



POLITECNICO
MILANO 1863

SCUOLA DI INGEGNERIA INDUSTRIALE
E DELL'INFORMAZIONE

**“Unravelling the 4-Day Week: A comprehensive
study of its implementation and global impacts,
with a focus on Italy”**

Advisor:

Mariano CORSO

Co-Advisors:

Fiorella CRESPI

Dora CARONIA ANGITTA

Graduate Students:

Agustina CARLONI RODRIGUEZ, 985968

Emilia DOMINGUEZ SPANDONARI, 985993

Academic Year 2022/2023

Acknowledgements

Gracias a nuestras tutoras, Dora y Fiorella, por confiar en nosotras y guiarnos en la escritura de esta tesis.

Gracias a nuestros amigos por acompañarnos durante todos estos años, por animarnos a seguir adelante, y sacarnos una sonrisa aun en los peores momentos.

Y sobre todo, gracias a nuestras familias por ser nuestro refugio en los momentos difíciles, por celebrar nuestros logros como si fueran propios, y por hacernos llegar su amor y apoyo incondicional a pesar de los 11.183 km de distancia. Sin ustedes, nada de esto hubiera sido posible.

Table of Contents

<i>Acknowledgements</i>	<i>1</i>
<i>Abstract</i>	<i>5</i>
<i>Executive Summary</i>	<i>6</i>
1 Introduction	13
1.1 Work context	13
1.1.1 Historical evolution of working hours	13
1.1.2 Work after Covid-19	18
1.1.2.1 Hybrid remote work	18
1.1.2.2 Decrease of wellbeing and increase of employee burnout	20
1.2 Smart Working	28
1.2.1 Definitions	29
1.2.2 Principles	30
1.2.2.1 Collaboration and communication	31
1.2.2.2 Empowerment and responsibility	31
1.2.2.3 Customization and flexibility	31
1.2.2.4 Talent and diversity	32
1.2.3 Theoretical framework	32
1.2.3.1 Organisational policies	32
1.2.3.2 Digital technologies	33
1.2.3.3 Physical layout of workers	34
1.2.3.4 Leadership behaviours and styles	35
2 Flexible Working	36
2.1 Definition	36
2.2 Theoretical model	37
2.2.1 Model variables	38
2.2.2 Conceptual relationships	38
2.2.3 The levels	39
2.2.3.1 Antecedents of workplace flexibility	39
2.2.3.2 Work-family fit	39
2.2.3.3 Vitality outcomes	40
2.3 Classification	40
2.3.1 Place flexibility	41
2.3.2 Time flexibility	41
2.3.2.1 Traditional flexible work time arrangements	41
2.3.2.2 New flexible work time arrangements	42
2.4 Impacts of traditional time and place flexible work arrangements	44
2.4.1 Individual vitality	44
2.4.2 Workplace vitality	47
2.4.3 Home and family vitality	49
2.4.4 Community vitality	51

2.5 Implementation of new flexible work time arrangements	53
2.5.1 Governmental initiatives	57
2.5.1.1 Belgium	57
2.5.1.2 Iceland	58
2.5.1.3 Japan	59
2.5.1.4 Lithuania	60
2.5.1.5 Spain	60
2.5.1.6 Sweden	61
2.5.1.7 Switzerland	62
2.5.1.8 United Kingdom	63
2.5.1.9 United Arab Emirates	63
2.5.1.10 United States of America	64
2.5.1.11 Italy	65
2.5.1.12 Argentina	66
2.5.2 Multiple company pilots	67
2.5.2.1 United Kingdom	68
2.5.2.2 Iceland	72
2.5.2.3 Ireland and United States	74
2.5.2.4 Australasia	77
2.5.2.5 South Africa	80
2.5.3 Individual company pilots	81
2.5.3.1 Implementation of 4-day week in Perpetual Guardian	82
2.5.3.2 Implementation of 4-day week in Collective Campus	87
2.5.3.3 Implementation of 4-day week in Microsoft Japan	89
2.5.3.4 Implementation of 4-day week in Buffer	92
2.5.3.5 Implementation of 4-day week in Unilever New Zealand	97
2.5.3.6 Implementation of 4-day week in Uplevel	100
3 Methodology	103
3.1 Objectives	103
3.2 Methodology of the literature review	104
3.3 Methodology of the empirical research	106
4 Empirical research	109
4.1 Objective	109
4.2 Data sample	109
4.3 Business cases	111
4.3.1 Implementation of 4-day week in Blink	111
4.3.2 Implementation of 4-day week in Literal Humans	114
4.3.3 Implementation of 4-day week in Methodos	117
4.3.4 Implementation of 4-day week in Awin	120
4.3.5 Implementation of 4-day week in Lavazza	122
4.3.6 Implementation of 4-day week in Intesa Sanpaolo	124
4.3.7 Implementation of 4-day week in Unilever Italy	127

4.3.8 Implementation of 4-day week in TeamSystem	130
4.3.9 Implementation of 4-day week in Etra	133
4.3.10 Implementation of 4-day week in Carter & Benson	136
4.3.11 Implementation of 4-day week in Realcable	138
4.3.12 Implementation of 4-day week in Aldia	140
4.3.13 Implementation of 4-day week in Rigoni d'Asiago	142
5 Results	146
5.1 Adoption of 4-day week policies worldwide	146
5.1.1 Global overview	146
5.1.1.1 4-day week implementation by geographical area	148
5.1.1.2 4-day week implementation by company characteristics	154
5.1.2 Italy	157
5.2 Impacts of 4-day week implementation	164
5.2.1 Individual vitality outcomes	164
5.2.2 Workplace vitality outcomes	167
5.2.3 Home and family vitality outcomes	173
5.2.4 Community vitality outcomes	176
6. Conclusions	178
6.1 Conclusions of the analysis	178
6.2 Contributions	183
6.3 Limitations and future research	185
Bibliography	189
Appendix	201

Abstract

The Covid-19 pandemic has undeniably revolutionised the way we work by encouraging a shift towards remote working and challenging the conventional 9-5 five-day work-weeks, leading employees and employers to question the status quo. Consequently, many companies worldwide have started implementing 4-day week policies aiming at improving employees' wellbeing, work-life balance, job satisfaction, and keeping production levels high.

The main obstacle when studying these topics is the scarcity of available literature and confusion regarding the term 4-day week. Hence, this thesis aims to provide a clear classification of the different forms of 4-day work weeks implemented, present a comprehensive overview of the challenges and benefits obtained by the companies experimenting with this new flexible work time arrangements, and assess the worldwide adoption of these policies, with a particular focus on Italy. To address these objectives, a comprehensive literature review was conducted, a custom-built database was created, and qualitative interviews were held with company representatives adopting 4-day week policies.

Evidence shows that the implementation of 4-day week policies bring positive impacts on employees' wellbeing, work-life balance, and job satisfaction, as well as providing higher talent attraction and employee retention, without sacrificing the companies' productivity. Although some challenges are reported in customer service, production, or fully remote companies, an integrative and customised Smart Working program enables these firms to obtain positive results as well.

On a global level, the United Kingdom is the undisputed leader in adoption of 4-day week policies. Instead, Italy is falling behind, with a low policy adoption per million inhabitants, and few *pure 4-day week* implementations due to the lack of organised multi-company trials and the strict Italian labour laws that create obstacles to the companies willing to provide employees more flexibility.

Executive Summary

Objectives

In the past years, the concept of a 4-day work week has gained significant popularity in the job market. This is not only seen in the increasing number of job postings offering this benefit, but also in the number of articles and Google searches regarding this topic (Nicola, 2021; Google Trends, 2023b). Although many organisations and countries have started experimenting with these policies to measure their impacts, there is a lack of academic research assessing the conglomerate results of the separate implementations, as well as the current adoption of these types of policies worldwide. This void contributes to the lack of clarity around the term 4-day work week. Some use this term when considering the pure model known as *100-80-100*, where employees work four full days instead of the traditional five; others use the term to encompass *compressed work-weeks* where the traditional working hours are compacted into four days without any reduction in overall working time.

Consequently, this research aims to provide a clear classification of the different forms of 4-day work weeks implemented, assess the worldwide adoption of these policies, and present a comprehensive overview of the challenges and benefits obtained by the companies that are already experimenting with these new flexible work time arrangements. Moreover, given our current residency in the Italian territory and contribution with the Smart Working Observatory of Politecnico di Milano, we aim to provide a deeper assessment of the current implementation of 4-day week policies in Italy to shed light on the challenges faced by the pioneering companies defining the new ways of working in the country.

Methodology

This study comprises two main parts in order to reach the above mentioned objectives, an extensive literature review and a qualitative empirical research.

In the first place, a comprehensive literature review was conducted aiming at understanding the evolution towards the present situation regarding 4-day week policies, the current trends shaping the work context, and the reported outcomes of experimentation conducted around the globe. In order to analyse the impacts of the implementation of 4-day week policies in a systematic way that would allow us to draw comparisons between companies and countries, the workplace flexibility model developed by E.J. Hill was used. For this reason, the outcomes from 4-day week experiments are classified into four *vitality outcomes*: individual, home and family, workplace, and community (Hill et al., 2008).

Additionally, as part of the literature review, an extensive custom-built database including 446 companies was created to map the adoption of 4-day week policies around the globe. In the aggregate, 147 sources were consulted for the literature review, including academic papers, books, reports, newspaper articles, and company websites.

Secondly, empirical research involving interviews with companies implementing these new flexible work time arrangements were conducted to gain insights about their motivations, challenges, and experiences. More than 13 company representatives including CEOs, general directors, and Human Resources managers participated in the interview process, considering 11 Italian and 2 British firms. Given the lack of information regarding this topic in the Italian territory, these interviews were crucial to map the current situation in this country.

Introduction

The evolution of working hours from the Industrial Revolution to modern times has been a gradual process that has led to a reduction in the number of hours worked per day, per week, and per year. This time shrinkage has been due to the introduction of the eight-hour workday, weekends, vacations, holidays, and other leaves of absence, leading to an increase in productivity and a more motivated and loyal workforce. Work time reductions also showed positive impacts on the economy, leading to increased consumption, production, and job creation. For this reason, many countries and companies are experimenting with new flexible work time arrangements

offering shorter work-days or work-weeks to understand if there are further benefits not yet exploited.

Furthermore, the abrupt measures taken to deal with the Covid-19 pandemic in 2020, dramatically changed the work scenario and the society. The first massive change in the ways of working was the implementation of remote work, forced by the quarantine periods and social distancing measures imposed by governments all around the world. However, once the state of emergency was over, many companies realised that work could be done remotely, without the need of going to the office 5 days a week, making remote working the new norm. Considering the Italian territory, the Smart Working Observatory of Politecnico di Milano reported that in 2022, 3.6 million employees still worked remotely (Smart Working Observatory of Politecnico di Milano, 2022).

While this has brought benefits and started a flexibilization process in the ways of working, it has also resulted in the blurring of boundaries between personal and work life, leading to employees suffering higher levels of stress and burnout. According to a survey carried out in March 2021 by Indeed, 53% of virtual or work from home employees were working more hours than they were in the office (Threlkeld, 2021). Even more concerning is the fact that, after the pandemic was over, this trend continued: according to a Future Forum survey conducted in February 2023, 42% of the workers reported burnout, marking the highest figure since May 2021 (Future Forum Pulse, 2023).

These changes in the work environment have led many workers to reassess their priorities and the role of their job in their lives, looking forward to better working conditions and greater autonomy and flexibility. This trend resulted in 3 phenomena that created an alarm in employers: The Great Resignation, Quiet Quitting and, the most recent one, The Great Regret. Consequently, companies that want to maintain competitiveness, retain talent, and attract new employees are increasingly exploring new flexible work time arrangements, like 4-day work weeks.

Results

The main results obtained from both the literature and empirical analysis can be divided into two main macro areas: a mapping of the current worldwide situation regarding 4-day week policies and reported outcomes from the application of these policies.

First and foremost, given the confusion around the naming convention, in this thesis, the term 4-day week includes both, the *compressed work-week* initiatives where traditional working hours are compacted within a shorter timeframe than the conventional five-day work-week, and *short work-weeks* policies where employees enjoy a time reduction in their work hours keeping the same remuneration.

Considering a global overview of the implementation of 4-day week policies, we found 446 companies adopting these new flexible work time arrangements worldwide. 90.8% of them correspond to the pure form of 4-day week, the *100-80-100 model*, which refers to policies where 100% of productivity is maintained while working 80% of the hours and keeping 100% of the pay (4 Day Week Global, n.d.).

Furthermore, a geographical analysis was conducted to assess which are the most developed countries regarding the implementation of 4-day week policies. Figure 1.a depicts a ranking of the countries in descending order considering the number of total companies implementing 4-day week policies. Figure 1.b depicts the same ranking, but considering the total number of companies implementing these policies by million inhabitants.

The results show that the United Kingdom is the undoubtable leader in this matter. When considering the number of policies implemented, the United States also has a huge advantage with respect to the other countries. When considering the ranking considering the number of policies by million inhabitants, although the United Kingdom continues to be the leading country, the United States loses the advantage. Instead, Iceland, Ireland, and New Zealand scale up in the ranking thanks to governmental initiatives encouraging 4-day work weeks and the multi-company organised trials. Given the deeper analysis in the Italian territory, it is not fair to

compare the number of policies implemented in this country with the others. Nonetheless, Italy still falls behind, taking the 11th position in the ranking of 4-day week policies per million inhabitants.

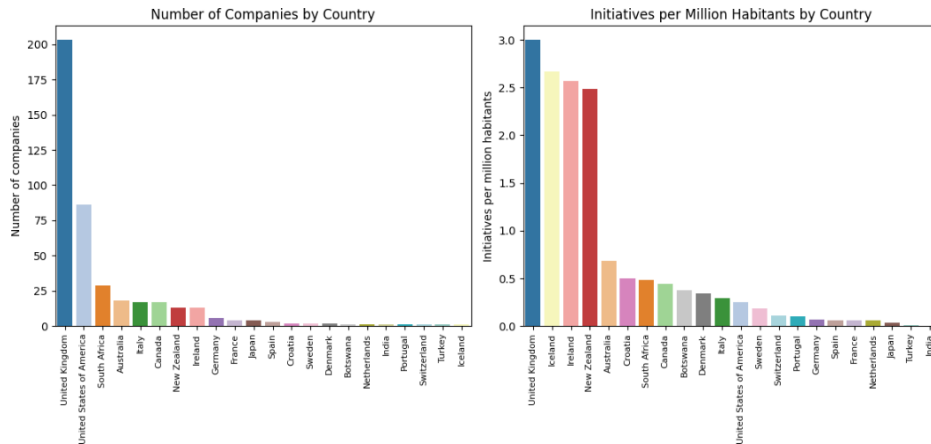


Figure 1.a: Ranking by country considering number of total companies implementing 4-day week policies.
Sample size: 426 companies

Figure 1.b: Ranking by country considering number of total companies implementing 4-day week policies by million inhabitants. Sample size: 426 companies

When focusing on Italy, the type of 4-day week policies implemented are more diverse. Figure 2 shows that only 36.4% of the interviewed Italian companies are applying the *100-80-100 model*, which is approximately a third of the ratio of companies applying *100-80-100* policies in the United Kingdom (95%). Moreover, we can see that 34.4% are applying different *compressed work-week* arrangements, meaning that traditional working hours are maintained the same but compacted into fewer days. This is explained by two main reasons. In the first place, this can be attributed to the absence of an organised trial that would push the labour market to implement more significant time reductions. Secondly, many of the interviewed company representatives addressed the adoption of *compressed work-weeks* instead of *short work-weeks* to the strict labour laws that define the working contracts in many industry sectors. Hence, creating obstacles to those firms that are taking the lead to adopt new and more flexible time arrangements.

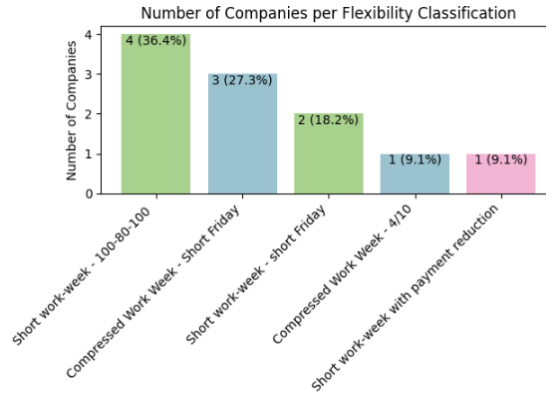


Figure 2: Number of Italian companies per flexibility classification. Sample size: 11 companies

Finally, we analysed the impact of 4-day week policies considering the four vitality outcomes. Starting with the *individual vitality* outcome we can confidently say that the introduction of 4-day week policies bring undoubted benefits to the wellbeing of employees, reporting improved health, stress, and burnout indicators.

Furthermore, the *workplace vitality* includes work related aspects such as company productivity, absenteeism, turnover, as well as employee loyalty and satisfaction. When looking at company productivity, most of the companies did not report significant changes when reducing or compressing the working hours, and some even reported improvements. Instead, when analysing employee related indicators, such as absenteeism, turnover, retention, loyalty, and job satisfaction, great benefits were reported. It is worth mentioning that the path to obtain these benefits is not seamless in all organisations, with some difficulties reported in companies with full remote jobs, or in harder areas such as production or customer service. However, after a series of iterations and thoughtful integrations with broader Smart Working projects most companies reached ad-hoc policies that allowed employers and employees to enjoy the benefits of 4-day week initiatives.

The third analysed outcome was that of *home and family vitality*, which was mainly quantified by employees' perception of work-life balance. With no doubt, work-life balance was one of the most positive outcomes reported. The possibility to have one more day off, or at least

half, gave employees the time to take care of administrative and household commitments, and use the weekends to invest in hobbies, personal care, and spend more time with their loved ones.

Finally, we analysed the *community vitality* outcomes considering the impacts in the environment. Although most of the trials did not report on these aspects, some mentioned reductions in electricity consumption and commuting, generating reductions in CO2 emissions, with no *travel rebound* indications. Additionally, many employees reported to spend more time on community initiatives to give back their newly gained time off. However, in order to better understand these impacts, future research is needed.

All points considered, we can confidently say that the implementation of the 4-day week creates positive impacts both from an employee and employer point of view.

Keywords: 4-day week, four-day week, 100-80-100 model, compressed work-week, short work-week, future of work, flexible work time arrangements, FWTAs.

1 Introduction

The workplace has undergone many transformations over the course of history, from the first agrarian societies to the Industrial Revolution and beyond. Today, we find ourselves in the midst of another major shift, as the COVID-19 pandemic has changed the way we think about work and the workplace. Moreover, after this health crisis, phenomena such as the "Great Resignation", "Quiet Quitting", and "Great Regret" have emerged, making many workers reassess their priorities and the role of their job in their lives, looking forward to better working conditions and greater flexibility.

In this section, we will provide an overview of the history of the workplace, tracing its evolution from its earliest origins to the present day. We will explore how the workplace has changed in response to technological advances, economic forces, and social and cultural trends. We will then focus on the concept of "Smart Working", a term that has gained popularity in the last decades to describe new approaches to work that leverage technology and flexibility to increase productivity and enhance work-life balance. We will define the principles and theoretical framework of Smart Working and explore its potential as a way to shape the future of work.

