, and only refers to another unit. But then it is like that, that we can book a meeting to listen to the customer and understand what the need is, in order to then be able to refer them to the right unit where they could get other contributions that can facilitate the everyday life of this customer. This is one example, and then there are lots of other examples that I also can present, but in general this is what it is about. That we previously didn't have the time to meet the citizens who wished to meet us, however there is no</p>	<p>Ja, det kan till exempel vara en familj som har ett autistiskt barn och vill verkligen diskutera det här med oss och kanske vill ordna en större lägenhet, bostad. Kommunen är inte skyldig till att göra det i första läge för vissa fall. Det kan till exempel vara en sådan grej, och då är det så att istället för att bara avslå ansökan så kan man träffa kunden och gå igenom exakt vad som är svårigheterna bakom, och vad som egentligen är behovet. Handlar det bara om en lägenhet eller finns det andra insatser som vi skulle kunna erbjuda som kommun, och då tänker jag andra enheter inom socialtjänsten. Men den typen fanns inte, utan man avslog bara detta innan för det är ingenting som ekonomiskt bistånd tar vid, och bara hänvisar till en annan del. Men då är det så att vi kan boka in ett möte för att lyssna på kunden och förstå vad behovet är, för att sedan kunna hänvisa till rätt ställe där de skulle kunna få andra insatser som underlättar vardagen i livet för denna kund. Det är ett exempel, sen finns det massor med andra exempel som jag också kan dra, men ungefär det handlar det om. Att vi inte tidigare hade tiden att träffa medborgarna som gärna</p>	TS-SI

		requirement that we need to meet everyone because everyone still gets to meet their career counsellor in *anonymized*. But there are still individuals who want to talk about their problems and maybe also want support in where to turn, and that is something that is a part of our duty.	vill det, det är inget krav att vi behöver träffa alla för alla får ändå träffa sin karriärvägledare i *anonymized*. Men det finns ändå individer som vill berätta om sina besvär och kanske också vill ha ett stöd i vart de ska vända sig, och det är något som ingår i vårt uppdrag.	
47	I	That was a great example. Then we are more aware of what work tasks it could include.	Det var ett jättebra exempel. Då är vi mer införstådda i vilka arbetsuppgifter det skulle kunna innefatta.	
48	E7	Well, great.	Ja men toppen.	
49	I	So if I understand you correctly, do you perceive that the use of RPA has affected your ability to focus on more tasks involving interaction with citizens?	Så om jag förstår dig rätt, upplever du användandet av RPA har påverkat dina möjligheter att fokusera på fler uppgifter som innefattar interaktion med invånare?	
50	E7	Yes.	Ja.	TS-SI
51	I	Well, great. I think it was very clear in the example you gave before?	Men toppen. Jag tänker att det var väldigt tydligt i det exemplet som du gav innan?	
52	E7	Yes, exactly.	Ja, precis.	
53	I	Okay. Next question, do you perceive that the use of RPA has allowed you to structure and control your work tasks more freely?	Okej. Nästa fråga, upplever du att användandet av RPA har gjort det möjligt för dig att strukturera och kontrollera dina arbetsuppgifter mer fritt?	
54	E7	Yes it does. Also the possibility of working from home, to a greater extent. Plan in another way because I now can see how many cases addressed in my name, in the digital platform where they submit the applications and that is where the robot goes in and works. There I can go in and search on myself, and see how many cases that has arrived and then also decide myself, that if I for example received 5-6 cases but when it might be 8-10 then maybe I can sit and work the afternoon in peace and quiet at home. Many work from home when, for example, if someone has to come and check something in their apartment or that someone needs to pick up a package in the afternoon, and this is enables since you can sit and work digitally based on that there are no secrecy documents that you need to access.	Ja, det gör det. Också möjligheten till att arbeta hemifrån, i större utsträckning. Planera in på ett annat sätt för jag kan se hur många ärenden som kommer i mitt namn, i den digitala plattformen där de lämnar in ansökningarna och det är där roboten går in och jobbar. Där kan jag gå in och söka på mig själv, och se hur många ärenden som har kommit in och då även bestämma att om jag till exempel fått in 5-6 ärenden men när det bli kanske 8-10 då kanske jag kan sitta eftermiddagen i lugn och ro hemma. Många gör även så om det till exempel har någon som ska komma och kolla på något i deras lägenhet, eller att någon behöver hämta ut ett paket på eftermiddagen då kan man bara jobba hemma istället den tiden då man kan sitta och jobba digitalt utifrån att det inte är några sekretesshandlingar som man behöver komma åt.	
55	I	So, RPA has made it possible for you to see how many cases you will have?	Så, RPA har möjliggjort det för er att se hur många ärenden ni nu kommer ha?	
56	E7	Yes, or how many cases that has arrived through the digital application. So it has not directly with RPA to do, but RPA makes it easier for us when	Ja, eller hur många som har kommit in genom den digitala ansökan. Så det har inte direkt med RPA att göra men RPA underlättar för oss när vi	A-SC

		we know that “Okay, this many have been prepared and I need to go through them, there are so many suggestions and the I can go through them and plan for them because then I somehow know how long time it can take”, and then I can plan that 10-20 maybe I could have in a afternoon. But that's just an example.	vet att “Okej, såhär många har förberetts och jag behöver gå igenom de, det finns så här många förslag och då kan jag gå igenom dem och planera för då vet jag på ett ungefär hur lång tid det kan ta”, och då kan jag utifrån det planera in att 10-20 kanske jag skulle kunna ha en hel eftermiddag. Men det är bara ett exempel.	
57	I	Okay, great. Do you perceive any differences in relation to time pressure on your work tasks, since the use of RPA has been introduced in the organisation?	Okej, toppen. Upplever du några skillnader i förhållande till tidspress kring dina arbetsuppgifter, sedan användandet av RPA har införts i organisationen?	
58	E7	No, or it has been less time pressure. I would say, because for the economic aid, it has become less since we previously had to go through all cases and we still had the same amount of cases. So then, I needed to type in everything myself, but now I do not have to, because it is already there.	Nej, eller det har blivit mindre tidspress. Skulle jag säga, för ekonomiskt bistånd har det blivit mindre för tidigare behövde vi gå igenom alla och vi hade fortfarande samma ärendemängd. Så då behövde jag knappa in allt själv, men nu behöver jag inte göra det, för det finns redan där.	A-TP
59	I	Great, so you believe the time pressure has decreased now that RPA has been introduced in the organisation?	Toppen, så du anser att tidspressen har minskat nu när RPA har införts i organisationen?	
60	E7	Yes, based on that it not requires that much time of me.	Ja, utifrån att det inte är lika mycket tid som krävs av mig.	A-TP
61	I	Okay thank you. We have a final question, and it is also a bit longer but I will try to make it clear Many believe that the use of RPA streamline processes due to its ability to automate work tasks. Do you believe, from your own experience with RPA, that automation through RPA has influenced how rapidly you obtain feedback about your work performance?	Okej, tack. Vi har en sista fråga, och den är också lite längre men jag ska försöka göra den tydlig. Många anser att användningen av RPA har effektiviserat processer på grund av dess egenskaper att automatisera arbetsuppgifter. Anser du, från dina egna erfarenheter med RPA, att automatiseringen genom RPA har påverkat hur snabbt du som anställd kan få feedback återkopplat till dig gällande din arbetsprestation?	
62	E7	I do not know, it's a little tricky. You mean if I get feedback from my manager?	Jag vet inte, den är lite klurig. Du menar om jag får feedback från min chef?	
63	I	Exactly, because many people believe that RPA speeds up work processes, and our question is then if you consider your feedback from your manager... I do not know if you work in longer work processes now compared to before since it has freed up time from you since it performs many monotonous and repetitive work tasks, and our question is then whether this has affected how rapidly you perceive	Precis, för många anser att RPA snabbar upp arbetsprocesser, och vår fråga är då om du anser att din feedback från din chef... Nu vet jag inte om du jobbar i längre arbetsprocesser än vad du tidigare har gjort då den har frigjort tid från dig då den utför många monotona och repetitiva arbetsuppgifter, och vår fråga är då om detta har påverkat hur snabbt du upplever att du får feedback på dina arbetsuppgifter?	

		that you receive feedback on your work tasks?		
64	E7	Okay, then I am with you. Yes, or I would like to highlight my colleagues there, because I was quick even before, and I want to say this without taking any "cred" here. But I know there is someone in the group who has really been quick and also now offers to help if someone else is a little behind. So we are some who tell the others when we are ready and offer us to either help or take on something else where we can help. So I do not think that I ... Possibly a little since it of course gains time.	Okej, då är jag med. Ja, eller jag skulle vilja lyfta mina kollegor där, för att jag var snabb innan också jag vill säga det utan att ta "cred" här. Men jag vet att det finns någon i gruppen som verkligen har blivit snabba och också nu erbjuder sig att hjälpa till om någon annan ligger lite back. Så vi är några som säger till de andra när vi är klara och erbjuder oss att antingen hjälpa till eller ta på oss något annat att göra där vi kan hjälpa till. Så jag tycker inte att jag... Möjligen lite för givetvis är det en tidsvinst.	
65	I	But you don't believe your feedback necessarily has been affected?	Men du anser inte att din feedback nödvändigtvis har påverkats?	
66	E7	No, I always get it. I even in certain situations handle cases faster than the robot. So I might be the wrong person to ask this question to. Because I actually measured the time a few times just for fun.	Nej, den får jag alltid. Jag handlägger till och med snabbare än roboten i vissa lägen. Så jag kanske är fel person att ställa frågan till. För jag har faktiskt mätt tiden några gånger bara för skojs skull.	F
67	I	That must be fun to feel this way.	Men det måste ju vara roligt att känna så.	
68	E7	Yes, that is fun. But there are some in the group that we have seen becoming much more effective since the use of RPA.	Ja, men det är roligt. Men det finns vissa i gruppen som vi har sett som har blivit mycket mer effektiva sedan RPA.	
69	I	So, these colleagues then might get feedback faster now?	Så dessa kolleger får då eventuellt feedback snabbare nu?	
70	E7	Yes, but I would say that. They now receive it faster from the manager.	Ja, men det skulle jag säga. De får det snabbare nu från chefen.	F
71	I	Great, it was actually all the main questions. Before we finish the interview, is it something you would like to add?	Toppen, det var faktiskt alla huvudfrågor. Innan vi avslutar intervjun, är det något du skulle vilja tillägga?	
72	E7	Yes, I really would like to add an important thing that I really disturbed on, if you get to express yourself in this way, when I started as a social secretary and were about to learn the job then I was hanging a lot with my colleagues. And in some cases we are actually two where we know that the customer can be drunk or are reported to the police and such things, then we usually are two from a safety perspective. And then it was very many times as colleagues to me, former colleagues, who said "this person was unpleasant" or "this person is like this" or "I know this person, so we could ignore this and that, and grant it anyway" or that	Ja, jag skulle egentligen också vilja tillägga en viktig grej som jag verkligen störde mig på, om man får uttrycka sig så, när jag började som socialsekreterare och skulle lära mig jobbet då hängde jag väldigt mycket med kollegorna. Och i vissa ärenden är vi faktiskt två där vi vet att kunden kan vara full eller är polisanmäld och sådana saker, då brukar vi vara två för säkerhets skull. Och då var det väldigt många gånger som kollegor till mig, tidigare kollegor, som sa att "den här personen var obehaglig" eller "den här personen är såhär" eller "jag känner för den här personen, så vi skulle väl kunna	

