Questioning the 40-Hour Work Week: Does working-time reduction in SMEs make sense?

* Master Thesis

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**Abstract**

To evaluate whether a working time reduction (WTR) is a feasible and attractive option for SMEs, I conducted eight in-depth interviews with CEOs or managers of German SMEs. WTR is a significant reduction in working hours with similar salary and output expectations to a full-time job. It is a relatively new concept that is still empirically understudied. I deduced a model from the literature that provides an overview of conditions and effects of a WTR. In addition, I found three factors not previously considered: Low levels of (1) required customer reachability and (2) tradition increase the feasibility of WTR for SMEs. Low levels of current employer attractiveness (3) increase the attractiveness of WTR. The main expected benefits are increased health, satisfaction and motivation, while the main disadvantages center around a social interaction decrease and potential social inequalities. The trends of a lack of qualified employees and demographic change call for innovative HR practices with focus on workplace flexibility, of which WTR can be a fruitful option. Further research could use large-scale samples with control groups and case studies for the in-depth analysis of the underlying reasons and effects.

**Keywords:** SMEs, working time reduction, productivity, employer attractiveness, workplace flexibility, part-time work.

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Word count: 13,869 words (excluding references and appendices)

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Acknowledgements

I would like to express my gratitude towards Dr. Maryse Brand of the Faculty of Economics and Business at the University of Groningen. I thank her for her valuable feedback and guidance throughout the research and writing process. Her experience and knowledge were a great help for me.
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1. Introduction

It was back in 2013 during my 3-year apprenticeship at a global ocean shipping company, that I was confronted with the phenomenon of rigid thinking towards working hours. The company was a medium-sized enterprise with 130 employees. It was 2 PM. I had just finished my previous work task and asked my colleague for a new task. He replied that he had finished all of his tasks for the day and also was idle. However, he was not allowed to leave, as it was not 5 PM yet. Since he filled the position of a ‘vessel operator’, he could receive calls and important emails at night and throughout weekends. Hence, I thought: “Why not allow him to leave the office now, if all his tasks are finished and it is likely that he will need to work on some tasks tonight and during the weekend anyways?”. A vessel operator is responsible for 5 to 6 vessels; thus, he cannot simply create new work tasks. It appeared to be a non-disputable company policy that every employee had to stay in the office until 5 PM, despite having to work on immediate issues during the night or even on weekends.

What started as a personal observation was since confirmed by a myriad of newspaper articles (Verlouw, 2018; Gurk, 2018; Webber, 2014; Eisenberg, 2013; Jacobs, 2018) and personal experiences of peers, to whom I talked about this topic. It appears that the 40-hour work week is accepted by most firms in the economy as a law-like concept, that governs the way employees work. I then asked myself “why is the 40-hour work week a gold standard in companies in high income countries?”.

Historic developments

A view in the past regarding working times may shed light. Up until the 1850s, workers would work around 11-12 hours a day, seven days a week (Amatori & Colli, 2011). By the end of the 19\textsuperscript{th} century, an average working day lasted 10 hours, with Sundays off to attend church services (Rosenbloom & Sundstrom, 1994). By the 1940s, the average daily working hours amounted to eight in the US, with Saturdays also eliminated, mainly due to union pressure (Rosenbloom & Sundstrom, 1994). Hence, during the first half of the 20\textsuperscript{th} century, working hours were decreased on average from 59 to 39 hours in the US (Whaples & Parker, 2013). Developments in Europe were similar, with a time lag of around a decade. It is evident from this short historic excerpt that reductions in working time for standard full-time jobs have not been realized in recent times and the 40-hour work week has already been in place for around 70 years.

Trends such as digitization, the internet, automation and more recently Artificial Intelligence and Big Data promise significant (potential) productivity increases (Hirsch-
Kreinsen, 2016; Maiti & Kayal, 2017; Loebbecke & Picot, 2015). However, these productivity increases have not fully been realized, as some technologies are still relatively new and investment in complementary assets is lacking, which leads to the so-called productivity paradox (Harteis, 2017). Specifically, investment in intangible assets such as “training, new work organization and appropriate management techniques”, is lacking (Harteis, 2017, p. 41). Hence, according to Brynjolfsson and McAfee (2014), an investment in human as well as organizational capital is required. Productivity increase from new technologies that have already been realized, however, have largely not been received by the employees. Instead, employers extracted the benefits of increased productivity as profits, which is visible in the decline of real wages since the 1990s (Autor et al., 1997; Reich, 2010). From an economic and technological perspective, it should be possible for firms to utilize a more flexible approach towards working hours. Digitization is considered to be the largest upheaval since the industrial revolution by some, and thus, it can be argued that it calls for new ways of working and thinking (Digital Enabler, 2019).

Relevance: Two major trends

Recent studies have shown that two major trends dominate most young professionals’ and graduates’ behavior. First, there is a desire to not just work for any company, but to actively change society for the better. The interest of this specific group is strongly going “beyond simply making money” (Ng, Schweitzer, & Lyons, 2010, p. 293). This corporate social responsibility (CSR) aspect is particularly common among millennials, which is defined as the demographic segment of people born between 1985 until around 2000. This demographic group is either already a part of the labor force with around a maximum of 10 years of work experience or is going to graduate soon and thus searching for employment (Greening & Turban, 2000; Holt, et al., 2012; Buchanon, 2010). A prime example is the creation of the job platform ‘GoodJobs’, which can be seen as an alternative to platforms such as LinkedIn, only listing jobs with a positive impact on society and the environment, that meet certain standards (GoodJobs, 2019).

A second trend is an emerging desire for flexible work arrangements among young professionals and graduates (Fondas, 2015; Glaveski, 2018; Matos & Galinsky, 2014). This was interpreted as an individualization and liberalization of Human Resource Management (hereafter ‘HRM’) by De Menzes and Kelliher (2016). Buzzwords such as ‘workplace flexibility’, ‘home-office’ and ‘work-life balance’ have dominated both the academic and the managerial debate in recent years. An increasing amount of companies offer some form of
flexible working arrangements and actively use it in attracting new employees, as they list it prominently in job advertisements, aiming at a differentiation of their firm against competitors. A survey amongst SMEs found that 77 percent of employees see flexible work arrangements as key criteria in job search and 36 percent consider leaving their current employer due to a lack of such practices, which underscores this second trend (Noyes, 2019).

During the 20th century, an employee’s main criteria during job search were job security, proximity and a steady income. Today, the focus of more and more young job seekers is placed on finding an employer that offers them meaningful work (Yang & Guy, 2006), is engaging in ethical, potentially socially-beneficial practices, and is allowing for flexible work arrangements (Twenge, 2006).

1.1. Relevance for SMEs

For small- and medium-sized enterprises (SMEs), the second trend of flexible work arrangements could potentially pose a crucial opportunity in attracting and retaining employees. While at a disadvantage in terms of salary, fringe benefits, training offerings and safety requirements (Storey & Greene, 2010; Forth et al., 2006), SMEs could capitalize on this trend by actively using their inherent flexibility to offer flexible working approaches to potential employees (Kotey, 2017; Thompson & Aspinwall, 2009). It is easier for SMEs to adapt and attempt such a new practice due to their inherent agility and size, which set them apart from large firms (Nootboom, 1994). Further, Heilman et al. (2018) suggest that agile HRM practices may secure long-term profitability and growth of SMEs. It is thus seen that SMEs could attract skilled employees based on agile, flexible HR and working practices. This is in line with Brand’s and Bax’ (2001) Strategic Labor Allocation Process-model (SLAP) for SHRM that places an emphasis on the labor market’s supply and demand dynamics. A working time reduction (henceforth ‘WTR’) would thus be aimed at improving an SME’s position on the labor demand side.

Lack of qualified employees

A lack of qualified employees on the supply side of the labor market is visible in The Netherlands and Germany. The Netherlands has a very low unemployment rate of 3.6 percent and a record high amount of 264,000 vacancies for which they cannot find suitable applicants, indicating a very tight labor market (Centraal Bureau voor de Statistiek, 2019; Vrieselaar & van de Hei, 2017). This substantial lack of qualified employees in many industries and craft-related
businesses also exists in Germany and is called ‘Fachkräftemangel’ (Deutsche Welle, 2017). The main reasons are demographic change and consequently an aging of the workforce, resulting in a lack of young potential employees. A major shortage of skilled labor is expected by 2030, which will heavily affect the German ‘Mittelstand’ (term for SMEs) (The Local, 2017). Potential solutions to overcome this lack of qualified employees include wage increases to improve the attractiveness of entering the relevant industries and worker migration to increase the labor force. Another solution for SMEs might be the attraction and retention of qualified employees by offering reduced working hours and other flexibility benefits (Fondas, 2015).

1.2. Literature Gap

Whereas recent literature has mainly focused on agile HR practices and flexibility in the work space in general (Mas & Pallais, 2017; Gerdenitsch, et al., 2015; Timms, et al., 2014), this research will specifically focus on the concept of WTR. It is thus focused on one specific element from the theme of workplace flexibility as an HR practice. While research on the largely related theme of ‘part-time work’ is developed, specific research in the direction of a working time reduction is lacking. Most studies focus on workplace flexibility practices in general (mentioning WTR as one of many approaches or not mentioning it explicitly). This study thus adds value to the academic debate, as it is the first in-depth study that focuses on the relatively new concept of WTR. While some might argue that part-time work equals WTR, the literature review will show that these are distinct concepts. Several models from practitioners exist that suggest a reduction to, for instance, working 4 days a week (Gurk, 2018), 6 hours a day (Glaveski, 2018) or 5 hours a day (Jacobs L., 2018).

In theory, a large amount of academic literature supports the proposition that employees can reach a similar productivity in less than eight hours (see Case Box 1).

Several authors argue that very demanding job characteristics can lead to stress, absenteeism and high employee turnover (Parkinson & Lancaster, 1965; Sindig, et al., 2014; Latham & Locke, 1975; Fondas, 2015). Increased perceived employer attractiveness and less organizational redundancy, and thus increased efficiency could be further outcomes. Yet scientific studies focusing on the specific aspect of WTR cannot be found and research into models like these is lacking, as the phenomenon is relatively new. It is the aim of this study to shed light upon this aspect and to critically examine under which conditions such a working time reduction is feasible and beneficial for both employers and employees. This study thus
aims at generating new insights into how these reductions could potentially benefit the individual, the SME, and the overall economy.

**CASE of Digital Enabler:** The IT agency ‘Digital Enabler’ started a model with 5 working hours per day with employees working from 8 AM to 1 PM (Jacobs L. , 2018). The underlying rationale of the owner and CEO of the agency is that employees work without any distractions or breaks with their highest efficiency, for 5 hours. Thereafter, they have free-time. In the afternoon, employees were seen to use their free-time for their own benefit. This means for instance to take lunch with their colleagues, socialize, use the afternoon to recover, take long walks in nature, do sports, engage in (culture) associations, read or learn and develop their skills. The owner thus expects a similar output and productivity. Employees finish their work tasks in less hours, while having more free-time for personal development or pursuing personal interests, since they are more efficient and more focused at work. This arrangement has led to increased workplace satisfaction and happiness at Digital Enabler.

**Box 1: CASE of Digital Enabler: Working Time Reduction**

1.3. Managerial interest

A main benefit of WTR could be the higher perceived attractiveness of SMEs as potential employers to employees who place high importance on job characteristics such as flexibility. Also, impact on the individual level could potentially result in higher employee satisfaction, less sick days and higher productivity, which in turn would benefit the firm (Koslowsky, 1998; Dougherty & Cordes, 1993).

1.4. Research Question

To examine the feasibility and potential benefits of WTR, I developed the following research question and sub-research questions: *To what extent is working time reduction a feasible and attractive option for SMEs?*

Sub-research question 1: *What is working time reduction and how is it different from other agile HR practices?*

Sub-research question 2: *What conditions determine the attractiveness & feasibility of WTR in SMEs?*
Sub-research question 3: *What are the positive or negative effects of working time reduction?*

Sub-research question 4: *What do SME managers know about working time reduction and how do they evaluate its attractiveness and feasibility?*

In the literature review, I will tease out a clear conceptualization of the term ‘working time reduction’ to answer the first sub-research question. The remaining sub-research questions will be answered by means of qualitative research.
2. Literature Review

To systematically discuss the concept of ‘working time reduction’ (WTR), I will discuss the larger theme of workplace flexibility. Then, I review existing literature on part-time work. I will define the concept of WTR and elaborate upon it, as well as the underlying mechanisms that enable it. Lastly, its effects on the employee level (individual), the firm-level (micro) and the country level (macro) are discussed. Figures 1, 2 and 3 provide a systematic overview.