1.1 Work context

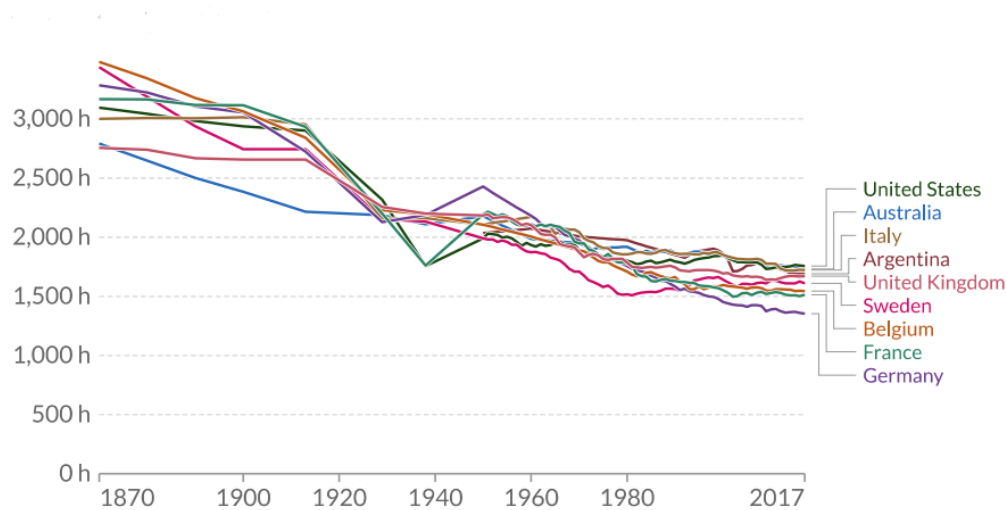
1.1.1 Historical evolution of working hours

The evolution of working hours has been a gradual process over centuries. In the fourteenth century, people worked around 1.440 hours per year, which continuously increased reaching a peak during the Industrial Revolution ("Hubstaff", 2023). From more than 3.000 hours of average work per year in 1870 (equivalent to 60-70 hours per week during 50 weeks a year), in the last 150 years, the average working hours per year have decreased dramatically to almost half. Nowadays, although there are huge discrepancies between countries, the average

work time is around 1.700 hours a year, as can be seen in Figure 3. This significant reduction is explained by a decrease in the hours worked per day, days worked per week, and weeks worked per year due to vacations, holidays, and leave of absence (Giattino, 2020).

Annual working hours per worker

Average working hours per worker over an entire year. Before 1950 the data corresponds only to full-time production workers (non-agricultural activities). Starting in 1950 estimates cover total hours worked in the economy as measured primarily from National Accounts data.



Source: Huberman & Minns (2007) and PWT 9.1 (2019) OurWorldInData.org/working-hours • CC BY
 Note: We plot the data from Huberman & Minns (2007) and extend coverage using an updated vintage of PWT, which uses the same underlying source. Comparisons between countries are limited due to differences in measurement.

Figure 3: Evolution of average working hours per year. Source: Giattino, C. 2020

As can be seen in Figure 3, in 2017 the annual working hours in Italy were 1.723 hours, which is 21,4% higher than Germany, who has drastically cut its working hours by 60% since 1870. Other European countries like the United Kingdom (UK) (1.670 hours/year), Sweden (1.609 hours/year), Belgium /1544 hs/year), and France (1514 hs/year) have more similar values for annual working hours, however, still lower than Italy, ranging from 1.3 to 5.2 standard 40 hs workweeks less per year.

The Industrial Revolution marked a significant shift in the way people worked. It brought the rise of factories and mass production, which required workers to work long hours, often more than 12 hours a day, six days a week. During this period, activists and trade unions started advocating for better working conditions and shorter working hours. In 1866, in the United

States (US), the National Labour Union asked the Congress to pass a law mandating eight-hour workdays, although this did not pass. Twenty years went by until in 1886, Illinois Legislature, was the first state to approve this law. The measure later took relevance during the twentieth century, after Henry Ford introduced 40-hour work weeks in 1926. The US was the first country to pass the Fair Labour Standard Act in 1938 stating that overtime should be paid for more than 44 hours worked per week. The Act was amended in 1940 officialising the 40 hours work-week (Lee, 2023). From there, it spread to other parts of the world, with most European countries standardising the forty-hour week by the 1970s (“Hubstaff”, 2023).

The eight-hour workday was a significant milestone in the evolution of working hours. Nonetheless, the number of days worked per week, and weeks per year also played a key role in the reduction of average working hours over time. As stated by Dora L. Costa in *The Wage and the Length of the Work Day: From the 1890s to 1991*:

“The length of the workday fell sharply between the 1880s, when the typical worker laboured 10 hours a day, 6 days a week, and 1920, when his counterpart worked an 8-hour day, 6 days a week. By 1940 the typical work schedule was 8 hours a day, 5 days a week. Although further reductions in work time largely took the form of increases in vacations, holidays, sick days, personal leave, and earlier retirement, time diary studies suggest that the workday has continued to trend downward less than 8 hours a day” (Costa, 2000 p.156).

Once the 5-day week became the norm, the *weekend* was set in most Western countries as Saturday and Sunday for religious traditions. For their own cultural and religious ceremonies, Muslim countries used to have Thursdays and Fridays off. However, to facilitate trading, most countries later adhered to the standard weekend: Saturday and Sunday. For this same reason, the working schedule was set from 9am to 6pm (“Hubstaff”, 2023).

Paid time off (PTO) has also been a big source of time reduction in the yearly working hours. Figure 4 shows the evolution of PTO over time in different countries (Giattino, 2020). Most nations have paid leave regulated by law with substantial differences in the absolute time between countries. However, there are still a few developed countries, among them the United

States, in which there are no legal requirements regarding vacation and paid time off (“Hubstaff”, 2023). As can be seen in Figure 4, with 42 days off per year considering vacations enforced by law and national holidays Italy is ranked second, only behind Germany with 43 days off/year.

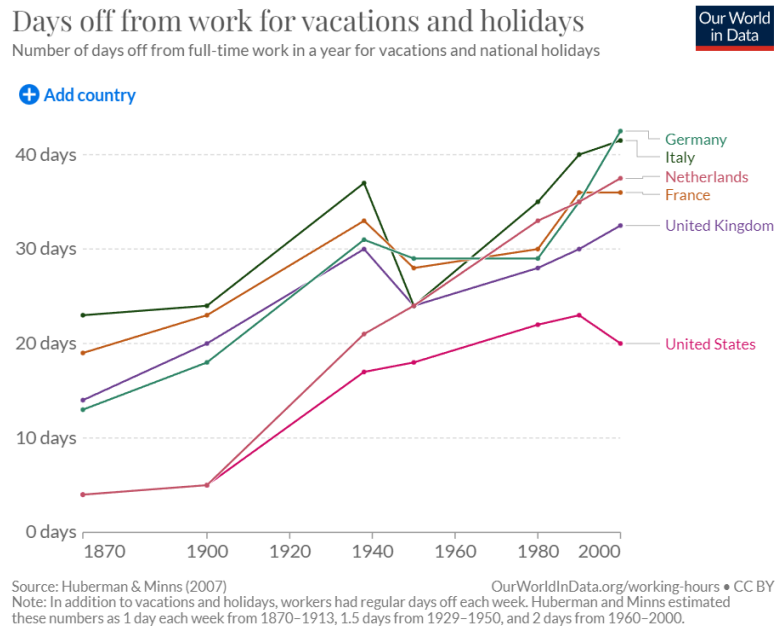


Figure 4: Evolution of paid time off over time in some countries. Source: (Giattino, 2020)

Although the main motivation to reduce working time has been to give workers more time for leisure activities, such as spending time with their families and pursuing hobbies, it has also led to an increase in productivity. This is because shorter working hours lead to better work-life balance, which reduces stress and increases job satisfaction. Studies have shown that workers who work shorter hours are more productive than those who work longer hours (Luxton, 2016). Productivity is defined as the ratio between the outputs produced and the inputs required to produce. From a macroeconomic perspective, productivity can be defined as gross domestic product (GDP) per hour of work. Figure 5 shows that there is a strong negative correlation between the working hours and productivity (Giattino, 2020): in countries where annual working hours are lower, like in European countries, productivity is higher while in countries where annual working hours are higher, like in Asian countries, productivity decreases abruptly. From a global point of view, Italy is well positioned regarding annual working hours per employee and

productivity. However, when compared with the most developed European countries only, there is still lots of room for improvement.

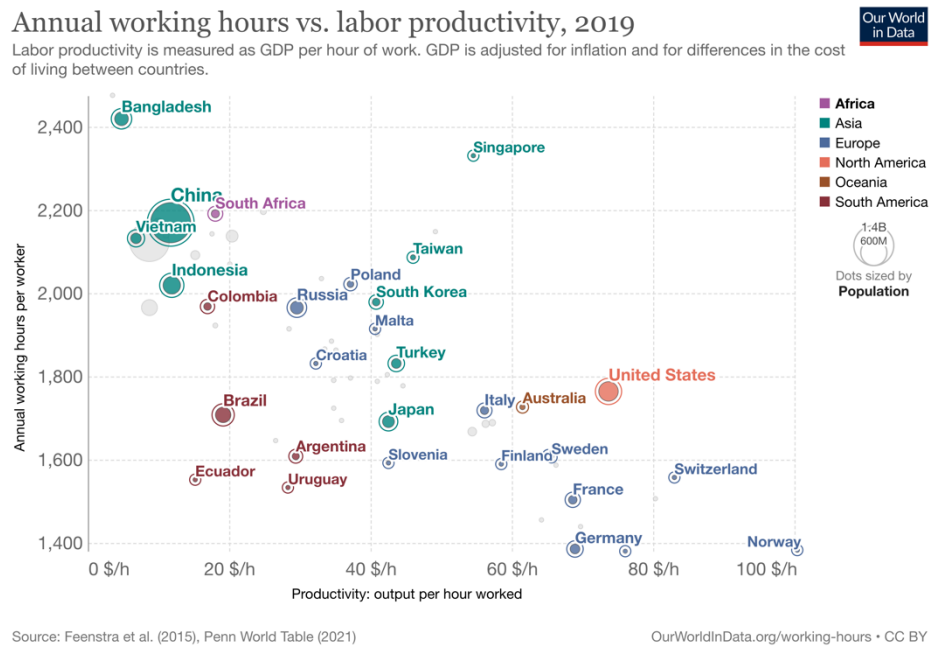


Figure 5: Working hours vs labour productivity by country

The reduction in working hours and the introduction of vacations, holidays, and sick leave have also had a positive impact on the economy. Studies have shown that shorter working hours lead to increased consumption, which in turn leads to increased production and job creation. This is because workers have more time to spend money on goods and services, which creates demand (“Hubstaff”, 2023). This increased demand leads to more jobs being created to meet that demand. Jacinda Adern, prime minister of New Zealand from 2017 to 2023, is a huge supporter of this idea and has encouraged this idea implementing a 4-day workweek in the country to reactivate the economy after Covid-19 pandemic (De Jong, 2020).

In conclusion, the evolution of working hours from the Industrial Revolution to modern times has been a gradual process that has led to a reduction in the number of hours worked per day, per week, and per year. This reduction has been due to the introduction of the eight-hour workday, *weekends*, vacations, holidays, and other leaves of absence. As a consequence, from this reduction in working hours, there has been an increase in productivity and a more motivated

and loyal workforce. It has also had a positive impact on the economy, leading to increased consumption, production, and job creation. For this reason, many countries and companies are experimenting with shorter work-days or work-weeks to understand if there are further benefits not yet exploited.

1.1.2 Work after Covid-19

The Covid-19 pandemic has caused unprecedented disruptions in the way we live and work, bringing profound changes to the global economy and society. With widespread lockdowns and social distancing measures in place, organisations around the world had to rapidly adapt to remote work and virtual collaboration. This shift has challenged traditional work structures and norms, blurring the lines between work and home life and highlighting the importance of technology in enabling connectivity and productivity. As the pandemic continues to evolve, it is clear that the way we work has been forever transformed, with far-reaching implications for employers and employees.

In this context, there have been two trends that, although they didn't start with the Covid-19 pandemic, have seen an acceleration and that will be key factors for defining a new way of working: **hybrid remote work** and **decrease of wellbeing** (especially mental health) **and increase in employee burnout**.

1.1.2.1 Hybrid remote work

The first accelerated trend because of the pandemic is what we know as **hybrid remote work**. This is perhaps the most obvious impact of Covid-19 on the labour force as the number of employees working remotely increased dramatically during the pandemic. However, numbers show that this trend is here to stay: 20% -25% of workers in advanced economies and about 10% in emerging economies could potentially work from home three to five days a week, mainly in the computer-based office work arena (Lund et al, 2021). Figure 6 shows the dramatic increase in the number of workers considered teleworkers in the European Union (EU) during the Covid-19 pandemic. The percentage of individuals aged 15 to 64 who worked remotely out of the total

employment in the EU saw a rise from 5.4% in 2019 to 12.0% in 2020 and further increased to 13.2% in 2021 (Türkes M.C. & Vuta D.R., 2022).

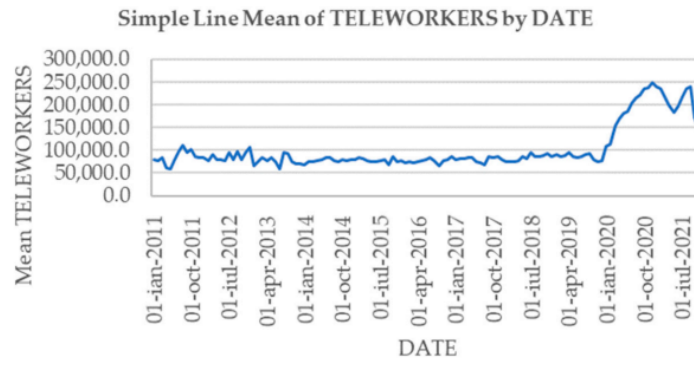


Figure 6: Simple mean teleworkers in the UE during 2011–2021. Source: (Türkes M.C. & Vuta D.R., 2022)

Considering the Italian territory, the Smart Working Observatory of Politecnico di Milano reports that around 3.6 million employees worked remotely during 2022, increasing 12.2% with respect to 2021. When analysed by company size as can be seen in Figure 7 shows that small and medium-sized enterprises (SMEs) and public administration (PA) registered a decrease in remote workers in 2022, while large companies continue to increase. Additionally, there is a huge difference between the average number of days worked remotely in the different company sizes: while large companies’ remote workers work from home 9.5 days/month and PA 8 days/month, SMEs only have 4.5 days/month of remote working (Smart Working Observatory of Politecnico di Milano, 2022).

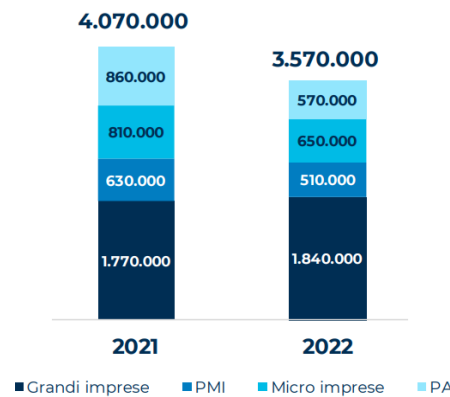


Figure 7: Number of remote workers per year in Italy divided by company size. Source: (Smart Working Observatory of Politecnico di Milano, 2022)

Besides the implementation of remote working, 52% of large companies in Italy have already modified their work environments during the pandemic, and the same goes for 30% of SMEs and 25% of PAs. Rethinking workspaces that consider people's different ways of working compared to the pre-pandemic period is crucial to facilitate a return to the office. The return to the office has been a hot topic lately with resistance from people in 68% of large companies and 45% of PAs in Italy according to the Smart Working Observatory (Smart Working Observatory of Politecnico di Milano, 2022).

1.1.2.2 Decrease of wellbeing and increase of employee burnout

The second trend that has seen an increase since the pandemic is the **decrease of wellbeing and increase in employee burnout** experienced by employees. Burnout is defined by the World Health Organization (WHO) as:

“a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed. It is characterised by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one’s job, or feelings of negativism or cynicism related to one’s job; and reduced professional efficacy” (World Health Organization, 2019).

The Covid-19 pandemic has led to a significant shift in the way people work, with remote working becoming the new norm for many employees. While this has brought benefits and started a flexibilization process in the ways of working, it has also resulted in the blurring of boundaries between personal and work life. Consequently, many workers have found it increasingly difficult to switch off from work and take the time they need to recharge, leading to higher levels of stress and burnout. In fact, according to a survey carried out in March 2021 by Indeed, 53% of virtual or work from home (WFH) employees were working more hours than they were in the office: nearly one-third (31%) said they are working “much more” than before the pandemic (Threlkeld, 2021). Without clear boundaries and a structured routine, remote workers may find themselves working longer hours and neglecting their personal lives,

ultimately impacting their overall well-being. In fact, the WHO states that working long hours is associated with symptoms of depression (World Health Organization, 2022).

However, now that lockdowns are over and that the state of emergency has ended, workers still say they're burnout and, in some cases, even more than before. In a February 2023 survey in which more than 10 thousand global workers participated, 42% reported burnout, marking the highest figure since May 2021 (Future Forum, 2023).

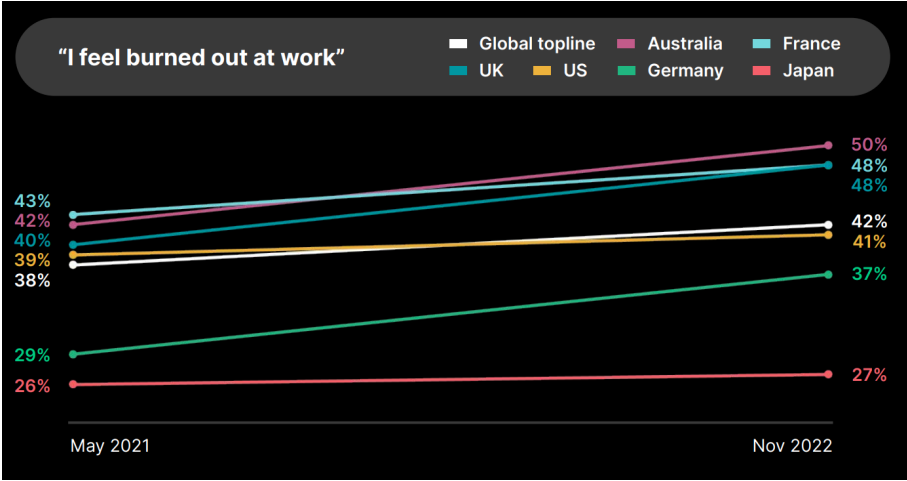


Figure 8: Evolution in time of the percentage of workforce that feel burned out. Source: (Future Forum, 2023)

It is worth noticing that this increasing feeling of burnout comes together with the work flexibility workers experience. In fact, 53% of those who are dissatisfied with their level of flexibility say they are burnout, which is significantly higher compared to 37% of employees expressing burnout who are satisfied with their level of flexibility (Future Forum, 2023). Furthermore, the WHO guidelines for mental health suggest that higher job control is associated with reduced emotional exhaustion burnout, while low job control increases the odds of absence due to mental health medical diagnosis (World Health Organization, 2022).

Moreover, the Work Health Survey filled by more than 11 thousand employees across 17 sectors in the United States from October 2020 to August 2021, suggests that 80% of employees agreed that the stress from work affects their relationships with friends, family, and co-workers, including 1 in 3 employees who strongly agreed with this statement. In addition, 78% of employees agreed that their workplace stress affects their mental health (Adams & Nguyen,

2022). These results raise concern and highlight the strong impact of burnout over employee’s work-life balance and wellbeing, which should be addressed.