	<p>you do not allow because the incompatibility not is working. This was something that I experienced many times and it really did disturbed me a lot. Because just because you felt something for this customer, then poor the other customer you did not feel that way for. We have to work according to laws and regulations, we are obliged to make correct decisions independently on what one believes or whether the one experiences any incompatibility or not. So that has been essential for me, in this job. I promised myself that the day I make a decision based on what I think about a certain person then I will resign. Because this is a very serious thing as I see it, and I have witnessed several times that a person says "yes but it can get or it cannot get" for these reasons. So the introduction of the RPA makes a reduction of 90%, just because you do not believe and feel. The human factor disappears, which I absolutely believe brings both pros and cons, but above all - correct it should be and everyone should be treated equally. And in those cases where individual assessments are required and where other assessments are made than what the law says, then of course, we still execute those assessments as well. And it also requires a lot of manual handling of special applications, too, because the robot cannot handle everything, because it cannot interpret what all the information could be if this is not specified but instead may be stated under "other cause" based on their application for example. Then it obviously ends up in manual handling because we should not risk making an incorrect payment. But, as I just mentioned regarding emotions and feelings, it completely disappears. Because now, we have also automated the part where they end up in order to be reviewed, so no one should have to feel that they always end up there because they are called a certain name, "is that why I end up being reviewed every time?". And his completely disappears and I think that is incredibly good, in addition to freeing us more time, so I think that part now disappears and I think that is so important. So that no judgments are made based on hair colour, skin colour or name.</p>	<p>bortse från det här och bevilja ändå" eller att man då inte beviljar för att personkemin inte fungerar. Jag har varit med flertalet gånger om sådana saker och det störde mig otroligt mycket. För att bara för att du kände något för den här kunden, stackars den andra kunde som du inte kände för då. Vi måste jobba efter lagar och regler, vi måste fatta korrekta beslut oavsett vad man tycker och tänker eller om personkemin inte fungerar så är vi skyldiga att fatta korrekta beslut. Så det har varit A och O för mig, i detta jobb. Jag lovade mig själv, att den dagen jag fattar ett beslut utifrån vad jag tycker eller tänker om en viss person då ska jag säga upp mig. För detta är en jätteallvarlig grej som jag ser det, och jag har ett flertal gånger varit med och vittnat till att en person säger "ja men den kan få eller den kan inte få" av de här anledningarna. Så införandet av RPA den gör så att 90 % försvinner, bara av att man inte tycker och känner. Den mänskliga faktorn försvinner, för- och nackdelar kan jag tycka absolut, men framförallt- korrekt ska det vara och alla ska behandlas lika. Och i de fallen där det krävs individuella bedömningar och där det görs andra bedömningar än det som lagen säger, så självklart, vi gör fortfarande de bedömningarna också. Och det krävs också mycket manuell hantering av särskilda ansökan också, för roboten kan inte hantera allt, utefter att den inte kan tolka vad alla uppgifter skulle kunna vara om detta inte är specificerat utan kanske står under "annan orsak" utifrån deras ansökan till exempel. Då hamnar det självklart i manuella hanteringen för att vi inte ska riskera att göra en felaktig utbetalning. Men som jag nämnde gällande känslor och tycka, det försvinner helt. För nu har vi också automatiserat den delen där de hamnar för granskning, så ingen ska behöva känna att de alltid hamnar där för att de heter något visst namn, "är det därför jag hamnar på granskning varje gång?". Och det försvinner helt och det tycker jag är otroligt gott, utöver att den frigör mer tid för</p>	
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			oss, så tycker jag att den delen försvinner och det anser jag är så viktigt. Så att inga bedömningar görs utifrån hårfärg, hudfärg eller namn.	
73	I	It is a very important example you bring up. Do you now feel that it has become more "by the book" since the use of RPA?	Det är ett väldigt viktigt exempel du tar upp. Känner du nu att det blivit mer regelmässigt rätt sedan användningen av RPA?	
74	E7	Yes, both that, and our work routines and guidelines. Because a human being can make mistakes but the robot does as it is told to.	Ja, både det och våra arbetsrutiner och riktlinjer. För en människa kan göra fel men roboten gör som man har sagt att den ska göra.	
75	I	Yes, thank you so much for that input. Is it okay for you if we contact you if there is something that needs to be clarified or if any question appears?	Ja, tack så mycket för den inputen. Är det okej för dig att vi hör av oss till dig om det är något som behöver förtydligas eller om någon fråga skulle dyka upp?	
76	E7	Of course.	Självklart.	
77	I	Great, then I would just like to thank you so much for letting you have this interview with you. It has really been beneficial from our side.	Toppen, då skulle jag bara vilja tacka dig så jättemycket för att du ställt upp på denna intervju. Det har verkligen varit till stor nytta.	
78	E7	Perfect.	Perfekt.	
79	I	So, thank you so much.	Så tack så jättemycket.	
80	E7	Thank you too!	Tack själva.	
81	I	Then we send the transcription as soon as it is finished. Just one last question, would you like us to send a copy of our study once it has been published?	Så skickar vi transkriberingen så fort den är färdigställd. En sista fråga bara, skulle du vilja att vi skickar en kopia av vår studie när den har blivit publicerad?	
82	E7	I would love you to.	Jättegärna.	
83	I	Great, then we do so. So once again, thank you so much and I wish you a nice rest of the day.	Toppen, då löser vi det. Så återigen, tack så jättemycket och så får du ha en fortsatt fin dag.	
84	E7	Thank you, you too and good luck.	Tack detsamma, lycka till.	
85	I	Thank you so much, buy.	Tack så mycket, hejdå.	
86	E7	Buy.	Hejdå.	

Appendix 10: Interview Transcript (M1)

Section	Person	Text	Code
1	I	Can you please introduce what position you possess in your organisation and what you do?	
2	M1	Yeah sure, so my name is *anonymized* and I am head of RPA Center of Excellence here at *anonymized*. My main role or main goal within the bank is to ensure that RPA is implemented in a secure and viable way. But then also to make sure that all of the specific RPA teams, developers and analysts, develop and work with RPA in a secure and long term way. So we have specific standard that we want everyone to follow. So it's our job to ensure that those specifics are followed. But then it is also our responsibility to ensure that, all advances and all future functionalities are implemented in a correct way.	
3	I	Okay, perfect. So can you please explain how you use RPA in your organisation and the objective for its use?	
4	M1	Sure. So, the main objective is to automate manual processes that are, for the specific individual or just a specific employee, extremely manual and none value adding, work that specifically is not very valuable, so the work that they're doing in that sense is extremely manual and very repetitive. And if you look at an organisation, like a major bank, you have within the bank sort of a tool bag with a lot of technology that you primarily want to use. Automate processes and also make this sort of organisation and specific issues that you will, well let's say automate, or more sort of streamline that are more easy to use. And RPA, in that sense is therefore introduced within the bank to be another tool that the bank can use to automate processes, but then also make streamlined processes within the bank more efficient. So that is the main cause. So it is a complement and addition to the tools that the bank has.	
5	I	Okay perfect. So, going into the more key questions. Do you believe that the employee perceives the skills required for executing their everyday work tasks has changed due to the use of RPA?	
6	M1	I would say specifically, no. At this point, I would say in general not just *anonymized*. The way that this technology has been used so far, is to eliminate extremely manual work. So work where you sit and you enter very, very straightforward data. Work where you move data from one system to another. So, in its essence that means that those types of, that type of work that people are doing has been removed. And that they in a sense will be able to focus on this specific task that was primarily meant for them to focus on. Because the main challenge that a lot of companies have with all their systems is that although the system have been implemented and although they are automating large process, what that has meant in practice is that it has created a lot of smaller tasks which are manual, which the employee has been forced to handle but which wasn't planned to be part of the daily work. So I would say that the employee has primarily been able to focus on the work that they were employed to specifically do, rather than doing a lot of tasks manual. A lot of outside tasks that was not planned.	TS-TC
7	I	Okay I see. So, it's actually more that this allows them to focus on what was meant to be their job from the beginning?	
8	M1	Yeah because a lot of... a lot of tasks and a lot of projects that drive their division forward rather than doing manual administrative work that you need to do daily.	

9	I	Okay, perfect. So this question kind of go hand-in-hand with what you already said. But, do you experience that the employee perceive their tasks they have now to be equally, more or less challenging compared to how they were before RPA was used?	
10	M1	Say that again please.	
11	I	Yeah. So, do you experience the employee perceives that the tasks they have now to be equally, more or less challenging compared to how they were before RPA was used?	
12	M1	I would say more. So that the tasks that they are working on at the moment is more challenging. But I mean, it's more challenging compared to the tasks that the robot is doing. But it's not more challenging in terms of the skill set that they have.	SV-CS TS-TC
13	I	Okay I see. So, moving on. Do you find that the employee perceive that the use of RPA has freed time for them to develop new skills?	
14	M1	It's a difficult question for me to answer. But I would say that if you look at the work that the robot is doing, I mean it's not work whereby you specifically can say that the employee is growing in their skill set by doing. So if RPA then frees up that specific time, but that should mean that there would be more time for specific work tasks increasing their skills. But then also, hopefully have more time to work on personal development. That can be courses that could be seminars, it could be certificates. So, in practice it should mean that they would be able to focus on more value or skill adding work.	SV-DS
15	I	So these new skills, or skill adding, are they required from the organisation or could they also do some volunteering skills? Like expand on skills that they voluntary want to? Or do you see what I mean?	
16	M1	No.	
17	I	No sorry. So these skills that they now can expand on, are they voluntary or are they required from the organisation?	
18	M1	Okay. Yeah, it's difficult for me to answer that question. But if you look at the hiring process. You do not hire the individual based on the skillset to complete, the manual work or manual tasks that. You hire that employee based on, the experience and the knowledge that person have. So, if you look it that way, then I would say that it's not voluntary skillsets. Did I answer your question there?	
19	I	Yeah, yeah you did.	
20	M1	Did I? Okay.	
21	I	Yeah you did, perfect. So, do you experience that the use of RPA has affected the impact and responsibility the employees have throughout their entire work process?	
22	M1	Ask that question again.	
23	I	Yes, so do you experience the use of RPA has affected how the employee perceive the impact and responsibility they have throughout their entire work process?	
24	M1	I mean, I would say that it hasn't affected their responsibility. You haven't changed their responsibility. But what it has done is that it has freed up time for them so that they can focus more on their primary responsibility that they are hired to actually do.	TI-R
25	I	Yeah, perfect. So it is basically what you said before, right? That now they can more focus on what they actually were hired to do?	
26	M1	Yeah exactly.	

27	I	So, do you experience the use of RPA has affected how the employee perceive the importance of their work tasks in regards to organisational outcomes?	
28	M1	Definitely yes. Because, I mean, for the specific departments and teams where RPA has taken over the majority of the manual tasks, they are focusing more on business critical tasks that require more of the human brain to work to be creative and make decisions based on several data points or information points. So that, in practice, then means that that type of work that requires those skills is more important for the business.	SV-CLS TI-IP TI-TIm
29	I	Yeah, perfect. So, many believe that the objective with RPA is to free times from monotonous and repetitive work tasks to enable the employee to work with more complex and challenging tasks. What is your opinion to this statement based on your own experience with RPA?	
30	M1	That's definitely the goal and that is definitely what happens once you start using RPA within the business more broadly. But I would say it's not necessarily accurate to everyone that is using RPA. The main reason is that, there are a lot of organisations that don't really understand RPA, or doesn't really see the value of RPA. Because RPA, from an IT standpoint, is a quick fix and not really solving the underlying problem in the underlying system. So for organisations where IT and business in general is against RPA, they do not get the main benefits from RPA within the business.	TS-TC
31	I	Okay, yeah. So, do experience that the employee perceive the use of RPA has enabled them to focus more on tasks involving interaction with the customers?	
32	M1	If their job is relating to that, then yes. Let me give you an example. For example, I was working for one of the biggest *anonymized* companies in Sweden where we automated the whole damage claim process. So that meant that we digitalised all claim forms that they had on their website. Built a backend/infrastructure to manage claims to than finally send them to the robot. We also had logic built in the process so that the robot could base on how the customer answered the claim, be able to determine whether or not the claim advisor needed to look into the claim any further not. The robot logged on to all the underlining systems and registered the claim, looked at whether or not the customer had active insurance; if the claim was covered by an active insurance. And then send that specific claim back to the claim advisor. That meant that the handler then only focused on communicating with the customer and looking specifically on whether or not the claim is accurate or not. That meant, in practice that yeah, the handler only focused on the specific customer.	TS-SI
33	I	Okay, thank you so much for expanding on that one. It's a great example. So, do you consider that the use of RPA has allowed the employee to more freely structure and control their work tasks?	
34	M1	Yes. I don't have an example for it, but yes.	A-SC
35	I	Okay, so you believe that they perceive to now be able to more freely structure and control their work tasks?	
36	M1	Yeah, definitely. Because they do not need to handle the sort of adhoc admin that comes in regularly.	A-SC
37	I	Yeah okay. Have you experienced any differences regarding time pressure the employee perceive of their work tasks since using RPA in the organisation?	
38	M1	No.	A-TP
39	I	No, so you believe, like, the time pressure on the work tasks for the employees is the same as before?	

40	M1	Yeah. Because, I mean the tasks hasn't necessarily, or work hasn't necessarily changed. It's just that they are able to focus their work more. I mean, I wouldn't say that because RPA is taking a lot of manual work that their responsibility within their work changes.	A-TP
41	I	Okay, perfect. This is a bit of a long question so please let me know if I need to recap it once again. Many believe that the use of RPA streamline processes due to its ability to automate work tasks. Do you believe from your own experience with RPA that RPA's automation of processes has had an impact on how rapidly the employee perceive that they obtain feedback about their work performance?	
42	M1	I would say no.	
43	I	Okay.	
44	M1	I would say no. I mean, as I understand this question I mean, it's the specific satisfaction that an employee feel when they complete a task.	
45	I	Exactly.	
46	M1	Yeah. And you're asking whether or not, because this smaller tasks or processes that have been automated with RPA, they don't necessarily feel that they are getting the feedback saying that "oh, you've done a great job".	
47	I	No exactly. Because of the processes now being quicker with RPA streamlining them. If they now experience more rapidly or like that they now obtain more rapidly feedback?	
48	M1	I would say that the majority of the tasks that they're working on after RPA is implement, is more long term tasks that take longer to complete. So the feedback in that sense would be obtained less frequently. But I think that the employee understand that the work that they're doing is more valuable. Hence, it's okay that this feedback or the appraisals comes a bit later.	F
49	I	Okay I see. So like, the tasks that they now are doing is taking a longer time, but as you say, they're also more valuable. Or there are also experienced to be more value in the tasks. So the feedback itself, perhaps will be slower due to the longer processes they are in?	
50	M1	Yeah.	
51	I	Okay perfect. So we're actually heading to the end. And I just wanted to ask you if you have anything else to do add before ending the interview?	
52	M1	So far no.	
53	I	So far no, perfect. Also a quick question, is it okay if we get back to you if anything is the need for clarification or if any other questions arise?	
54	M1	Yes that is fine.	
55	I	Perfect. So thank you so much for participating in our study. It will truly help us. Would you like us to send a copy of the study when it's published?	
56	M1	Yeah please do.	
57	I	Yeah okay, perfect. Then that's it. Thank you.	