2.1. Workplace flexibility

Since the beginning of the 21st century, a variety of different HR practices have emerged due to changes in technology and society (Balliester & Elsheikhi, 2018). Christensen and Schneider (2015, p. 2) argue that the prevailing “one-size-fits-all” workplace is not matching with the current situation anymore. The 20th century largely saw one parent working while the other stayed at home. Nowadays 70 percent of all married households are dual-earners, which is due to declining real wages as well as increased female independence and employment (Binachi, Robinson, & Milkie, 2006). This rise of dual-earners paved the way for the term ‘work-life balance’ which is defined as “the individual perception that work and non-work activities are compatible and promote growth in accordance with an individual’s current life priorities” (Kalliath & Brough, 2008, p. 326).

Some argue that a certain amount of workplace flexibility is required to achieve a reasonable work-life balance (Hill, Hawkins, Ferris, & Weitzman, 2001). Workplace flexibility is broadly defined as “the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks” (Hill, et al., 2008, p. 149). Work place flexibility includes several concepts, such as home-office possibilities, sabbaticals, maternity or paternity leave and part-time working (Kotey, 2017; Thompson & Aspinwall, 2009; Heilmann, et al., 2018). Christensen and Schneider (2015) discuss workplace flexibility broadly, considering the circumstances of the 21st century. They discuss different approaches to workplace flexibility, such as short-term time off for illness or other immediate circumstances, full-time scheduling flexibility for non-traditional schedules, reduced hours, extended time off in case of health conditions or family member needs, or career exit and reentry, for example through a sabbatical leave arrangement. Galinsky et al. (2015) distinguish between flextime and flex-place. Flextime is the practice of giving full-time employees the permission to vary starting and end times. This can be periodic, for instance in case of seasonal work changes, or daily. Compressed work weeks consider that the full-time hours are achieved in four days by working longer hours. Flex-place is the practice of allowing employees to work from another place on an occasional basis,
for instance from home (home-office) or cafés. Part-time work implies working half a day and earning a partial salary (Christensen & Schneider, 2015). Job-sharing is a special form of part-time, since two employees share the responsibilities, salary and work load of one job. Output expectations are thus lower than with a full-time job. WTR is not the same as part-time working, as output expectations are similar to an 8-hour job mainly supported by means of prioritizing, focusing and effective working with a minimal amount of distractions (Glaveski, 2018). Figure 1 provides an overview over these concepts under the larger theme of workplace flexibility.

<table>
<thead>
<tr>
<th>Concept</th>
<th>Details</th>
<th>Working hours</th>
<th>Salary</th>
<th>Output expectation (per employee)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Flextime</td>
<td>Vary start- and end-time</td>
<td>Full-time</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Daily</td>
<td>Daily variation of start- and end-time</td>
<td>Full-time</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Periodic</td>
<td>Periodic variation of start- and end-time, e.g. seasonal</td>
<td>Full-time</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Compressed Work Weeks</td>
<td>Working 4 days with more hours per day</td>
<td>Full-time</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Flex-place</td>
<td>Occasionally working from home or another location</td>
<td>Full-time</td>
<td>Full</td>
<td>Full</td>
</tr>
<tr>
<td>Part-time Work</td>
<td>Working a reduced number of hours</td>
<td>Part-time</td>
<td>Partial</td>
<td>Decreased</td>
</tr>
<tr>
<td>Job Sharing</td>
<td>Two employees share one job in terms of responsibilities, work and salary</td>
<td>Part-time</td>
<td>Partial</td>
<td>Decreased</td>
</tr>
<tr>
<td>Working Time Reduction</td>
<td>Working less than 8 hours with same expected output and salary</td>
<td>Part-time</td>
<td>Full</td>
<td>Full</td>
</tr>
</tbody>
</table>

*Figure 1: Overview of workplace flexibility practices (based on the literature review in section 2.1. and the referenced sources)*

### 2.2. Part-time work

Based on the analysis and Figure 1, it is visible that a WTR is similar to part-time work in terms of hours worked. Part-time work is a concept that has already been studied extensively in HRM literature. Major reasons for part-time work include family life awareness, personal and job demands (Reynolds, 2005). Part-time workers thus work reduced hours to fulfil other commitments, especially on the family side. Hutchens and Nolen (2015) underscore the family-friendliness of part-time working possibilities, which implies that same holds for a WTR. There are two origins of part-time work. First, it can be the result of individuals having to balance domestic commitments and work, thus reducing hours and downgrading pay (Garnero, Kampelmann, & Rycx, 2014). Second, it can be a result of collective negotiations for a reduction of hours and better training, hence, not affecting hourly pay.
**Costs**

One major difference between part-time work and full-time work is the cost dimension. Fixed costs related to employing an employee do not change proportionally if the employee is working part- or full-time (Montgomery, 1988). For instance, recruitment, managing, coordination and administrative costs do not change to a great extent between these employment forms, resulting in lower wages for part-time workers (Lewis S., 2001). In order to compensate for these relatively high fixed costs, employers often pay lower hourly wages to part-time employees.

**Productivity**

In general, authors argue that part-time workers are relatively more productive than full-time employees. This is confirmed in empirical studies of Conesa and Kehoe (2017) and Künn-Nelen, De Grip and Fourage (2013). The literature proposes different causes for this higher productivity.

First, there is a better cognitive functioning. Kajitani et al. (2016, p. 2) found “a non-linearity in the effect of working hours on cognitive functioning”, which implies that attention span, effective productivity and overall cognitive ability significantly decrease after working more than 25 hours per week.

Second, part-time workers are seen to effectively prioritize their work, doing the most impactful and important tasks first (Hansen, 2018). Many authors have used the phrase ‘work smarter, not harder’ for such behavior.

Third, because part-time workers have fewer working hours, they are generally less tired, experience less stress and thus they perform at a higher capability (Brewster, Hegewisch, & Mayne, 1994).

Fourth, when shifting from full-time to part-time, output expectations are often not adjusted properly, resulting in a relatively higher workload (Lewis S., 2001; Edwards & Robinson, 2000) and a higher productivity per hour.

On the other hand, there are also arguments that productivity may be lower in part-time workers. First, it was found that human capital of part-time employees is lower, as investments in training are more risky and less useful for firms (Felstead, Ashton, & Green, 2000), resulting from lower employment commitment (Branine, 1999). Thus, employee’s skills may stagnate, resulting in a lower productivity.
Second, job involvement was seen to be lower for part-time employees. This results in lower commitment and productivity (Thorsteinson, 2010).

Third, part-time workers are seen to have less skills, as they accumulate less human capital and experience. This results in lower productivity and ultimately wages. Hirsch (2004) calls this phenomenon the ‘part-time penalty’.

**Institutional factors**

Part-time employees often receive non-proportionally lower wages than full-time employees. Next to fixed costs, institutional factors were found to influence the wage gap between full-time and part-time employees. First, bargaining power is lower for part-time employees, partially resulting from lower union membership rates amongst part-timers (Riley, 1997). Further, the tax structure in many high-income countries does not favor part-time workers, which decreases their net salary (Garnero, Kampelmann, & Rycx, 2014).

Moreover, firm’s decision-making structures are often biased towards full-time employees and men, as these account for the majority of the labor force (Garnero, Kampelmann, & Rycx, 2014). Hence, part-time employees, who are often female, are somewhat neglected and treated as less important. Therefore, part-time employees receive less attention, less promotions and lower wages.

**Summary**

The fixed costs for part-time employees as well as institutional factors result in lower wages for part-time workers. The argument for productivity is divided, as productivity per hour is higher based on better cognitive functioning, effective prioritization, lower tiredness and a not-fully-adjusted workload. Especially the latter demonstrates that employees can actually perform more in less time, if it is required from them. Yet, productivity is lower, if human capital, job involvement and skills are not promoted.

Based on this analysis, I deduce that employees who shift from full-time to part-time work can reach a higher productivity per hour, if investments in training and skills, human capital and job involvement are made.

**2.3. Working time reduction**

WTR is defined as a time decrease of total hours spent on the workplace (Hörning, Gerhardt, & Michailow, 2018). I expand on this definition and adopt an approach where WTR
implies that employees decrease the number of hours spent on the workplace but are paid the full salary while achieving a full output in terms of productivity and workload. Similar to the shift from full-time to part-time work, WTR will thus most likely result in higher productivity per hour. When shifting from 40 hours per week to, for instance, 25, a higher productivity per hour might be reached, as output expectations are not decreased, but remain the same. This is mainly realized by eliminating interruptions and distractions, working more efficiently and decreasing social interactions at work (for a discussion of social interactions turn to page 20).

I do not place specific research focus on the exact number of hours or days that employees should work per day or week, but rather, I investigate the potential benefits and disadvantages this WTR could pose.

A WTR implies a shift of focus from ‘clock-time’ or otherwise known as ‘chair time’, being the time spent on the workplace, to ‘task-time’, which is time spent working on a specific task (Blyton, Hassard, Hill, & Starkey, 2017) or ‘effective working time’. Hence, a cognitive shift in management and the way work is assessed, takes place.

2.4. Theoretical mechanisms of WTR

Workload adjustment

Marks (1977) found that employees tend to spread their energy over their full work day, as they know that they have to be (or appear) productive over the course of the full working day, thus 8 hours or more. Parkinson’s Law confirms these findings, as it states “that work expands so as to fill the time available for its completion” (Parkinson & Lancaster, 1965, p. 1). Both, a replication study (Latham & Locke, 1975) and an experiment (Bryan & Locke, 1967) found strong evidence for Parkinson’s Law. Hence, due to a lack of direct control and accountability, as well as a lack of incentives, employees might often need more time for specific tasks than what would actually be necessary for its completion (Glaveski, 2018).

The connection of the theory above regarding employee’s energy saving and spreading (Marks, 1977), and Parkinson’s Law can thus explain employee behavior: from 8 hours of paid working time often only around 5 to 6 hours are worked efficiently, while the rest of the time is spent engaging in office politics and rumors, unnecessary long meetings, private mobile phone usage, smoking and frequent kitchen or printer trips (see Case). When combining these findings with Lewis’ (2001) theory about part-time work productivity, the concept of ‘workload adjustment’ emerges.
CASE of Digital Enabler:
At Digital Enabler, employees strictly have to focus on their work, without looking at their phone, often using headphones to not be distracted. Meetings may only take a maximum of 15 minutes, forcing the attendants to be prepared, on time and decreasing the number of attendees to a minimum requirement (Jacobs L., 2018). Employees would thus come to work 10 minutes early or take lunch after work to engage in non-work-related talks and chit-chat. These practices helped then firm in implementing WTR. Employees now work five instead of 8 hours per day.

Box 2: CASE of Digital Enabler: Practices to achieve a working time reduction

Focused attention
According to psychologist Adam Grant as cited by Glaveski (2018, p. 2) “people waste a lot of time at work,” and “would get more done in six focused hours than eight unfocused hours.” This statement builds on the concept of flow, which was defined by Csikszentmihalyi (1990, p. 277) as “a subjective psychological state that occurs when one is totally involved in an activity and feels simultaneously cognitively efficient, motivated and happy”. This is also called ‘deep work’ by Newport (2016). The employee fully immerses into the work task and pays full attention to it. As a result, it is understood that an approach towards WTR could potentially be realized by using the concept of flow with its focused attention, combined with Kajitani et al. ’s (2006) findings on cognitive functioning. Thereby, an individual’s energy and focus are more efficiently channeled. These concepts together lead to a ‘focused attention’ and thus build one strategic aspect of the model (cf. Figure 2).