The Covid-19 pandemic has transformed the way we work, and it has brought new trends in the workplace. As many companies switched to remote work or hybrid models, employees experienced increased burnout. As a result, several new trends have emerged, such as the "**Great Resignation**", "**Quiet Quitting**", and the "**Great Regret**". These new trends, as will be explained below, have significant implications for employers and employees alike and are likely to shape the future of work.

1.1.2.2.1 The Great Resignation

In recent times, there has been a growing trend of employees leaving their jobs in large numbers. Anthony Klotz, an associate professor of management at Texas A&M University, coined the term “the Great Resignation” in a Bloomberg Businessweek article in May 2021: "*The great resignation is coming. When there's uncertainty, people tend to stay put, so there are pent-up resignations that didn't happen over the past year*” (Hetler, 2023).

Although the term Great Resignation was proposed to describe the wave of employees leaving their jobs in 2021 and 2022 after the Covid-19 pandemic, this is only one of the reasons to explain the increasing rates of employees quitting their jobs. As can be seen in Figure 9, this trend started way before 2020’s world crisis (Fuller, 2022, Iacurci, 2023).

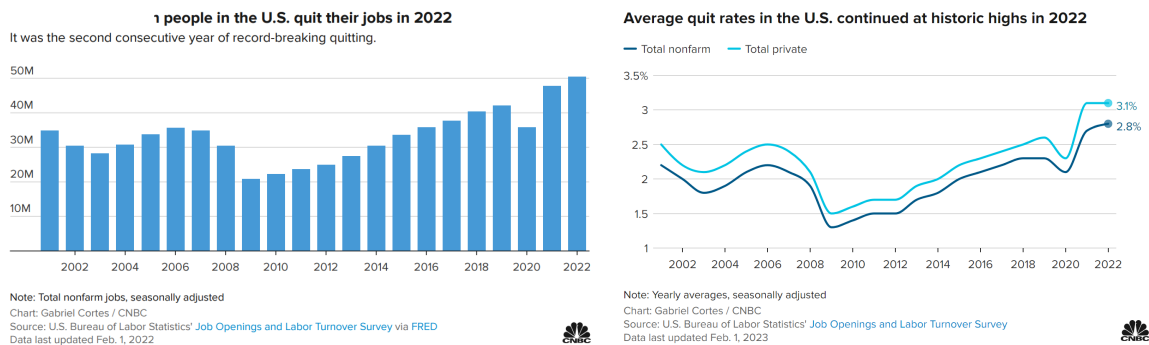


Figure 9: Resignation rates in the United States over time. Source: (Iacurci, 2023)

Over the course of a decade, between 2009 and 2019, the mean monthly rate of resignations in the United States increased annually by 0.10 percentage points. The rate of workers leaving their jobs decelerated in 2020 as a result of the pandemic, with many people retaining their employment amid the global crisis. However, in 2021, as the pandemic's unpredictability subsided, a substantial number of employees departed from their positions, which has been dubbed as “the Great Resignation”. It should be noted that this increase included a significant number of workers who may have quit in 2020 if the pandemic had not occurred. In other words, “the Great Resignation” is not a sudden, short-term event, but rather the continuation of a long-term trend (Fuller, 2022).

This growing trend can be attributed to various factors which have intensified due to the pandemic, such as younger retirement; prioritising personal life over work to take care and spend more time with the loved ones; looking for more satisfying jobs in other industries; better work-life balance; and a desire for more flexible working conditions (Fuller, 2022). These changes in workers' reasoning is also enabled by the strong employee driven market given by the high number of available job opportunities, which decreases the cost of resignation (Tessema et al, 2022).

As can be seen in Figure 10, the Work Health Survey conducted during 2020 and 2021 in the United States shows that employees working in healthier workplaces are less likely to look for open positions. In fact, nearly 40% of the participants working in what they considered an unhealthy workplace agreed with the statement “I actively spend time looking for a new position”, while less than 10% of the surveyed employees working in a healthy workplace agreed with this affirmation. According to the report, promoting the use of paid time off (PTO) as a managerial expectation is a prevalent practice in nearly half of the healthiest workplaces, in contrast to just 4% of the least healthy ones. Consequently, encouraging employees to take time off work to de-stress and recuperate can be an effective way to reduce burnout and prevent resignations (Adams & Nguyen, 2022).

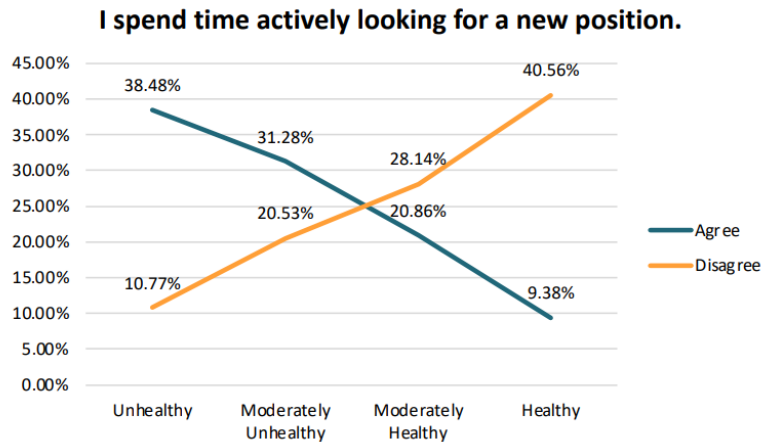


Figure 10: Percentage of participants in agreement and disagreement with the statement “I spend time actively looking for a new position” classified by their perception of healthiness of their workplace. Source: (Adams & Nguyen, 2022)

According to the quarterly notes from the Ministry of Labour, there were almost 2.2 million voluntary resignations in Italy recorded in 2022, an increase of 13.8% compared to 2021 and 27.6% compared to 2019, pre-pandemic. Research from the HR Innovation Practice from Politecnico di Milano found that 46% of workers have changed jobs in 2022 or plan to do so soon. This percentage rises to 77% for Generation Z. The study suggests that there are three main reasons for Italian workers to change their jobs. First and foremost is the search for better pay and economic benefits. Although the Italian job market is experiencing a growth phase, with the highest employment rate recorded since 2004 as of December 2022, it is the only European country where, in the last 20 years, the average gross annual salaries have decreased in real terms (HR Innovation Practice Observatory, 2023).

The second reason for resignations is the flexibility to organise one's work schedule. Overall, the research data highlights how work-life balance is one of the strongest areas of dissatisfaction among workers. Finally, the third cause for quitting is related to employees' physical and/or mental health. Based on a survey conducted to close to 1000 employees in Italy, only 11% report to be doing well in all three dimensions of well-being investigated by the research: psychological, relational, and physical (HR Innovation Practice Observatory, 2023).

The “Great Resignation” is a wake-up call for employers all around the world to re-evaluate their approach to workplace flexibility. Employees are increasingly seeking greater autonomy and flexibility in their working lives, and employers who fail to recognize and respond to this trend risk losing their best talent. This has led many organisations to adopt new initiatives aimed at providing more flexible working conditions for their employees, which will be described in depth later in this thesis.

1.1.2.2.2 Quiet Quitting

The pandemic has made people re-evaluate their relationship with work, with more employees now engaging in *quiet quitting* rather than quitting altogether. Although there are previous mentions to this expression, the term quiet quitting gained popularity in July of 2022 when Zaid Khan posted a TikTok¹ that went viral in which he expressed:

“I recently learned about this term called quiet quitting, where you’re not outright quitting your job but you’re quitting the idea of going above and beyond. You’re still performing your duties, but you’re no longer subscribing to the hustle-culture mentality that work has to be your life. (...) Your worth as a person is not defined by your labour” (Newport, 2022).

In short, quiet quitting is defined by Anthony C. Klotz and Mark C. Bolino in a Harvard Business Review article as *“the trend in which people opt-out of tasks beyond their assigned duties or become less psychologically invested in work”* (Klotz & Bolino, 2022).

The term reflects the current reality where employees are becoming more disengaged, frustrated, and burnt out at work, and it is seen as an alternative to resigning from work. Although this trend has been exacerbated by the Covid-19 pandemic, which has forced many employees to reassess their priorities and desires, the root causes behind this phenomenon have been present for decades. In fact, since Gallup began conducting employee engagement surveys in 2000, the percentage of Americans who have reported being actively disengaged at work has

¹ Available at URL: <https://www.tiktok.com/@zaidleppelin/video/7124414185282391342>

ranged from 13% to 20%, with its lowest peak in 2018-2019 previous to Covid-19 pandemic (Harter, 2023).

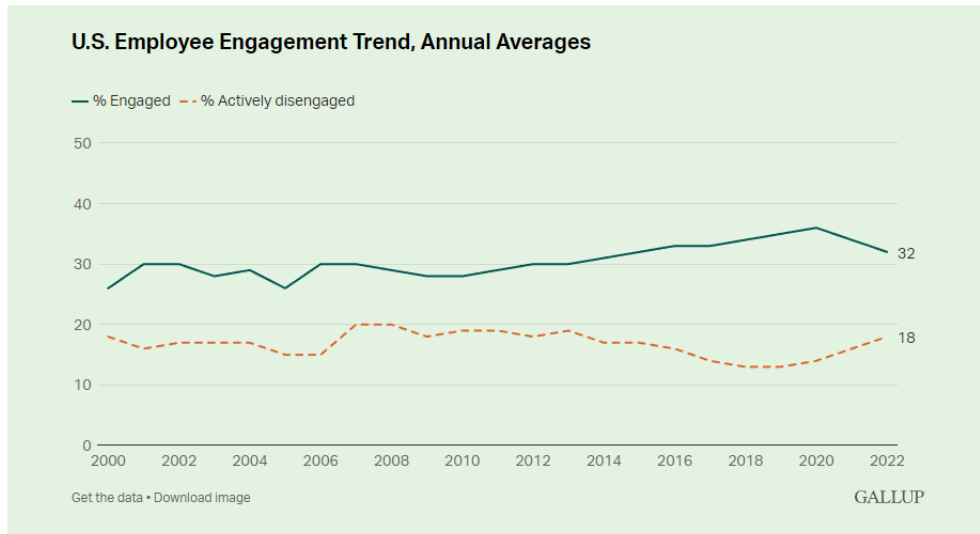


Figure 11: Employee disengagement rate over time in the US. Source: (Harter, 2023).

It is true that quiet quitting has had less media exposure than the Great Resignation. However, Gallup has associated this trend with 50% of the US working force ("AllBusiness", 2022). In Italy, data from the HR Innovation Practice Observatory from Politecnico di Milano in 2023 suggests that 12% of workers are quiet quitters (HR Innovation Practice Observatory, 2023).

Additionally, this trend has massively spread within Gen Z workers who had their first work experiences during the Covid-19 pandemic and were heavily influenced by the lack of dissociation between personal and work life during this period. A survey conducted by Microsoft in 2021 showed that 54% of Gen Z workers are considering quitting their job, which is significantly higher than the 41% of the entire global workforce (Fleming, 2021).

The trend of quiet quitting is a sign of a larger trend towards rethinking the institution of work, with the pandemic being the trigger point for many people. Workers are becoming more aware of the importance of having a work-life balance and doing what they love (Aratani, 2023). Therefore, it is essential for organisations to listen to their workers, address their unique needs,

and create cultures that invite workers to go beyond the tasks specified in their contracts. Policies like flexible work arrangements are crucial to prevent this issue.

1.1.2.2.3 The Great Regret

The desire for better pay, benefits, and work-life balance led to the “Great Resignation”, where 47 million Americans quit their jobs in 2021 hoping to find better opportunities. However, during 2022 this trend has transformed into the “Great Regret” (Jackson, 2023). A survey conducted by Joblist during the second quarter of 2022 in the US indicates that 26% of those who quit their job regret their decision (Joblist, 2022). Moreover, a new study published by Paychex in January 2023 suggests 80% of workers who left their jobs during the pandemic wish they hadn’t. Gen Z workers are the most regretful, with 89% wishing they had stayed in their old jobs, also reporting that their mental health has declined as a result (Paychex, 2023).

Although mental health, and work-life balance were some of the most influential factors in employees’ resignations, Paychex study shows only 54% of the respondents are satisfied with their mental health and 43% with their work-life balance in their new workplace. Additionally, only 11% are more satisfied with their new salaries. Joblist survey also evidences that 42% of quitters say their new jobs haven’t lived up to their expectations, and 48% of them are willing to move to a new job in less than a year. Among the most common reasons mentioned by the participants to regret leaving their old jobs are that finding a new job had been harder than expected (it took 39% of Paychex participants more than seven months to find a new job), and missing old coworkers (Joblist, 2022; Paychex, 2023).

The trend towards “boomerang employees” and the willingness of employers to rehire workers who left during the pandemic indicates that companies are recognizing the importance of retaining talent. As the job market becomes increasingly competitive, retaining existing employees may be more cost-effective than constantly hiring and training new workers. Paychex survey argues that 70% of employers are open to rehiring former employees since they may benefit from the familiarity and knowledge of the company that these workers have. Some

companies have already rehired some personnel and have even offered new benefits, such as remote work and flexible hours (Paychex, 2023).

The pandemic has led many workers to reassess their priorities and opt for jobs that offer more work-life balance, better salaries, and benefits. However, the above-mentioned studies highlight that workers who have made this decision are now struggling with their mental health and work-life balance, leading to regrets about leaving their old jobs. This suggests that flexibility alone may not be sufficient to keep workers satisfied and that employers need to prioritise employee well-being and provide support to those who may be struggling with the transition.

In conclusion, the Covid-19 pandemic has brought significant changes to the way people work and has accelerated the adoption of remote work, flexible schedules, and digital communication tools. While these changes have brought many benefits, they have also highlighted the challenges of maintaining a healthy work-life balance and avoiding burnout in this new context, which has led the workforce to re-assess their priorities and dramatically shifted their mindsets towards work. It is clear that the workplace will never be the same, and employers must continue to adapt to these changes to support their employees' well-being and productivity. As we move forward, it will be important to find the right balance between flexibility and structure, leveraging technology to create new opportunities for collaboration and connection.

1.2 Smart Working

Smart Working has become an increasingly popular concept in recent years as a result of technological advancements, demographic changes, and shifting attitudes towards work. While the term itself has been around for several decades, its relevance and importance have become more pronounced in the modern workplace, especially after the Covid-19 pandemic. This section of the thesis will explore various definitions of Smart Working, including its principles and theoretical models.

1.2.1 Definitions

There are numerous definitions of the term Smart Working that evidence different characteristics of this way of working. In this section, some of these definitions are provided with the objective of gaining a deeper understanding of how employers and employees can benefit from Smart Working, and the challenges that must be overcome to make it a successful practice.

According to the Smart Working Observatory of Politecnico di Milano, Smart Working is “*a management approach based on giving back to people the flexibility and autonomy of choosing spaces, schedules, and tools to use in return for greater result accountability*” (Smart Working Observatory of Politecnico di Milano, 2023).

With this first definition, the pillars of Smart Working are established: **flexibility** and **autonomy** for workers.

Another definition provided by the Smart Working Observatory of Politecnico di Milano is: “*Smart Working means rethinking work from a more intelligent standpoint, questioning traditional obligations related to workplace and schedule, leaving people more independence to define work modalities based more on result-based responsibilities. Independence, but also flexibility, accountability, valuing talents and trust become the key principles of this new approach.*” (Smart Working Observatory of Politecnico di Milano, 2018).

This second definition emphasises on the fact that Smart Working is not only a matter of giving employees more flexibility, but it is about **redesigning the whole working structure**.

Another definition is the one proposed by the Italian Ministry of Labor and Social Policy, which defines Smart Working as “*a mode of execution of the employment relationship established by agreement between the parties, including forms of organisation by phases, cycles and objectives and without precise constraints of time or place of work, with the possible use of technological tools for the performance of the work activity*” (Ministero del Lavoro e delle Politiche Sociali, 2017).

This third definition relates Smart Working not only with time and space flexibility, but also with an organisation focused on **objectives** and **cycles**. This suggests a new way of working where what's important is not the time compliance, but the completion of tasks.

Finally, the Smart Working Handbook states: *“Smart Working is a business-focused approach to flexible working that delivers more efficiency and effectiveness in work organisation, service delivery and organisational agility, as well as benefits for working people. Key features are management by results, a trust-based culture, high levels of autonomy, flexibility in the time and location of work, new tools and work environments, reduced reliance on physical resources and openness to continuing change.”* (The Smart Working Handbook, 2015, p.3).

The definition above reinforces the importance of defining a new way of working guided by results and also adds the fact that Smart Working is about being **open to change** and understanding that there is not one single way of working.

By taking into consideration all the previous definitions, Smart Working can be defined as a management approach focused on the achievement of results whose pillars are autonomy of workers, and spatial and time flexibility. This approach implies a redefinition of the company's culture which needs to be continuously updated. Furthermore, we need to consider the impact of technologies that are a necessary, but not sufficient, means to successfully apply a Smart Working model.

1.2.2 Principles

The deep root of Smart Working lies in overcoming the pillars of traditional organisations formed during the Industrial Revolution, such as hierarchy, subordination, formalisation of tasks, and standardisation of activities, and replacing them with new principles more consistent with the opportunities offered by new technologies and the new needs of individuals and organisations. The Smart Working Observatory of Politecnico di Milano identifies four main principles to analyse a Smart Working-oriented organisation: **collaboration and**

communication, empowerment and responsibility, customization and flexibility, and talent and diversity.

1.2.2.1 Collaboration and communication

This first fundamental principle refers to using open and emergent collaboration and communication as the main coordination tool. In traditional organisations, hierarchy was the prevailing mode of coordination among people. New collaboration and communication technologies are much more effective at enabling the exchange of information flows that, because of their intensity, dynamism and specialisation, are ill-suited to being mediated and confined through hierarchical relationships. The removal of hierarchy as primary coordination tool gives more freedom and flexibility to employees, accelerating the decision-making process.

1.2.2.2 Empowerment and responsibility

To be effective in carrying out their activities, individuals must be able to work with autonomy, and make decisions taking ownership of the results and achieved. In traditional organisations, shaped by the Second Industrial Revolution, subordination and obedience were the norm. This change in principles should mainly be driven by managers, who change their roles from supervisors to leaders and coaches capable of working with individuals and teams to collaboratively define goals and results to be achieved, facilitate widespread collaboration, and accompany workers to increasingly full autonomy and assumption of responsibility.

1.2.2.3 Customization and flexibility

Customization and flexibility in working arrangements should replace the principle of standardisation. Flexibility should no longer be seen as a unilateral "concession" from the boss toward the employee, but rather a common path of experimenting with working arrangements that are better able to balance and integrate the needs of the organisation and workers.

1.2.2.4 Talent and diversity

In the new organisations, employees are one of the main assets, they have different characteristics, and this diversity is a value and determines the distinctiveness of the organisation. Leaders have a fundamental role in understanding and valuing each person's talents, so as to unleash commitment, creativity, and capacity for innovation. True equity in a Smart Working model is not about giving everyone the same constraints and working conditions, but rather about allowing everyone to find the best opportunities to exploit and develop their human and professional abilities.

1.2.3 Theoretical framework

In order to make the organisational principles of Smart Working a reality, according to the Smart Working Observatory of Politecnico di Milano, it is necessary to create joint and coherent initiatives pertaining to four design levers: **organisational policies**, **digital technologies**, **physical layout of workspaces**, and **leadership behaviours and styles**. Each of them has different business stakeholders. The most mature Smart Working initiatives require acting on all four levers, however, the priority with which they are activated depends on the needs and motivations that lead organisations to embark on the path toward Smart Working.