Appendix 11: Interview Transcript (M2)

Section	Person	Text	Code
1	I	So, can you please introduce what position you possess in your organisation and what you do?	
2	M2	Obviously, I'm working with *anonymized*. I am working in the department that is doing technical reports for *anonymized*. You can think about how much CO2 we emit or how much gas we use to produce electricity. How much electricity we do produce. So, a lot of technical KPIs are reported by our department. And within our department... Because my role is to monitor the measurements. There are quite a lot of measurements used within the report. And it is my role to monitor them, if they are functioning correctly.	
3	I	Okay. Thank you. Can you please explain how you use RPA in your organisation and the objective for its use?	
4	M2	Yes. Again, this is quite short. I have talked about these measurements, and most of the measurements are connected by wire to our computer systems. But there are some measurements, for example for the use of water that are not connected to our computers and they are mostly noted on a paper and this paper is filled in in the system and system takes over this measurement reading to you to the computer, to the database. And now, because it was used to be done monthly, writing it down and then type it over in other systems and then it is introduced in the database. And now the role of the RPA is to take the... the measurements are now filled in in an excel sheet and the RPA takes the excel sheet and transport these metadata into the database by itself every month. So, there is no longer need for the operator to type it in two times and then it is in the database. So that is what the RPA does for us now.	
5	I	Okay, perfect. Thank you. So, now we are heading to the key questions. Do you believe that the employee perceive the skills required for them in executing the everyday work tasks, has changed due to the use of RPA?	
6	M2	Skills that it takes?	
7	I	Yes.	
8	M2	Not really. They have to be... No. It was a quite simple task and it is now automated but I am sure they still have the same skills and they need the skills for other things. It's not like they lose the skills. No, I do not think so.	SV-CS
9	I	Okay. Thank you. So, do you experience that the employee perceives the tasks they have now to be equally, more, or less challenging compared to how they were before RPA was used?	
10	M2	No. Not less challenging. They gain time, but it is not a matter of challenging or not challenging. They just gain some time extra.	
11	I	Okay yeah. Do you have any examples on what they can use this time for instead?	
12	M2	Well, other tasks of their business, do some checks, making reports. And all the other stuff that they have to do.	
13	I	Okay, perfect. So, do you think that the use of RPA requires the employees to have more problem solving and complex skills?	
14	M2	No. Well not the employees themselves, but obviously there are some other skills required. But they are fulfilled by other employees. For example, if the robot does not work, it requires someone from IT. Or if the robot has to	SV-CS

		change his program, there is another person who has to reprogram the RPA. So, for the employee itself there are no other tasks required, but these tasks are shifted to the IT or a dedicated person who is involved in programming the robot.	
15	I	Okay. So, if I understand you correctly, the RPA has not really changed the required set of skills for the individual employee who is working with RPA as support? It is just other employees with that type of skills that come in and do certain parts instead?	
16	M2	Yes, correctly. The tasks regarding RPA are within the IT or this dedicated person. But the task of the meter readings is not bothered with any extra work or extra knowledge or nothing else.	SV-CLS
17	I	Okay, thank you. Do you experience that the use of RPA has affected the employee's perceived impact and responsibility that they have throughout the entire work processes?	
18	M2	Well, slightly at most. Because, now it is done automatically so the only thing the employee has to check is whether the tasks are performed by the RPA. Furthermore, no it hasn't changed.	TI-R
19	I	Okay. Do you experience that the use of RPA has affected the importance the employee perceive for their work tasks, in regard to the organisational outcomes?	
20	M2	No definitely not, this was a simple task. I am sure he is glad, that he is not bothered with the simple task. And you can argue that his importance has grown because he can... well, be occupied with other work. So, no. I think if you want... It has slightly grown because he can do more important tasks.	TI-IP TI-TIm
21	I	Okay, thank you. So, moving on to the next question. It is quite long so please tell me if you want me to repeat it	
22	M2	Okay.	
23	I	Many believe that the objective with RPA is to free time from monotonous and repetitive work tasks to enable the employees to work with more complex and challenging tasks. So, what is your opinion to this statement, based on your own experience with RPA?	
24	M2	Well it is more like the previous question. In our situation it is a simple task that is taken over by RPA. So yes, on average his level of work has grown. You could say that.	
25	I	Yeah, okay. So, do I understand you correctly that RPA has allowed him to do more complex and challenging tasks than before, due to these simpler and monotonous tasks being replaced?	
26	M2	Yes, on average. It is only a small task in our situation. But I think you could argue that, because simple tasks are taken away. On average, his tasks have increased in level or in complexity.	TS-SI TS-TC
27	I	Okay. Then, do you experience that the use of RPA has enabled the employees to focus more on tasks involving interactions with colleagues for example?	
28	M2	Almost the same result as in the previous question. Yes, if you take away a simple task of typing numbers in a system. If you take that away, yes then you have more time for other things including cooperation with colleagues.	SV-DS TS-SI
29	I	Yes. Okay.	
30	M2	It is only slightly, but I think you could you could argue that. Yes.	TS-SI
31	I	Okay.	

		Do you consider that the employee perceive that the use of RPA has allowed them to more freely structure and control their work tasks?	
32	M2	No, I do not think so. I do not think this has anything to do with the structure of their other tasks. It is just that this simple task is taken away and it has no influence on the structure of his daily work. No, I do not think so.	A-SC
33	I	Okay. Have you experienced any differences regarding time pressure that the employee perceives on their work tasks since using RPA in the organisation?	
34	M2	Yes, slightly. Same again, because some time consuming tasks are taken away. Obviously, this affects his time pressure. Yes, I think so.	A-TP
35	I	Yeah. So, could you say that it is sometimes easier then, for the employee, to reach deadlines since RPA is taking away these time consuming tasks or?	
36	M2	Yes. Well, we have to remind that it is only a very small task that is taken away. Only once a month, I think for two hours on average, and because it is only a small task the impact is not very big. But then again there is a slight benefit from it, yes.	TS-SI A-TP
37	I	Okay. Thank you. So, this is another question that is long so, please let me know if you want me to repeat it.	
38	M2	No problem.	
39	I	Many believe that the use of RPA streamline processes due to its ability to automate work tasks. Do you believe, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly the employee perceives to obtain feedback about their work performance?	
40	M2	That is a long question indeed. What this mean, whether the feedback on this task has improved or change, correctly?	
41	I	Yes exactly.	
42	M2	I do not think so. I do not think there is any influencing in that. And that is because the task you are fulfilling was for its own purpose. There is not much for reporting. So whether he does it himself or the robot does it for him, there is no people outside our department do not use this figures. No, there's no change in feedback whether the robot does it or the employee does it himself.	
43	I	Okay. So would you... Has it changed anything in how rapidly that the employee perceives to obtain feedback back from his own work? We have been talking about it a little bit before when you mentioned that it is only saving two hours, but still takes away some time consuming tasks. Does that make it a change in how rapidly that the employee obtains feedback from his own work?	
44	M2	Well, maybe I am misunderstanding the feedback. You made the feedback from colleagues or?	
45	I	Yes exactly.	
46	M2	No, I do not think that has changed a lot. It might have occurred sometime that his work was not finished. And now he is sooner the ready with his work. And therefore the change in feedback. But no, I do not think so, that there is any influence on the feedback from colleagues etcetera. No, I do not think so.	F
47	I	Okay. Thank you very much. So, we are heading to the end of the interview now. Is there anything that you feel like I have left out or anything that you feel like you want to add before we are ending the interview?	
48	M2	No I do not think so. I think the questions were quite related to each other. But I hope I have given consistent answers.	
49	I	Yeah, definitely. We are very happy with the answers. Thank you.	

		So, would you be okay if we get back to you if anything is in need for clarification or if any other questions arise?	
50	M2	No problem at all.	
51	I	Okay. So, would you like also if we send a copy of this study when it has been published?	
52	M2	That would be nice, I am very interested in the results of this report regarding RPA.	
53	I	Okay perfect. So we will email you the transcription of the interview then afterwards, and thank you very much for taking your time to participate in our study. It means a lot for us.	
54	M2	Well, good luck with your study. And no problems from my side.	
55	I	Thank you so much. And you have a great rest of the day for you then.	
56	M2	Thank you, bye.	
57	I	Bye.	

Appendix 12: Interview Transcript (M3)

Section	Person	English Text (Translated Text)	Swedish Text (Original Text)	Code
1	I	Would you like to start by explaining what position in your organisation you possess and what it includes?	Skulle du vilja börja med att förklara vilken position i er organisation du besitter och vad denna innefattar?	
2	M3	I am a unit manager for economic support and integration. And that means I am the unit manager for two groups where one works with economic support and the other with integration. Budget- and debt counselors, estate administrators, all are part of the same group and it is about 30 people. Economic support has 16 social secretaries, two of whom are group leaders or the first social secretary, and integration has two social secretaries. Then there are some other positions, secretary of housing for instance, integration coordinators, administrative staff and so on.	Jag är enhetschef på försörjningsstöd och integration. Och det betyder att jag är enhetschef för två grupper där den ena jobbar med försörjningsstöd och den andra med integration. Budget- och skuldrådgivare, dödsboutredare, alla ingår i samma grupp och det är runt 30 personer. Försörjningsstöd har 16 socialsekreterare, varav två gruppledare eller förste socialsekreterare, och integration har två socialsekreterare. Sen finns det en del andra befattningar, bostadssekreterare bland annat, integrationsamordnare, administrativ personal och så vidare.	
3	I	Great, would you like to explain how employees use RPA in your organisation and what is the purpose of its use?	Toppen, skulle du vilja förklara hur de anställda använder RPA i er organisation och vad som är avsikten med dess användning?	
4	M3	<p>We started digitalize *anonymized*. And then I say digitalize because at that point, we introduced the possibility of applying for economic support via an e-service. And then we started with the application from clients who were recurring and who had already applied for economic support earlier, in other words - not those who were new. And so we kept on until *anonymized*. Then in *anonymized*, we opened up to search digitally for those who applied for the first time as well, because in *anonymized* a decision was made that we should automate and that we should buy a robot that will handle economic support.</p> <p>We have looked at *anonymized* a bit before but we have chosen another model that we, between us, call the *anonymized* model. And we have been very clear that the purpose of the automation is to create more time for the social secretaries, for the clients. What is important to consider is that social services are very much affected by what is happening in society. Since we have had quite a high economic situation lately, the</p>	<p>Vi började digitalisera *anonymized*. Och då säger jag digitalisera eftersom då införde vi möjligheten till att ansöka om försörjningsstöd via en e-tjänst. Och då började vi med ansökan från klienter som var återkommande och som redan sökt försörjningsstöd tidigare, alltså inte de som var nya. Och så höll vi på fram till *anonymized*. Sen i *anonymized* öppnade vi upp för att söka digitalt även för de som sökte för första gången, för att i *anonymized* då fattades ett beslut om att vi ska automatisera och att vi ska köpa en robot som ska behandla försörjningsstöd.</p> <p>Innan har vi tittat lite på *anonymized* men vi har valt en annan modell som vi, oss emellan, kallar för *anonymized* modellen. Och vi har varit jättydliga om att syftet med automatiseringen är att skapa mer tid för socialsekreterarna, för klienterna. Det som är viktigt att tänka på är att socialtjänsten påverkas väldigt mycket av vad som händer ute i samhället. I och med att vi har haft ganska hög konjunktur sista tiden, så målgruppen som har kvar inom socialtjänsten är personer som befinner sig långt ifrån arbetsmarknaden och med omfattande problematik. Och då</p>	SV-CS