Strategic smart working
WTR is a simple mechanism that is powerful, since it practically ‘forces’ employees to strategically think about how they approach their work (Glaveski, 2018). When having a shorter time available for completion of the same amount of work, employees need to effectively prioritize, cut, automate and outsource their tasks. The prioritization aspect builds upon Pareto’s principle, which implies that often around 80% of an outcome is derived from 20% of its causes (Pareto, 1896). The principle has seen wide applications across fields like computer science, business, wealth distribution, taxation and sports. Firms for instance often derive 80% of sales from 20% of their clients (Marshall, 2013). For time management, it implies that employees should focus on the tasks that add the most value to prioritize them accordingly, while
simultaneously cutting or automating tasks that are not adding significant value to business processes. This can be named ‘strategic smart working’ and creates one strategic aspect of the model (cf. Figure 2).

The same principle is seen in part-time work, especially when employees shift from full-time to part-time jobs. Usually, output expectations are not proportionally decreased. The employee is forced to focus more and become more productive per hour (Lewis S., 2001; Edwards & Robinson, 2000). Employees working under a WTR scheme thus have to focus more on their work tasks. This could have negative effects on the employee as strains and stress could be higher (Sindig, Waldstrøm, Krietner, & Kinicki, 2014). Employees thus need to be capable of working with focused attention under a WTR. Training and coaching are measures that aid this process.

**Setting for a WTR**

The type of work and its settings need to be taken into account as well. Not every employee can simply work more efficiently with less distractions. Especially economies shifting from an industry-based to a knowledge-based society experience a significant amount of worker heterogeneity, where abilities of employees as well as the nature of their job tasks differ greatly (Pinto, 2016). This implies that firms with few knowledge-based jobs, but with a large amount of industry- or primary-sector jobs, are less likely to implement a WTR.

Further, it is crucial to distinguish between jobs that are designed with an output expectation and jobs designed with a presence expectation (Sindig, Waldstrøm, Krietner, & Kinicki, 2014). Security guards or bus drivers cannot increase their productivity due to the inherent nature of the job and thus, cannot decrease working hours while maintaining a similar output. Office workers, on the other hand, are usually individually able to adjust the speed of their work, if the input of work tasks is not restricted or dependent on other processes. Stemming from operations management literature, a bottleneck is defined as the task with the lowest capacity in a process, which limits the productivity of following processes (Jacobs & Chase, 2013). Hence, an employee’s task input should not be dependent on previous tasks to be able to reduce working hours.

The concepts of focused attention and strategic smart working enable a successful working time reduction, if it takes place in the identified setting. Stemming from the part-time literature, workload adjustments and the facilitating factors were identified. Figure 2 provides a comprehensive overview over the underlying process of a WTR.
2.5. Effects on the individual level (employee)

This section discusses the potential effects of WTR on the individual level.

* Factors that were identified in the analysis of part-time work

Figure 2: Overview of the underlying reasons of WTR
Health and stress

The academic literature has not reached a consensus regarding WTR’s impact on employee’s stress level. On the one hand, it is argued that WTR could lead to a reduction of stress and potentially burnout of employees (Dougherty & Cordes, 1993), since employees have more free-time and work more efficiently during their workday. Koslowsky (1998) argued that this decrease of stress could also lead to a decreased rate of absenteeism, which implies less sickness and a higher actual productivity of the employee. However, other factors affect the perceived stress level as well, such as extra-organizational factors, job task demands and technology (Sinding et al. 2014). Further, it is argued that more free-time and less chair-time could lead to the individual employee being more physically active (Eichberg, 2009), thereby decreasing stress and improving personal health. Company sport groups and offerings could increase this impact. Furthermore, it was found that employee satisfaction could increase due to reduced working time (Koslowsky, 1998). This is based on the fact that currently employees face a lot of overtime and stress at work (Wagner, 2017). Another health issue is burn-out. It is a common problem amongst office employees, which results from overworking oneself or monotonous tasks (Freudenberg, 1974). A WTR might be able to lower the risk of a burn-out, as employees are simply not allowed to work a large number of hours on a regular basis. However, a potential negative effects of WTR could be that employees are stressed by the mere fact that they have to fit the same amount of work in less hours. Hence, WTR calls for an organizational design and management that allocates a reasonable and attainable amount of work to employees in the first place (Barnwell & Robbins, 2006).

Motivation

Furthermore, psychology literature about motivation has shown that employees are motivated extrinsically by rewards, as for instance salary, promotions and other benefits, or intrinsically by the task and its meaning itself as well as the internal self-concept, which centers around values and ideals (Barbuto & Scholl, 1998). One can argue that employees could see reduced working hours due to WTR as an extrinsic motivation, as it is a kind of reward to finish work earlier and have more free-time. Further, the employee could see it as intrinsic, as it allows him or her to engage in meaningful other activities besides work, such as voluntary work. It can be argued that employee motivation could increase as a result of WTR.
Social interactions

However, the aspect of WTR might place large strains on employees, as social interaction times are heavily reduced. The concept of WTR aims at decreasing so-called ‘chit-chat’, rumor spreading, office politics and other forms of non-work-related conversations. This decrease is an essential part of being able to significantly decreasing working hours (Grant & Parker, 2009). Yet, it was found that social relationships are crucial for humans and their health (House, Landis, & Umberson, 1988) and helps employees to achieve goals and perform tasks successfully in the organization (Bourdieu, 1986). Social networks allow the forming of social capital, which is defined as “the ability of actors to extract benefits from their social structures, networks and relationships” (Davidsson & Honig, 2003, p. 307). It is a basis for trust and cooperation. Under WTR, it might be possible that employees feel less connected with their colleagues and lack the ability to use their social capital. A potential way to maintain social capital is a practice of taking lunch together or spending free-time with colleagues (see Case).

CASE of Digital Enabler: One way to counter this potential lack of social ties is organizing frequent in-official events or encourage employees to take lunch together or jointly do other free-time activities. It is interesting to note that the employees of Digital Enabler started to meet ten minutes prior to work, take lunch together or met in private, once the shift towards the WTR was executed.

Box 3: CASE of Digital Enabler: Social interactions

2.6. Effects on the micro-level (SME)

This section discusses the theoretical effects of WTR on the micro-level.

Performance increases due to improved employee well-being

An increase in employee satisfaction, health and motivation is beneficial for the firm, as SMEs are often human resource-intensive businesses (Storey & Greene, 2010). Relying strongly on their employees, SMEs benefit from their labor force being happier, healthier and more motivated. Large firms on the other hand cannot realize scale advantages in human-resource intensive fields, which is why SMEs can compete with them in knowledge-intensive industries (Nooteboom, 1994). A sustained competitive advantage, as posited by Barney (1991), for SMEs could thus stem from a better labor force, when operating in these industries.
Company attractiveness improvements

Also, when implementing a WTR, perceived company attractiveness could increase, leading to attracting and retaining more human talent (Fondas, 2015). When placing job advertisements and positioning themselves for recruiting, firms tend to stress non-pecuniary benefits more and more, mentioning, for instance, flexible working approaches. This expected increase in employer attractiveness is hence in line with Nooteboom’s (1994) suggestion that an SME should focus on human capital. In the last decade, employer branding was developed as a further strategic tool of positioning a company and presenting it in a beneficial light to potential employees (Barrow & Mosley, 2005; Martin, 2008). Capitalizing on the trend of work flexibility amongst young professionals and graduates, it is understood that effective employer branding with direction towards WTR could result in a higher perceived attractiveness. This could also counter the trend of a lack of qualified employees (as mentioned in the introduction).

Organizational change effects

Furthermore, WTR causes organizational change. This is typically difficult to implement, as individuals are reluctant to change (Lewin, 1947). WTR has a disruptive nature, as it heavily changes employees working behavior and habits. It becomes necessary to measure the output of employees more. Relying on the fact that an employee spent a certain number of hours at the work place is not necessary anymore. Instead, job design and capacity of every employee need to be considered and adjusted (Sindig, Waldstrøm, Krietner, & Kinicki, 2014).

Organizational slack implications

Resources are crucial for an organization’s growth and success (Barney, 1991). Human resources are one of these critical resources. There can either be resource constraints or resource slack. The former might pose organizational strains on the firm, however, could also foster creativity and efficiency (Hoegl, Gibbert, & Mazursky, 2008). The latter allows firms to quickly adjust to changes and innovate, yet also relaxes internal controls (Agarwal, Sarkar, & Echambadi, 2002). Hence, an optimal level of organizational slack is required, since it takes an inverted u-shape relationship with firm performance (Bradley, Wiklund, & Shepherd, 2011).

When implementing a WTR, the time-related availability of human resources is decreased. Mixed findings are thus to be expected, as employees need to prioritize and become more productive, while the firm is less able to quickly adapt to changes and immediate needs.
Power and implementation of WTR

An increase in organizational layers resulting from changes in the organizational structure, for instance from a simple hierarchy to a machine bureaucracy with wider vertical and horizontal differentiation, results in more spans of control (Mintzberg, 1983). This results in an increase of standardization and formalization, which can, for instance, be seen in a standardized working time practice, implying that employees have to arrive and leave the office at the same given time (Barnwell & Robbins, 2006). The power-control view states that a firm will always take a structure and hierarchy so that those in power can control and sustain their position. Hence, it is common that firms monitor, control and measure their employees and their performance based on the hours spent at the work place, rather than by measuring their output and the actual time taken for a specific task. Since larger firms tend to have inflated organizational structures, they tend to use this practice.

SMEs, however, tend to be characterized by a smaller size and more direct accountability and control, deploying a simpler hierarchical structure (Storey & Greene, 2010). The core characteristics of an SME are crucial, as Noteboom (1994) argues that SMEs are defined by small scale, personality and independence. Especially the personality aspect can be related to the HR dimension. Due to more direct contact between the employee and the manager / owner, a closer relationship can be maintained, resulting in more trust and less formality (Storey et al., 2010). Therefore, I develop the argument that SMEs could implement a WTR more easily and more effectively due to their structure.

2.7. Effects on the macro-level

After thoroughly analyzing the individual- and micro-level, the focus is now laid upon the macro-level.

Degrowth

This aspect will be viewed in light of the greater theme of ‘degrowth’ (Kallis, 2011). This emerging literature stream argues that since resources on the planet are finite, infinite economic growth-based systems such as consumer capitalism should be abandoned or significantly adapted. Other terms in that stream are ‘circular economy’ or ‘cradle to cradle’. It implies that growth, currently at the heart of the economy, is not the ultimate goal anymore. Economic growth has continuously increased living standards of people. Yet, from this perspective, it is argued that since resources are limited and the world population is growing rapidly, a change in the economic systems is required. An example for the exorbitant use of
resources is the Earth Overshoot Day, which is on the 2\textsuperscript{nd} of August for 2019, while it was on the 7\textsuperscript{th} of December in 1990 (Earth Overshoot Day, 2019). This concept calculates when more resources are used than the planet is able to renew in the same year. Another example is the report from the Intergovernmental Panel on Climate Change (2018) which stressed the importance to reduce Co2-emissions by two third by 2050.

**Consumption behavior**

WTR does not aim at solving the issue with a growth-centered economy directly, since the same output is expected from employees and the direct effect is less, but more efficient working hours. Yet, indirect benefits are considered, mainly in the area of consumption. Researchers argue that WTR would lead to individuals being able to spend their newly-won free-time in a way that allows them to consume less and live more sustainable (Kallis, Kerschner, & Martinez-Alier, 2012). The underlying rationale is that individuals who work 40 or more hours a week are too tired and exhausted after a full day of working. When they arrive at their home after work, free-time is more valuable and thus not ‘wasted’ in for instance repairing things. A clear craving for consumption to balance out the stress and strains felt from working the whole day is identified (Jackson, 2009). It is economically more rational to purchase something new, since the own free-time is valued higher. This is in line with the economic theory of specialization, which is based on the theory of comparative advantage (Ricardo, 1891).

**Use of newly-won free-time**

However, when working fewer hours, individuals might search for a meaningful use of their newly-won free-time. They might become active and use their free-time for their own benefit, thereby recovering from their work (Paech, 2012). Individuals could grow their own crops, repair items before throwing them away, care more for each other, relax more actively and achieve life-long learning (Jackson, 2009). Also, individuals might be able to cycle or walk to and from work. Time benefits are often an argument for commuting by car. Yet, when individuals have a far larger amount of free-time due to WTR, they might use this time to sometimes commute to work by bike or by walking. These potential benefits resulting from a WTR would contribute towards a more sustainable lifestyle, since less resources are used and individuals have more time to repair, reuse and recycle items themselves. Also, individuals are able to use their newly-won free-time in a meaningful way, for instance by engaging in
voluntary work or taking care of the elderly. Paech (2012) calls this craft, culture and care. This benefits society as a whole.