1.2.3.1 Organisational policies

The starting point for the proper introduction of Smart Working is the preparation of a company regulation and/or policy. These are the rules that specify all the fundamental aspects related to the concrete application of the individual Smart Working model. Human Resources Management plays a key role as sponsor and guide of organisational and cultural change, to rethink its practices and processes aligned with the characteristics and needs of workers who become "smarter" and "more flexible."

The formalisation of the adoption of Smart Working can take place through individual or company agreements considering the specific internal conditions of the company. The different modes of work performance in Smart Working may have consequences on different legal and

contractual employment relationships. In the regulation of Smart Working, it is therefore necessary to recall the regulation already in place within the company and/or the specific reference legislation to make the appropriate alignments.

Smart Working should be seen as an opportunity to rethink organisational policies in a broader way, avoiding focusing too much on the issue of remote work. There is a risk of maintaining rigidity in working hours and attendance tracking when in the office, creating obvious contradictions with the flexibility policies. These organisational changes leading to a "smarter" and "more flexible" organisation, also impact the talent management process.

A positive effect of Smart Working is undoubtedly achieved from the perspective of employer branding and people engagement. Given the current working context, there is an increasing demand for flexibility and Smart Working from the workforce. Hence, companies that are able to seize this opportunity can increase the attraction and retention of talents who today are more sensitive to the possibility of organising their work spaces and hours more autonomously and flexibly with respect to their personal needs. For this reason, Smart Working has become a relevant element of the *Value Proposition* toward workers and should be used as part of internal and external communication activities and explicitly included in the job context description used in recruiting.

1.2.3.2 Digital technologies

This lever is usually in the hands of the Information and Communication Technologies Department. Digital technologies play a key role in facilitating and enabling new ways of working and are undoubtedly a key driver of the emergence of Smart Working. These technologies enable workspace to be expanded and made virtual, making communication, collaboration and socialisation independent of work schedules and workplaces, creating the prerequisite for the development of Smart Working logics.

The real difficulty lies not in choosing and introducing new tools, but in making sure that they are effectively adopted and positively influence the way of working by creating new

opportunities for more mature and engaging relationships and collaboration. To exploit the potential offered by technologies, it is necessary to spread a true digital culture and develop new skills for the balanced and effective use of new tools. Alongside the introduction of new digital technologies, the consistent and synergistic development of "soft" managerial and behavioural skills must be promoted in order to effectively use the new digital tools to improve the productivity and the quality of work.

1.2.3.3 Physical layout of workers

This lever is usually in the hands of the Facility Management Department. When talking about Smart Working, associating the concept exclusively with remote working is a common mistake. The term “remote working” refers to the condition in which a worker can carry out his tasks and activities remotely, in a place that can be his home (but not only), communicating and interacting with colleagues and the organisation by means of technological tools. The change in work arrangements toward increasing flexibility and mobility of people must be matched by the availability of spaces that can support such flexibility and mobility, spaces that need not necessarily be sought outside one's corporate headquarters. Even when in the office, the worker must find the ability to choose where and how to work according to his needs and preferences.

Also, in terms of approach to change, the rethinking of spaces and the introduction of technologies, policies and managerial models geared to Smart Working are mutually reinforcing, making the adoption and diffusion of virtuous behaviours easier and more pervasive. The design of an environment that can support Smart Working, must take into consideration four different aspects:

1. **Differentiation:** the spaces present must offer workers different choices in terms of work environment, type of collaboration and socialisation, and technologies. It is necessary that environments are aimed at meeting the more specific professional needs of people in accordance with the principle of activity based working, i.e., concentration, collaboration, communication, and contemplation.

2. **Reconfiguration:** it is essential that spaces allow for change in a timely and cost-effective manner. The ability to have environments that are adaptable with respect to contingent needs or long-term evolutions of the organisation ensures that it is not the space that constrains the organisation's behaviour but, on the contrary, is able to adapt to its changes.
3. **Habitability:** the design of spaces should not be limited to considering the adequate functional support to the performance of work activities, but all those spaces should also provide added value to the people who experience daily work life there. Work environment must be designed in such a way that it is welcoming so that people feel comfortable. This helps to reduce the level of stress, which any profession entails, and allows people to work better and be more productive.
4. **Intelligence:** this aspect refers to the integration of spaces with digital technologies which is essential to achieve real effectiveness in their use. This synergy between environments and technology favours, on the one hand, the mobility of people within the corporate headquarters and, on the other hand, allows for greater usability and effectiveness in the use of spaces.

1.2.3.4 Leadership behaviours and styles

In this lever, the key stakeholders are the managers in all levels of the company. They are the ones who have the task of putting into practice and transferring to their people the new principles and models of work organisation by fostering the profound cultural change needed to achieve real benefits from Smart Working.

In order to take full advantage of the benefits offered by the new digital technologies, the use of the new layouts of physical spaces, and flexibility policies, first of all, a change in leadership behaviours and styles is required. These changes are related to the culture of workers and their way of "experiencing" work, and to the approach by bosses to the exercise of authority and control.

2 Flexible Working

Flexible work arrangements have gained increasing attention from both employers and employees in recent years. The term *flexible work arrangements* (FWAs) encompasses a range of policies that allow employees to modify their work schedules and/or working location to better suit their personal and professional needs. In this section, we will look into the definition, theoretical models, and classifications of flexible work arrangements. Finally, we will analyse the impacts of the implementation of traditional flexible work arrangements and new flexible work time arrangements (FWTAs) available in the literature to understand if this could shape the future ways of working.

2.1 Definition

After the disruptions generated by the Covid-19 pandemic, many employers and workers are seeking for a “new normal”, making this the perfect opportunity to develop a new concept for work. In this context, the World Economic Forum suggested a new framework in 2022: “*The Good Work Framework proposes a new benchmark for job quality in the future of work: to provide a consistent and goal-oriented approach to the development of comprehensive people strategies and to guide measurable actions to promote good work.*” (World Economic Forum, 2022, p.11). One of the pillars of this framework is to provide flexibility and security to all employees, where flexibility is intended as “*the ability of workers to make choices influencing when and where they engage in work- related tasks*” (World Economic Forum, 2022, p.14).

Another similar definition is the one provided by the International Labour Organization (ILO): “*flexible working refers to any arrangement in which the place of work, the hours of work, or the pattern of work may be adjusted to suit the needs of the worker or the enterprise*” (ILO, 2017).

The literature proposes many other definitions, as flexible working has been used as an umbrella-term to encompass a wide variety of activities that break the “9-to-5” standard norm, including practices such as remote working, reduced hours, different hours (either agreed, non-standard hours, or discretion over working hours on a day-by-day basis) and compressed working time (Kelliher & Anderson, 2008). However, what all these definitions agree with is the fact that workers get to decide different aspects related to the way they work giving them more autonomy. This is creating a shift away from “one-size-fits-all” job models towards greater personalization of the employee experience (World Economic Forum, 2022).

2.2 Theoretical model

In order to deepen the definition of workplace flexibility, the theoretical model developed by E.J. Hill will be taken as a reference, which is represented in Figure 12 (Hill et al., 2008).

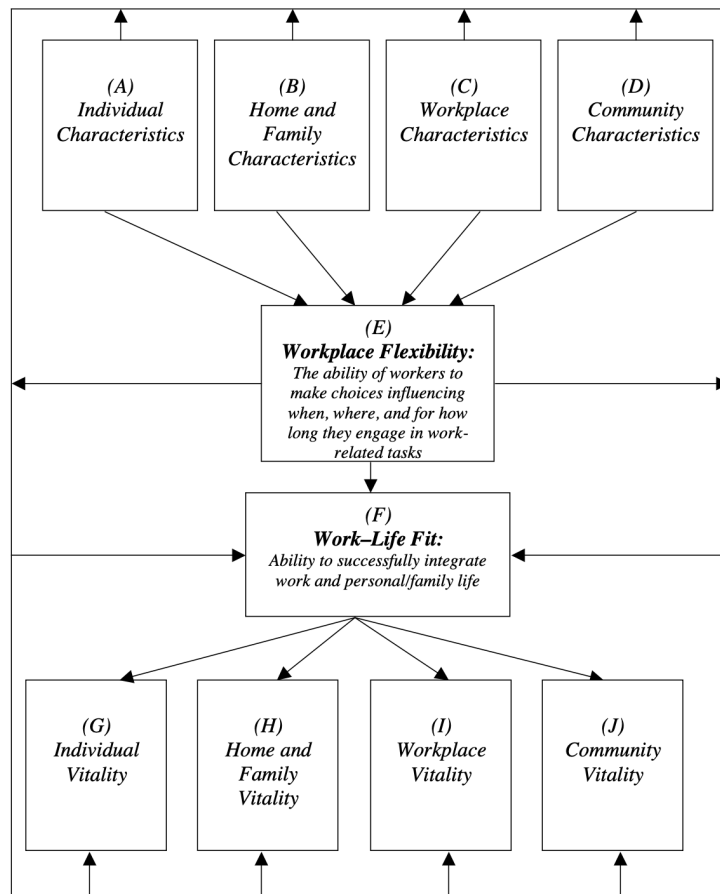


Figure 12: Conceptualising workplace flexibility. Source: (Hill et al., 2008)

2.2.1 Model variables

The model is conceptualised in four different levels:

- **Antecedents to workplace flexibility** (First Level): In this level there are four antecedents to consider: Individual Characteristics (A), Home and Family Characteristics (B), Workplace Characteristics (C), and Community Characteristics (D). These are the independent variables in the model.
- **Workplace flexibility** (Second Level): the model defines workplace flexibility (E) as “*the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks*” and considers it an environmental attribute of the workplace which contributes positively on different outcomes.
- **Work-life fit** (Third Level): work-life fit (F) is defined as the “*ability to successfully integrate work and personal/family life*”.
- **Outcomes** (Fourth Level): There are four outcomes to consider: Individual Vitality (G), Home and Family Vitality (H), Workplace Vitality (I), and Community Vitality (J). These are the dependent variables of the model.

2.2.2 Conceptual relationships

The antecedents (A, B, C, D) are considered to have a direct influence on all parts of the model: workplace flexibility (E), work-life fit (F), and the four vitality outcomes (G, H, I, J). Then, workplace flexibility (E) is conceptualised to influence both of the levels below it: work-life fit (F) and the four vitality outcomes (G, H, I, J). Finally, work-life fit (F) is said to directly influence the four vitality outcomes (G, H, I, J).

2.2.3 The levels

2.2.3.1 Antecedents of workplace flexibility

As previously mentioned, the antecedents of workplace flexibility are conceptualised as independent variables that influence all the levels of the model. These can be classified into four main groups:

- **Individual characteristics:** demographic characteristics of the individual considered as a person separate from work (e.g., age, gender, ethnicity, education, and income).
- **Home and family characteristics:** marital/partner status; household; presence, age, and responsibility for children; and caregiving arrangements.
- **Workplace characteristics:** these refer to workplace characteristics that influence workers' ability to choose when, where, and how long work-related tasks are completed. In essence, flexibility work arrangements.
- **Community characteristics:** this variable can be divided into two main groups: community infrastructure and social relationships. Community infrastructure refers to the physical context of a community (such as transportation systems, availability of utility services, buildings, and childcare services) that may put constraints or opportunities to workplace flexibility. On the other hand, social relationships refer to the social norms of the community that may influence the adoption of workplace flexibility arrangements.

2.2.3.2 Work-family fit

Work-family fit refers to the “*individuals' overall assessment of their ability to integrate paid work and family life*”. This variable has a direct influence on the four vitality outcomes and is influenced by both antecedents and workplace flexibility.

2.2.3.3 Vitality outcomes

Vitality outcomes are the dependent variables, influenced by all the previous components of the model. These outcomes, measured in terms of vitality, highlight the positive impacts of workplace flexibility. There are four relevant outcomes:

- **Individual Vitality:** this effect can be proven by the measurement of variables such as health, depression, burnout, life satisfaction, and personal success.
- **Home and Family Vitality:** in this case, relevant variables include marital satisfaction and stability, parenting and child behaviour, fertility, and time spent in childcare and housework.
- **Workplace Vitality:** relevant variables include employees' productivity, organisational commitment, retention, morale, absenteeism, turnover, and job satisfaction.
- **Community Vitality:** in order to correctly evaluate the impacts of workplace flexibility, the model suggests that its effects on community outcomes should also be considered. The authors express that workplace flexibility affects the level of voluntary participation in community organisations which has positive effects in the overall community. In this way, flexible working policies could include sustainability policies that aim at, not only reducing the negative environmental impacts, but also at increasing the value in the surrounding areas where the company operates.

2.3 Classification

Flexible working is a “*type of working arrangement which gives a degree of flexibility on how long, where, when and at what times employees work*” (“The Chartered Institute of Personnel and Development”, 2022). These practices can be classified into two main categories: **place flexibility** and **time flexibility** (The Smart Working Handbook, 2015). Although both types of initiatives are usually implemented together, this thesis will particularly focus on new trends of flexible work time arrangements (FWTAs). However, an initial classification is provided for all the existing types of flexible work arrangements (FWAs).

2.3.1 Place flexibility

Place flexibility policies include arrangements that allow workers to choose where their work-related activities will be completed, and it is often referred to as **flexplace** (Hill et al., 2008). Although there are many different policies within this category, they all share the essential need for telecommunication technologies.

The main form of place flexibility allows the workforce to work remotely on a full-time or part-time basis, which is known as hybrid working. When talking about part-time place flexibility, employees work partly from the offices and the remaining time in a remote location, while in full-time arrangements employees are not required to go to the company offices.

Additionally, within the office, flexibility can be implemented by sharing spaces. This means that there are no individually assigned desks. Instead, the building offers a varied range of working stations among which the employee moves according to their needs, including quiet spaces, individual desks in open areas, conference rooms, breakout areas, project rooms, training rooms, kitchenettes, among others (The Smart Working Handbook, 2015).

2.3.2 Time flexibility

On the other hand, **time flexibility**, which is often called **schedule flexibility**, allows workers to modify their work schedules using a variety of formalised policies (Hill et al., 2008). Given the recent changes in the work landscape already described, various time flexibility policies have emerged in recent years. Consequently, we will categorise these policies into two groups: *traditional* and *new* flexible work time agreements (FWTAs).

2.3.2.1 Traditional flexible work time arrangements

Among the traditional flexible work time arrangements, the most used ones are:

- **Part-time**: these jobs are the most traditional form of flexible scheduling and are typically used when a job requires fewer than the standard 35-40 hours of work per week (International Labour Organization, 2016). In these cases, the reduction in working hours comes together with a proportional reduction in salary.

- **Time off in lieu (TOIL):** this arrangement allows the adjustment of working hours on different days, compensating for additional hours worked on one day by providing time off on other days ("The Smart Working Handbook", 2015).
- **Flexi-time:** as defined in the Cambridge Dictionary, flexi-time is “*a system of working in which people work a set number of hours within a fixed period of time, but can change the time they start or finish work*” (Cambridge Dictionary, n.d.). The fundamental flexi-time model is composed of five elements (Berkery et al., 2020):
 - (1) a range of hours during which work must be completed (such as 7am - 6pm);
 - (2) a fixed time period during which all workers must be present, which is usually called *core time* (for instance 10am to 3pm);
 - (3) a flexible range of hours before, after, or between the core time that gives employees the ability to choose when they are present or absent from work;
 - (4) a system of banking that enables the carryover of extra or deficit hours worked;
 - (5) scheduling variability, which permits employees to change their working hours from one period to the next without the need to ask permission from their managers beforehand.

2.3.2.2 *New flexible work time arrangements*

Due to the already mentioned trends and crises that characterise the modern working environment, besides the traditional work time arrangements, companies started exploring new policies. These innovative approaches include unlimited vacation policies, compressed work-weeks, and shorter work-weeks, which have gained considerable popularity in the past years.

- **Unlimited vacations:** in these policies employees are allowed, and even encouraged, to take as many vacation days as they need, provided they still fulfil their responsibilities towards the company (Arevalo & De Jong, 2015). While the name of this policy can lead to the idea that employees can take time off whenever they'd like, that's not likely the case, as usually employees still need to request time off from their manager.

- **Compressed work-week:** this policy gives employees the flexibility to complete their weekly working hours within a shorter timeframe than the conventional five-day work-week (Hill et al., 2008). This means that the total working hours remain the same (36-40 hours per week depending on the contract), but they are carried out in fewer days. This is usually implemented as a “**4/10**” work week that consists of working four 10-hour days (or equivalent 4/9 for 36 hs contracts), usually leaving Friday or Monday off. The “**9/80**” work-week is another type of compressed work-week in which employees complete 80 hours of work over a span of 9 days instead of 10, having one day off every two weeks ("4 day week", 2021). Another alternative that is becoming more frequent, is that of working 9 hours from Monday to Friday and half a day on Friday (4.5 days per week). We will call this initiative “**Compressed Work Week - Short Friday**” to differentiate it from the true Short Friday initiative with reduced hours.
- **Short work-week:** this policy, as defined by the Ministry of Manpower of Singapore, is a “*work arrangement where an establishment reduces its employees' work, either in terms of the number of hours each day or the number of working days per week*” (Manpower Research and Statistics Department, 2019, p. 1). This differs from the compressed work-week since it proposes a reduction of weekly working hours from the standard 36 to 40 hours (Chung, 2022). Additionally, it is distinguished from other agreements such as part-time jobs since a time reduction is carried out, but payment remains the same.

There are various implementations of short work-weeks but the purest form, which has been theorised by Charlotte Lockhart and Andrew Barnes, leaders of the non-profit community 4 Day Week Global, is what is known as the **100-80-100 model** (4 Day Week Global, n.d.). In this case, employees receive 100% pay for 80% worked time with 100% productivity targets achieved, obtaining a 4-day work week. Some variations of this model are also emerging, such as **short Friday** policies, in which employees work 4.5 days per week since hours are cut by 10%, leaving Friday’s afternoon free. Another

possible implementation is **shorter working days**, in which employees work 6 hours per day during the 5 week-days, conducting a total of 30 weekly hours ("4 day week", 2021).

Given the confusion around the naming convention used to address these policies not only in the news, but also in the academic literature, in this thesis all the compressed and short work-week policies are collectively referred to as “**4-day week week**” initiatives, even those whose average working days are still higher than 4 days per week. The analysed cases of new FWTAs will be classified according to the specific policies described earlier, specifying whether the adopted 4-day week model corresponds to a short or compressed work-week. This approach aims to provide clarity and consistency in the classification process.

2.4 Impacts of traditional time and place flexible work arrangements

Many studies have been conducted along time to measure the impact of traditional time and place flexible work arrangements (FWAs) on various aspects of employees' lives, as well as on organisations. In this section, we explore those findings, classifying them according to the vitality outcomes described in the model developed by E.J. Hill: individual, home and family, workplace, and community vitality (Hill et al., 2008).

2.4.1 Individual vitality

The individual vitality outcome considers the health, depression, burnout, and life satisfaction of employees, which can be synthesised in the concept of employee well-being.