	<p>target group that remains in the social services are people who are far from the labour market and with extensive problems. And then it has been a need in some way, or the need has increased in order for social secretaries to be able to meet these people more often and sometimes, literally, for example, accompany them the police station to obtain ID cards, or accompany them to psychiatry and attend dialogues and such. And then we have reasoned that, if we get a robot, the social secretary will have more time to work with client meetings. And then we have said that when we automate, we should move forward slowly. With slow progress I mean that * anonymized * has said that when they introduced their automated processes, they discharged all staff and then recruited them with other tasks. Firstly those who will work with change management, who does not work with exercise of authority, and then they hired a group that would work with the exercise of authority. And when we started, all social secretaries worked with both change management and with the exercise of authority so that, when the robot has progressed, change a little parts in the organisation. And then, the robot has first started to actualize all cases per capita, which was a relief for all social workers. After that, we have gone to the next step where the robot performs the calculations that lies as a foundation for the economic support (norm calculation). And then, all the social secretaries have still worked with their cases, but they have received help with actualizing and norm calculations. Then we have proceeded by letting the robot make proposals for decisions, not that it goes all the way, meaning that it takes decisions and pay out money, but rather making proposals for decisions that a social secretary look at and then pay out money. So all social secretaries were involved in that sense, but somewhere when one came to a decision, we have also started to take out social secretaries. In other words, freeing them from administrative work. The social secretaries we have taken out are those who work with young</p>	<p>har det på något sätt varit behov, eller behovet har ökat för att socialsekreterare ska kunna träffa de här personerna oftare och ibland, bokstavligen, till exempel följa med till polisstationen för att skaffa ID-kort, eller följa med till psykiatrin och närvara på trepartsmöten och sådant. Och då har vi resonerat att, om vi skaffar en robot så kommer socialsekreteraren att få mer tid åt att jobba med klientmöten. Och då har vi sagt att när vi automatiserar så ska vi gå långsamt framåt. Med långsamt framåt menar jag att *anonymized* har sagt att när de införde sina automatiserade processer, så sa de upp all personal och sen anställde på nytt med andra arbetsuppgifter. Först de som ska jobba med förändringsarbete, som inte har med myndighetsutövning att göra, och sen anställde de en grupp som skulle jobba med myndighetsutövning. Och när vi började så jobbade alla socialsekreterare både med förändringsarbete och med myndighetsutövning för att sen, när roboten har gått framåt, förändra lite i verksamheten. Och då har roboten först börjat aktualisera alla ärenden per capita, vilket var en lättnad för alla socialsekreterare. Sen har vi gått till nästa steg, att roboten gör normberäkningar. Och då har alla socialsekreterare fortfarande jobbat med sina ärenden, fast de har fått hjälp med aktualisering och normberäkning. Sen har vi gått vidare till att roboten gör förslag till beslut, inte att den går hela vägen, det vill säga fatta beslut och betala ut pengar, utan att den gör förslag på beslut och sen får en socialsekreterare titta på det och sen betala ut pengar. Så det var så att alla socialsekreterare var inblandade, men där någonstans när man kom fram till ett beslut har vi också börjat ta ut socialsekreterare, alltså att befria dem från administrativt arbete. De socialsekreterare vi har tagit ut är de som jobbar med ungdomar, och deras primära arbetsuppgift är inte att sitta och räkna försörjningsstöd utan sitta och jobba med ungdomar, träffa dem mycket oftare än vad man har gjort tidigare, upprätta handlingsplaner som ska leda till självförsörjning och följa upp förändringsprocessen. Sen har socialsekreterarna också kommit själva på en del gemensamma aktiviteter för klienter, till exempel jobbsökaraktiviteter. De har också fått mer tid för att medverka i</p>	
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	<p>people, and their primary work task is not to sit and calculate economic support but rather to sit and work with youths, meeting them much more often than they have done before, establish action plans that will lead to self-sufficiency and follow up on the change process. Moreover, the social secretaries have also come up with some common activities for clients, job searching activities for example. They have also had more time to participate in meetings at the psychiatry and other things, depending on the clients' needs.</p> <p>The next group we have taken out is a group that works with clients, which is a little closer to the labor market. Their job is also to establish action plans and meet clients, follow up on action plans. And lastly, we have taken out those who work with long-term. So, in principle, the last three months, we have said that the social secretaries should not perform the administration over decision-making. In contrast, they make an action plan to later follow up the action plan and, based on what they write, the persons who take care of the robot should be able to ensure that decisions are made.</p> <p>We have not reached our goal to 100%. The social secretaries may still jump in and do some things when it comes to, for example, determining a rejection and so on. We are looking at a schedule where the social secretaries serve, which we call ambulatory. And that means something like this; that the automated application comes in and is put in a box where there are four people who work with these applications, who check that the robot has really made all the operations and that it is paid. Then there are box number two, where you put in paper applications and there we have also developed an input service, which means that paper applications are first being entered by the case worker and then being processed by the robot. Then we have box number three ... It is important to say that all people who work with that input, they are not social workers. And then we have box</p>	<p>möten hos psykiatrin och annat beroende på klienternas behov.</p> <p>Nästa grupp som vi har tagit ut är en grupp som jobbar med klienter, som är lite närmare arbetsmarknaden. Deras jobb är också att upprätta handlingsplaner och träffa klienter, följa upp handlingsplaner. Och sist har vi tagit ut de som jobbar med långvariga. Så, i princip de sista tre månaderna har vi sagt att socialsekreterarna inte ska hålla på med administration över beslutsfattande. Utan, de gör handlingsplan och sen följer de upp handlingsplanen och utifrån det som de skriver så ska personerna som ombesörjer roboten kunna se till att beslut fattas.</p> <p>Vi är inte i mål till 100 %. Det är fortfarande så att socialsekreterarna får hoppa in och göra vissa saker när det gäller till exempel avslagsbeslut och så. Vi tittar på ett schema där socialsekreterarna tjänstgör, som vi kallar det ambulerande. Och det betyder ungefär så här; att den automatiserade ansökan kommer och läggs i en låda där det sen finns det fyra personer som jobbar med de här, som kollar att roboten verkligen gjort alla operationer och att det blir utbetalt. Sen finns det låda två, där man lägger in pappersansökningar och där har vi också utvecklat en inmatningstjänst, vilket betyder att pappersansökningar först matas in av handläggare och sen behandlas de av roboten. Sen har vi låda tre... Det är viktigt att säga att alla personer som jobbar med det inmatning, de är inte socionomer. Och då har vi låda tre, och till den kommer det som roboten inte kan hantera. Det är allt som går utanför vanligt försörjningsstöd, vanligt ekonomiskt bistånd. Då fattar den ambulerande socialsekreteraren beslut om de, och de är ambulerande under en vecka där tanken är att de ska behålla kompetens i beslutsfattande, just när det gäller det här med myndighetsutövning och beslutsfattande, och att de ska kunna hoppa in om det behövs. Så där är vi nu. Men det verkar inte vara slut för vi upptäcker hela tiden nya saker att förändra och ibland är det så att vi försöker förändra och påverka de automatiserade processerna. Och ibland är det så att vi är tvungna att göra vissa förändringar</p>	
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		<p>three, and to that box comes everything that the robot cannot handle. It is everything that goes beyond economic support, usually economic aid. Then does the ambulatory social secretary make decisions on them, and they are ambulatory for a week where the idea is that they should retain competence in decision-making, specifically when it comes to this with the exercise of authority and decision-making, and that they should be able to jump in if needed. So there are we now. But it doesn't seem to be over because we are constantly discovering new things to change and sometimes we try to change and influence the automated processes. And sometimes, we have to make certain changes depending on how the automated processes are done.</p>	<p>beroende på hur de automatiserade processerna går till.</p>	
5	I	<p>So, if I understand you correctly, it still requires, to some extent, that your employees need to supplement the work with the robot, but that the robot yet has released a lot of time for your employees that they can now spend with customers and residents?</p>	<p>Så, om jag förstår dig rätt krävs det fortfarande, till en viss del, att era anställda behöver komplettera arbetet med roboten, men att roboten ändå har frigjort mycket tid för era anställda som de nu kan spendera med kunder och invånare?</p>	
6	M3	<p>Yes, and we do not think we should come to, at least not fast, that the robot takes over all the work. In order to provide economic support, one has to look to people, and they are different individuals who have different needs. The robot works everywhere where you can put stencils, if we say so. The robot usually works so, that if we say we put a command; it is a single person who is looking for costs and who have rent up to 6500, it is granted. Then you put a number of barriers. So, if one has been granted the first time, which is done by the social secretaries, then the robot itself must not raise the figure more than what has been granted. If there are two people, then you start to signal that it has now become a change. I mean, it is in such cases the robot works. But if we say that I am applying for dental care, there are a few different solutions. * anonymized * has done so that if it is dental up to *anonymized* crowns a year, then you can get it. And that means that everyone who seeks receive up to *anonymized* crowns per year. This saves time. But we</p>	<p>Ja, och vi tänker inte att vi ska komma till, i alla fall inte fort, att roboten tar över allt arbete. För att gällande försörjningsstöd måste man se till människor, och de är olika individer som har olika behov. Roboten fungerar överallt där man kan sätta schabloner, om vi säger så. Roboten jobbar oftast så att om vi säger att vi sätter ett kommando; att är det en ensamstående person som söker för kostnader som har hyra upp till 6500, så beviljas det. Sen lägger man ett antal spärrar. Så, har man blivit beviljad första gången, vilket görs av socialsekreterarna, då får inte roboten själv höja siffran mer än det som är beviljat. Blir det två personer, då börjar man signalera att det nu har blivit en förändring. Jag menar, i sådana fall jobbar roboten. Men om vi säger att jag ansöker om tandvård, där finns det lite olika lösningar. *anonymized* har gjort så att är det tandvård upp till *anonymized* kronor per år, då kan man få det. Och det betyder att alla som söker får upp till *anonymized* kronor per år. Detta spar tid. Men vi tänker att man måste göra en individuell bedömning också, för det finns både</p>	TS-SI

		also think that one must make an individual assessment as well, because it exists both for when it is dental care and when it is intercourse trips and when it is home education and such things. It is very much that can work in different ways and which one has to take into account. And then we want a person to look at it, which is, a social secretary.	när det är tandvård och när det är umgängesresor och när det är hemundervisning och sådana saker. Det är väldigt mycket som kan fungera på olika sätt och som man måste ta hänsyn till. Och då vill vi att en människa tittar på det, alltså en socialsekreterare.	
7	I	Great, thank you so much. Then I will go more into our main questions now. Do you think the employee perceives that the skills required from their side, regarding the performance of their everyday tasks, have changed due to the use of RPA?	Toppen, tack så mycket. Då kommer jag gå in mer på våra huvudfrågor nu. Tror du att den anställda upplever att de färdigheter som krävs från sin sida, gällande utförandet av deras vardagliga arbetsuppgifter, har förändrats på grund av användningen av RPA?	
8	M3	Both yes and no. Somehow, my view of society today is that one should have, or that it is seen as general education, that one has IT skills and that one can work with ordinary systems and manage them without major problems. But when we have planned this, then we have said that, okay if we are implementing the robot then we can save 2.2 services. And just to repeat, not discharging people or anything, but we should have 180 hours more per week to work with clients. But what no one thinks of, or at least very rarely, when you do this is that there is a lot of maintenance required. Because when there are be changes, when you have worked in something called SSBTEK, it is a database that collects information from the National Insurance Office, from the Employment Office, from the National Tax Agency and so on, and it is also delivered to us in per capita that we work with. And there are changes there, then it affects our robot and then we also have to look at it. And this has also created an openness to digital solutions so that everyone who works within the economic support has become more creative. Because in the beginning, we mostly thought about how we work and then we were afraid of the thought that a robot might be able do the same as we do. Now it is more that we are creative and think that we want to fly to the moon, can we get a robot that can sort it out? Then you can ask an	Både ja och nej. På något sätt är det så att min syn på samhället idag är att man ska ha, eller att det ses som allmänbildning, att man har IT-färdigheter och att man kan jobba med vanliga system och hantera dem utan stora problem. Men när vi har planerat det här, då har vi sagt att, okej om vi inför roboten då kan vi spara 2,2 tjänster. Och bara för att upprepa, inte avskeda folk eller något, utan vi ska ha 180 timmar mer per vecka för att jobba med klienter. Men det som ingen tänker på, eller i alla fall väldigt sällan, när man gör det här är att det är väldigt mycket underhåll som krävs. För när det blir förändringar, när du har jobbat inom något som heter SSBTEK, det är en databas som samlar uppgifter från försäkringskassan, från arbetsförmedlingen, från skatteverket och så vidare, och den levereras till oss också i per capita som vi jobbar med. Och blir det förändringar där, då påverkar det vår robot och då måste vi också titta på det. Och detta har också skapat en öppenhet på digitala lösningar så att alla som jobbar inom försörjningsstöd har blivit mer kreativa. För i början tänkte vi mest på hur vi jobbar och sen var vi rädda om en robot skulle kunna göra samma sak som vi gör. Nu är det mer så att vi är kreativa och tänker att vi vill flyga till månen, kan vi få en robot som fixar det? Så kan man ställa en öppen fråga, för vi har upptäckt att det är väldigt mycket som robotar fixar. Så dels en kompetens som krävs, en som känner socialt arbete och som också är lite haj på robotar. Men jag tror det här även är	SV- CLS SV-DS TI-SI