I acknowledge that this is against the theory of specialization. Based on standard economic exchange theory, it would economically make most sense to fully specialize one’s activities and purchase all required products and services through the market (Coase, 1984). However, the aspect of WTR in the field of ‘de-growth’ argues for a voluntary de-specialization, as maximization of financial utility is not at the core of an individual’s behavior anymore. Instead, utility can and will be derived from both monetary and non-monetary rewards. This is in line with the previously mentioned potentially increased satisfaction of employees who have more free-time, as this is a non-monetary reward. Furthermore, health care costs could decrease, as people are sick less often and live more actively. This affects society as a whole in a positive way, as health care systems are less strained.

Social inequality

However, a disadvantage on the macro level could be a social inequality in terms of working hours between output workers that work reduced hours and other workers, who are paid for their presence. Social inequality implies that resources are unevenly distributed along certain patterns (Wade, 2014). It is understood that jobs that require less knowledge and education, such as security guard, taxi driver or supermarket cashier would have to work 40 hours, since their presence is paid. On the other hand, data analysts, marketers and sales executives would be able to work 25 hours a week, given that WTR is successfully implemented. This could lead to a divide between output workers and presence workers, as the former have significantly more free-time. This would imply that WTR would be a major success and see an economy-wide implementation. Further, flexible working arrangements, part-time working, home office have become normal and are thus generally more accepted.

Figure 3 below provides a systematic overview of these findings.
### Theorized Effect

<table>
<thead>
<tr>
<th><strong>Individual level</strong></th>
<th><strong>Firm level</strong></th>
<th><strong>Macro level</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>+ Reduction of stress resulting from long hours (Dougherty &amp; Cordes, 1993)</td>
<td>+ performance increase (Storey &amp; Greene, 2010; Noteboom, 1994)</td>
<td>+ higher sustainability due to less resource use (Kallis et al., 2012)</td>
</tr>
<tr>
<td>+ decreased burnout (Freudenberg, 1974)</td>
<td>+ decreased absenteeism of employees (Kowslowsky, 1998)</td>
<td>+ increased sense of caring in the society (Jackson, 2009)</td>
</tr>
<tr>
<td>+ higher productivity (Koslosky, 1998; Conesa &amp; Kehoe, 2017)</td>
<td>+ increased employer attractiveness (Fondas, 2015)</td>
<td>+ more time for life-long learning (Jackson, 2009)</td>
</tr>
<tr>
<td>+ more physical activity (Eichberg, 2009)</td>
<td>+ fitting with trend for young professionals (Fondas, 2015; Matos &amp; Galinksy, 2014)</td>
<td>+ more voluntary work &amp; associations (Paech, 2012)</td>
</tr>
<tr>
<td>+ increased work satisfaction (Koslosky, 1998; Wagner, 2017)</td>
<td>+ increased motivation (Barbuto &amp; Scholl, 1998)</td>
<td>+ more active individuals (Eichberg, 2009): less health care costs</td>
</tr>
<tr>
<td>+ increased motivation (Barbuto &amp; Scholl, 1998)</td>
<td>- higher stress due to more demands in terms of concentration (Barnwell &amp; Robbins, 2006)</td>
<td>- potential social inequalities between presence and output workers: fairness perception (Wade, 2014)</td>
</tr>
<tr>
<td>- higher stress due to more demands in terms of concentration (Barnwell &amp; Robbins, 2006)</td>
<td>- need for organizational change (Lewin, 1947)</td>
<td>-</td>
</tr>
<tr>
<td>- potentially less social contact time and interactions at work (social capital theory) (Grant &amp; Parker, 2009; House, Landis &amp; Umberson, 1988)</td>
<td>- decrease in organizational slack (Agarwal, Sarkar &amp; Echambadi, 2002)</td>
<td>-</td>
</tr>
</tbody>
</table>

**Figure 3: Theorized impact of a WTR on individual, firm and macro level**
3. Methodology

In this study, I aim at investigating the aspect of WTR by means of qualitative research. The research question is phrased very broadly on intent, as this study can be considered more to be an exploratory study approach, since research in this field is significantly underdeveloped (Yin, 2009). A qualitative approach is thus appropriate (Denzin & Lincoln, 1994). Since the phenomenon under study is not quantifiable or amenable to statistical analysis at these very early stages of research, qualitative research is adequate (Strauss & Corbin, 1998). The approach allows for a nuanced and in-depth examination of WTR. Qualitative research aims to “study things in their natural setting, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2000, p. 3), which is particularly important when studying how employees and employers understand and judge WTR.

Qualitative research can have several functions in social research. It can be contextual (providing a description of existing phenomena or things), explanatory (explaining reasons for existing phenomena or things), evaluative (considering how effective something is) and explorative or generative (developing strategies, theories or directions) (Ritchie, 2013). Since WTR is to date only implemented in very few companies and the focus of this study is the feasibility and attractiveness for SMEs, this study can be considered to be of explorative and generative nature. It is aimed at elucidating new strategies, theories or directions that can aid in evaluating WTR.

Sub-research question 1 was answered by help of a literature review, as WTR is a concept that can be clearly defined. The remaining sub-research questions were aimed to be answered by means of qualitative research.

3.1. Data Collection

I conducted eight semi-structured in-depth interviews with an average length of 45 minutes to collect data. In-depth interviews are a suitable way to discover meaning, crucial insights and a deep understanding of a topic (Rynes & Gephart, 2004). It is argued that the power of language is much larger than the power of numbers, as the “feature of language is its capacity to present descriptions, explanations, and evaluations” (Hammersley & Atkinson, 1995, p. 126). In this case, quantitative research might only have scratched on the surface of the deeper and necessarily subjective perception of WTR among employees and employers (Legard, Keegan, & Ward, 2013).
I deployed convenience sampling, which is defined as when “the researcher chooses the sample according to ease of access” (Ritchie, Lewis, & Elam, 2013, p. 83). It is argued that this is the most common form of sampling in qualitative research. I chose this approach due to resource and access constraints. Stemming from previous contacts with SMEs, I experienced that direct contact with a firm without previous interaction, such as ‘cold-calling’ or ‘cold-emailing’, has a very low likelihood of success. This directly relates to social network theory, as previous contact to a firm establishes trust and knowledge (Davidsson & Honig, 2003). These in turn are crucial when talking about sensitive, internal company details. Also, based on the resource limitations that characterize SMEs (Nooteboom, 1994), they often deny interview requests, since the owner / manager’s time and attention is limited. Therefore, I decided to build a sample of firms which I knew personally or were referred to me.

**Interview Approach and Questions**

Reconsidering the research question “To what extent is working time reduction a feasible and attractive option for SMEs?” and the four sub-research questions, I developed 20 open questions. I based these on findings from the literature review and theory. Further, I asked probing questions, where necessary, to build a deeper understanding.

I asked three blocks of questions, first concerning the SME, second regarding employment as well as recruiting, and lastly regarding working time. Specifically, I considered the feasibility and attractiveness of WTR. Also, I questioned regarding the interviewee’s awareness of WTR. Appendix A demonstrates how the interview questions were derived. Appendix B provides a comprehensive overview of the interview guide.

In line with the main focus of this research, the interviewees were managers or owners of SMEs. I considered interviewing employees of the SMEs as well. However, the reliability of such answers is highly questionable since effective measures for anonymizing responses were difficult to implement. In some cases, it might even have been the case that the CEO would have wanted to join the interview and directly hear the respondent’s questions. Hence, based on the theme studied, I decided that interviewing employees was not viable at this stage.

I conducted the interviews until theoretical saturation was reached, which is the situation when no further concepts or links are found from analyzing the data (Strauss & Corbin, 1990). I held the interviews both in English and German. Hence, a translation bias has to be noted as a limitation, which stems from the nature of the study. A translation bias results from cross-cultural research in multiple languages, when linguistic equivalence cannot always be reached (Peña, 2007). An example that I found during the process of translating the questions was the
term ‘performance’ as used in the term firm performance. While the English term ‘performance’ does not clearly imply a financial dimension, a German equivalent that has a similar broad range of meaning is difficult to find. Kaplan and Norton’s (1992) balanced scorecard for instance measures performance along four distinct dimensions, which shows that performance is not only understood in financial terms. Hence, it is important that a German phrasing was used which is not clearly identifiable as both financial and non-financial and thus is largely dependent on the respondent’s perceptions.

Sample Description

Figure 4 provides an overview of the interviewees and the respective firm. I present a diverse range of industries in which the SMEs operate. Diversity in the sample increase the findings’ generalizability. This is described as heterogeneous sampling, in which respondents vary from each other (Holloway & Wheeler, 1996). Further, I mention the title of the interviewee in order to show that the respondent was a legitimate interview partner who is actually in a position where he or she has the power to assess employee behavior, recruiting challenges and potentially implement a WTR. Also, the firm size in terms of number of employees is shown in order to establish whether the firms actually are SMEs. For this research, I utilized the SME definition of the European Commission (European Commission, 2019). Specifically, I used the staff headcount dimensions, since information on turnover or balance sheet total were not disclosed by all interview respondents. A firm is considered to be small if staff headcount is between 10 and 49, while a firm is considered to be medium if staff headcount is between 50 and 249. I do not distinguish between small and medium but use ‘SME’ as a grouping term. I also added the location, which shows that the sample is located in different regions. Lastly, I asked for firm age, in order to see whether newer firms might differ in their responses.

It is crucial to note that all SMEs do not have a WTR in place, as the phenomenon is relatively new and only implement in very few firms so far. The supplementary document includes the transcripts of the interviews.
3.2. Data Analysis

I analyzed the data gathered from the interviews by means of coding, deploying the program Atlas.ti. This computer-assisted way of organizing and structuring the data allows for a more efficient way of data analysis (Coffey & Atkinson, 1996). It is not to be understood as a substitute of intellectual analysis, but rather as an assisting tool.

Flick’s (2009) circular model of qualitative research explains this data analysis process. Preliminary assumptions (a-priori), as developed in the literature review section, are the starting point. The collected data is then coded and interviews are compared with each other (Flick, 2009). Thereby, the a-priori hypothetical factors are tested, but also new, unknown factors are discovered. Inductive and deductive thinking are thus used in a combined way.

I used standard coding procedure, as in open coding (1), followed by axial coding (2) followed by selective coding (3) (Wolfsinkel, Furtmueller, & Wilderom, 2013). Open coding (1) is the first procedure and implies that in the process of data fragmentation different segments are established by assigning codes and then ordering and grouping them (Strauss A. L., 1987). Hence, categories of codes that are related are found. Axial coding (2) follows, which is the
process of relating the found codes or categories to each other. Thereafter, selective coding (3) is used to identify the most important categories. After achieving theoretical saturation, a storyline connecting the categories is built, which then results in a theory in form of, for instance, a framework, a conceptual model or several hypotheses. Open coding (1) is related to data management, selective coding (2) is used for description and sorting, whereas axial coding (3) is explanatory. One can say that the coding process allows for raw data to be labelled, sorted and summarized (Spencer, Ritchie, & O'Connor, 2013). Then, typologies can be established, and patterns detected, before an explanation can be deduced. The supplementary document provides overview of the coding results.

3.3. Reliability and Validity

I critically assessed reliability and validity of my research before analyzing. Reliability implies that a study’s findings are replicable (Lewis & Ritchie, 2013). By using the standard qualitative research measures of data collection by interviewing and text analysis by means of coding, a procedural reliability is maintained. I deployed means such as a transparent research process and methodology (cf. the detailed sections ‘Data Collection’ and ‘Data Analysis’), the recording of interviews, using standardized procedures (cf. Appendix A: same interview questions used for all interviews and the same codes for all interviews during coding) and pretesting interviews as well as interviewer training, which significantly aided in ensuring reliability (Lewis & Ritchie, 2013).