Employee autonomy is a critical element to consider on how flexible work arrangements impact on the employees' well-being. The *self-determination theory* suggests that intrinsic motivation, i.e. motivation that comes from an internal desire to accomplish something, has beneficial effects, while extrinsic motivation, coming from an external incentive, can have negative ones (Austin-Egole, I. S., Iheriohanma, E., & Chinedu, N., 2020). This theory suggests that people prefer to have control over their actions rather than simply following orders as it gives them a sense of autonomy which encourages them to take responsibility and feel more

engaged with the company. Conversely, employees who have no say in their working schedules and location may feel externally controlled, leading to less commitment to the organisation and less willingness to contribute to it (Berkery et al., 2017). This theory is convalidated by the World Health Organization (WHO) by reporting that offering control in flexible working arrangements, such as self-scheduling or flexible hours, may have favourable impacts on health (World Health Organization, 2022).

In light of this, empirical studies differentiate employee-oriented from employer-oriented flexible work arrangements. While the primary focus of this thesis is on flexible policies in which employees have control (employee-oriented FWAs), it is crucial to emphasise the distinct impacts of both categories of policies.

To begin with, Janssen D. and Nachreiner F., professors at the Industrial and Organisational Psychology Unit of the Universitaet Oldenburg in Germany, conducted two surveys in 2004 to assess the impact of flexible hours in health and well-being. This analysis was based on two factors: the variability of working hours (none, low, high) and the level of control employees had over the variability (none, low, high). The obtained results reveal that a lack of control over working hours, and high variability in flexible working hours, whether determined by the company or by the individual, are strongly linked to negative effects on health and well-being. On the contrary, those who have autonomy over their flexible working hours tend to experience fewer impairments, although autonomy alone cannot offset the negative effects of variability, particularly for those with high variability (Janssen & Nachreiner, 2004).

In addition, a research conducted in 2018, studied the sustained effects of flexible time arrangements in well-being, measuring job and leisure time satisfaction in both employee-oriented and employer-oriented flexible working time arrangements (Uglanova & Dettmers, 2018). The results of this study based on the German Socio-Economic Panel (GSOEP) between 2003 and 2013 regarding leisure time satisfaction are summarised in Figure 13.

The results suggest that flexible work time agreements (FWTAs) in which individuals have control over their schedules report consistent, positive, and significant impacts on women's

satisfaction with leisure time. However, for men, both employee- and employer-oriented policies lead to a decrease in leisure satisfaction in the short term, but this effect returns to the initial levels in the long term, indicating an adaptive pattern. In the employer-oriented FWTA, the well-being for women follows a pattern of sensitization, with a consistent decrease in satisfaction in leisure time over time. One potential interpretation of gender differences in these results, may lie in the unequal allocation of household work performed by men and women (Uglanova & Dettmers, 2018).

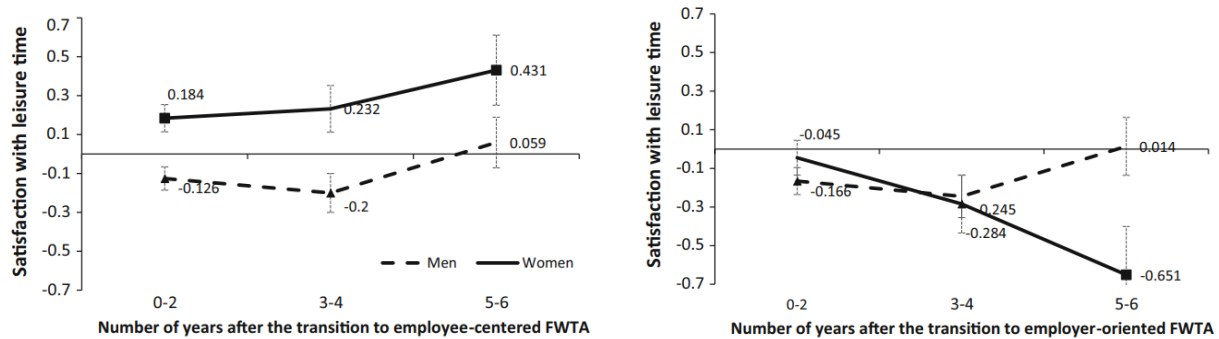


Figure 13: Effects of transitions to employee- and employer-oriented flexible working time arrangements on time leisure satisfaction. Source: (Uglanova & Dettmers, 2018)

Finally, Figure 14 shows the results of a study conducted by the Smart Working observatory in 2022 regarding the wellbeing of three different types of employees: *on-site workers*, who work exclusively at their designated workplace; *remote non-smart workers*, who have the option to work remotely but lack other forms of flexibility; and *smart workers*, who possess both location and time flexibility and operate with a goal-oriented approach.

The findings conclude that *smart workers* experience higher levels of well-being with respect to *on-site workers* and *remote workers*. This suggests that remote work alone, without other Smart Working initiatives nor integration with broader flexibility frameworks, does not bring benefits, neither personally nor socially. On the contrary, isolated remote working policies can lead to more negative outcomes, even compared to workers with no form of flexibility like *on-site workers* (Smart Working Observatory of Politecnico di Milano, 2022).

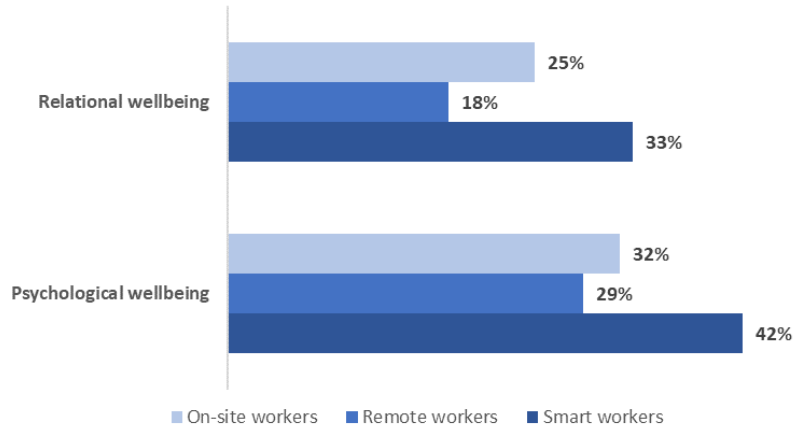


Figure 14: Worker well-being (Base: 1000 workers, 269 smart workers, 208 non-smart remote workers, 523 on-site workers in 2022. Source: (Smart Working Observatory of Politecnico di Milano, 2022)

To conclude, literature research suggests a huge difference in the effects of employee- and employer-driven FWAs over employees’ wellbeing. While the implementation of flexibility measures in which the employee is in control brings positive outcomes, even in the long term, the imposition of time and place constraints report detrimental effects on the employees’ health and satisfaction.

2.4.2 Workplace vitality

The workplace vitality outcome defined by E.J. Hill in the Workplace Flexibility model considers employee productivity or performance, organisational commitment, retention, morale, satisfaction, and absenteeism.

Employee performance can be defined as “*the level of success of employees in carrying out their duties and responsibilities*” (Rachmaliya & Efendy, 2017, p. 42). Employees who have access to flexible work arrangements, such as teleworking and home-based working, tend to be highly motivated, self-sufficient, self-disciplined, and well-organised, leading to higher levels of performance (Austin-Egole, I. S., Iheriohanma, E., & Chinedu, N., 2020). This causal relationship is also supported by research studies conducted by Gallup in 2020 using data collected from more than 195 thousand employees in the United States, suggesting that highly

engaged workplaces have 41% lower absenteeism, 40% fewer quality defects, and 21% higher profitability (Gallup, 2020).

In addition, Table 1 shows that the optimal engagement boost occurs when employees have flexible space arrangements that allows them to spend 60% to 80% of their time working off-site, which corresponds to three to four days in a five-day work-week (Gallup, 2020).

Time spent working remotely (%)	Percentage of workers (%)		
	Engaged	Not engaged	Actively disengaged
None of the time	30	55	15
1% to 20%	36	53	11
20% to 40%	37	52	11
40% to 60%	37	50	13
60% to 80%	41	48	11
80% to 100%	32	51	17
All of the time	30	54	16

Table 1: Engagement of workers according to the time spent working remotely. Source: (Gallup, 2020).

Considering time flexibility, a study conducted in Turkey in 2014 involving 200 participants from various working sectors reported that the performance of employees can be boosted through flexible work time arrangements, as these have a direct and positive impact on their satisfaction with work and life, as well as their loyalty to the organisation (Altındağ & Siller, 2014).

Additionally, Figure 15 summarises the findings of the study of the Universitaet Oldenburg regarding the sustained effects of flexible working time arrangements on job satisfaction. This figure shows that neither employee- nor employer-oriented policies have a significant effect over men's job satisfaction in the short or long term. Instead, women's job satisfaction is increased and maintained over time with employee-oriented FWTAs, while employer-oriented FWTAs cause a significant decrease in job satisfaction, accelerated over time (Uglanova & Dettmers, 2018).

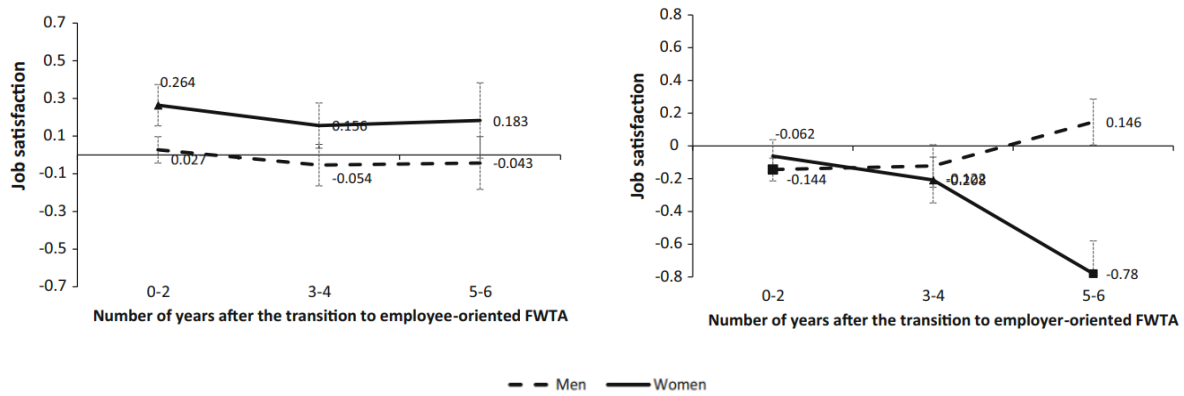


Figure 15: Effects of transitions to employee- and employer-oriented flexible working time arrangements on job satisfaction. Source: (Uglanova & Dettmers, 2018)

In conclusion, empirical research suggests that employee driven FWAs can help improve workplace vitality outcomes, providing positive effects on employee satisfaction, engagement, and performance. Instead, close evaluation should be given to the implantation of FWAs in which employees don't feel in control.

2.4.3 Home and family vitality

The home and family vitality outcome defined by E.J. Hill in the Workplace Flexibility model considers marital satisfaction and stability, parenting and child behaviour, fertility, and time spent in childcare and housework. In general, all of these aspects can be considered within the concept of *work-life balance*.

According to Cambridge English Dictionary, work-life balance is defined as “*the amount of time you spend doing your job compared with the amount of time you spend with your family and doing things you enjoy*” (Cambridge Dictionary, n.d.).

Extensive evidence consistently supports the notion that flexible work time agreements yield positive outcomes in terms of enhancing employee work-life balance. To begin with, a study conducted by the Limkokwing University of Creative Technology in Malaysia suggests that flexible work agreements that give employees the ability to control when, where, and how much time they work contribute to improve work-life balance (Shagvaliyeva & Yazdanifard,

2014). Moreover, a study carried on in Turkey by Beykent University, also concludes that flexible working practices have a positive effect on work-life balance (Altındağ & Siller, 2014).

Furthermore, the American Psychological Association studied the influence of place and time workplace flexibility on work-life conflict for a global sample of workers from four groups of countries. An increase in work-life conflict suggests a decrease in work-life balance. The results of this study conclude that workplace flexibility helps improve work-life balance. Additionally, time flexibility has a greater benefit in reducing work-life conflicts compared to work-at-home policies (Hill et al., 2010).

Higher levels of work-life balance brings numerous benefits not only to employees, but also to employers. In fact, a research conducted across 44 industries in Spain revealed a positive correlation between work-life balance measures and productivity. In other words, the more work-life balance initiatives offered to workers, the bigger the improvement in corporate productivity (Rojo, 2019).

Literature also suggests that the existence of a fixed schedule following the standard work-week, i.e., fixed working hours for a fixed number of days per week is more beneficial than not having a fixed schedule since the high variability makes it difficult to have an organised routine (Janssen & Nachreiner, 2004).

Finally, a recent study considering data from 1250 remote workers from management, logistics, and IT from the *Vigili del fuoco*² in Italy concluded that temporal flexibility and job autonomy are both positively and significantly correlated to work-life balance (Boccoli, Sestino, Gastaldi, & Corso, 2022). Additionally, the study shows that work-life balance is also positively correlated with work engagement and job satisfaction. It is worth mentioning that the results also suggest that age slightly and negatively impacts both work engagement and job satisfaction, which is interesting since the survey was conducted during the pandemic when all employees were forced to work remotely, and older generations might have been less prepared to adapt to these circumstances. The results of the study are summarised in the model in Figure 16.

² The Italian institution for fire-fighting and rescuing

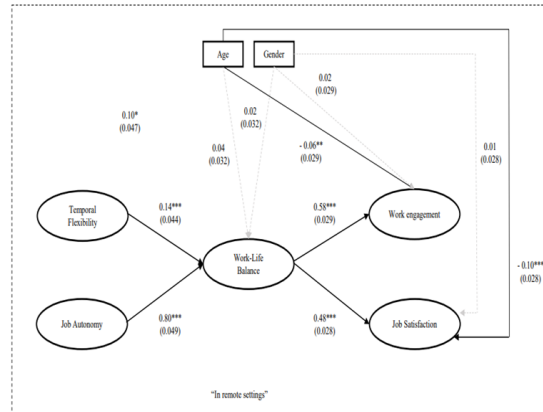


Figure 16: Model and results of the study published by *Sinergie* regarding impacts of FWAs on work -life balance, 2022. Note: Standardised coefficients are reported, with standard errors in the parentheses. * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$. Source: (Boccoli, Sestino, Gastaldi, & Corso, 2022)

Finally, considering more specific flexible work time arrangements, many studies have shown a positive correlation between work-life balance and flexitime. A meta-analysis of eight studies that explored flexitime and work-family conflict concluded that both variables are inversely correlated (Byron, 2005).

In conclusion, empirical research suggests that flexible working arrangements can help improve work-life balance by providing employees the possibility of deciding when and where to work, making it possible for them to better organise work and personal activities.

2.4.4 Community vitality

The community vitality outcomes defined by E.J. Hill in the Workplace Flexibility model refers to the positive outcomes that flexible working arrangements might have in the community. Although not clearly defined in the model, in this thesis we will include in this category all the outputs related to environmental sustainability. These can be measured through carbon emissions, energy savings, and commuting costs.

During the CoreNet Global Summit in San Diego in 2009, the Program Manager of Hewlett Packard (HP) Workplace, presented findings on the impact of mobility strategies on carbon footprint (Hood, 2009). The presentation highlighted the advantages of increasing workplace flexibility, citing the Bracknell transformation as an example of how space flexibility within an office led to a 63% area reduction and 49% energy savings. Hood also mentioned the

impressive results of the Melbourne Woodvale project, stating that "*Energy costs were reduced by 70%, and CO2 emissions were reduced by 70% as well*" (Oseland & Webber, 2012, as cited in Hood, 2009).

According to Oseland & Webber's literature review conducted in 2012, implementation of space flexible working reforms between 1997 and 1999 resulted in a significant reduction of CO2 emissions, leading to a lower carbon footprint. Results show that their staff travelled 178 miles less per week, resulting in a total of 150 million fewer miles travelled per year. This reduction allowed the company to avoid purchasing approximately 12 million litres of fuel per year and, as a result, generated 54 thousand fewer tonnes of CO2 in the United Kingdom per year (Oseland & Webber, 2012, as cited in Hood, 2009). Although no numerical values were estimated, even more environmental benefits should be reported due to the use of teleconferencing instead of face-to-face meetings.

Furthermore, a model formulated by the Smart Working Observatory of Politecnico di Milano estimates that people working remotely for two days a week creates a reduction in commuting costs of approximately €1,000/person/year, on average. This saving is partially offset by an increase in household expenses, estimated at around €400/person/year, leading to a net saving of approximately €600/person/year for each remote worker. If the decision were made to reduce the office space, for example, by 30%, this saving could increase up to approximately €2,500/person/year. These economic savings could be translated to environmental benefits, by reducing CO2 emissions by approximately 450 kg per person per year due to reductions in commuting (Smart Working Observatory of Politecnico di Milano, 2022).

To sum up, the introduction of space and time FWAs can provide positive outcomes not only to companies and their internal parties, but also to external communities. Companies and employees are benefited from cost reductions due to reduced travelling, reduced office space, or shorter working hours. On the other hand, the community is indirectly benefited by lower carbon emissions, which contribute to solving some of the major environmental problems suffered in the twenty-first century, like global warming.

2.5 Implementation of new flexible work time arrangements

In the last couple of years, there has been a significant rise in the popularity of flexible work time arrangements (FWTAs). The 9-to-5 office routine has been the standard for many employees, but with evolving technologies and shifting attitudes towards work-life balance encouraged by Covid-19 pandemic, a growing number of companies and individuals are embracing more flexible schedules. As seen in the previous section, traditional FWAs have provided good results for individuals, companies, and the environment. However, many countries and organisations are looking for emerging trends to transform the future of work.

One of the trendy flexible work time arrangements gaining popularity among companies is that of **unlimited vacations**. Many individual organisations have begun implementing this policy long ago, such as Netflix in 2004, Morningstar in 2010, Adobe in 2012, Lexmark in 2013, MGM Resorts in 2013, Virgin in 2014, and Chipotle in 2020 ("Glassdoor", 2019; Collier & Rozen, 2020; Chen, 2020). Despite the huge wave of companies implementing this policy, there is a lack of extensive research on its outcomes. Only two qualitative research papers were found about the outputs of this policy, both focused on Technological companies, one based in the United States and the other one in Austria. Considering the two studies, a total of four companies were analysed, reporting an increase in job satisfaction, perceived productivity, and work-life balance (Arevalo & De Jong, 2015); Röcklinger, 2020).

In spite of these findings, the Altech case study suggests that the decision to change to unlimited vacations is not driven by concerns about employee morale, but for the financial benefits obtained by not paying the banked paid time off for the untaken days off. Literature points out that although many employees reported to love the policy, some "*felt cheated out of the compensation bonus for unused vacation days*" (Collier & Rozen, 2020, p. 113).

Figure 17 shows metrics regarding Google searches on unlimited vacations in the United States from January 2004 until April 2023. The y-axis reflects the search interest relative to the highest point on the chart for a given region and time. A value of 100 indicates the peak popularity of a term. Here we can observe that in 2004, a significant surge was observed when

Netflix became the first large organisation to introduce the policy. However, after that initial peak, the searches remained consistently low, with no increasing trend (“Google Trends”, 2023a).