	<p>open question, because we have discovered that robots are fixing a lot. So it is both a competence that is required, one that knows social work, but also that has some knowledge of robots. But I think this is also something for, for example, children and schools, meaning the administration within *anonymized* municipality that is also beginning to digitalize. So they will face the same issue.</p> <p>I believe that what is going on is a great demand for interdisciplinary people who are somewhere between IT and any specific industry, such as social services, economists or whatever it may be. That there is an IT revolution that will create a need for such. It's one thing. Then it will also be that, questions that I think we will face in the future, is that if the social secretaries are only meeting the clients and do not sit and work with paper, because before that we have talked about how much we sit with applications and how much we meet with the clients. But now it is that, if you meet clients, how many clients is it appropriate to meet each day? For example, in psychiatry where work is mostly about client meeting, the question has been relevant. We have also said, and we have been very clear about this, that according to tradition it is that the social workers who work with change management and do not work with exercise of authorities, have higher salaries than those who work with exercise of authorities. So it has also been a question that has come up, where we have said that we do not make any difference and that it is rather social work that we are looking at. So, what kind of supervision should you have? Because our drafts of how we should handle our cases have been about; if I have to pay so much if the situation is like this, and if the situation changes, how much should I pay then? And somehow, the robot reduces the number of such issues. It makes it legally secure, or more legally secure in a way. But what I have read about in a brief summary in some research report is that if it reduces the possibility of ... For example, if a social secretary is sitting</p>	<p>något för till exempel är barn och skola, alltså den förvaltningen inom *anonymized* kommun börjar digitalisera också. Så de kommer att möta samma fråga.</p> <p>Jag tror att det som är på gång är en stor efterfrågan av tvärvetenskapare som är någonstans mellan IT och någon specifik bransch, som till exempel socialtjänst, ekonomer eller vad det kan vara. Att det liksom finns en IT-revolution som kommer skapa ett behov av sådant. Det är en sak. Sen blir det också att, frågor som jag tror vi kommer att möta framöver är att om socialsekreterarna bara träffar klienter och inte sitter och jobbar med papper, för innan var det så att vi har pratat om hur mycket sitter vi med ansökningar och hur mycket träffar vi klienter. Men nu är det så att om man träffar klienter, hur många klienter är då lämpligt att träffa per dag? Till exempel inom psykiatri där arbete handlar mest om klientmöte har frågan varit aktuell. Vi har också sagt, och det har vi varit jättetydliga med, att enligt traditionen är det så att de socionomer som jobbar med förändringsarbete och inte jobbar med myndighetsutövningar, har högre löner än de som jobbar med myndighetsutövningar. Så det har också varit en fråga som har kommit upp och där har vi sagt att vi inte gör någon skillnad utan det är socialt arbete som vi tittar på. Så, vilken typ av handledning ska man ha? För våra ärendedragningar har handlat om; om jag ska betala så mycket om situationen är såhär, och om situationen förändras, hur mycket ska jag betala då? Och på något sätt, roboten minskar antalet av sådana frågor. Den gör att det blir rättssäkert, eller mer rättssäkert på ett sätt. Men det jag har läst som en kort sammanfattning i någon forskningsrapport är att den minskar möjlighet till... Till exempel om en socialsekreterare sitter med en pappersansökan och jobbar, sen på eftermiddagen ringer klienten och säger att de har angett fel uppgifter och att de har glömt bort vissa saker, då är det mycket enklare att ändra och det blir en kommunikation under hela processen. Roboten fattar beslut på en minut, på det som finns i ansökan, och i denna forskningsrapport så står det att den möjligheten till kommunikation under hela</p>	
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		<p>with a paper application and working, and later in the afternoon the client calls and says that they have entered the wrong data and that they have forgotten some things, then it is much easier to change and it becomes a communication throughout the process. The robot makes a decision in one minute, on what is in the application, and in this research report it says that the possibility of communication throughout the process decreases. But then, on the other hand, I have said that yes but then you can choose to sit with the client and fill in the application if the client needs it or if there is a need for some reason. Then it is also quite natural that you go through various financial records, police areas and *anonymized* cards. *anonymized* cards are our kind of bus cards here in *anonymized*. Why do they need it? Are they working? Are they going to doctors? And so on. And then it also happens that you get a lot of tasks in a different way.</p>	<p>processen minskar. Men då, å andra sidan, har jag sagt att ja men då kan man välja att sitta med klienten och fylla i ansökan om klienten behöver det eller om det finns behov av någon anledning. Då blir det också ganska naturligt att man går igenom olika ekonomiska poster, polisområden och *anonymized*-kort. *anonymized*-kort är våra, typ, busskort här i *anonymized*. Varför behöver de det? Jobbar dem? Går de till läkare? Och så vidare. Och då blir det också att man får en massa uppgifter på ett annat sätt.</p>	
9	I	<p>So, do you think the employee perceives that the they have now are equal, more, or less demanding, compared to how it was before RPA was used?</p>	<p>Så, tror du att den anställda upplever att de arbetsuppgifter som den anställda har nu är lika, mer, eller mindre krävande jämfört med hur det var innan RPA användes?</p>	
10	M3	<p>If they are more or less challenging. I do not think they are more or less challenging but that it is changing, that is true. But at the same time, one must also think that social workers must be prepared for change. For example, when you had a very high unemployment rate, we worked against the Employment Office because it was mostly unemployed who were in the social services and then you had to learn the rules at the Employment Office by heart and know how to take this client through the system so that it gets the best possible help from the Employment Office. Then the National Insurance Office has changed its rules and then it was a lot of people who came here because they have just been insured, then we have to turn and we should suddenly work more towards the National Insurance Office and think about how it works for them. We have knowledge that one should have all the time, but depending on how it changes then one focuses more on</p>	<p>Om de är mer eller mindre utmanande. Jag tror inte de är mer eller mindre utmanande men att det förändras, det stämmer. Men samtidigt måste man också tänka såhär att socionomer måste va beredda på förändringar. För till exempel när man hade jättehög arbetslöshet då arbetade vi mot arbetsförmedlingen för att det var mest arbetslösa som var inom socialtjänsten och då var man tvungen att lära sig utan och innan reglerna som var på arbetsförmedlingen och veta hur ska jag ta den här klienten genom systemet så att den får bästa möjliga hjälp av arbetsförmedlingen. Sen har försäkringskassan ändrat sina regler och då var det massa personer som kom hit för att de har vart just försäkrade, och då måste vi svänga och då ska vi plötsligt jobba mer mot försäkringskassan och tänka på hur det fungerar hos dem. Vi har kunskap som man ska ha hela tiden, men beroende på hur det förändras då fokuserar man mer på ett eller annat. Nu blir det för de som jobbar med klientprocessen att fråga sig hur de ska få</p>	TI-TC

		<p>one thing or the other. Now it will be for those who work with the client process to ask themselves how to get this client to accompany me. How should we create the best possible action plan? The focus is very much on the change management. Previously it has been more 50/50 per cent because then you also had to put focus on how much things cost and what to grant and not grant. It is not that you have ignored what to grant now, but you do not have to put focus on it in the same way. So yes it has changed but as I said, I think not only that depends on IT but that we as an industry must be prepared to change a little bit depending on what is happening in society.</p>	<p>denna klienten att följa med mig. Hur ska vi skapa bästa möjliga handlingsplan? Fokus ligger väldigt mycket på förändringsarbetet. Tidigare har det varit mer 50/50 procent för då har man också varit tvungen att lägga fokus på hur mycket saker och ting kostar och vad man skulle bevilja och inte bevilja. Det är inte så att man struntat i vad man ska bevilja nu, men man behöver inte lägga fokus på det på samma sätt. Så ja det har förändrats men som sagt, jag tror inte bara det beror på IT utan att vi som bransch måste vara beredda på att ändra lite beroende på vad som händer i samhället.</p>	
11	I	<p>I understand. So if I have understood you correctly, the employee perceive that there are no more complex work tasks or work tasks that require more problem-solving skills, but rather that there is a change and this happens depending on how society looks?</p>	<p>Jag förstår. Så om jag har tolkat dig rätt så upplever den anställda att det inte blir mer komplexa arbetsuppgifter eller arbetsuppgifter som kräver mer problemlösningsfärdigheter, utan det sker en förändring och detta sker beroende på hur samhället ser ut?</p>	
12	M3	<p>Yes, how society looks and what is important. As I did not say from the beginning is that we have something called *anonymized* that we have created before we started automating. And the *anonymized* is a collection of all the processes we have in the social services. Then it is like this, that those who are on social secretaries and economic support, then it starts with the application coming in, who takes it? What is the next step you do? And so on. That is what we have done with the entire social services. And it was a pretty good support when we started automating, but those processes changes and it becomes obvious if you look at the Social Services Act. Or if you look, there is a manual for economic aid, I do not know if you have had it but it can be downloaded at the National Board of Health and Welfare and there it says like this; if you work with economic support, then you firstly work with getting an approval for a change process and to achieve a change that will lead to this person becoming self-sufficient. That is number one. Number two is that, while this is going on, you have to</p>	<p>Ja, på hur samhället ser ut och det som är viktigt. Som jag inte sa från början är att vi har något som heter *anonymized* som vi har skapat innan vi började automatisera. Och *anonymized* är en samling av alla processer som vi har inom socialtjänsten. Då är det så att de som är på socialsekreterering och försörjningsstöd, då börjar det med att ansökan kommer in, vem tar den? Vad är nästa steg som du gör? Och så vidare. Så har vi gjort med hela socialtjänsten. Och det var ganska bra stöd när vi började automatisera, men de processerna blir förändrade och det blir jättetydligt om du tittar på socialtjänstlagen. Eller om du tittar, det finns en handbok för ekonomiskt bistånd, jag vet inte om du har haft den men den går att ladda ner på socialstyrelsen och där står det så här; om man jobbar med försörjningsstöd, då jobbar man nummer ett med att få tillstånd en förändringsprocess och för att åstadkomma en förändring som ska leda den här personen till självförsörjning. Det är nummer ett. Nummer två är att man ska under tiden som det här pågår betala försörjningsstöd, så är det formulerat. Det som socialtjänsten har gjort på sista tiden är att betala ut pengar och jobba med förändringsprocesser så mycket som man</p>	TI-TC

		<p>pay support, that is how it is formulated. What the social services have done lately is to pay out money and work with change processes as much as they can. And the robot enables that one can take it in the right order for our job. Of course we will pay the right money according to it is prescribed and no more or less. But we have not educated us to sit and work with that, we have gone our education to work with people and see; why is this person in the social services? What does it need to become self-sufficient and avoid us? It is our primary mission. In the meanwhile, we should pay out support that is correct. And that's what the robot gives back to the social services I think.</p>	<p>hinner. Och roboten möjliggör att man tar det i rätt ordning för vårt jobb. Självklart ska vi betala ut rätt pengar enligt det är förskrivet och inte mera och inte mindre. Men vi har inte gått utbildning för att sitta och jobba med det, vi har gått vår utbildning för att jobba med människor och se; varför är denna människa inom socialtjänsten? Vad behöver den för att bli självförsörjande och slippa oss? Det är vårt primära uppdrag. Undertiden ska vi betala ut stöd som är rätt. Och det är det som roboten ger tillbaka till socialtjänsten tycker jag.</p>	
13	I	<p>Thank you so much.</p> <p>Do you think the employee perceives that the use of RPA has influenced the employee's impact and responsibility regarding the entire work process?</p>	<p>Tack så jättemycket.</p> <p>Tror du att den anställda upplever att användandet av RPA påverkat den anställdes påverkan och ansvar gällande hela arbetsprocessen?</p>	
14	M3	<p>Yes, when we started to automate, it was in some municipality where social secretaries had resigned because they felt that it would not be good. But we haven't had a drop off because of it. We have got a fairly stable foundation. There are still questions... I mean this with automation is so new, *anonymized* has done it and then we have also done it. But we have gone a different way than *anonymized*, so many questions that we have, there is no one else who has the answers to and you have to go and make your own mistakes. And because of this, some things are done in a wrong way, where we realize that some things we have done with the robot might not be the best and optimal, and that we need to change something. Or that the change affects something that we had not counted on and such things, which means that you always have to keep track of routines and so. There have been some questions about it and it has been raised that it has been difficult for the social secretaries periodically. Because as we have been working for a month, we may have changed the next month. And especially since we have chosen this slow</p>	<p>Ja, när vi började automatisera så var det i någon kommun där socialsekreterare hade hoppat av sitt jobb för att de tyckte sig känna att det inte skulle bli bra. Men vi har inte haft avhopp på grund av det. Vi har fått till en ganska stabil grund. Det finns fortfarande frågor... Jag menar det här med automatisering är så nytt, *anonymized* har gjort det och sen har vi också gjort det. Men vi har gått en annan väg än *anonymized*, så väldigt många frågor som vi sitter med finns det ingen annan som har gjort utan man får gå och göra sina egna fel. Och det gör att det blir fel, där vi upptäcker att vissa grejer vi gjort med roboten kanske inte var det bästa och mest optimala utan att vi måste ändra någonting. Eller att förändringen påverkar något som vi inte hade räknat med och sådana saker, vilket gör att man hela tiden måste hålla koll på rutiner och så. Det har varit en del frågor kring det och det har tagits upp att det periodvis varit svår för socialsekreterarna. För så som vi har jobbat en månad, har vi kanske ändrat nästa månadsskifte. Och speciellt eftersom vi har valt den här långsamma förändringen med automatiseringen och i förändringen i hur man jobbar för vissa grupper. Lite har det varit, men det har</p>	

		change with the automation and in the change of how to work for certain groups. It has been a little bit, but it has not been that people have chosen to resign because of that. I think they perceive it as positive for the most of the time.	inte varit så att folk har valt att sluta på grund av det. Jag tror för det mesta att de upplever det som positivt.	
15	I	Okay, so do you think the employee feels that it has gained more responsibility now that the robot has come in and taken over certain work tasks?	Okej, så tror du att den anställda känner att den har fått mer ansvar nu när roboten har kommit in och tagit över vissa arbetsuppgifter?	
16	M3	No, I do not think so. I don't think they have got more responsibility because the responsibility they have, they had in the past as well. More that it has been taken up to the surface depending on which generation of social secretaries you work with. Then you notice who is more used to working with people, who has come during those periods when you worked more administratively and may not being as used to working with people. As I said, it becomes clearer now that you have to be good at meeting people and talking to people and raise their questions. There are other skills that come on first place if you say so.	Nej, det tror jag inte. Jag tror inte de har fått mer ansvar för ansvaret har de haft tidigare också. Mera att det har tagits upp till ytan beroende på vilken generation av socialsekreterare man jobbar med. Då märker man vilka som är mer vana att jobba med människor, vilka som har kommit under de perioderna när man jobbat mer administrativt och kanske inte är lika vana vid att jobba med människor. För som sagt, det blir mer tydligt nu att man måste vara bra på att möta folk och prata med folk och driva deras frågor. Det är andra färdigheter som kommer på första plats om man säger så.	TI-R
17	I	Okay, do you think that the employee perceives that the use of RPA has influenced the importance of their duties in relation to the organisational results?	Okej, tror du då att den anställda upplever att användandet av RPA har påverkat betydelsen av deras arbetsuppgifter, i förhållande till de organisatoriska resultaten?	
18	M3	How do you mean?	Hur menar du då?	
19	I	That they now feel an increased importance in the tasks they now have?	Att de nu känner en ökad betydelse i de arbetsuppgifterna som de nu har?	
20	M3	Well... If their work tasks are of greater importance, I do not know.	Ja... Om deras arbetsuppgifter har större betydelse det vet jag inte.	TI-TIm
21	I	For example, that they can now work more with the residents instead of just sitting with paperwork? Do you think this could have an influence on how they feel?	Till exempel att de nu kan jobba mer med invånarna istället för att bara sitta med pappersarbete? Tror du att detta skulle kunna ha påverkat hur de känner?	
22	M3	Yes, as I told you, everyone has not started to work with the client at the same time, but the best results are seen in this youth group. For the youth group, except from being the first group who did not have to work with administration, they have also moved to separate premises so that they sit together with the Employment Office and representatives from psychiatry. We have a hope that we will get representatives from the National Insurance Office as well and then it may look like this, that when they come in the morning and meet a	Ja, som jag sa till dig så har alla inte börjat jobba med klienten samtidigt utan de bästa resultaten ser man i den här ungdomsgruppen. För ungdomsgruppen, förutom att vara första grupp som slapp jobba med administration, så har de också flyttat till separata lokaler så de sitter tillsammans med arbetsförmedlingen och representanter från psykiatri. Vi har en förhoppning om att vi får representanter från försäkringskassan också och då kan det se ut såhär, att när de kommer på förmiddagen och träffar en socialsekreterare, så säger de att du kanske skulle träffa en coach	TI-IP TI-TIm