Validity implies that findings from a study are correct and precise. It is separated into internal validity, which is whether the research design fits the research question or direction (Arksey & Knight, 1999), and into external validity, which is whether the findings are applicable to other settings or groups (Lincoln & Guba, 1985). Regarding internal validity, I ensured that the interview questions covered the different aspects of the research question (Arksey & Knight, 1999). Moreover, I ensured that credible interviewees were found by selecting CEOs or high-level executives who were actually in the position to evaluate the situation in their firm. By ensuring that respondents worked for SMEs which were active in different industries (cf. Figure 4), I ensured that generalizability would not be limited to specific industries, increasing external validity (Lincoln & Guba, 1985).
4. Results

This section presents the results of the research process, which were found after coding and analyzing the data. The following sections provide insights regarding recent trends, current working hours in the SMEs, attractiveness and feasibility of WTR and its potential effects.

4.1. Recent trends

Interviewees saw productivity increases and a reduction in the amount of work due to digitization: “Due to digitization, we see that many jobs that were done by people will be done by machines. For instance, receipt filing. Before, we had wall with a lot of physical files. Now, these are scanned and filed automatically in a digital program” (Interviewee 7). This matched the starting point of the argument of this study.

Further, workplace flexibility as a crucial aspect in job search was seen. Several interviewees mentioned that they highlight it as one of the benefits they offer to potential recruits, which matches the theory. When asked about current workplace offerings, some interviewees mentioned several workplace flexibility offerings of their firm, while some stressed that they identified the need for it and will have to implement more flexible models: “For the future, we need to consider this: [...] We need to change our structure in certain areas to some extent” (I3). Figure 5 depicts the current offerings in the SMEs.

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Industry</th>
<th>Standard Flexitime</th>
<th>Daily</th>
<th>Periodic</th>
<th>Compressed work weeks</th>
<th>Flexplace</th>
<th>Part-time work</th>
<th>Job sharing</th>
<th>WTR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Online Marketing</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Newspaper and Printing</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Mineral Oil, Hotel, Gas stations, Waste disposal</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Construction steel wholesale</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>Cattle breeding and marketing</td>
<td>(Yes)*</td>
<td>(Yes)*</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Ship Owning</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td>-</td>
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<tr>
<td>7</td>
<td>Textiles</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>Yes</td>
<td>(Yes)*</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Agriculture Supplies</td>
<td>Yes</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>(Yes)*</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

* This is practice in some departments, but not throughout the whole firm

Figure 5: Overview of workplace flexibility offerings
Although the offerings differed significantly, from having nearly none to offering nearly all known flexibility offerings, interviewees asserted that firm attractiveness would increase by offering it. One interviewee stated that “It could become a serious competitive advantage on the human resource side” (I3). This matched with the theorized effect.

Furthermore, a clear lack of qualified employees was identified. A first reason for this was demographic change, as one interviewee (I3) exemplarily stated: “The demographic change is a problem. For instance, the truck drivers are all older than 40. Several will go into retirement in some years and there is a huge lack of employees.” The second reason noted by interviewees was “full employment in Germany” (I2), resulting in “less people who are searching for a job or are jobless” (I4). This again matched with the expectations.

Interestingly, firms with more workplace flexibility offerings in this study stated that they had less problems with finding employees. Most interviewees said that they have the issue on their agenda and want to offer more in the future to become more attractive. Instead of increasing salary, they understood the importance of workplace flexibility offerings and the increased employer attractiveness resulting from it. Further, it appears that the age of the management team has an effect on the overall innovativeness on the HR level and thus, the workplace flexibility offerings. More specifically, the firms with younger CEOs had more offerings.

4.2. Current working hours

Before investigating WTR, the current working hours and practices were established. While one SME demanded their employees to work from 8:00 to 17:00 without any flexibility, one SME relied on its employees working any time between 7:00 and 20:00, as long as departments were adequately staffed at all times, which was seen as the other side of the spectrum.

The interviews revealed that all managers were aware of time loss at work and thus the discrepancy between chair time and effective working time. One interviewee stated: “I believe the effectiveness used to be higher in the old days. People are nowadays heavily distracted by their smart phones” (I3). For some, this question started a thinking process and raised awareness of the topic, while some were aware and could answer directly. Figure 6 below provides an overview of working hour practices in the SMEs and the estimate of effective working time. Two interviewees did not give an estimate.
<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Industry</th>
<th>Weekly working hours</th>
<th>Daily working hours</th>
<th>Daily effective working hours (estimate / opinion)</th>
<th>Time Tracking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Online Marketing</td>
<td>37,5</td>
<td>7,5</td>
<td>IT: 7,5</td>
<td>6,5-7</td>
</tr>
<tr>
<td>2</td>
<td>Newspaper and Printing</td>
<td>40</td>
<td>8</td>
<td>5-5,5</td>
<td>5-5,5</td>
</tr>
<tr>
<td>3</td>
<td>Mineral Oil, Hotel, Gas stations, Waste disposal</td>
<td>40</td>
<td>8</td>
<td>-</td>
<td>Lower, ca. 6-7</td>
</tr>
</tbody>
</table>
| 4           | Construction steel wholesale | 40-42,5             | 8 – 8,5             | Field workers: Summer: ca. 7,5 Winter: ca. 6     | Field workers: Check clock
              |                       |                     |                                                  | Others: none  |
| 5           | Cattle breeding and marketing | 40                  | 8                  | -*                                                | -*            |
| 6           | Ship Owning | 40                  | 8                  | -*                                                | -*            |
| 7           | Textiles | 40                  | 8                  | Warehouse workers: 7,5                            | Lower, around 7 |
| 8           | Agriculture Supplies | 40                  | 8                  | Field workers: 6,8                               | 6,8           |

*Interviewees did not give an estimate (not able / not willing)

**Figure 6: Overview of working hours practice of sample SMEs**

This table shows that CEOs and managers estimate that jobs with a fixed input or those which create a bottleneck, such as the IT employees in firm 1, or the warehouse employees in firm 7, can reach nearly full productivity. Office workers do not seem to reach full productivity and see an average effective working time of 6.5 hours. This confirms the idea that WTR could be effectively implemented in an office setting. In addition, seasonal work – as seen for instance in firm 4 that operates in construction, where summer is high season due to weather - implies strong changes in working hours. This appears to be an industry-specific obstacle for implementing a WTR.

### 4.3. Knowledge and feasibility of a WTR

Further, knowledge of the practice of WTR as well as implementation considerations were checked. Four interviewees were familiar with it, while the remaining were not aware of the model. Four interviewees did not deem it feasible or attractive, mainly due to the salience...
of traditional work-time norms or industry-related reasons. Interviewees stated that “We are a traditional sector. [...] At the moment, it would be difficult to implement.” (I7) and “the external inputs are here for 24 hours. This industry demands it. Hence, it will be very difficult for some departments” (I6). One respondent (I4) saw it partly feasible due to seasonality: “In the four winter months it would be possible.” The remaining three interviewees saw it partly feasible and attractive, as they did not categorically negate it, but found it “interesting to see what happens if you try this out” (I6) and pointed to the future by stating “ask me again in 10 years. It would be interesting to see how the situation is then” (I7). Figure 7 provides an overview of the different positions regarding WTR.

<table>
<thead>
<tr>
<th>Feasible &amp; attractive</th>
<th>Familiar / Knowledgeable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>Partly</td>
</tr>
<tr>
<td>Yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partly</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

*Figure 7: Interviewee categorization: WTR knowledge and feasibility*

Interviewees noted reachability and customer expectations as key issues with regard to implementing WTR in their firm. Some interviewees agreed on the WTR being an interesting option but wanted to wait for some years first and see how it plays out at other firms. Further, some interviewees were open to it in general for the economy but did not want to be the pioneer who tries it out. Thus, a certain proactive risk attitude seems necessary to trial WTR in SMEs. All firms were still able to find enough employees, which is why none of them saw the immediate necessity to fundamentally change the way they work.

### 4.4. Underlying reasons of a WTR

Although not specifically asked for in this exploratory study, the interviewees found and alluded to some of the underlying reasons of a WTR. The aspect of focused attention due to flow, better cognitive functioning as well as lower levels of tiredness and stress was found.

Facilitating factors such as skills training, job involvement and commitment were not mentioned and thus not found. The same holds for strategic smart working including prioritization, automation and cutting as well as Pareto efficiency.

Workload adjustments with a relatively higher workload together were partly found, as interviewees alluded to them. Specifically, interviewees stated that “People stretch their work,
to get through the work” (I4) and another mentioned that “I think you can have a little bit more focus, since you feel like you can achieve more. When you work full time, you think you do not need to hurry and still have enough time” (I2). This depicts that SME managers are aware of time loss and employee stretching their energy to last the full working day. As a result, a WTR could indeed benefit from this current behavior and make use of the forcing effect of having less time and more energy.

4.5. Effects of a WTR

Due to the research design, no interviewee has an actual WTR in place. All replies regarding effects were thus based on thought experiments and theories from the interviewees as to what would happen to their firm and their employees if a WTR were implemented. It is crucial to note that these effects are thus not proven or observed in a real-life setting, but rather effects that interviewees in their capacity as experienced SME managers would expect.

**Individual level**

Some interviewees noted that WTR could lead to lower levels of stress among staff. For example, one interviewee (I7) argued that “they will be more relaxed, have more distance and relaxation from work”. The theorized burnout decrease was not found. An increase in productivity was expected, as indeed interviewees saw increases resulting from WTR. One interviewee thought “it would be good for productivity” (I2). Also, interviewees expected higher levels of physical activity resulting from more free-time.

Further, some interviewees expected that a WTR would lead to an increase in employee satisfaction (I2): “I think it would increase overall satisfaction of employees with the company. Free-time has a lot of value to me and for most people.” Motivation increase was mentioned as well (I4): “Benefits would be that employees might be more motivated.”

On the obstacle side, I found increased stress and strains on the employee. For example, one interviewee stated that “it is also a strain on the employees, because they have to able to manage this freedom” (I6).

Further, a crucial issue that was raised by all interviewees throughout all industries is the decrease in social interactions due to less social contact time. Interviewees expected a deterioration in company climate and underscored the social aspect of work: “work is not just
for earning money but has a social component. The work setting is an important social pillar in the life of people” (I7). I deduce that this presents a major obstacle for a WTR.

**Micro level**

The theorized performance increase was partly confirmed by the interviewees. WTR was identified as a “serious competitive advantage on the human resource side” (I3), while one interviewee stressed the importance of several factors: “It depends on the firm, on the job and on the person. It is a double-edged sword” (I4). Furthermore, I found decreased absenteeism as a potential effect of a WTR. For instance, one interviewee stated that “things like sick days would reduce” (I2).

The link to young professionals and graduates’ behavior and job preferences was not directly observed, but interviews saw the potential for an overall increase in employer attractiveness due to WTR: “The way people see our company would change and we would attract more people that we want” (I2).

What had not been previously theorized, but was expected by interviewees, was an improvement in the quality of work due to increased focus and a reduction in time loss. Exemplary, one interviewee (7) stated that “any job or firm or job sees a lot of time loss. This implies work that is not necessary at all, searching for things, malfunctions and other problems. These losses sure account for 20 to 40% in some systems.” As a result, the elimination of such time loss can heavily benefit and allow for a WTR. Additional expected benefits resulting from WTR was increased loyalty and retention of employees.

On the obstacle side, the theorized need for organizational change was found. The aspect of shift work required to maintain current opening hours and reachability was seen: “I then have to arrange for the employees to work in shifts” (I3). Another interviewee stated: “The question is what happens with the reachability for the client? You would need a shift system with an overlap and a lot of fine tuning” (I6). This led to a further issue: Clients are used to full reachability and having one specific contact person in the SME, with which they usually build a relationship. For one firm, the competitive advantage explicitly laid in its reachability and flexibility. This reachability issue is a major obstacle for a WTR.