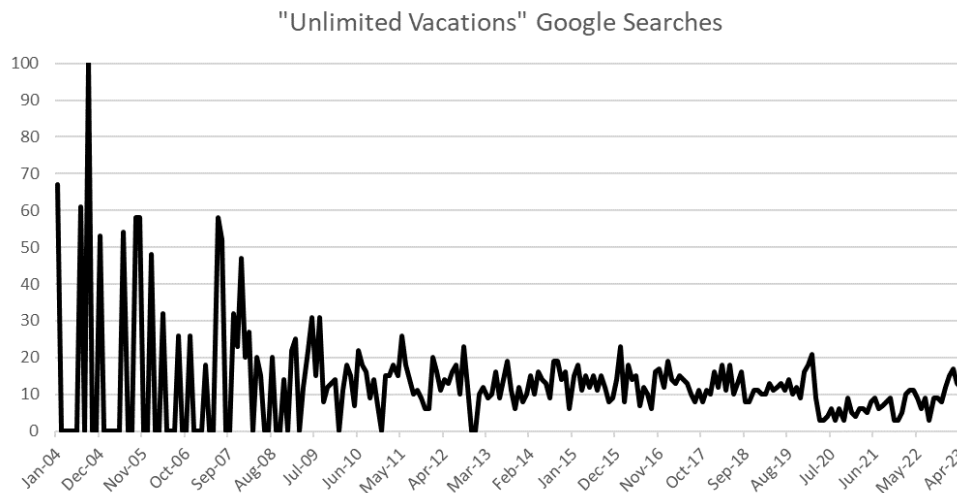


Figure 17: Google Searches of “unlimited vacations” over time. Source: (“Google Trends”, 2023a)

Due to the aforementioned limitations in existing studies on unlimited policies, this thesis will specifically concentrate on the other new FWTAs, namely **4-day week** initiatives.

Although this concept was already discussed in the 1970s (Hedges, 1971), the topic started to gain sustained traction in recent years. It is worth remembering that in this thesis, we will consider as 4-day week policies both, *compressed work-week* and *short work-week* initiatives.

As can be seen in Figure 18, Google Trends data regarding “4 day week” searches show an increasing trend since 2018 (Google Trends, 2023b). The first strong peak was in November 2019, when Microsoft published the results of its 4-day week trial in Japan (Paul, 2019). Other remarkable peaks are seen in January 2022, when the largest 4-day week trial in the United Kingdom was announced; June 2022, when the pilot started; and February 2023, when its results were published (Bateman, 2022; Autonomy, 2023).



Figure 18: Google Searches of “4 day week” over time. Source: (Google Trends, 2023b)

According to a report from Henley Business School, the 4-day week trend continues to gain momentum without any sign of slowing down. Almost half of executives from large businesses (46%) agree that transitioning to a 4-day work schedule will be crucial for achieving future success in the business landscape (Henley Business School, 2019). This is in line with a 2018 Kronos survey that suggests that 78% of United Kingdom Human Resources leaders believe that the 4-day work week will become more common in the future (“Businesswire”, 2018).

However, this wave is not only present among executives, as workers are showing great support for the initiative as well. Henley Business report states that 72% of the consulted employees support the 4-day week movement and 80% of Gen Z answered that it is an important factor when choosing where to work (Henley Business School, 2019). Moreover, workers do not only show willingness to adopt these changes, but also believe it is possible without affecting productivity. A 2019 study by Autonomy revealed that 50% of United Kingdom’s workers believe that their job could be done effectively in four days per week (Autonomy, 2021), which is aligned with the results of a survey conducted by YouGov that showed that 45% of United States’ workers believe they could do their job effectively in 30 hours per week or less (Ibbetson, 2019).

Considering the job market, according to data from ZipRecruiter, the number of job postings offering a 4-day week have been constantly increasing even before the pandemic, as can be seen in Figure 19 (Nicola, 2021). ZipRecruiter’s labour economist stated that “*on average, job postings offering a 4-day workweek receive 15% more applications than other job postings in the same industry*” (Torres, 2021). Additionally, according to a 2019 employee benefits report from the Society for Human Resource Management, approximately 15% of organisations in the United States provide all of their employees with 4-day work weeks consisting of 32 hours or less, either on a regular or seasonal basis (Agovino, 2020). Moreover, a Payscale report affirms that the share of companies offering a 4-day work week benefit in Japan reached 10% in 2022 (Smith, 2023).



Figure 19: Job Postings on ZipRecruiter Offering a 4-Day Week over time. Source: (Nicola, 2021)

Despite the undeniable growth of the 4-day week movement, companies started to highlight big challenges to implement the policies. Henley Business School’s report exhibits that 82% of United Kingdom’s businesses argue that being available to customers is the biggest barrier to implementing a 4-day work week, and 73% of executives believe it is too complicated to manage once in place (Henley Business School, 2019). Additionally, according to Zapier, not all industries can embark on this journey since in some production is time dependent (Ellis, 2018).

In spite of these challenges, numerous companies, organisations, and governments around the world have started implementing these new flexible work time arrangements. In the

following sections, we will cover in depth the **governmental initiatives**, **multi-company organised trials**, and **individual companies' business cases** regarding 4-day week policies, including *short work weeks* and *compressed work weeks* around the world.

2.5.1 Governmental initiatives

Recognizing the evolving dynamics of the modern workforce and the need to strike a balance between productivity, employee wellbeing, and economic growth, several governments have taken proactive steps to experiment with and adopt alternative work schedules. In this section, we will explore a comprehensive list of governmental initiatives that have emerged in recent years focused on the implementation of flexible work time arrangements. In particular, the following countries are analysed: Belgium, Iceland, Japan, Lithuania, Spain, Sweden, Switzerland, United Kingdom, United Arab Emirates, and United States of America.

In addition, a section indicating the current situation in Italy is also included because, although Italy cannot be evaluated within the countries implementing avant-garde FWTAs, considering that we are located in Italian territory, we deem it of great significance to assess the situation in the country.

Finally, the situation in Argentina is also mentioned as, although flexibility measures in the country are still significantly lagging behind those implemented in the above mentioned countries, we wanted to analyse the situation in our home country.

2.5.1.1 Belgium

The primary legislation that regulates labour rights and obligations in Belgium is the Belgian Labor Act of 1978 which establishes a maximum of 38 working hours per week (“Federal Public Service Employment, Labour and Social Dialogue”, n.d.). Traditionally, as in almost all countries worldwide, these 38 hours per week were distributed in 5 days per week with a maximum of 8 hours per day.

However, due to increases in burnout rates during the Covid-19 pandemic, the government decided to review the Labor Act. This concern first appeared in 2021, when a study carried out by Securex announced that the risk of burnout among employees went from 23.8% in 2019 to 28.5% in 2021, with a 61.4% increase in the number of employees at serious risk of burnout (Chini, 2022). In addition, a study carried out by Belgium's National Institute for Health and Disability Insurance (Inami) in 2021 concluded that *“The number of employees, self-employed and unemployed people who have been off work for more than a year due to depression or burnout has increased by 45% in five years”* (Institut national d'assurance maladie-invalidité, n.d.).

Concerned by this trend, in early 2022, the Belgian government introduced a new labour market reform allowing all full-time private companies to choose how to split the 38 working hours per week: in the traditional 5-day work week or in a *compressed 4-day workweek* ("Loyns & Loeff", 2022). In this way, for the companies that decide to adopt this new schedule, the Labor Act allows an increase to 9.5 the maximum working hours per day (“Federal Public Service Employment, Labour and Social Dialogue”, n.d.). According to Prime Minister Alexander de Croo *“The goal is to give people and companies more freedom to arrange their work time, with the hope of decreasing the worrying levels of stress and burnout experienced by Belgian employees”* (Hurst, 2022).

2.5.1.2 Iceland

Iceland is known for having a strong culture around work-life balance and employee wellbeing. While the standard working week in Iceland is 40 hours, there are laws in place to prevent overworking and burnout. As in most developed countries, the law requires employers to pay overtime for any additional hours worked. However, the law also entitles employees to a minimum of 11 hours of rest per 24 hours worked (Icelandic Confederation of Labour, n.d.).

Historically, workers in Iceland used to work much more than its neighbour countries. In 2018, Icelanders would work on average 44.4 hours per week, making it the third highest within

Eurostat countries (Eurostat, 2023). Icelandic trade unions argued that these long working hours caused fatigue in the workplace, which resulted in a decrease in productivity. As a result, a vicious circle was created: in order to deal with the loss of productivity, longer working days were needed.

With this motivation, two trials were conducted between 2015 and 2019 in order to analyse the impacts of a reduction to a 35 to 36 hour work week instead of the traditional 40-hour workweek. These pilots, which are explained in detail in the following section regarding multi-company initiatives, were a great success and lead to the permanent implementation of shorter working weeks in 2021 for workers associated with some trade unions in the country. Around 170 thousand from the 196 thousand Icelander workers were reached by this initiative ("Statistics Iceland", 2022). As a result, since 2021, 86% of Iceland's working population has moved to shorter working hours or count with established mechanisms at a national level to negotiate and attain shorter working hours (Autonomy, 2021).

2.5.1.3 Japan

The work culture in Japan differs significantly from that of most Western countries, particularly in measurable aspects such as the number of working hours. The Japanese have a reputation for being highly diligent individuals, and their cultural work ethic highlights work as an integral part of their lifestyle, rather than merely a means to an end (Norbury & Bownas, 2019).

Article 32 of the Labour Standards Law (LSL) in Japan stipulates that the average working time is 40 hours per week and 8 hours per day (Jung, n.d.). However, a growing number of Japanese employees now follow a seven-day workweek as the standard (Edlin & Golanty 2012), and according to a 2016 government survey, almost one quarter of Japanese companies require employees to work more than 80 hours of overtime a month (Saiidi, 2018). These extensive working days have led to an increase in what is known as "*karoshi*" which translates to

“death by overwork” which is a legal term recognized as a cause of death (International Labour Organization, 2013).

In an effort to address this issue, the Japanese government has explored various initiatives over the years. In 2019, a revision was introduced to the Labor Standards Act which mandates companies, regardless of their size or industry, to ensure that employees who are entitled to 10 or more days of paid annual leave take a minimum of 5 of those days per year (Yasuzawa, 2021).

In June 2021, in another attempt to promote a healthier work-life balance, the Japanese government included in the country’s annual economic policy guidelines a recommendation for employers to adopt 4-day work weeks (Westfall, 2021). Although there’s still a long road ahead for the Japanese government, the 4-day work week is already being implemented in a considerable number of companies. In fact, according to a Payscale report, the share of companies offering a 4-day work week benefit in Japan reached 10% in 2022 (Smith, 2023).

2.5.1.4 Lithuania

In Lithuania the standard working week is 40 hours, although in April 2022 the Lithuanian government passed a new law giving public-sector employees with children under the age of three the right to work 32 hours per week without experiencing a reduction in pay (Seputyte, 2022). This initiative aims to help families improve work-life balance while also reducing gender pay gap, since in most cases women are the ones who sacrifice their work time for childcare duties (O’Loughlin, 2023).

2.5.1.5 Spain

In 2019, Spain was one of the countries with the longest average working hours in Europe, but reporting low levels of productivity (Domenech, 2019). Since then, the country embarked on discussions to adapt to evolving social demands and explore alternative arrangements that prioritise employee wellbeing and productivity.

Inspired by the successful trials in other countries and fueled by a desire to reshape the traditional work week, Spain has emerged as a strong promoter of shorter work hours. In 2021,

the Spanish political party Más País presented a project to invest 50 million euros into a three-year 4-day work week trial (Kassam, 2021). In this way, the government would support companies that reduced working hours from 40 to 32 hours a week without reduction in pay. The state would cover 100% of the companies' costs in the first year, 50% in the second year, and 33% during the final year of the trial.

Although there was no further news from this project, a new one was launched in December 2022 with the objective of reducing the country's work week to four days without reducing employees' salaries. In order to offset the significant increase in expenses, the project states that the Ministry of Industry will provide a subsidy of 150000 euros to small and medium-sized enterprises (SMEs) that adopt the new schedule. This pilot is expected to help 60-70 SMEs with a total budget of almost 10 million euros (Lizana, 2022). Currently, the project is at an initial stage consisting of the selection of enterprises ("La Moncloa", 2023). The pilot is expected to begin at the end of 2023 and will last two years.

Besides this national level initiative, Valencia's city council has recently carried out another trial. Taking advantage of the four public holidays on Mondays in 2023 between April 10 and May 7, the municipality implemented a 4-day week pilot. During this period, the municipality tracked the impacts of working 32 instead of 40 hours per week on productivity, leisure time, mobility, economy, and health of people. The results are expected to come in July 2023 ("elEconomista", 2023).

Although the legislation regarding working hours in Spain has not undergone significant change yet, the country has shown that it acknowledges the need for a reform, recognizing the importance of employees' work-life balance to enhance productivity on a national level.

2.5.1.6 Sweden

Sweden is widely known for its progressive labour policies and commitment to work-life balance. While no nationwide flexible work time arrangement was implemented in Sweden,

some companies and municipalities have experimented with *shorter working days* to promote employee well-being and productivity.

In 2015, the Swedish government organised a shorter working day trial involving several start-ups, two hospital departments, an elderly care home, and a surgery unit distributed along the country. The pilot aimed at testing the impact of reducing daily working hours from 8 to 6 without a loss in pay, obtaining a total of 30 hours worked per week. The trial lasted two years and results were very positive, reporting lower sick leaves, better perceived health, and boosted productivity (Savage, 2017). However, the trial was strongly criticised mainly because of its high organisation costs.

Following the short working day trial, some municipalities in Sweden started conducting their own locally funded trials targeting groups of employees who experienced high levels of burnout.

Besides these trials, there is currently no further evidence supporting widespread implementation of shorter working weeks in Sweden. Additionally, there are no indications of the government officially changing the labour laws to adopt a shorter work week in the near future.

2.5.1.7 Switzerland

Switzerland has a reputation for maintaining a healthy work-life balance as the country's culture values leisure time and emphasises the importance of family, recreation, and personal well-being. However, Swiss working hours for full time employees are one of the longest in Europe with an average of 42 hours per week (Glatthard, 2020).

These long working hours and the consequent increase in employees' burnout and stress have caused the Swiss government to rethink labour laws. In March 2023, Zurich's local parliament decided to pilot a 35-hour work week ("The Swiss Times", 2023). The trial will be implemented among city employees who work in shift-based roles, such as those working in

cleaning, police, transportation companies and care services, as they are more susceptible to experiencing elevated levels of stress.

2.5.1.8 United Kingdom

In the United Kingdom, the concept of a 4-day work week has been gaining significance, particularly after the resounding success of the trial conducted by the Australian non-profit organisation, 4-day Week Global that took place in 2022 involving 61 UK-based companies, which will be explained in depth in the following chapter.

In addition, a government organised trial is scheduled to begin in 2023 in Scotland, fulfilling a campaign promise made by the governing Scottish National Party (SNP). Under this initiative, workers will adopt a pure 100-80-100 model, reducing 20% the working time and keeping the same salary. The SNP has committed €11.8 million to support the participating companies (Joly, 2023).

2.5.1.9 United Arab Emirates

Historically, the working week in the United Arab Emirates (UAE) went from Sunday to Thursday, leaving Friday and Saturday as weekend days mainly because of the Muslim religion. However, in a move aimed at enhancing the country's competitiveness, the UAE's government announced in 2022, a shift in the weekend, transitioning from Friday-Saturday to Saturday-Sunday as most western countries. Additionally, the implementation of a shortened working week of four-and-a-half days was also announced to allow workers to attend Friday's prayers (Agence France-Presse, 2021).

This is a particular case in which the motivation for the shorter work-week is not strictly related to improving work-life balance, employees' wellbeing, or company productivity. However, it can be understood in that direction indirectly, given the strong culture of the country and its willingness to align with the rest of the world to help the country grow ("4 day week", n.d.).

2.5.1.10 United States of America

While the majority of companies and organisations in the United States continue to adhere to a traditional five-day workweek, there is a growing movement towards experimenting with a 32-hour 4-day work week without reducing employee compensation.

The working culture in the United States is often characterised by a strong emphasis on productivity, efficiency, and dedication to work. Many companies prioritise long hours and overtime, and employees are usually expected to go above and beyond in their work commitments. However, in recent years, flexible arrangements, such as the 4-day work week started gaining traction to work towards the improvement of employee's work-life balance and the need for employees to focus on their well-being.

A Washington Post poll conducted in April 2023 showed that 75% of American workers would prefer working four 10-hour days versus five 8-hour days (Abril, 2023). Some politicians are beginning to listen to these desires such as congressman Mark Takano who, in March 2023, reintroduced the Thirty-Two Hour Workweek Act. This is a bill aimed at reducing the standard workweek from 40 hours to 32 hours by amending the Fair Labor Standards Act (FLSA) and adjusting the maximum hours for overtime compensation to modernise work standards and improve the quality of life for workers ("Takano", 2023). The project has gained support from various organisations and groups including the renowned non-profit organisation 4 Day Week Global.

In addition, Massachusetts lawmakers, Rep. Dylan Fernandes and Rep. Josh Cutler, have proposed in April 2023 what they've called the "*Massachusetts Smart Work Week Pilot*". This project consists of a 4-day work week pilot program which would enable businesses to transition their employees to a reduced work schedule without payment reduction. The trial would last two years and would be overseen by the Executive Office of Labor and Workforce Development, aiming to explore its impacts (Lockhart, 2023).

Furthermore, in May 2023, the non-profit organisation 4 Day Week Global released the results of two pilots based on six-month trials that include 33 companies and a total of 903 employees, primarily in the US and Ireland. Although the description and results of these trials will be discussed further in the following chapter, it's important to note that the results were positive for both employers and employees (Schor et al, 2022). With growing evidence supporting the benefits of alternative arrangements, it is likely that more discussions and experiments will take place in the country, potentially leading to widespread adoption of new flexibility measures.

2.5.1.11 Italy

In 2017, Italy took a notable step towards embracing modern work practices with the passage of Law 81/2017. This legislation marked an important milestone as it provided the country with its first official definition of the term "Smart Working" (Gazzetta Ufficiale, 2017). By introducing this legal framework, the Italian government acknowledged the changing dynamics of the contemporary work environment and recognized the need to adapt to new ways of working. This served as a foundation to foster a more flexible and technology-driven approach to work.

Italian companies are now recognizing the need for a more profound change and are starting to adopt different measures. In fact, 92% of Italian public administrations that do Smart Working provide the possibility to work flexible hours. In this sense, the most frequent initiatives are the adoption of flexible start and end times, as well as the freedom to decide the length of the working day, known as *flexitime* (Smart Working Observatory of Politecnico di Milano, 2022).

In addition, private companies are also starting to explore these new flexible work time arrangements. Thanks to the qualitative research including interviews with Italian companies adopting the policy a comprehensive overview of individual companies implementing 4-day work weeks is presented in following chapters.

Although Italian companies are gradually recognizing the need to adapt their working schedules to remain competitive in the evolving business landscape, the Italian government has not intervened in any way to encourage new flexible work time arrangements. The absence of specific legislation or incentives may pose a challenge for Italian companies seeking to implement alternative work arrangements and explore the potential benefits they can offer.

2.5.1.12 Argentina

In Argentina, the standard legal working hours are set at eight hours per day and 48 hours per week. However, for daily work, the regular working week is limited to 44 hours, for night work to 42 hours, and for work performed in hazardous or unhealthy environments, it is limited to 36 hours (Bronstein, n.d.).

Although labour law in Argentina hasn't been modified in the last decades, the impact of Covid-19 has significantly altered people's perspective on work-life dynamics. According to a survey conducted by Randstad in 2022, 43% of the total workers in Argentina declared that they wouldn't accept a job if it didn't provide flexibility around working hours. Moreover, 58% declared that they want to find a better work-life balance (Randstad, 2022). These numbers show that employees in Argentina feel that the working scenario has to change and are willing to reject job opportunities if these are not aligned with their personal needs.