		social secretary, they say that you might meet a coach who can help you to come out in the working life. Then you might meet a coach the same day or maybe meeting a representative from a school in the afternoon. And then they might sign up to start studying an education. So it is a much shorter process, and in this way they are happy and more fond of this way of working. Then it has become a much more open contact with automation. So it is very often, when we talk about how we should do things, that someone says; can a robot do this? Is it possible to automate? So I think they clearly see a winning with automation.	<p>som kan hjälpa dig ut i arbetslivet. Sen kanske du träffar en coach samma dag eller kanske träffar en representant från en skola på eftermiddag. Och sen kanske de skriver in sig på en utbildning för att börja plugga. Så det är en mycket kortare process, och på så sätt är de glada och mer måna om detta sätt att jobba. Sen är det som så att det har blivit en mycket öppnare kontakt för det här med automatisering. Så det är väldigt ofta när vi pratar om hur vi ska göra, så är det någon som säger; kan en robot göra det här? Går det automatisera? Så jag tror att de klart ser en vinst med automatisering.</p>	
23	I	Great.	Men toppen.	
		Do you think the employee perceive that the use of RPA has enabled the employee to structure and control their work tasks more freely?	Tror du att den anställda upplever att användandet av RPA har gjort det möjligt för de anställda att strukturera och kontrollera sina arbetsuppgifter mer fritt?	
24	M3	Structure and control more freely... It depends, because most of the time we expect some to work with payments. And there it is like this, that if it is the monthly change, it is clearly payments that apply, but also to control applications and such things. And there is not much to choose from. But the others who work with clients, there you have to book your meetings and you have to make the judgments if you want to meet them every week, if you want to meet them once a month or what you now consider appropriate. We have also talked about planning some groups. So, in some way, more room has been created to be creative as a social secretary. I think is has got more, what to say, a creative expression from some people compared to what I have seen before. Because then it is the competence that wants to work with groups, who have attended some course in something called Socratic conversations, who thinks that you could apply it. And then we sit and look at how we could do this. Previously, we have not talked about such things and we have not had room for such things.	<p>Strukturera och kontrollera mer fritt... Det beror på, för att för oftast så förväntar vi oss att en del jobbar med utbetalningar. Och där är det så att, det är klart att om det är månadsskifte så är det utbetalningar som gäller och att kontrollera ansökningar och sådana saker. Och där finns det inte så mycket att välja på. Men de andra som jobbar med klienter, där är det att man får boka sina möten och man får göra bedömningar om man vill träffa de varje vecka, om man vill träffa de en gång i månaden eller vad man nu anser är lämpligt. Vi har också pratat om att planera en del grupper. Så på något sätt har det skapats mer utrymme för att vara kreativ som socialsekreterare. Det tycker jag har kommit mer, vad ska man säga, ett kreativt uttryck från en del jämfört med vad jag har kunnat se tidigare. För då är det kompetens som vill jobba med grupper, som har gått någon kurs i något som heter sokratiska samtal och tycker att man skulle kunna tillämpa det. Och så sitter vi och titta på hur vi skulle kunna göra det här. Tidigare har vi inte pratat om såna saker och vi har inte haft utrymmer för sånt.</p>	A-SC
25	I	That's fun to her.	Vad kul att höra.	
26	M3	Yes.	Ja.	

27	I	Do you think that employee have perceived any differences in relation to time pressure on their work tasks, since the use of RPA has been introduced in the organisation?	Tror du att den anställda har upplevt några skillnader i förhållande till tidspress kring deras arbetsuppgifter, sedan användandet av RPA införts i organisationen?	
28	M3	Well, time pressure. I have got this from the social secretaries. It has been improvements. I mean, in the past we have had that from the 15th every month until the last, a prolonged period of payments of money and it was hard and stressful. The social secretaries back then were really stressed. And now, the robot is starting to handle cases. And then we have introduced that all payments are made on the 27th, which means that it now has become quiet and then are all the economic supports being paid out, on the 27th of the month. And then we have a payment period that is a maximum of one week, and then it is very intensive for those who work and handle payments. But it has become much shorter and much calmer during the payment periods, and that is what the social secretaries have said themselves.	Alltså tidspress. Detta har jag fått från socialsekreterarna. Det har skett förbättringar. Det är så att tidigare har vi haft att från den 15:de varje månad till den sista, en långdragen period med utbetalningar av pengar och det var jobbigt och det var stressigt. Då var socialsekreterarna jättestressade. Och nu är det så att roboten börjar hantera ärenden. Och sen har vi infört att alla utbetalningar sker den 27:e, vilket gör att nu har det blivit lugnt och då betalas all försörjningsstöd ut den 27:e i månaden. Och då har vi en utbetalningsperiod som är max en vecka, och då är det väldigt intensivt för de som jobbar och hanterar utbetalningar. Men det har blivit mycket kortare och mycket lugnare under utbetalningsperioden och det har socialsekreterarna sagt själva.	A-TP
29	I	Okay, great. I still have a main question left. Many believe that the use of RPA streamline processes due to its ability to automate work tasks. Do you believe that the employee perceives, from your own experience with RPA, that RPA's automation of processes has had an impact on how rapidly he/she obtain feedback about his/her work performance?	Okej toppen. Jag har en huvudfråga kvar. Många anser att användningen av RPA effektiviserar processer på grund av dess egenskaper att automatisera arbetsuppgifter. Tror du, från din egen erfarenhet med RPA, att de anställda upplever att automatisering genom RPA har påverkat hur snabbt de kan få feedback och återkoppling gällande deras arbetsprestationer?	
30	M3	What a complicated question.	Vilken komplicerad fråga.	
31	I	Do you want me to take it again and clarify it?	Vill du jag ska ta den en gång till och förtydliga den?	
32	M3	Do you mean, kind of, that the introduction of this has in any way led to an influence of their work performance or?	Menar du alltså att typ införandet av det här har på något sätt lett till påverkan av deras arbetsprestationer eller?	
33	I	No, what we mean is that RPA automates some of their repetitive and monotonous tasks where they sit with paperwork. If it has influenced how quickly the employee perceives to receive feedback on their work that they carry out?	Nej, utan det vi menar är att RPA automatiserar en del av deras repetitiva och monotona arbetsuppgifter där de sitter med pappersarbete. Om det har påverkat hur snabbt de anställda upplever att de får feedback på sitt arbete som de genomför?	
34	M3	Can you give me an example on what you mean?	Kan du ge ett exempel på vad du menar?	

35	I	Since they can now work more with citizens, maybe it will be longer work processes and then influence how rapidly they get feedback on what they perform?	I och med att de nu kan jobba mer med invånare så kanske det blir längre arbetsprocesser och påverkar det då hur snabbt de får feedback på det de presterar?	
36	M3	Feedback internally, or?	Feedback internt, eller?	
37	I	Yes exactly, feedback within your organisation.	Ja precis, feedback inom er organisation.	
38	M3	I'll answer that as well. I have to say that I do not know what you have done or where you have been. But you have thought through this quite well, because it is very wise questions. The thing is, if you previously measured what the social secretaries do, which is not okay within the social service since you always come down to that we work with people, and that it is not possible to measure and so. So, you might have looked at how many decisions that were made by a social secretary, which is also not okay because you can make decisions about economic support in a single decision where you write that you grant economic aid for that, and that, and that. Or you can make five different decisions during one month, where one is economic support, the other is the *anonymized* card. The third might be a thing that has come in the same application, so it is relative and might not be a good way to measure. Measuring how many cases a social secretary has completed is also a bad way to measure because, if a psychiatrist from *anonymized* municipality resign and move, then we feel it because they are so few so it will be queue. And we sit with people where we do not have any diagnosis and we can't do anything more. And if the Employment Office is saving money, then imagine what giant changes that might happen. And all of the sudden they will reorganize, and our clients will wait in the meantime, and so will we. So, you can't measure how many cases you have completed because it does not only depend on the social secretaries. But since we have worked with automation and, as I told you, it has, at least, created a climate where you think freely about what you can automate. And then we have thought about another robot that is a follow-up tool. We're talking about it. We are thinking to, with	Det ska jag svara på också. Jag måste säga att jag vet inte vad ni har gjort eller var ni har varit men ni har tänkt igenom det här ganska bra, för det är väldigt kloka frågor. Grejen är såhär, att om man tidigare skulle mäta vad socialsekreterarna gör, vilket inte är okej inom socialtjänsten för man alltid landar i att vi jobbar med människor, och att det inte går att mäta och så. Så man har kanske tittat på hur många beslut som fattades av en socialsekreterare, vilket inte heller är okej för man kan fatta beslut om försörjningsstöd i ett enda beslut där man skriver under att man beviljar ekonomiskt bistånd för det och det och det. Eller man kan under en månad fatta fem olika beslut där den ena är försörjningsstöd, den andra är *anonymized*-kort. Den tredje är kanske en grej som kommit i samma ansökan, så det är relativt och kanske inte något bra sätt att mäta. Att mäta hur många ärenden som en socialsekreterare har avslutat är också ett kasst sätt att mäta för, går en psykiatriker från *anonymized* kommun och flyttar, då känner vi det för de är så få så då blir det kö. Och vi sitter med folk där vi inte har någon diagnos och vi kan inte göra något mer. Och sparar arbetsförmedlingen pengar, tänk dig att då blir det jätteförändringar. Då ska de omorganisera, och då väntar våra klienter undertiden och vi väntar också. Så man kan inte mäta på hur många man har avslutat för det beror inte bara på socialsekreterarna. Men eftersom vi har jobbat med automatisering och, som jag sa till dig, att det i alla fall har skapat ett klimat där man tänker fritt kring vad man kan automatisera. Och då har vi funderat på en annan robot som är ett uppföljningsverktyg. Vi pratar om det. Vi funderar på att, med hjälp av en uppföljningsrobot, titta på när ett ärende har aktualiserats, hur lång tid har de tagit till första beslut? När har klienten hänvisats till någon aktivitet? När han man gjort handlings-	F

		<p>the help of a follow-up robot, look at when a case has been actualized, how long have they taken to make the first decision? When has the client been referred to any activity? When have you made the action plan? When have you followed up the action plan? You can measure that. And then you can know that this person has applied, and he has got a decision within 1,2,3 days and has not sat and waited for forever. We have also said that we preferably should have a decision the next day. Then we don't have all the decisions the next day, because people simply send it in for the first time and therefore don't send all the papers that we need. But we have said that we should contact people by the next day, as latest, when they search. And that has made me to now... I don't remember the last time I received a call regarding that they have applied and wondered how it is going since it has gone two weeks, and nothing has happened and so on. Now I don't receive such calls anymore so it means that clients get answers in time. And people get an action plan. And then the action plan must be followed up, and this puts demands on social secretaries to meet with clients, which in turn leads to clients getting more help and hopefully becoming self-sufficient quicker. So in this way, we are talking about following up on their work. That we should follow up the social secretaries' work in the number of client meetings that one has. In client time. But it is important to find good... This measurement will also be the basis for feedback, and then we have something to talk about that is approved and okay to talk about, although we work with people.</p>	<p>planen? När har man följt upp handlingsplanen? Och det kan man mäta. Och då kan man veta att denna personen har sökt och han har fått beslut inom 1,2,3 dagar och inte suttit och väntat hur länge som helst. Vi har också sagt att vi ska helst ha beslut nästa dag. Sen har vi inte alla beslut nästa dag, för att folk helt enkelt skickar in för första gången och skickar då inte alla papper som vi behöver. Men vi har sagt att vi ska kontakta folk senast nästa dag, när de söker. Och det har gjort att jag nu... Jag minns inte senast jag fick senaste samtalet gällande att de har sökt och undrat hur det går för det har gått två veckor och det har inte hänt något och så vidare. Nu får jag inte sådana samtal längre så det betyder att klienter får svar i tid. Och folk får en handlingsplan. Och sen ska handlingsplanen följas upp, och det ställer krav på socialsekreterare att träffa klienter, vilket i sin tur leder till att klienter får mer hjälp och förhoppningsvis kommer i självförsörjning snabbare. Så på så sätt pratar vi om att vi ska följa upp deras arbete. Att vi ska följa upp socialsekreterarnas arbete i antal klientmöten som man har. I klient-tid. Men det gäller att hitta bra... Den här mätningen kommer också att bli underlag för feedback, och då har vi någonting att prata om som är godkänt och okej att prata om, fast vi jobbar med människor.</p>	
39	I	So the idea is, if I understand you correctly, that you should be able to provide more meaningful feedback to your employees?	Så tanken är, om jag förstår dig rätt, att ni ska kunna ge mer innehållsrik feedback till era medarbetare?	
40	M3	Yes, exactly.	Ja, precis.	
41	I	That is great, thank you so much. We are actually done with the main questions, but is there anything else you want to add before we finish the interview?	Toppen, tack så jättemycket. Vi är faktiskt klara med huvudfrågorna, men är det någonting annat du vill tillägga innan vi avslutar intervjun?	