A decrease in organizational slack, as theorized, was expected, as an interviewee (I2) stated exemplarily, that “a potential issue could be shocks and unanticipated increase in work, as it would be more difficult to compensate.” Hence, WTR could decrease organizational flexibility and slack.
Other obstacles not previously considered were the need for a role model, high employee discipline and the limitations imposed by WTR on other HR practices. First, one interviewee noted that the CEO of an SME would have to lead by example: “I would need to be a good role model” (I1). This may be a considerable challenge for some CEOs due to their workload. Second, discipline amongst employees needs to be very high for a WTR to succeed: “It only works, if the employees are very disciplined or if the job amount is steady” (I4). Third, WTR might limit a firm in terms of other innovative HR approaches, as these cannot be realized in parallel to WTR: “For instance to use paid free-time, like 10% of your time or the Friday afternoon can be used for personal use such as education or anything they want. […] It does not work in combination with the 25-hour work week” (I1).

**Macro level**

The results show that a more efficient use of resources and time could result in higher sustainability. Regarding an increased sense of caring, no finding was reached. An increase in life-long learning, more voluntary work and associations as well as lower health care costs was expected by the interviewees.

On the obstacle side, social inequalities between presence and output workers were found. Exemplary, an interviewee (I4) stated that “it might lead to social injustice in the firm, if some work less [hours] than others. I trust that not every employee is able to understand it.”

Further, implications for the future of work and society were found: “In the future, we will most likely see many repetitive jobs are done by machines. […] A firm cannot only consist of 3 employees. The other 33 will be jobless and do not contribute to the economy anymore. Hence, they do not pay salary tax anymore. […] This is rather in 15 to 20 years. Working time in total in all systems and firms should thus be reduced to be able to have work for all people” (I7). This raised the issue of the future of work and how job loss resulting from digitization and automation can be addressed.

Appendix C provides an overview of these findings, combining the model based on the literature reviewed with the findings of this study. Figure 8 depicts a simplified version of the integrated model, based on Figure 2 and 3. Appendix D demonstrates the extensive version.
Figure 8: Integrated conceptual model (simplified, based on Figures 2 and 3)

* = partly expected and found

Individual level
- Health
- Satisfaction
- Motivation
- Strains
- Social Interactions

Firm level
- Performance
- Employer Attractiveness
- Organizational Change
- Limiting HR Innovation
- Discipline

Macro level
- Sustainability
- Society Benefits
- Social Inequality

Setting / Preconditions
- Specific Job Types
- Employee Capability

Empirically verified / expected effect
5. Discussion

5.1. Answers to research questions

The purpose of this study was to investigate the feasibility and attractiveness of a WTR for SMEs. Based on my analysis in the literature review section, I answered sub-research question 1. WTR is a significant decrease of total hours spent on the workplace, which functions by eliminating time loss and inefficient time use. Employees are able to achieve the same output in significantly less hours due to workload adjustments and focused attention. It is different from other agile HR practices, as output expectations and salary are similar to a standard full-time job.

Conditions determining feasibility

Three major conditions determine the feasibility. First, the customer reachability aspect was raised by the majority of interviewees. As one (I5) stated: “you have to realize that the customer is the one who pays your salary”. Consequently, a major feasibility issue was reachability, as customers are used to being able to reach their supplier or retailer during the day. Even shift work as a potential solution was ruled out by many, as clients are used to having one standard contact at their supplier, with whom they have built a relationship. This implies that a successful implementation of WTR requires acceptance and understanding by customers, when operating in an industry where frequent customer contact is paramount. This phenomenon is present throughout the value chain, as virtually all firms have customers, for which needs they try to cater (Porter, 2001). Thus, WTR implementation in industries with lower levels of required customer reachability, for example in industries relying more on project work, appears to be more feasible. Also, young firms or start-ups might see an easier implementation of WTR regarding this aspect, as customers are not used to a certain standard yet and these firms do not have a tradition yet.

Second, the type of jobs in a firm determine the feasibility. If a firm offers products or services that rely on presence workers, such as a bus company offering transportation, WTR is not feasible for the majority of the employees, as they cannot simply increase their efficiency by the presented mechanism. Instead, WTR is applicable for employees that can adjust the speed of their work independently, as holds for most office employees.

Third, the level of tradition determines WTR feasibility. Often, rigid thinking follows from old and unchanged structures and norms, which in turn decreases the openness to innovation (Len, 1983). If a firm’s management is used to certain traditional standards, such as
the 40-hour work week, a new, somewhat radical idea such as WTR may not be understood and appreciated. One interviewee (I2) stated that the management of the firm “would not like it, as they feel that a person needs to work for 40 hours, otherwise it is not proper”. Ownership conditions, on the other hand can have an influencing factor due to tradition as well. For instance, in the agriculture-related firms 5 and 8, which are cooperatives, the farmers as main customers are available 24/7 and work long hours. Hence, they expect the employees of their cooperative to work similar hours and not heavily reduce them when implementing a WTR. A lower level of tradition in a firm thus results in a higher feasibility of a WTR.

**Conditions determining attractiveness**

One major condition, employer attractiveness, determines the attractiveness of WTR. If an SME already has several workplace flexibility offerings and does not face problems in recruiting employees, a WTR might not be useful or viewed as necessary. However, if there is a significant lack of qualified employees in that industry, an increase in employer attractiveness is crucial. This can be reached by offering more workplace flexibility options, with the WTR being the most distinctive offering. Thus, a lower level in current employer attractiveness results in a higher attractiveness and feasibility of a WTR.

I deduce that for a WTR to be implemented in a firm, either the pressure on the HR side needs to be significant, or management / ownership in general needs to be open to new ideas and should not persist on measuring the value of work by hours and presence. Yet, due to the reachability aspect, firms will see a major risk in a WTR due to decreased opening hours and customer contact - which could substantially harm their business.

**Positive and negative effects**

On the individual level, health, satisfaction and motivation increases were seen as positive effects, while strains and less social interactions were negative effects.

On the firm level, performance and employer attractiveness increases were positive effects, while organizational change, HR innovation limitations and the need for lasting discipline were negative effects. Implementing a WTR could become a major strategy to countering the trends of the increasing importance of flexibility in job search and the lack of qualified employees. Thus, it could become a competitive advantage. This holds for SMEs in particular, as they are often human-resource-intensive (Nootenboom, 1994).
On the macro level, increased sustainability and other benefits for society due to more free-time were found as positive effects, while increasing social inequality due to different types of jobs was a negative effect.

Data from the interview process largely focused on the micro and individual level, while the macro effects were only considered by few and partly indirectly.

A decrease in social interactions of employees was found as a major negative effect. This strongly concurs with the theorized effect (Bourdieu, 1986; Davidsson & Honig, 2003).

The data has also shown that discipline is crucial. Employees need to be able to work under a WTR scheme and management should take a leading role. Expanding on this, interviewees categorized employees into two types. The first type “tend to sit at a job, feel responsible for their direct tasks but do not cover other tasks that go beyond that” (I7). Another respondent calls these ‘farmers’. The second type, the ‘hunters’, are ambitious and ask for more responsibility and work, after they finished their initial tasks. These two types thus differ regarding their proactive behavior and consequently also on their effective working hours. To mediate these differences in attitude, the first type of employee should be allocated to tasks with a clear input and low possibilities of time waste. The second could be allowed more freedom and responsibilities. This very simplified model of employee behavior matches with literature on employee motivation and initiative. Employees differ in the degree of showing an active approach to work (Bateman & Crant, 1993). If all employees were proactive, time loss at work would not be an issue and productivity would be very close to 100 percent. However, since the SMEs all observed time loss and reduced productivity, a WTR might be a solution to motivate and force the passive employees to become more productive and disciplined. Thereby, goals of employees and employers would be aligned, which is a strategy from classic agency theory (Eisenhardt, 1989).

Knowledge about WTR and feasibility

Knowledge about WTR amongst the interviewees was limited. The idea is still relatively new and to date only one firm in Germany has implemented it. As a result, some interviewees were aware of it, but none had ever considered implementing it at their firm. Feasibility was seen to be low, mainly due to customer reachability reasons. I deduce that SME managers do not (yet) see the need to implement a WTR, as they fear that profits and the ability to handle orders and satisfy customers might decrease. It is only logical from a capitalistic perspective that employers have their employees work for as long as possible, increasing their value-added time (Marx, 1867). Past reductions in working time have also been realized through
collectivistic struggle and union pressure (Amatori & Colli, 2001; Rosenbloom & Sundstrom, 1994), not due to anthropologic gestures of goodwill by managers/owners. To summarize, one can quote Adam Smith (1776; p. 7): “It is not from the benevolence of the butcher, the brewer, or the baker that we expect our dinner, but from their regard to their own interest.”

5.2. Theoretical Implications

This study advanced the academic debate on workplace flexibility and WTR, as it provided an overview of the current research, provided a clear definition of WTR, and proposed a synthesized model of WTR as well as positive and negative effects. Through the interviews, I was able to advance this model and reveal additional salient effects that had not been previously discussed in the literature. By considering the conditions determining the attractiveness and feasibility of a WTR as well as establishing expected positive and negative effects, I contributed to the conceptual work and burgeoning literature on WTR.

5.3. Managerial Implications

Theoretically, WTR could be a valuable tool that improves an SME’s position on the supply side of the labor market, as it decreases distractions and time loss, while it promotes smart working and focusing on high-value tasks. Necessary preconditions are a favorable setting, a suitable job type, customer understanding and the facilitation of social interactions at work in light of reduced presence hours. It is crucial to consider this reduction in social interactions and to find means to allow for social interactions after work, for instance by offering frequent events, socializing possibilities and actively encouraging that employees spent their newly-won free-time together. Another possibility would be to explicitly calculate and include a certain amount of time, for instance one hour per day, for social interactions. Then, the WTR would still rely on focused attention and workload adjustment but would allow for adequate social interactions.

While firms might not see the imminent need for WTR in the current labor market, it is likely that future job seekers will place more emphasis on workplace flexibility. Firms should thus critically examine their current offerings and try to establish a competitive advantage on the HR side by offering new practices, such as WTR. A trial period, for instance starting with one department, would offer managers the opportunity to test WTR’s feasibility and attractiveness in their own firm under their own conditions without putting the entire firm’s organization at risk.
5.4. Limitations & Further Research

This research has several limitations. First, the generalizability of this study is limited. Although different industries, firm sizes and ages were considered, the sample size remains small due to the nature of this research.

Second, no firm in the sample had a WTR in place. The findings of this study are thus representative to manager’s expectations.

Further, the study was conducted with German SMEs and interview transcripts had to be translated into English, which results in a language and translation bias (Temple & Young, 2004).

Also, I assumed employee support as a prerequisite for this study, since I investigated feasibility from an employer side. Yet, it is not clear if all employees would appreciate a WTR. Thus, further studies could focus on the employee side in more detail.

A social desirability bias is noted, as interviewees aimed at presenting their firm and their employees in a positive light (Edwards A., 1957). Their actual attitude towards WTR or workplace flexibility might thus be less positive.

Future research could study a larger number of firms. A large-scale study could compare firms introducing a WTR with a control group of similar firms without a WTR. This comparative study could, for example, explore WTR’s impact on stress levels, for which this study only yielded contradictory findings.

I discovered no further underlying reasons in this study. I suggest that other studies with more resources at their disposal specifically focus on the underlying reasons of a WTR by use of experiments, case studies and field observations.

Moreover, in-depth case studies could provide valuable insights in the actual effects of a WTR and empirically confirm or reject the theorized and expected effects of this study. The integrated conceptual model derived from this study could serve as a benchmark and starting point for such research.
6. Conclusion

To answer my research question, I conducted eight semi-structured in-depth interviews with managers or CEOs of a diverse set of German SMEs. These firms did not have a WTR in place and the interviewees’ opinions were thus based on expectations. I can say that at the moment WTR is an attractive and feasible option for SMEs to a limited extent.

Employer attractiveness is a condition that determines the attractiveness of WTR. If the level of employer attractiveness is low, a WTR is more attractive for a firm.

Customer reachability expectations, job types and tradition determine the feasibility of WTR. If customer reachability expectation levels and tradition levels are low, a WTR is considered to be more feasible. Similar, if job types are output-focused and not presence-related, a WTR is considered to be more feasible.

Positive effects are expected increased health, motivation and satisfaction as well as increased employer attractiveness. Further, sustainability increases and society benefits due to increased free-time are positive effects. Negative effects are expected decreased social interactions and the need for discipline in relation to proactive behavior of employees. Further, social inequalities due to different working hours could be a negative effect.