Some individual companies have heard employees' requests and have already started exploring time flexibility policies. In fact, 55% of the workers surveyed by Randstad have reported that their jobs provide some kind of flexibility in terms of working hours. However, the lack of modifications in the labour law in Argentina does not contribute to encouraging organisations to experiment with these policies. Additionally, there is no consideration of new FWTAs. In this way, similar to the situation in Italy, the absence of dedicated legislation or incentives may create barriers for companies that are actually aiming to adopt alternative work arrangements.

Certain companies have responded to the requests of their employees and have initiated the exploration of time flexibility policies. According to a survey conducted by Randstad in 2022, approximately 55% of the surveyed workers stated that their jobs offer some level of flexibility in terms of working hours (Randstad, 2022).

Nonetheless, the absence of amendments in Argentina's labour law hinders organisations from being motivated to experiment with any type of FWAs, including the new FWTAs that are starting to emerge in the rest of the world. Akin to the situation in Italy, the absence of dedicated legislation or incentives may pose obstacles for companies that genuinely seek to embrace alternative work arrangements.

2.5.2 Multiple company pilots

In recent years, the concept of a 4-day workweek has gained significant attention as a potential solution to improve work-life balance and increase productivity. Multi-company pilots conducted in various countries have been instrumental in exploring the feasibility and impact of implementing a *shorter work-week*. The Australian non-profit organisation, 4-day Week Global has taken a leading role in organising pilots in numerous companies across different industries, sizes, and countries. These experiments reducing the traditional five-day work week to four days offer valuable insights into the potential benefits, challenges, and implications of adopting a shorter work-week on a broader scale.

In this section, we will cover a comprehensive overview of the **multi-company trials** mainly organised by 4-day Week Global to this day, including the cases in the United Kingdom, Iceland, Ireland and the United States of America, Australasia, and the recently announced pilot in South Africa. These case studies are analysed considering the following structure: trial format, data collection and analysis, indicators and outputs, challenges and concerns, and conclusions. It is worth mentioning that this section only presents a quick overview of the results reported by each trial. A more detailed description of the measured impacts of 4-day week trials are

presented in the results chapter, aggregating the results from governmental, multi-company, and individual initiatives classified by vitality outcomes.

2.5.2.1 United Kingdom

In 2022, a 6-month 4-day week trial was carried out by teams at Boston College, University of Cambridge, and Autonomy involving companies of different sectors and sizes in the United Kingdom (UK). In this section, a summary of the trial and key findings published in February 2023 by the think-tank Autonomy is provided (Autonomy, 2023).

Trial format

This 4-day week trial took place in the United Kingdom from June to December 2022, involving 61 companies and around 2900 workers which makes it the world's largest 4-day working week trial to date.

Considering all the organisations that took part in the pilot, the largest group comes from the marketing/advertising sector (18%), which is representative of the current adoption of the policy around the world. The range of company-sizes was broad, but the large majority (66%) have up to 25 employees, and only 22% of the firms are considered medium or large sized companies with more than 50 employees.

To prepare for the six-month trial, companies previously participated in two months of preparations including workshops, coaching, mentoring and peer support to make sure that they were prepared to carry out such a radical change in their working schedules.

Companies participating in the trial were granted the flexibility to craft their own working models, aligned with their specific industry, challenges, and work culture. The only requirement imposed was to provide employees with a "meaningful" reduction in work time while ensuring that their compensation remained unchanged. This led to the implementation of five distinct *short work-week* arrangements:

- **Fifth day stoppage:** the company shuts down operations for one additional day per week.

- **Staggered:** staff takes alternating days off so that the company is active the five days of the traditional work-week. For example, the staff may be divided into two teams, with one team taking Mondays off, and the other taking Fridays off.
- **Decentralised:** different departments operating on different work patterns.
- **Annualised:** staff work a 32-hour average working week, calculated on the scale of a year, which could be useful to businesses with high seasonality.
- **Conditional:** the 4-day week is tied directly with performance. In other words, if there is evidence that performance targets are not being reached, seniors in the company may temporarily suspend the 4-day week for certain individuals or departments.

Data collection and analysis

In order to consider the companies' perspective, administrative data was gathered previously, during, and after the trial. In the pre-trial phase, companies completed an onboarding survey and provided six months of data to be used as baseline. During the trial, companies provided monthly data on a small set of common metrics and two other metrics of their choice. Pre- and post-methodologies were applied to analyse the data.

In order to gather data from the employees' perspective, employee surveys were performed at three points: before the trial began (baseline), halfway through it (midpoint), and close to the end (endpoint). The surveys included questions about work experience, wellbeing, family, and personal life and 70% of the employees who completed the initial survey also completed the endpoint survey, having enough data to perform a reliable analysis. In addition, employee interviews were carried out to provide context to the survey data. 58 employees from 23 companies were interviewed covering a wide variety of industries, such as manufacturing, hospitality, finance, education, and professional care.

Indicators and outcomes

Table 2 summarises the adopted indicators classified by vitality outcomes. The results column indicates whether the measured effects were positive, negative, or no changes were seen.

Positive results indicate that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score).

Vitality Outcomes	Indicator	Perspective	Result
Individual Vitality	Stress	Employee	Positive
Individual Vitality	Burnout	Employee	Positive
Individual Vitality	Mental health	Employee	Positive
Individual Vitality	Anxiety	Employee	Positive
Individual Vitality	Physical health	Employee	Positive
Individual Vitality	Fatigue	Employee	Positive
Individual Vitality	Insomnia	Employee	No changes
Workplace Vitality	Revenue	Company	Positive
Workplace Vitality	Resignations	Company	Positive
Workplace Vitality	Job Satisfaction	Employee	Positive
Workplace Vitality	Likelihood of changing jobs	Employee	Positive
Home and Family Vitality	Work-family balance	Employee	Positive
Home and Family Vitality	Work-life balance	Employee	Positive
Home and Family Vitality	Work-to-family conflict	Employee	Positive

Table 2: Overview of indicators and outcomes from the 4-Day Week Global multi-company trial in the United Kingdom

Challenges and concerns

Although most of the companies decided to implement the 4-day week policy permanently at the end of the trial, the pilot was not successful for every business. Some firms decided to discontinue the experiment, while others have not yet transitioned to adopting the 4-day work week on a permanent basis, but have decided to continue with an extended trial.

Mark Roderick, the managing director of Allcap, an engineering and industrial supplies company that joined the trial, stated that *“we found that employees had extreme working days – once they got to their scheduled day off they were exhausted”* since *“when it was someone’s turn for their day off, the buck passed to a colleague, and they were left under pressure”*. Additionally, he reported that they were already short in headcount when they started the pilot, and *“once we factored in holidays, sickness, and caring responsibilities, we also struggled to find cover for an employee on their rest day”*. In consequence, the firm had to abandon the trial months prior to its conclusion. Highlighting the difficulty to implement shorter work-weeks in

manufacturing sectors the company representative said: *“If you’re in professional services, you often have project-based work that affords greater flexibility in meeting deadlines. Here, (...) working from home is impossible, so you need a minimum number of staff on site, or you don’t have a business”* (Christian, 2023).

Another complicated scenario is that of firms, like Citizens Advice, with customer-service sectors. A company representative stated that the firm invested in three additional full time employees so that the contact centre employees could join the trial. Additional pains were found in this specific area since the busiest days are also Monday and Friday, restricting the flexibility of these workers in the shorter work-week. Although the other areas in the business have reported a positive effect from the initiative, the company has decided to extend the trial to try alternative solutions for their customer-facing employees and stated that *“unless targets are met by the contact centre team, it’s unlikely the shorter workweek will be made permanent in any part of the business. We have 220 employees: I can’t imagine that we’d allow a four-day for some and not for others”* (Christian, 2023).

Although these represents only a fraction of the trial’s participants, it indicates that the 4-day work week is not a one-size-fits-all solution and that further investigation needs to be done to better understand how to implement it in industries in which productivity depends on the hours worked, or customer support should be provided every day of the week.

Conclusions

Positive findings regarding the 4-day week were obtained from the largest trial in the world to date. Employees were pleased, with 96% stating they preferred 4-day working weeks instead of five-day weeks, and 15% suggesting that no amount of money would induce them to accept a five-day schedule over the 4-day week. Companies also expressed satisfaction with productivity and the overall experience, with 56 out of the 61 companies that participated in the trial reporting to continue with the 4-day week in a permanent way or with an extended trial. However, a few companies struggled with the implementation of the policy due to the industry in

which they operate and had to abandon the initiative. Hence, more experimentation is required to be able to keep extending the implementation of the policy.

2.5.2.2 *Iceland*

From 2015 to 2019, two large-scale trials of *shorter working weeks* were conducted in Iceland. The reduction in working hours consisted in moving from a 40-hour to a 35- or 36-hour week without a payment reduction. In this section, a summary of the trial and key findings published in June 2021 by Autonomy is provided (Autonomy, 2021).

Trial Format

The first Icelandic trial was conducted from 2015 to 2019 in the capital of the country, Reykjavik, by the city authorities together with one of the major trade union confederations, Confederation of State and Municipal Employees of Iceland (BSRB). Over 2500 individuals were involved, primarily employed as traditional daytime workers in two separate public organisations. The participants' working hours per week were reduced to either 35 or 36 hours depending on their workplace. To facilitate comparison, a third organisation was chosen as a control group, where regular working hours were maintained.

The second Icelandic trial was held between 2017 and 2021. Once again, it was conducted by the Icelandic government and BSRB, comprising around 440 individuals including traditional daytime workers as well as irregular shift-workers (e.g., night shifts). A control group was also selected for comparison composed by 364 staff members. In this case, working hours were reduced to 36 hours for all employees in the experimental groups.

These two *short work-week* trials combined generated a reduction of working hours to around 3000 individuals working in 100 different workplaces, reaching 1.3% of Iceland's total workforce. Any organisation was welcome to join the trials as long as they explained their strategy to maintain their same level of service while working less hours.

Data collection and analysis

During the trials, information about different indicators including wellbeing, performance, and work-life balance was obtained by conducting interviews and surveys to employees. In order to measure the success of the trials from the organisations' perspective, productivity and service level were measured. The employees' point of view was gathered in the surveys including questions about wellbeing and work-life balance. No more detail regarding the data collection process is provided in the study as 4-Day Week Global was not the organiser as in the other multi-company trials. Instead, the published report summarises the information already present in quantitative studies done by the Reykjavík City Council and the Icelandic government which are part of their usual operations.

Although no detail is indicated on the design of the experiments and methodologies used to measure the effects of the trial, both pilots involved control groups to be able to accurately measure the impacts of such long term experimentation.

Indicators and outcomes

Considering that the published report is a summary of a number of qualitative and quantitative analyses done by different entities, there is no precise information about the specific indicators used to assess the effects of the trials. However, overall, the results showed that the reduction in working hours had positive effects on workers' wellbeing and work-life balance, and that productivity and service provision were maintained or, in some cases, improved.

Challenges and concerns

The trial report by Autonomy does not present any information regarding qualitative analysis, nor negative feedback received and lessons learned.

Conclusions

Both trials showed that the *short work-week* can lead to an improvement in employees' wellbeing and work-life balance without affecting companies' productivity nor level of service.

As more than 1% of Iceland's entire labour force participated in these trials, the obtained results could be considered representative for the whole Icelandic population. In fact, thanks to the huge success of the trial, 86% of Iceland's entire working population has transitioned to shorter working hours, or count with established mechanisms at a national level to negotiate and attain shorter working hours.

2.5.2.3 Ireland and United States

This section summarises the findings of the trials conducted by the Australian non-profit organisation, 4-Day Week Global, for companies mainly based in the United States of America and Ireland (Schor et al, 2022).

Trial format

In February 2022, the non-profit organisation 4-Day Week Global (4DWG) organised two six month trials aimed at testing the impact of applying a *short work-week*. The first trial began in February 2022, while the second one in April. Before the trials started, participating companies went through a two-month preparation period including workshops, coaching, and mentoring sessions in order to ensure that all the organisations were well-equipped for the schedule change.

Combined, both pilots involved 33 companies and 903 employees mainly based in the United States and Ireland. The trial sample included a wide variety of organisations regarding industries, sizes, and geographic location.

Considering the business sector, the majority of the companies (36%) represented the administration, IT, and telecommunication industries, followed by professional service companies (27%). The remaining firms were distributed over a range of industries, including arts and entertainment, manufacturing, construction, educational services, food, healthcare, retail, and non-profit.

Regarding the company size, the majority of the companies (52%) are considered *extra-small* with ten or less employees. An additional 27% are considered *small-sized* with 10 to 25 employees. The remaining companies represent medium or large sized companies.

Finally, regarding the geographic location, 33% of the participating organisations are located in Ireland, 18% in the US, and 36% operate fully remote.

Regarding the policies to be applied, the trials conducted by 4DGW require companies to achieve a "meaningful" reduction in work time while ensuring that employees' pay remains at 100%. No specific time reduction was mandated nor that it should cover the complete workforce, giving companies freedom in their approach. Out of the 33 participating companies, 29 implemented a 4-day week for all employees, while the remaining 4 adopted a 4-day week for most of their staff.

The most popular choice for the day off was Friday, with 15 companies opting for it. Among the remaining 18 companies, 8 did not select a common day off for all employees, while the others chose Mondays, Wednesdays, or a different day off each week.

Data collection and analysis

The study was conducted by academic researchers at Boston college, University College Dublin, and Cambridge University. These organisations were involved from the data collection to the data analysis process.

Regarding company data, before the trial began, all companies completed an “onboarding” survey with general details and provided six months of data to have a baseline to compare with the data collected during the trial. Once the trial began, companies provided monthly data on a set of common metrics. In order to correctly assess the effects of the trial, the outputs were not only compared to the pre-trial values, but also to the same period in the previous year to consider any seasonal changes. In order to measure the impacts of the trials, participating companies were required to report metrics including revenue, absenteeism, resignations, new hires, and energy use, plus two optional ones of their choice.

Employee data was collected through surveys at three different points: before the trial began (baseline), mid-way through it (mid-point), and after the trial (end-point). Employee surveys at baseline and end-point were longer, including questions regarding work experience, well-being, family, and personal life. Instead, the mid-point survey only included a few questions about well-being and how employees were using the extra day off. The effects of the trial on employees were assessed by considering the 495 workers who completed the baseline and end-point survey.

Indicators and outcomes

Table 3 below summarises the indicators collected in the US and Ireland trials classified by vitality outcomes. In the results column, positive results indicate that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score).

Vitality Outcomes	Indicator	Perspective	Result
Workplace Vitality	<i>Revenue</i>	Company	Positive
Workplace Vitality	<i>Resignation Rate</i>	Company	Not statistically significant change
Workplace Vitality	<i>New hire rate</i>	Company	Not statistically significant change
Workplace Vitality	<i>Absenteeism</i>	Company	Not statistically significant change
Workplace Vitality	<i>Overtime</i>	Employee	Positive ***
Workplace Vitality	<i>Schedule control</i>	Employee	Positive ***
Workplace Vitality	<i>Current work ability</i>	Employee	Positive ***
Individual Vitality	<i>Work stress</i>	Employee	Positive ***
Individual Vitality	<i>Burnout</i>	Employee	Positive ***
Workplace Vitality	<i>Job satisfaction</i>	Employee	Positive **
Individual Vitality	<i>Mental health</i>	Employee	Positive ***
Individual Vitality	<i>Anxiety</i>	Employee	Positive ***
Individual Vitality	<i>Exercise frequency</i>	Employee	Positive *
Individual Vitality	<i>Exercise duration</i>	Employee	Positive ***
Individual Vitality	<i>Sleep problems</i>	Employee	Positive ***
Home and Family Vitality	<i>Work-family balance</i>	Employee	Positive ***
Home and Family Vitality	<i>Childcare costs</i>	Employee	Positive ***
Community Vitality	<i>Time volunteering</i>	Employee	Positive *
Community Vitality	<i>Commute time per week</i>	Employee	Positive ***
Community Vitality	<i>Means of commuting to work</i>	Employee	Positive **

Table 3: Overview of indicators and outcomes from the 4-Day Week Global multi-company trial in the US and Ireland. *p*-value < 0.1; * *p*-value < 0.05; ** *p*-value < 0.01; *** *p*-value < 0.001 using paired-sample *t* tests.

Challenges and concerns

When analysing the results of the trials, the researchers reported that many companies did not provide detailed performance or productivity measures as required. This limited the possibility to assess the statistical effects of the trials on the production outcomes. Additionally, although there was enough data to report the environmental impacts of a shorter work week, the researchers found it difficult to translate these results into carbon emissions. This was addressed to the fact that most of the existing calculators are not oriented to short-term changes.

The qualitative data presented in the results does not highlight any challenge faced by the participating companies in the shorter work-week experimentation.

Conclusions

The two short work-week pilots conducted in the US and Ireland resulted in highly positive findings. Employees were pleased, with almost 97% expressing a desire to continue with the reduced schedule, and 13% suggesting that no amount of money would induce them to accept a five-day schedule over the 4-day week. Companies also expressed satisfaction with the overall experience, with 18 out of the 33 companies that participated in the trial reporting to continue with the 4-day week in a permanent way, while the rest of the companies have not yet expressed their final decision. These encouraging results not only validate the effectiveness of the 4-day week trial, but also provide evidence of the pressing need for a reevaluation and transformation of the prevailing five-day working week convention.

2.5.2.4 Australasia

This section summarises the findings of the trial conducted by the Australian non-profit organisation, 4-Day Week Global in Australasia. It is worth mentioning that these are the most recent results from a multi-company organised trial, being released in May 2023 (4 Day Week Global, 2023).

Trial format

Since August 2022, 26 companies mainly based in Australia and New Zealand participated in a six-month 4-day week pilot programme organised by 4 Day Week Global. The trial involved two months of preparation, with workshops, coaching and mentoring. Peer support was also provided during the trial to assist companies or employees that faced challenges.

The trial sample included a wide variety of organisations regarding industries, sizes, and geographic location. The vast majority of the companies are situated in Australasia (73%), and the remaining ones are based in Europe and North America. Although some bigger and smaller companies participated, most of them (73%) are considered *small-sized* (between 11 and 50 employees). Moreover, the majority of the industries involved are professional services and marketing/advertisement (45%), in line with the general implementation trend of the policy worldwide. A total of 758 employees took part in the trial.

No information was divulged regarding the specific 4-day week arrangements the companies adopted regarding time reduction. Participating firms were only required to maintain 100% of the pay and give employees a “meaningful” time reduction.

Regarding scheduling, the most popular measure (41% from the 22 that reported the policy implemented) was for all workers to not have the same day off, including for example, a different day for each department, or rotations between employees on different months. All the companies reported to have days off on either Mondays, Wednesdays, or Fridays, with 36% selecting Friday (or mostly Friday) as day off (4-day Week Global, 2023).

Data Collection and Analysis

Data was collected from two main sources: survey data from employees and administrative data from companies. For both, a pre- and post-methodology analysis were carried out by professors from Boston College. Before the trial, the participating companies completed a survey indicating basic information about the company, as well as providing six months of data to compare with the one from the six months of the trial. The response rate for the employee

surveys gathering information about work experience, well-being, family, personal life, and energy use was 74%.

Indicators and Outcomes

It is worth mentioning that the available results regarding company data only include the percentage variation of the indicators, without statistical significance indication. Instead, for the employees data findings, the results only include the percentage of employees who reported a positive variation in the indicators. The proportion of employees who reported negative or invariant feedback is not shown, neither the pre- and post-trial scores. Hence, these results should be taken with caution.