42	M3	I don't know what to add. But there are always areas of improvement and I think this is just the beginning. And the development is undoubtedly going this way. Then we have had more than 30 different municipalities that, in some way, have visited us, emailed, asked and had a meeting in different ways because they want to automate. So that we will automate throughout Sweden, there is no question about that. It is only a matter of finding a good way that saves time and favour both clients and employees.	Jag vet inte vad jag ska tillägga. Men det finns alltid förbättringsområden och jag tror att detta är bara början. Och det är utan tvekan så att utvecklingen kommer gå åt det här hållet. Sen har vi haft mer än 30 olika kommuner som på något sätt har hälsat på hos oss, mailat, frågat och haft möte på olika sätt för att de vill automatisera. Så att vi kommer automatisera i hela Sverige, det är inget snack om saken. Men det gäller bara att hitta ett bra sätt spar tid och gynnar både klienter och medarbetare.	
43	I	I totally agree with you. Would it be okay for you if we contact you, if there would be something that needs clarification or if we have any questions that pop up? By e-mail?	Det håller jag helt med dig om. Skulle det vara okej för dig om vi hör av oss, om det skulle vara något som behöver förtydligas eller om vi har några frågor som dyker upp? På mail?	
44	M3	Absolutely, that is totally fine. But as I said, email, because I may not answer if I'm sitting in a meeting. So it gets the most smooth.	Absolut, det går jättebra. Men som sagt maila, för det kan hända att jag inte svarar för att jag sitter i möte. Så blir det smidigast.	
45	I	Absolutely. Thank you so much for taking your time. I know you have a lot to stand in and that there are many who contact you. So it is really appreciated that you took your time for this interview and we have received great answers and are very satisfied. Have a nice day.	Absolut. Tack så jättemycket för att du tog dig tiden. Jag vet att du har mycket att stå i och att det är många som kontaktar er. Så det uppskattas verkligen att du tog dig tiden till denna intervju och vi har fått jättebra svar och är super nöjda. Så får du ha en fortsatt fin dag.	
46	M3	Yes, thank you so much. Good luck with your studies.	Ja, tack så mycket. Ni får lycka till med studierna.	
47	I	Thank you so much, bye.	Tack så mycket, hej då.	
48	M3	Thank you. Bye, bye.	Tack. Hej, hej.	

Appendix 13: Interview Transcript (M4)

Section	Person	English Text (Translated Text)	Swedish Text (Original Text)	Code
1	I	Would you like to start by explaining what position in your organisation you possess and what it includes?	Skulle du vilja börja med att förklara vilken position i er organisation som du besitter och vad den innefattar?	
2	M4	In the labor market administration, I am unit manager for the authority process, it includes economic aid, the exercise of authority for children and young people and our emission activities. Then I also have a role in the digitization area in municipality of *anonymized*.	På arbetsmarknadsförvaltningen så är jag enhetschef för myndighetsprocessen, det innefattar ekonomiskt bistånd, myndighetsutövning för barn och unga och vår utslussverksamhet. Sen har jag också en roll i digitaliseringsrådet i *anonymized* kommun.	
3	I	Okay, thank you. Would you like to explain how employees use RPA in your organisation and what is the purpose of using RPA?	Okej, tack. Skulle du vilja förklara hur de anställda använder RPA i er organisation och vad som är avsikten med användningen av RPA?	
4	M4	After all, we have applied the technology to the ongoing application and economic support. In *anonymized* we monthly get about 300 of this type of applications. Our process is administrative and follows rules and therefore it is also suitable to automate. We have had this since *anonymized*, so for just over two years we have used the technology on that process. What it does is ... We have an e-service for the economic support since *anonymized*, and what RPA does is that it goes into, and retrieve, all the applications that have been received, put them in the operating system on the person or in the household and then execute a calculation based on what the applicant has filled in and controls their income towards the National Insurance Office. Then it also looks in the labor market module, in other words, where the labor market secretaries' document, there it is ensured that the applicant has a planning, and that it is followed in order to reach the closest path to self-sufficiency and after that a decision is made and then the payments are made.	Vi har ju applicerat tekniken på den löpande ansökan och försörjningsstöd. I *anonymized* får vi in ungefär 300 sådana ansökningar månadsvis. Vår process är administrativ och följer regler och därför är den också lämplig att automatisera. Det har vi haft sedan *anonymized*, så i lite drygt två år har vi använt tekniken på den processen. Det den gör är... Vi har en e-tjänst för försörjningsstödet sedan *anonymized*, och det RPA gör är att gå in och hämta alla de ansökningar som har inkommit, lägger in de i verksamhetssystemet på personen eller i hushållet och gör då en beräkning utifrån vad den sökande har fyllt i och kontrollerar deras inkomster gentemot försäkringskassan. Sen tittar den också i arbetsmarknadsmodulen, det vill säga där arbetsmarknadssekreterarna dokumenterar, där säkerställer man att den sökande har en planering som man följer för närmsta vägen mot självförsörjning och efter det så fattas ett beslut och då görs utbetalningar.	
5	I	Great. Then we are heading to the questions constituting the main questions for the actual interview. Do you believe the employees perceive that the skills	Toppen. Då kommer vi till de frågorna som är huvudfrågor för själva intervjun. Tror du att de anställda upplever att de färdigheter som krävs från deras	

		being required from their side, in relation to the performance of their everyday work tasks, have changed due to the use of RPA?	sida, i förhållande till utförandes av deras vardagliga arbetsuppgifter, har förändrats på grund av användandet av RPA?	
6	M4	RPA does part of their job. However, it is important that one knows what kind of technology we use and what it can do and what it cannot do. So, of course, they have an awareness of what RPA is, but they have not been required to learn anything new, but it is rather that one now looks elsewhere or that it is another document, but it is nothing new.	RPA gör ju delar av deras arbete. Däremot är det av vikt att man vet vad det är för typ av teknik som vi använder och vad den kan göra och vad den inte kan göra. Så att såklart har de kännedom om vad RPA är, men de har inte behövt lära sig någonting nytt, utan det är väl mer att man tittar på andra ställen eller att det är ett annat dokument men det är inget nytt.	SV-CS
7	I	So no new skills then?	Inga nya färdigheter då?	
8	M4	No.	Nej.	
9	I	Okay, thank you. Next question, do you believe that the employees perceive that the work tasks they have are equal, more, or less challenging compared to how they were before RPA was used?	Okej, tack. Nästa fråga, tror du att de anställda upplever att de arbetsuppgifter som de har är likvärdiga, mer, eller mindre utmanande jämfört med hur de var innan RPA användes?	
10	M4	Their job description has not changed over time but it is only, or maybe not only, that the RPA does part of their job. However, we have become fewer case workers, which means that they have more cases per case worker to handle, but the actual tasks themselves are the same. It is still true that, of course RAP does a lot, but there are still new applications for which basic investigations are to be made, in order to make decisions and when and when one has appealed its decision, it is still up to the case worker to make the decision whether to the case should be reconsidered or lead to a ruling.	Deras arbetsbeskrivning har inte förändrats över tid utan det är bara, eller bara och bara, att RPA gör delar av deras arbete. Däremot har vi blivit färre handläggare, vilket gör att de har fler ärende per handläggare att hantera men själva arbetsuppgifterna är detsamma. Det är fortfarande så att, nog för att RAP gör väldigt mycket, men det är fortfarande nya ansökningar som det ska göras grundutredningar för att tas beslut kring och när man har överklagat sitt beslut så är det fortfarande handläggaren som ska göra bedömningen om det ska omprövas eller gå till ett yttrande.	
11	I	Do you believe that maybe the employees perceive that the use of RPA requires that they now have more skills including problem solving and complexity, now that RPA has taken over certain parts of the tasks, which you mentioned?	Tror du då att det kanske är så att de anställda upplever att användningen av RPA kräver att de har mer färdigheter kring problemlösning och komplexitet, nu när RPA har tagit över vissa delar av arbetsuppgifterna som du nämnde?	
12	M4	No, no skills are required ... You need to know about the technology, how it works and how the process behind the actual programming is organized, which guidelines that exist or what legislation we have to relate to, and what assessment we do, this has not changed.	Nej det krävs ingen... Du behöver veta om tekniken, hur den fungerar och hur processen bakom själva programmeringen är upplagd, vilka riktlinjer som finns eller vilken lagstiftning vi har att förhålla oss till, och vilka bedömning vi gör, detta har inte förändrats.	SV-CLS
13	I	Okay, is it then more ... Do I understand it correctly that they have more opportunity to work with more cases	Okej, är det då mer... Förstår jag det rätt att de har mer möjlighet att	

		because the robot takes over more simple tasks that are time-consuming?	jobba med fler ärenden för att roboten tar över mer enkla uppgifter som är tidskrävande?	
14	M4	Yes, you can definitely say that. If you look at the time, it could take between 3-5 minutes to handle a current application that should be approved, then it could take between 5-17 minutes to handle a case for which a rejection would be added. RPA handles whether it is a refusal or approval, in one minute. So it is obvious that the time they do not have to put on these things results in that they instead can put time on the cases that require their skills and their assessment, but it is also that they are fewer case workers so they have now more cases to handle.	Ja, så kan man absolut säga om det. Om man tittar på tid så kunde det ta mellan 3-5 minuter att handlägga en löpande ansökan som det skulle bli bifall på, sen kunde det ta mellan 5-17 minuter att hantera ett ärende som det skulle läggas ett avslag på. RPA handlägger oavsett om det skulle bli avslag eller bifall på en minut. Så det är klart att den tiden som de inte behöver lägga på de sakerna, dels kan de lägga ner mer tid på de ärenden som kräver deras kompetens och deras bedömning men det är så också att de är ju färre handläggare så de har fått fler ärenden att hantera.	SV-CS SV-DS TI-TIm TS-TC
15	I	Okay, great. The next question then is, do you think the employees perceive that the use of RPA has affected their own influence and responsibility throughout the work process?	Okej, toppen. Nästa fråga är då, tror du att de anställda upplever att användandet av RPA har påverkat deras eget inflytande och ansvar genom hela arbetsprocessen?	
16	M4	No, when we... RPA is programmed along a case worker, how it had handled the case, and the case workers have been involved in this process. They have been involved in programming and setting up various decision messages. I do not really know if this was the answers to your question, but they have been involved in this so it is they themselves who have developed it based on how they think, so there is a confidence in the technology.	Nej, när vi... RPA är programmerad utefter en handläggare, hur den hade hanterat ärendet och det har handläggarna varit med i. De har varit med i programmering och att sätta upp olika beslutsmeddelande. Jag vet inte riktigt om det var svar på er fråga, men de har varit delaktiga i det här så det är de själva som har tagit fram det utifrån hur de tänker så det finns en tillit till tekniken.	TI-R
17	I	It sounds great, it was absolutely an answer to the question. Do you believe that employees perceive that the use of RPA has affected the importance of their work tasks in regards to the organisational outcomes and goals?	Det låter jättebra, det var absolut svar på frågan. Tror du att de anställda upplever att användandet av RPA har påverkat betydelsen av deras arbetsuppgifter i förhållande till de organisatoriska resultaten och målen?	
18	M4	My employees are very proud to have been involved in developing this RPA process with us. We were *anonymized* in the country, so they are very proud of it and can see the benefits of using RPA on the processes that are administrative so that they can use their skills and time to do things where they can make more difference each day. And if you look at *anonymized* then the cost of the	Mina medarbetare är väldigt stolta över att ha varit med och utvecklat den här RPA-processen hos oss. Vi var ju *anonymized* i landet, så de är väldigt stolta över det och kan se fördelarna med att använda RPA på de processerna som är administrativa så att de kan använda sin kompetens och tid till att göra saker där de kan göra mer skillnad varje dag. Och ser man till *anonymized* så	TI-IP TI-TIm