With the major changes seen in the 21st century, such as digitization, automation, increasing dual-earner households or Artificial Intelligence, new ways of organizing work are required. The 40-hour work week has been a gold standard for 70 years. This pertains to the old perception that presence equals productivity. However, this research has shown that it is often not the case. The 40-hour work week remains to be questioned and a shift of perception would be beneficial for both employers and employees: We should increasingly consider effective working time instead of presence time. Then, it would be possible for my colleague - from the personal story in the introduction - to leave the office at 2PM and enjoy his free-time, not waiting idle until 5PM.
Bibliography


8. Appendix

Appendix A – Interview Questions

This section discusses how the interview questions were derived. It is crucial to reconsider the research question “To what extent is a working time reduction a feasible and attractive option for SMEs?” and the sub-research questions.

The first sub-research question can be answered by the literature review and thus does not have to be considered in the interview process. This is the case since a clear conceptualization of the term ‘working time reduction’ was found and established. In order to start the interview in a smooth way allowing the respondent to become comfortable, some demographic questions should be asked first (Rynes & Gephart, 2004). The answers to these questions are used to provide some descriptive information of the sample (cf. Figure 4).

Patton (2002) provides a systematic categorization of questions, arguing that they can ask regarding behavior or experience, opinion or belief, feelings, knowledge, sensory and background or demographic. I decided that demographic information, experience- and behavior-related and opinion- or belief-oriented questions were necessary to answer my research questions.

Listing the identified concepts in a table aided me in systematically creating interview questions. Figure 5 provides this overview.
<table>
<thead>
<tr>
<th>Concept / Theme</th>
<th>Literature</th>
<th>Question objective</th>
<th>Potential Question</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Demographics</strong></td>
<td><strong>Methodology</strong></td>
<td>Establish SME general information for <em>Figure 4</em></td>
<td>In what activities does your company engage in and what is your role? How many employees do you have at the moment?</td>
</tr>
<tr>
<td></td>
<td>Holloway &amp; Wheeler (1996)</td>
<td>Establishing whether SME labor force can be categorized; is categorization in presence- and output-based employees possible?</td>
<td>What type of employees do you have? (aiming at presence vs. output workers, but not limited to this definition; maybe interview respondents conceptualize this question differently: e.g. office vs. field employees) Potential probing question could be directed at presence vs. output workers.</td>
</tr>
<tr>
<td></td>
<td>Blyton, Hassard, Hill &amp; Starkey (2017)</td>
<td>Establish SME general information for <em>Figure 4</em></td>
<td>What is the age of your company?</td>
</tr>
<tr>
<td><strong>Employment / Recruiting</strong></td>
<td><strong>Methodology</strong></td>
<td>Establish SME general information for <em>Figure 4</em></td>
<td>How do you recruit new employees? Use of field coding</td>
</tr>
<tr>
<td></td>
<td>Deutsche Welle (2017)</td>
<td>Examining whether a lack of qualified employees is seen</td>
<td>Do you have problems with finding new employees? Probing questions could hint at the amount of vacancies, how long it takes to fill them and whether recent trends are visible.</td>
</tr>
<tr>
<td></td>
<td>Christensen and Schneider (2015)</td>
<td>Examining current workplace flexibility offerings, for comparison with <em>Figure 1</em></td>
<td>Do you offer some form of workplace flexibility to your employees? If yes: What is offered? How is it accepted by employees? What is the employee’s opinion on this?</td>
</tr>
<tr>
<td></td>
<td>Barrow and Mosley (2005); Martin (2008)</td>
<td>Assessing current offerings and benefits in relation to company attractiveness</td>
<td>Do you try to be seen as an attractive employer? If yes: How?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>What benefits do you highlight when attracting new employees?</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Working Time</th>
<th>Glaveski (2018); Hörmung, Gerhardt &amp; Michailow (2018); Blyton, Hassard, Hill &amp; Starkey (2017)</th>
<th>Establishing difference between presence hours / chair time / clock time and task time / effective working time / output time</th>
<th>How many hours do employees in your firm usually work per week? Probing questions directed at number of hours that employees are present. Probing questions regarding part-time and full-time workers and functions, depending on answers for question 1.3.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>How many hours do employees in your firm usually work per day?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>How many hours, do you think, do your employees effectively work per day? Opinion-based question to detect, whether respondent is aware of a gap between efficient working time and present time.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>WTR considerations: establishing whether SME managers know WTR and have considered it (Sub-research Question 4)</td>
<td>Have you ever considered reducing the number of hours for your employees?</td>
</tr>
<tr>
<td></td>
<td>Fondas (2015); Barrow &amp; Mosley, (2005); Martin (2008); Lewin (1947); Sindig et al. (2014); Hoegl et al. (2008); Agarwal et al. (2002); Bradley, Wiklund &amp; Shepherd (2011); Kallis (2011);</td>
<td>Establishing the effects resulting from a WTR in order to confirm the theorized effects presented in Figure 3. (Sub-research Question 3)</td>
<td>What kind of effect do you think would come out from this? Potential answer directed at individual, micro and macro effects.</td>
</tr>
<tr>
<td>Working Time</td>
<td>Jackson (2009); Paech (2012); Wade (2014)</td>
<td>Glaveski (2018)</td>
<td>Establishing whether SME manager see a possibility for implementation of WTR (Sub-research Question 4)</td>
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<td></td>
<td></td>
<td>Lewin (1947)</td>
<td>Establishing the potential obstacles and benefits, respectively, for implementing a WTR in the SMEs (Sub-research Question 2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Koslowsky, (1998); Doughtery and Cordes (1993)</td>
<td>Establishing implications on SME performance resulting from WTR (Sub-research Question 4)</td>
</tr>
<tr>
<td></td>
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<td>Do you believe that you could reduce the hours per person per day, for example, to 5 while maintaining business operations and keeping staff headcount constant? Case of Digital Enabler is explained</td>
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<td></td>
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<td></td>
<td>Why / Why not?</td>
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<td></td>
<td>What obstacles do you see for this approach in your company?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>What benefits do you see for this approach in your company?</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>What effects do you think would such a reduction in working hours have on your company performance?</td>
</tr>
</tbody>
</table>

*Figure 5: Systematic overview of concepts, themes, literature and interview questions*
Section 1 included questions regarding the firm, such as a general description of company activities, staff headcount, the type of employees the firm employs (presence vs. output workers) and the firm age. Based on Patton’s (2002) categorization of interview questions, these questions concerned background or demographic information.

Section 2 discussed workplace flexibility and recruiting, asking for existing practices in the SME. Thereby, it was established how the firm managed its current workforce in terms of employment and whether the lack of qualified employees (as discussed in the introduction) was experienced by the firm as well. Based on Patton’s (2002) categorization of interview questions, these questions concerned experience and behavior.

Section 3 specifically focused on WTR. Questions regarding feasibility, benefits and obstacles and the potential impact were asked. Specifically, it was crucial to establish whether the respondents were familiar with WTR or had considered it or even implemented it. Further, questions directed at potential benefits and advantage as well as obstacles and drawbacks of WTR were asked. The example of Digital Enabler was given as a case to explain WTR. Based on Patton’s (2002) categorization of interview questions, these questions concerned opinion or belief.
Dear interviewee,

my name is Hilko Pastoor, I am a master student studying Small Business & Entrepreneurship at the University of Groningen. Thank you for taking the time to conduct this interview. The topic is the attractiveness of SMEs as employers and working time. By means of this research, I aim at establishing findings about WTR and its potential impact on firms.

I will ask 20 questions, first about the SME, then about employment and recruiting and lastly about working time.

I would like to record the interview in order to process your answers easier.

All responses will be kept confidential and will not be published.

Do you have any questions before starting the interview?

<table>
<thead>
<tr>
<th>Theme</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The SME</td>
<td>1.1. In what activities does your company engage in and what is your role?</td>
</tr>
<tr>
<td></td>
<td>1.2. How many employees do you have at the moment?</td>
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<tr>
<td></td>
<td>1.3. What type of employees do you have?</td>
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<tr>
<td></td>
<td>1.4. What is the age of your company?</td>
</tr>
<tr>
<td>2. Employment / Recruiting</td>
<td>2.1. How do you recruit new employees?</td>
</tr>
<tr>
<td></td>
<td>2.2. Do you have problems with finding new employees?</td>
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<td></td>
<td>2.3. Do you offer some form of workplace flexibility to your employees?</td>
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<td><em>If yes: What is offered? How is it accepted by employees? What is the employee’s opinion on this?</em></td>
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<td>2.4. Do you try to be seen as an attractive employer?</td>
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<td>*If yes: How?</td>
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<tr>
<td></td>
<td>2.5. What benefits do you highlight when attracting new employees?</td>
</tr>
<tr>
<td>3. Working Time</td>
<td>3.1. How many hours do employees in your firm usually work per week?</td>
</tr>
<tr>
<td></td>
<td>3.2. How many hours do employees in your firm usually work per day?</td>
</tr>
</tbody>
</table>
3.3. How many hours, do you think, do your employees effectively work per day?

3.4. Have you ever considered reducing the number of hours for your employees?

3.5. What kind of effect do you think would come out from this?

3.6. Do you believe that you could reduce the hours per person per day, for example, to 5 while maintaining business operations? *Case of Digital Enabler given*

3.7. Why / Why not?

3.8. What obstacles do you see for this approach in your company?

3.9. What benefits do you see for this approach in your company?

3.10. What effects do you think would such a reduction in working hours have on your company performance?

Thank you very much for participating in this interview.
## Appendix C – Results from Coding and Analyzing the Interviews

<table>
<thead>
<tr>
<th>Theory</th>
<th>Based on</th>
<th>Exemplary Quotes</th>
<th>Comment</th>
<th>Result</th>
</tr>
</thead>
</table>
| Digitization leads to a productivity increase and a reduction of the amount of work. | Hirsch-Kreinsen (2016), Maiti & Kayal (2017), Loebbecke & Picot (2015) | “Due to digitization, we see that many jobs that were done by people will be done by machines. For instance, receipt filing. Before, we had wall with a lot of physical files. Now, these are scanned and filed automatically in a digital program.” – I7  
“[…]a reduction on the work itself is crucial, due to digitization it will be necessary to maintain economies.” – I7  
“We have implemented quite some digitization processes.” – I8 | Found |        |
| Workplace flexibility is a crucial aspect in job search.              | Noyes (2019), Fondas (2015)                                               | “Demands for less hours were not seen. Instead, more flexible working arrangements were fought for, such as part-time, flextime and sabbaticals.” - I7  
“There are a lot of liberties for our employees. Only for few people, the starting time is fixed. The rest can work how they want, when the customer wants to buy. We do not impose any daily hours on them.” – I2  
“We stress the individual flexible organization of ones work, especially for the field sales employees.” – I5  
“We do not have core working hours in our company. What we need and demand is that the departments are manned adequately. But this implies | Found |        |
<table>
<thead>
<tr>
<th>Firm attractiveness increases by offering workplace flexibility and WTR.</th>
<th>Kotey (2017), Thompson &amp; Aspinwall (2009)</th>
<th>“We would be seen as a more attractive employer and productivity would increase” – I2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>“The way people see our company would change and we would attract more people that we want.” – I2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It would make sense if potential recruits know this concept and understand it.” – I1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“It could become a serious competitive advantage on the human resource side.” – I3</td>
</tr>
<tr>
<td>Lack of qualified employees due to demographic change, the aging of the workforce and full employment.</td>
<td>Vrieselaar &amp; van de Hei (2017), Deutsche Welle (2017)</td>
<td>“However, we know that we need a different approach since there is full employment in Germany and there is big issue in hiring. We can’t even find the people that we don’t want to hire. It is very difficult to find those, who we want to hire.” – I2</td>
</tr>
<tr>
<td></td>
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<td>“The demographic change is a problem. For instance, the truck drivers are all older than 40. Several will go into retirement in some years and there is a huge lack of employees.” – I3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“First of all, there are less people who are searching for a job or are jobless.” – I4</td>
</tr>
</tbody>
</table>
| Different Workplace Flexibility Practices exist and are widely used. | “It is not easy to find new insemination workers.” - I5  
“Yes, in the highly specialized area of clothes manufacturing we have problems in our region here in North West Germany. For instance, when wanting to hire a clothes manufacturing engineer, or clothes manufacturing sales personnel, it is very difficult.” – I7 |
| --- | --- |
| Christensen & Schneider (2015), Kotey (2017), Heilmann et al. (2018), Galinsky et al. (2015), Glaveski (2018) | “There are a lot of liberties for our employees. Only for few people, the starting time is fixed. The rest can work how they want, when the customer wants to buy. We do not impose any daily hours on them.” - I2  
“For the field sales force, they can do home-office and have fixed goals to achieve.” – I3  
“Further, if someone has an appointment, it is possible for them to come later or leave earlier. [...] Some employees work 8 months per year for 8,5 hours and then work 6 hours per day in the remaining months in winter.” – I4  
“The working hours are given for the office employees. These are from 8AM to 5PM, which have to be worked here in the office. We have some part-time employees.” – I6 |
<p>| See Figure 5 for an overview of workplace flexibility offerings per SME of the sample | Found |
| Workload adjustment: a relatively higher workload, Parkinson’s Law and energy spreading theory lead to employees being more productive per hour, if they work less hours. | Lewis (2001), Edwards &amp; Robinson (2000), Parkinson &amp; Lancaster (1965), Marks (1977) | “People stretch their work, to get through the work. If we implement a working time reduction, it implies that employees still get their work done and do not One interviewee made an allusion to energy spreading theory, another to |
| | | Partly found |</p>
<table>
<thead>
<tr>
<th>Facilitating factors such as skills training, job involvement and commitment and experience accumulation allow for a WTR.</th>
<th>Felstead, Ashton &amp; Green (2000), Thorsteinson (2010), Hirsch (2004)</th>
<th>“I think you can have a little bit more focus, since you feel like you can achieve more. When you work full time, you think you do not need to hurry and still have enough time.” – I2</th>
<th>Workload adjustment. Concepts were not specifically tested and asked for due to research design.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitating factors such as skills training, job involvement and commitment and experience accumulation allow for a WTR.</td>
<td>Felstead, Ashton &amp; Green (2000), Thorsteinson (2010), Hirsch (2004)</td>
<td>“Showing that being concentrated for a block is wanted, would be beneficial.” – I6</td>
<td>Not found</td>
</tr>
<tr>
<td>Focused attention, due to flow, better cognitive functioning and a lower tiredness and stress allow for a WTR.</td>
<td>Csikszentmihalyi (1990), Kajitani et al., (2016), Brewster, Hegewisch &amp; Mayne (1994)</td>
<td>“I read a study once that said that part-time workers are almost as productive in total as people that work full time.” – I2</td>
<td>Found</td>
</tr>
<tr>
<td>Focused attention, due to flow, better cognitive functioning and a lower tiredness and stress allow for a WTR.</td>
<td>Csikszentmihalyi (1990), Kajitani et al., (2016), Brewster, Hegewisch &amp; Mayne (1994)</td>
<td>“[…] it would totally contradict with the flow and the 25-hour work week concept.” – I5</td>
<td></td>
</tr>
<tr>
<td>Focused attention, due to flow, better cognitive functioning and a lower tiredness and stress allow for a WTR.</td>
<td>Csikszentmihalyi (1990), Kajitani et al., (2016), Brewster, Hegewisch &amp; Mayne (1994)</td>
<td>“They will be more relaxed, have more distance and relaxation from work.” – I7</td>
<td></td>
</tr>
<tr>
<td>Strategic smart working with the importance of prioritization, automation and cutting as well as pareto efficiency can realize a WTR.</td>
<td>Hansen (2018), Glaveski, (2018), Pareto (1896)</td>
<td>“We try to counter this by reducing and digitizing work tasks in order to save costs. By automating and closer cooperation with suppliers, this is reached.” – I8</td>
<td>Not specifically tested and asked for due to research design. One allusion to automation.</td>
</tr>
</tbody>
</table>

**Theorized Effects**

**Individual level**
<table>
<thead>
<tr>
<th>Reduction of stress</th>
<th>Dougherty &amp; Cordes (1993)</th>
<th>“They will be more relaxed, have more distance and relaxation from work.” – I7</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased Burnout</td>
<td>Freudenberg (1974)</td>
<td>“I think it would be good for productivity.”- I2</td>
<td>Not found</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“We would be seen as a more attractive employer and productivity would increase.” – I2</td>
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<tr>
<td></td>
<td></td>
<td>“I do not think that overall productivity gains would be realized.” – I1</td>
<td></td>
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<tr>
<td>Higher productivity</td>
<td>Koslowsky (1998); Conesa &amp; Kehoe (2017)</td>
<td>“The main question is: what do the people do with their newly-won free-time. One aspect is the self-optimization. People will do that more in the future due to sports, looks and education.”- I7</td>
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<td></td>
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<td>“It might be that employees are more thankful to find such a job. For instance if they have [...] a time-intensive free-time activity. For instance walking the dog for one hour in the morning and in the evening. [...] Also, if they have more free-time, they might get an expensive free-time activity.” – I4</td>
<td></td>
</tr>
<tr>
<td>More physical activity</td>
<td>Eichberg (2009)</td>
<td>“I think it would increase overall satisfaction of employees with the company. Free-time has a lot of value to me and for most people.” – I2</td>
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<td>“I believe that overall satisfaction would increase” – I2</td>
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<tr>
<td></td>
<td></td>
<td>“It could increase employee satisfaction, as they have more free-time.” – I3</td>
<td></td>
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<tr>
<td>Increased satisfaction</td>
<td>Koslowsky (1998); Wagner (2017)</td>
<td>“Benefits would be that employees might be more motivated.” – I4</td>
<td></td>
</tr>
<tr>
<td>Increased motivation</td>
<td>Barbuto &amp; Scholl, 1998</td>
<td></td>
<td>Found</td>
</tr>
<tr>
<td>Increased stress and strain on the employee</td>
<td>Barnwell &amp; Robbins (2006)</td>
<td>“I am not sure how feasible it is. It is also a strain on the employees, because they have to able to manage this freedom.” – I6</td>
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<td></td>
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<td>“If we implement a working time reduction, it implies that employees still get their work done and do not become exhausted too early. I see this danger […]” – I4</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>Less social contact time and interactions result from a WTR and are a negative effect.</th>
<th>Grant &amp; Parker (2009); House, Landis &amp; Umberson (1988)</th>
<th>“[…] socializing is a relevant part of work.” – I2</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>“I think that talking, also not professional ones, regarding the soccer cup final or a fashion show at the local fashion retailer, are a part of the company climate.” – I3</td>
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<td></td>
<td></td>
<td>“The people meet here at work and should have a good connection with each other. Sometimes, there is a lot of work and the employees cannot really converse with each other. Hence, it is crucial for them to be able to do that in low times.” – I5</td>
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<tr>
<td></td>
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<td>“Further, work is not just for earning money, but has a social component. The work setting is an important social pillar in the life of people, next to their family and friends. Working together and commonly achieving something is crucial for people as well. We cannot eliminate this social component of interaction at work. Humans are creatures that</td>
</tr>
</tbody>
</table>

| Found | Found |
always get into contact with people and talk. If we try to eliminate this, we will alienate the employees.” – I7

“The question is: are the employees as happy as in their current situation? People want to talk over their weekend and what they happened. Hence, I think the social structure of the firm relies on chit-chat and a good relation with your colleagues.” – I8

| Firm level (micro) | Storey & Greene (2010); Noteboom (1994) | “I think it could remain same, if implemented properly.” – I1
“I would remain same or increase, if we implement it correctly.” – I2
“It could become a serious competitive advantage on the human resource side.” – I3
“It depends on the firm, on the job and on the person. It is a double-edged sword.” – I4 | Partly found |
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<tbody>
<tr>
<td>Performance increase</td>
<td>Deceased absenteeism</td>
<td>Koslowsky (1998)</td>
<td>“Overall, I think things like sick days would reduce.” – I2</td>
</tr>
</tbody>
</table>
| Fitting with trend for young professional | (Fondas, 2015; Matos & Galinsky, 2014) | “It could become a serious competitive advantage on the human resource side.” – I3
“We would be seen as a more attractive employer and productivity would increase” – I2
“The way people see our company would change and we would attract more people that we want.” – I2 | Not directly confirmed, rather implied by respondents implicitly. | Indirectly found |
| Need for organizational change | (Lewin, 1947) | “Not everyone could do the same shift, as there would be problems with reachability.” – I2  
“Next to shift work for reachability and the newspaper production, I do not think there are too many issues. Otherwise, it is just the main issue with the management that does not like it.” – I2  
“It would require us to do better planning with our time.” – I2  
“I then have to arrange for the employees to work in shifts then.” – I3  
“The question is what happens with the reachability for the client? You would need a shift system with an overlap and a lot of fine tuning.” – I6 | Shift work identified as major organizational change, due to reachability issues and customer expectations. | Found |
| Decrease in organizational slack | Agarwal, Sarkar & Echambadi (2002) | “A potential issue could be shocks and unanticipated increase in work, as it would be more difficult to compensate.” – I2  
“We have changes due to seasonal changes. […] During the season, it would be very difficult.” – I4 | Found |
| Society level (Macro) | | “There are people that print every email, in color. One colleague does this always. This is an example of a loss of time and resources.” – I7  
“Indirect benefits are the reduction in variable costs, for instance electricity. The employee is in the office less and uses up less resources.” – I3 | Found |
<p>| Higher sustainability | Kallis et al. (2012) | | Found |</p>
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Source</th>
<th>Quote</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased sense of caring</td>
<td>Jackson (2009)</td>
<td>“One aspect is the self-optimization. People will do that more in the future due to sports, looks and education. The human becomes a better human.” – I7</td>
<td></td>
</tr>
<tr>
<td>More life-long learning</td>
<td>Jackson (2009)</td>
<td>“One aspect is the self-optimization. People will do that more in the future due to sports, looks and education. The human becomes a better human.” – I7</td>
<td>Found</td>
</tr>
<tr>
<td>More voluntary work and associations</td>
<td>Paech (2012)</td>
<td>“Second, an advantage for society is that people have more energy to engage in associations and voluntary work. Many associations see a lack of new voluntary workers. Life complexity has increased over the last years.” – I7</td>
<td>Found</td>
</tr>
<tr>
<td>Lower health care costs</td>
<td>Eichberg (2009)</td>
<td>“It could be a point system in health care insurance that rewards some actions.” – I7</td>
<td>Found</td>
</tr>
</tbody>
</table>
| Social inequalities between presence and output workers | Wade (2014)            | “However, it might lead to social injustice in the firm, if some work less than others. I trust that not every employee is able to understand it.” – I4
“Will it be fair, if some have the morning shift and the other ones the evening one?” – I8 | Found |
Appendix D – Adapted conceptual model (based on Figures 2 and 3)

**Workload adjustment**
- relatively higher workload
- Parkinson’s Law: work spreads according to time available for completion
- Energy spreading theory

Effective working time / task-time: significantly less than 8 hours per day

**Focused attention**
- Flow
- Better cognitive functioning
- Lower tiredness and stress

**Empirically verified / expected effect**

**Individual level**
- + reduction of stress resulting from long hours
- + higher productivity
- + more physical activity
- + increased work satisfaction
- + increased motivation

- + lowered stress & strains due to more demands in terms of concentration
- + potentially less social contact time and interactions at work (social capital theory)

**Firm level**
- + performance increase*
- + decreased absenteeism of employees
- + increased employer attractiveness
- + fitting with trend for young professionals*
- + increase in quality of work

- - need for organizational change with focus on opening hours / customer contact
- - decrease in organizational slack
- - limiting other innovative HR approaches
- - CEO needs to be role model
- - employees need to be highly disciplined

**Macro level**
- + increased sustainability due to lower resource use
- + more time for life-long learning
- + more voluntary work & associations
- + more active individuals: lower health care costs

- - potential social inequalities between presence and output workers: fairness perception

**Setting**

- Suitable for job types:
  - office jobs where speed of work is adjustable
  - with an output orientation and no bottleneck
  - economies / companies with many office-based / knowledge-based jobs
- Suitable for employees:
  - capable employees, who are able to work under WTR scheme (places strain on employees)

* = partly expected and found