		<p>economic aid has gone down very much since the introduction of RPA and it is about that there is a pride in that we are an administrative process and the more effective we can be in our process the better the conditions it generates in the other processes in the organisation. So that we can put more resources into the labor market process, for example, so that we get citizens into self-sufficiency in a faster, better and more efficient way. So the case workers here see their role in the bigger picture.</p>	<p>har kostnaden för försörjningsstödet sjunkit väldigt mycket sedan införandet av RPA och det handlar om att det finns en stolthet i att vi är en administrativ process och ju mer effektiva vi kan va i vår process desto bättre förutsättningar genererar det i de andra processerna i organisationen. Så att vi kan lägga fler resurser i arbetsmarknadsprocessen till exempel så att vi på ett snabbare, bättre och mer effektivt sätt får ut medborgare i självförsörjning. Så handläggarna här ser sin roll i det stora hela.</p>	
19	I	<p>Okay.</p> <p>Here comes a little longer question so please let me know if you want me to repeat it. It is like that, that many believe that RPA is used with the intention of freeing time from repetitive and monotonous tasks in order to allow the employees to work with more complex and challenging work tasks. What is your opinion on this assumption, based on your own and *anonymized* experience with RPA?</p>	<p>Okej.</p> <p>Här kommer en lite längre fråga så säg gärna till om du vill att jag ska upprepa den. Det är så att många anser att RPA används med avsikt att frigöra tid från repetitiva och monotona arbetsuppgifter för att istället låta de anställda kunna arbeta mer med komplexa och utmanande arbetsuppgifter. Vad är din åsikt kring detta antagande, baserat på din egna och *anonymized* erfarenhet med RPA?</p>	
20	M4	<p>I agree with that. In our case, it is also about ... As I said, we are fewer case workers who handle the economic aid. So the additional resources we needed here before the RPA, we have put in another process, in that process where we meet citizens where we can make the change so they can become self-sufficient.</p>	<p>Det instämmer jag med. I vårt fall handlar det också om att... Som jag sa, vi är färre handläggare som handlägger försörjningsstödet. Så de resurserna som vi behövde ha fler här innan RPA, har vi lagt i en annan process, i den processen där vi möter medborgare där vi kan göra förändringen så de kommer ut i självförsörjning.</p>	<p>TS-SI TS-TC A-TP</p>
21	I	<p>Yes. Do you then think that employees perceive that the use of RPA has made it possible for the employees to focus on more tasks involving interaction with the citizens?</p>	<p>Ja. Tror du då att de anställda upplever att användandet av RPA har möjliggjort det för de anställda att fokusera på fler uppgifter som innefattar interaktion med invånarna?</p>	
22	M4	<p>Would you like to repeat the question again?</p>	<p>Skulle du vilja repetera frågan igen?</p>	<p>TS-SI</p>
23	I	<p>Absolutely. Do you think that employees perceive that the use of RPA has enabled them to focus on more tasks that involve handling with the citizens?</p>	<p>Absolut. Tror du att de anställda upplever att användandet av RPA har gjort det möjligt för de själva att fokusera på fler uppgifter som innefattar hantering med invånarna?</p>	
24	M4	<p>Yes, not for the case worker's part in the authority process, but the use of RPA, which belongs almost together with the question before, has made us able to add more resources to the process where human meetings take place. Where we meet the citizen and where we offer them service.</p>	<p>Ja, inte för handläggarens del inom myndighetsprocessen men användandet av RPA, det hör nästan ihop med frågan innan, har gjort att vi kan lägga fler resurser på den processen där mänskliga möten sker. Där vi träffar medborgaren och där vi erbjuder de service.</p>	

25	I	Okay thanks. Do you believe the employees perceive that using RPA has enabled them to structure and control their work tasks more freely?	Okej, tack. Tror du att de anställda upplever att användandet av RPA har gjort det möjligt för de att strukturera och kontrollera deras arbetsuppgifter med fritt?	
26	M4	Yes, they can plan their day in a different way. The report from the RPA is available in the morning when they arrive and then the current cases will only be based on the fact that the payment must be completed by 9.30 am if you are going to get the money that same day. Then you can plan the rest of the day based on what they have going on at the moment.	Ja, de kan lägga upp sin dag på ett annat sätt. RPA-rapporten finns ju på morgonen när de kommer och sen gör de löpande ärendena först utifrån att utbetalningen måste vara färdig vid halv 10 om man ska få ut pengar den dagen. Sen kan man lägga upp resten av dagen utifrån vad man har på bordet just då.	A-SC A-TP
27	I	Absolutely. So, RPA has actually freed up more time for them to more easily structure their working day?	Absolut. Så, RPA har egentligen frigjort mer tid för de för att lättare kunna strukturera upp sin arbetsdag?	
28	M4	Yes.	Ja.	A-SC
29	I	Okay. Do you think the employees perceive any differences regarding time pressure on the employee's work tasks, since beginning to use RPA in * anonymized *?	Okej. Tror du att de anställda upplever några skillnader i förhållande till tidspress kring den anställdes arbetsuppgifter sedan användandet av RPA har börjat hos er i *anonymized*?	
30	M4	Sorry, what did you initially say? Time?	Förlåt, vad sa du inledningsvis? Tids?	
31	I	If they perceive any differences regarding time pressure on their work tasks?	Om de upplever några skillnader i förhållande till tidspress kring deras arbetsuppgifter?	
32	M4	No, but it is rather connected with the payments then I believe. Because 9.30 in the morning, it must be done in order for the applicant to receive money that same day and this has nothing to do with our RPA, it has been like this before. So I don't think it has changed. On the other hand, the case workers here have more to do at the end of the month, based on the fact that there are more people who apply then. But then they also have a slightly calmer period in the beginning of the month when they have time for recovery and time to do other things.	Nej, utan det hänger väl ihop med utbetalningarna då tänker jag. För halv 10 på morgonen måste det gå ut för att den sökande ska få pengar den dagen och detta har inget med vår RPA att göra för så har det varit även tidigare. Så jag tänker inte att det har förändrats. Däremot har handläggarna här mer att göra i slutet av månaden, utifrån att det är fler som ansöker då. Men sen har de också en lite lugnare period i början av månaden då de har tid för återhämtning och tid för att göra andra saker.	A-TP
33	I	Okay, so if you think about what we've previously have been touching upon, that RPA then has freed time for them to be able to focus on other types of tasks instead, and that they then might have received more cases? Is the time pressure due to this the	Okej, så om man tänker då på det vi varit inne på lite innan, att RPA då har frigjort tid för de att kunna fokusera på andra typer av uppgifter istället och att de då kanske har fått fler ärenden? Är tidspressen på grund av det här densamma, eller tror du att det finns en skillnad i det	

		same, or do you believe there is a difference in it because they perceive that it has given them more time?	för att de upplever att den gett mer tid till dem?	
34	M4	Yes, this is absolutely the case, it has generated more time for them to do other things or spend more time on a ruling or something else. Of course, it has changed a little bit after all. But it is also about that they have received more cases and then they have to handle them at the same time, and then it is also about being more efficient, having structures, having routines, having guidelines and having templates. All of that has, especially last year was such a year where we spent a lot of time on decisions and clarity in order to provide better conditions.	Ja men så är det absolut, det har ju genererat mer tid för de att göra andra saker eller lägga mer tid på ett yttrande eller någonting annat. Det är klart att det har trots allt förändrats lite grann. Men det handlar också om att de har fått fler ärenden och då måste de hantera dem på samma tid och då handlar det också om att vara mer effektiv, ha strukturer, ha rutiner, ha riktlinjer och ha mallar. Allt sådant har ju, särskilt i fjol var ett sådant år där vi la väldigt mycket tid på beslut och klarspråk för att det skulle ge bättre förutsättningar.	A-TP
35	I	Do I understand you correctly that they then feel that they have time to help more in the end, thanks to RPA?	Förstår jag dig rätt, att de då känner att de har tid att hjälpa fler i slutändan tack vare RPA?	
36	M4	Yes.	Ja.	
37	I	Okay, thanks. Then we have another question here that is a little longer, so just let me know if you want me to repeat it. Many believe that the use of RPA streamlines processes because of RPA's ability to automate work tasks. Do you believe, from your own experience with RPA, that employees perceive that automation through RPA has had an impact on how rapidly they can obtain feedback fed back to them regarding their work performance?	Okej, tack. Då har vi en till fråga här som är lite längre, så säg bara till om du vill att jag ska upprepa den. Många anser att användningen av RPA effektiviserar processer på grund av att RPAs egenskaper att automatisera arbetsuppgifter. Tror du, från din egen erfarenhet med RPA, att de anställda upplever att automatiseringen genom RPA har påverkat hur snabbt de kan få feedback återkopplat till sig gällande deras arbetsprestation?	
38	M4	Please repeat again.	Upprepa gärna igen.	
39	I	Absolutely. Many believe that the use of RPA makes processes more efficient, because of the technology's ability to automate work tasks. Do you believe, from your own experience with RPA, that employees feel that automation through RPA has been able to influence how rapidly they get feedback fed back to themselves regarding their own work performance?	Absolut. Många anser att användningen av RPA effektiviserar processer, på grund av teknikens egenskaper att automatisera arbetsuppgifter. Tror du, från din egen erfarenhet med RPA, att de anställda upplever att automatisering genom RPA har kunnat påverka hur snabbt de får feedback återkopplat till sig gällande sin egen arbetsprestation?	
40	M4	I don't really know if I understand, but we can see if you are satisfied with the answer I give.	Jag vet inte riktigt om jag förstår, men vi kan väl se om ni blir nöjda med svaret jag ger.	
41	I	Absolutely.	Absolut.	
42	M4	Of course, the processes that you automate become more efficient, it goes faster. Then you have to be careful about which processes you choose to automate, there must be a benefit	Det är klart att processerna som man automatiserar blir mer effektiva, det går snabbare. Sen får man vara försiktig med vilka processer som man väljer att automatisera, det	F

		with it. You have to be able to see the benefits, you should not automate just for the sake of automation. The employees, if they get faster feedback on their work performance, I do not know. If you get feedback on the performance you do otherwise, I believe this has to do that what relationship you have with the manager. How to give feedback to their employees, and from my perspective that feedback has not changed through RPA.	måste finnas en nytta med det. Man måste kunna se vinsterna, man ska inte automatisera bara för automatiserandets skull. Medarbetarna, om de får snabbare feedback på sin arbetsprestation, jag vet inte. Om man får feedback på den prestation man gör i övrigt det handlar väl om relationen till chefen tänker jag. Hur man ger feedback till sina anställda och för min del har inte den feedbacken förändrats genom RPA.	
43	I	If one considers what we have talked about regarding RPA and the time it saves and thus enables the case workers to spend time on other tasks and similar things. Has it resulted in the processes becoming longer or shorter, and thus influenced how rapidly they can get feedback on the work?	Om man tänker på det som vi har pratat om gällande RPA och den tid som den sparar och på så sätt möjliggör det för handläggarna att lägga tiden på andra uppgifter och liknande. Har det resulterat i att processerna blivit längre eller kortare, och därmed påverkat hur snabbt de kan få feedback på arbetet?	
44	M4	Looking at the RPA. The citizen gets a better service and gets his decision faster, which means that if one has received a rejection then the appeal will enter the same day or the day after and it may well be some kind of feedback that one gets. The whole process has been speeded up, before the RPA we have had the e-service that where the applicants have been able to see their decision on "my pages" anyway, but absolutely one can notice that it goes faster today. One can get the appeal the same day as you have the decision in the morning, so certainly everything goes much faster. Decisions within 24 hours we have had since *anonymized*. But when the e-service was introduced in *anonymized*, the citizen could see his decision directly via my page and did not have to wait for the mailbox and thus it goes faster and they also make demands on the other processes within the organisation.	Om man ser till RPA. Medborgaren får en bättre service och får sitt beslut snabbare vilket gör att om man har fått ett avslag så kommer överklagan in samma dag eller dagen efter och det kan väl vara någon form av feedback som man får. Hela processen har snabbats upp, innan RPA har vi haft e-tjänsten som de sökande har kunnat se sitt beslut på "mina sidor" ändå, men absolut kan man märka att det går snabbare idag. Man kan få in överklagan samma dag som man har beslutet på morgonen, så visst går allt mycket snabbare. Beslut inom 24 timmar har vi haft sedan *anonymized*. Men vid införandet av e-tjänsten i *anonymized* kunde medborgaren se sitt beslut direkt via min sida och behövde inte vänta på postgången och därmed går det snabbare och de ställer krav även på de andra processerna inom organisationen.	
45	I	Okay thanks. Then we have actually come to the end of the interview and I was just going to ask if it is something that you would like to add before we finish the interview?	Okej, tack. Då har vi faktiskt kommit till slutet av intervjun och jag tänkte bara fråga om det är något som du själv skulle vilja tillägga innan vi avslutar intervjun?	
46	M4	No, or ... What has been a success factor for us, in this, is that we not only introduced RPA because it would be and not based on the technology either. But we have worked	Nej, eller... Det som varit en framgångsfaktor för oss, i det här, det är att vi inte bara införde RPA för att det skulle vara och inte utifrån tekniken heller. Utan vi har jobbat med	

		with the change and streamlining the processes and shortening the processing time for the case handling time over a few years, so for us this was a natural next step. What is important when you go through such a change when you take it in, that is that you have ... It is about transparency in the leadership and it is very important for the employees to be on the journey and be allowed to feel involved and get allowed say their opinion.	förändringen och effektivisera processerna och korta handläggningstiden under några år, så för oss var detta ett naturligt nästa steg. Det som är viktigt när man genomgår en sådan här förändring när man tar in den, det är att man har... Det handlar om transparens i ledarskapet och det är väldigt viktigt för medarbetarna att vara med på resan och få lov att känna sig delaktiga och få lov att tycka till.	
47	I	Great, thank you so much for that. Then I also thought about, is it okay for you that we get back to you if the case is that we feel that something needs clarification or if any other question would appear?	Jättebra, tack så jättemycket för det. Sen tänkte jag också fråga, är det okej för dig att vi hör av oss om det är så att vi känner att någonting behöver förtydligas eller om någon annan fråga skulle dyka upp?	
48	M4	Yes but of course.	Ja men självklart.	
49	I	Great, thank you very much. Would you also like us to send a copy of our study when it has been published?	Jättebra, tack så hemskt mycket. Skulle du även vilja att vi skickar en kopia av vår studie när den har blivit publicerad?	
50	M4	Yes, it would have been great fun	Ja, det hade varit jätteroligt.	
51	I	Absolutely, then we'll fix that. And then I just want to thank you so much for taking the time to participate in our study, it is greatly appreciated by us.	Absolut, då fixar vi det. Och då får jag bara tacka så hemskt mycket för att du tagit dig tiden att delta i vår studie, det uppskattas jättemycket av oss.	
52	M4	Of course, I wish you good luck.	Självklart, jag önskar er lycka till.	
53	I	Thank you very much, have a nice rest of the day.	Tack så mycket, ha en fortsatt fin dag.	
54	M4	You too.	Detsamma.	
55	I	Thanks, bye.	Tack, hejdå.	
56	M4	Bye.	Hejdå.	

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