Table 4 summarises the indicators used during the trial to measure the effects of the pilot, considering companies and employees' perspective, as well as the outcomes. In the results column, positive indicates that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score). For employee data points, the percentage of employees indicating the positive variation is shown.

Vitality Outcomes	Indicator	Perspective	Result
Individual Vitality	<i>Fatigue</i>	Employee	Positive (38%*)
Individual Vitality	<i>Sleep Problems</i>	Employee	Positive (35%*)
Individual Vitality	<i>Exercise Duration</i>	Employee	Positive (+20 min/week)
Individual Vitality	<i>Exercise Frequency</i>	Employee	Positive (36%*)
Individual Vitality	<i>Burnout</i>	Employee	Positive (64%*)
Workplace Vitality	<i>Absenteeism</i>	Company	Positive (-44.3%)
Workplace Vitality	<i>Resignation Rate</i>	Company	Positive (-8.6%)
Workplace Vitality	<i>Impact on Employee Attraction</i>	Company	Positive (8.3/10)
Workplace Vitality	<i>Productivity</i>	Company	Positive (7/10)
Workplace Vitality	<i>Productivity</i>	Employee	Positive (54%*)
Workplace Vitality	<i>Effective Time Reduction</i>	Employee	Positive (96%*)
Home and Family Vitality	<i>Work-life conflict</i>	Employee	Positive (49%*)
Home and Family Vitality	<i>Leisure Time Satisfaction</i>	Employee	Positive (65%*)
Community Vitality	<i>Commuting Time</i>	Employee	Positive (-36 min/week)

Table 4: Indicators defined to measure the success of the Australasian 4-day week trial. The percentage shown in the result column indicate the percentage of employees reporting a positive variation of the indicator (*).

Challenges and Concerns

The trial results do not present any information regarding qualitative analysis, nor negative feedback received and lessons learned.

Conclusions

The results presented by the 4-day Week Global trial conducted in Australasia provide reasons to be optimistic about the future of the policy, reporting positive improvements in all vitality outcomes. 95% of the 20 companies who indicated their intention would like to continue the 4-day week, with only one organisation reporting not moving forward with the initiative. Companies rated the overall impact of the trial an 8.2/10, and employees rated the trial a 9/10. Additionally, 96% of employees stated their desire to continue the 4-day week, with the same percentage indicating to have effectively reduced their working hours, and 88% getting one full additional day off per week. Finally, 11% of employees reported that no amount of money would make them go back to traditional five day weeks.

2.5.2.5 South Africa

In March 2023, 4-day Week Global started another pilot, this time in South Africa. 28 South African and 1 Botswana companies are participating in the first multi-company organised trial for the 4-day week in the African continent, named *4 Day Week SA Pioneer Pilot*. Around 500 employees will take part in the pilot following the *100-80-100 model*.

Prior to the pilot, the companies participated in 4 weeks of intensive onboarding, and are now in the 6 months of experimentation that will be studied in collaboration with Boston College and Stellenbosch Business School. Pre-, mid-, and post-trial data is being collected considering the companies' and employees' perspective. As the trial has just started, no results are yet available. However, the recruitment process for a second trial in the country has already started (Lockhart, 2023a).

2.5.3 Individual company pilots

In this section, we present a summary of the most relevant cases of individual-company implementations of 4-day week policies available in the literature. Table 5 found below provides an overview of the six cases analysed, including company characteristics, such as industry, base country, and size, as well as peculiarities of the initiatives including the classification of the initiative, the year in which the policy was implemented, and the current situation.

The companies' sizes were standardised following the below defined classification:

- **Small:** 11- 49 employees
- **Medium:** 50 - 249 employees
- **Large:** 250 - 499 employees
- **Extra large:** 500 employees

The type of FWTAs adopted were classified according to the definitions provided in section 2.3.2.2. Finally, the current situation of the policy within the company are assessed considering the following definitions:

- **Initial trial:** the company is carrying out a first trial of the 4-day week.
- **Extended trial:** the company carried out a first trial, but is still conducting an extended trial to better assess the impacts of the implementation and any required adaptations of the policy before taking a permanent decision.
- **Permanent policy:** the company has decided to make the policy permanent.
- **Unknown:** there is no information related to the current situation of the policy within the company.

Company	Industry	Base Country	Size	Flexibility Classification of the initiative	Year	Current Situation
Perpetual Guardian	Finance	New Zealand	Medium	Short work-week - 100-80-100	2018	Permanent Policy
Collective Campus	Consulting	Australia	Small	Short work-week - shorter working days	2018	Permanent Policy
Microsoft Japan	Technological	Japan	Extra Large	Short work-week - 100-80-100	2019	Unknown
Buffer	Technological	United States	Medium	Short work-week - 100-80-100	2020	Permanent Policy

Unilever New Zealand	Manufacturing	New Zealand	Extra Large	Short work-week - 100-80-100	2020	Extended Trial
Uplevel	Technological	United States	Small	Short work-week - 100-80-100	2022	Extended Trial

Table 5: Most relevant single-company implementations of 4-day week policies obtained by a thorough literature review.

In the following subsections, each of the implementations will be analysed with more detail. The business cases are organised into seven distinct sections: the organisation, the motivations, the solution, data collection and analysis, indicators and outcomes, challenges and concerns, and conclusion. A deeper analysis of the results from these cases is done in the results chapter integrating the findings with the governmental and multi-company results, as well as those coming from the companies analysed in the qualitative empirical research.

2.5.3.1 Implementation of 4-day week in Perpetual Guardian

The organisation

Perpetual Guardian is a privately held company that provides estate planning services founded in New Zealand from the acquisition of Perpetual Trust in 2013 and Guardian Trust in 2014. The company is classified as a medium size company with around 250 employees. Perpetual Guardian's forward-thinking mindset and dedication to finding new ways to enhance productivity and overall employee satisfaction have garnered global recognition, making it an influential force in redefining the modern workplace (Perpetual Guardian, 2023).

The motivations

In 2018, given New Zealand’s low ranks among Organisation for Economic Co-operation and Development (OECD) countries regarding productivity, Andrew Barnes, Perpetual Guardian’s founder, decided to take measures on the matter. The reasons behind the decision to trial a 4-day week as a solution for this problem were explained by Christine Brotherton, Head of People and Capability at the company: *“If employees are engaged with their job and employer, they are more productive. The trial was a valuable and timely way to test our theory that efficiencies will come with more staff focus and motivation”* (Perpetual Guardian, 2019, p.5).

The solution

On March 5th 2018, Perpetual Guardian started the world-first private company trial of a 4-day week. The pilot lasted 8 weeks involving 240 staff members all around New Zealand. This trial gave birth to the *100-80-100* model since it was the first to propose a 20% time reduction (from 37.5 to 30 hours per week) keeping the same level of production and leaving all other employment conditions the same, including remuneration (Perpetual Guardian, 2019).

The trial was flexible in the sense that not many restrictions were set and each team was free to propose initiatives and set their own ways to measure and increase productivity. One of the many initiatives that came from staff to better implement the FWTA policy was to cut meeting times from an hour to 30 minutes (Perpetual Guardian, 2019).

Data collection and analysis

To ensure the trial's significance on both local and global scales, Perpetual Guardian partnered with academic institutions, University of Auckland and Auckland University of Technology (AUT), to measure the effects of the trial (Perpetual Guardian, 2019).

Quantitative data was collected on a survey the week before the trial (pre-trial) and a week after the trial (post-trial). Employee data indicates the workforces' experience reporting on a 1 - 5 scale, while supervisors present their vision of their teams, reporting on a 1 - 6 scale. Additionally, qualitative research was undertaken considering four semi-structured interviews with senior leaders and eight focus groups with over 40 Perpetual Guardian employees and managers aimed to gather their own experience as well as their teams'.

Answers to pre- and post-trial surveys were matched considering location and demographics in order to have the best understanding of the effects. 122 survey responses were finally used to gather employees' perspectives and 27 from supervisors. Additional analyses were conducted to confirm the robustness, conclusiveness, and unbiased results (Haar, 2018).

Indicators and outcomes

In order to measure the effectiveness of the initiative based on the survey responses, the company used a varied range of measures to get the employees' and supervisors' perspectives on the trial. Table 6 summarises the indicators defined, classified by vitality outcomes, and their results. Positive results indicate that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score). Qualitative findings were used to define the future direction of the trial learning from benefits and challenges. It is worth mentioning that the benefits mentioned in the qualitative analysis are in line with the quantitative findings shown in Table 6 (Haar, 2018).

Vitality Outcomes	Indicator	Perspective	Description	Result
Individual Vitality	<i>Perceived Organisational Support</i>	Employee	Perception of organisation caring about their wellbeing	Positive*
Individual Vitality	<i>Psychosocial Safety Climate</i>	Employee	Perception of organisation caring for their psychological health and safety	Positive*
Individual Vitality	<i>Life Satisfaction</i>	Employee	-	Positive****
Individual Vitality	<i>Health Satisfaction</i>	Employee	-	Positive****
Individual Vitality	<i>Job related Stress</i>	Employee	-	Positive***
Workplace Vitality	<i>Team Psychological Capital</i>	Employee	Strength of the team in regard to having Hope, Confidence, Resilience and Optimism	Positive****
Workplace Vitality	<i>Team Cohesion</i>	Employee	way their team operates together – how they get on and are a cohesive unit	Positive****
Workplace Vitality	<i>Work Demands</i>	Employee	worker workload and the nature of over work.	Positive**
Workplace Vitality	<i>Team Citizenship Behaviours</i>	Employee	How their team engages in helpful work behaviours	Positive****
Workplace Vitality	<i>Creativity Behaviours</i>	Employee	how their team perform with regard to being innovative and creative	Positive****
Workplace Vitality	<i>Job Satisfaction</i>	Employee	-	Positive****
Workplace Vitality	<i>Work Engagement</i>	Employee	-	Positive****
Workplace Vitality	<i>Employee Retention</i>	Employee	Attitude towards staying with the organisation	Positive***
Workplace Vitality	<i>Job Performance</i>	Supervisor	Way the supervisor see's their employee team/s doing their job	No change
Workplace Vitality	<i>Attendance behaviour</i>	Supervisor	Being on time (start and end of day, and before/after breaks etc.)	Positive**

Workplace Vitality	<i>Organisational Citizenship Behaviour</i>	Supervisor	Behaviours outside of one's job description but are viewed as positive	Positive**
Workplace Vitality	<i>Customer service performance</i>	Supervisor	Engagement with customers	Positive**
Workplace Vitality	<i>Creativity behaviour</i>	Supervisor	how their team/s perform with regard to being innovative and creative	Positive*
Home and Family Vitality	<i>Work-Life Balance</i>	Employee	-	Positive****
Home and Family Vitality	<i>Leisure Satisfaction</i>	Employee	-	Positive****
Community Vitality	<i>Community Satisfaction</i>	Employee	Involvement with their local community	Positive****

Table 6: Indicators defined to measure the success of the Perpetual Guardian 4-day week trial. Source: (Haar, 2018). * *p*-value < 0.1; ** *p*-value < 0.05; *** *p*-value < 0.01; **** *p*-value < 0.001

Challenges and concerns

While the majority of the participants in the qualitative analysis highlighted the benefits of the trial that were in line with the quantitative analysis, some also revealed several challenges and frustrations.

Tammy Barker, Branch Manager at Perpetual Guardian at the moment of the trial, stated “*The biggest concern from an employer point of view is ensuring that the full-time introduction of the policy doesn't lead to complacency, with the risk that people's productivity will slip back. To guard against this happening we've spent a lot of time making sure every person in every team has their own plan as to how they're going to maintain and even improve their productivity*” (Perpetual Guardian, 2019).

Furthermore, some managers expressed caution about implementing a FWTAs reducing hours without a significant redesign and investment into the full concept of Smart Working. Employees suggested the implementation of advanced information technology, such as remote working tools, an improved knowledge management system, and automation through chatbots or robots, to enhance productivity. Teams would also benefit from structured guidance and training on applying lean management principles to identify inefficiencies and develop new ways of working (Perpetual Guardian, 2019).

Although Perpetual Guardian decided not to define strict policies regarding the extra day off, some argued that this lack of guidelines generated some friction. There were debates about whether it should be treated as a day of annual leave with no expectation of work, or as a flexible working day where work might be required if needed. Some questioned whether the reduced hours should be mandatory for equality reasons, considering the potential imbalance in career progression and job assignments if some employees chose not to take the time off (Perpetual Guardian, 2019).

Finally, although the overall results from the quantitative research state the opposite (Haar, 2018), some employees experienced increased stress and pressure to complete tasks within a shorter time frame. As a result, certain teams or divisions were unable to fully or partially participate in the trial, and some employees ended up working compressed hours instead of reduced hours (4/10 model) (Perpetual Guardian, 2019).

Conclusions

To conclude, the quantitative findings show that the first private company trial of a *short-work week* was a huge success considering all vitality outcomes. Most of the employees and managers reported positive feedback and highlighted the benefits of the initiative in the qualitative analysis as well. However, some of the challenges presented leave room for improvement and lead the way to even more beneficial implementations of the 4-day week. The major proof of the success of the trial can be seen in the decision of Perpetual Guardian to make the policy permanent from November 2018 (Perpetual Guardian, 2019).

2.5.3.2 Implementation of 4-day week in Collective Campus

The organisation

Collective Campus is a corporate innovator accelerator founded in Australia in 2015. The company has eight core employees and an extended team of twenty more facilitators including consultants, assistants, designers, and developers. Collective Campus offers its employees remote working from the early beginnings. Its CEO and co-founder, Steve Glaveski, is an innovator with the mission to “*create more impact for humanity and empower their people to lead more fulfilling work lives*” (Collective campus, n.d.).

The motivations

Collective Campus recognized the transformative changes taking place in the modern work landscape and made a strategic decision to explore the potential benefits of adopting *shorter working days*. With the realisation that traditional 9-5 schedules no longer align with the evolving job requirements, the company aimed to embrace a more flexible and efficient approach to work.

Moreover, Collective Campus acknowledged that individuals can effectively operate in a state of intense *flow* for only a limited number of hours each day where *flow* is defined as “*a mental state of operation in which a person performing an activity is fully immersed in a feeling of energised focus*” (Glaveski, 2018). Building upon the insights of experts like Cal Newport, a renowned author in this field, the company recognized that dedicating three to four hours of uninterrupted deep work each day could yield transformative improvements in productivity and overall well-being.

The solution

The company started a two-week experiment cutting work hours in 2018 where, instead of doing the traditional 9-to- 5, Collective Campus changed its schedule to 9-to-3, working a total of 30 hours per week. Since before the implementation of the experiment, the Collective Campus has implemented several tools to optimise output by being in the *flow*, such as,

automating tasks, outsourcing non value added tasks, prioritising tasks effectively by using the Pareto Principle, and minimising distractions, doing the hardest things first, and encouraging intense focus on a single task with an optimal challenge/skill ratio. It is worth mentioning that the 3pm ending time was just a guideline, contingent on cognitive capacity, outcomes delivered, and urgency of planned activities (Glaveski, 2018).

Data collection and analysis

During the two-week trial, employees were asked to answer a survey at the beginning and the end of the day, to bring awareness of how they were feeling and their outputs. At the end of the trial, the team gathered to evaluate the statistics around the collected data, share their personal experience, and drive improvements (Glaveski, 2018).

Indicators and outcomes

The company measured not only productivity, but also employee wellness, energy, and morale. Being a small team, each employee was encouraged to measure their productivity in their own way, since productivity is not as easy to quantify in these roles and each might have their best approach.

Table 7 shows the questions answered in the survey regarding employee’s perspective and the average answers. Employee performance was analysed separately based on the different metrics provided by each employee (Glaveski, 2018 , "Collective Campus", 2018).

Vitality Outcome	Question	Result
Workplace Vitality	How much more could you give at 3pm? (10 is much more)	5.8/10
Individual Vitality	How good did you feel at the start of each day on average? (10 is Excellent)	8.4/10
Individual Vitality	How did you feel during the day? (10 is excellent, 1 is anxious and rushed)	7.6/10
Workplace Vitality	Did you feel like you were moving the needle on our goals or compromising our goals by working shorter hours? (10 being moving, 1 compromising)	8.2/10
Individual Vitality	How comfortable were you doing this? Did you feel okay leaving at 3 or did you feel you had to wait for others? (10 is most Comfortable)	7.4/10
Workplace Vitality	Did you feel like you were falling behind? (10 being "not at all")	7.6/10
Workplace Vitality	Performance (measured individually by each employee)	No significant change

Table 7: Questions used to measure the success of the Collective Campus trial. Source: ("Collective Campus", 2018)

Challenges and concerns

Collective campus did not include any major challenge in the implementation of these measures. However, the approach followed by the company is only possible in trust work environments. Employees should feel comfortable to share their thoughts and measure their performance, understanding that this is not intended to micromanage, but for the whole purpose of the experiment. Collective Campus is a small company in which all employees are hand picked by the CEO, knowing that they are aligned with the company's goals and are passionate about learning, growing as individuals, and take pride in the team's achievements. The above mentioned peculiarities of the organisation made it possible to implement this *short work-week* policy without major challenges.

Conclusion

Collective Campus's *shorter working days* trial was a success, reporting no changes on production and increased motivation and less-stressed employees. The company reported to be enthusiastic to try other flexible work arrangements that can contribute to productivity and employees' well being simultaneously, such as the 4-day work week or broken up workdays (aim for five hours of deep work with two optional hours of shallow work throughout the day). Another measure of the success of the trial can be seen in the permanent adoption of the policy within the company (Glaveski, 2018 ; Collective Campus, 2018).

2.5.3.3 Implementation of 4-day week in Microsoft Japan

The organisation

Microsoft Corporation was founded in 1975 and is now a leading multinational technology corporation with its headquarters located in Washington. Due to its status as a major global corporation, Microsoft has significant influence and has a profound impact on the world. Recognizing this responsibility, the company has developed a robust and well-defined Corporate Social Responsibility (CSR) plan which has four main pillars: support inclusive economic growth, protect fundamental rights, create a sustainable future, and earn trust (Microsoft, 2022).

The motivations

Besides the persistent efforts introduced by the Japanese government, *karoshi* (death from overwork) still causes a significant number of deaths in Japan. After the introduction of a revision to the Labor Standards Act in 2019 to address the issue on a country level, Microsoft Japan decided to take a disruptive initiative to tackle the problem first hand.

Microsoft's in-house project, named Work Life Choice Challenge (WLCC), was introduced by the company in the summer of 2019 with the objective to “*create an environment where each employee can choose diverse and flexible workstyles based on their work and life circumstances*” (Microsoft Japan, 2019a). This policy challenged employees to “*work shorter hours, take sufficient rest, and engage in continuous learning aiming to enhance productivity and creativity*” (Microsoft Japan, 2019a).

The solution

During August 2019, all employees at Microsoft Japan worked four days a week following what we now call a *100-80-100 model*. During this period, Fridays were designated as non-working days and full-time employees were paid a special paid leave. To ensure that all employees would benefit from this initiative, company offices remained closed from Friday to Sunday. In order to promote a more efficient use of time, internal company meetings were reduced to 30 minutes and encouraged the use of Microsoft Teams for communication instead of emails or meetings (Microsoft Japan, 2019a).

Besides the reduction in working hours, Microsoft also implemented support programs to promote a healthier work-life balance. These initiatives focused on three main areas: work, home and personal life, and society.

From the work perspective, the employees were offered expenses related to self-development activities to develop professional skills, such as membership to courses, tuition or certification fees. Additionally, cross-cultural and industry activities experiences were available to exchange opinions and discuss with other people outside of their knowledge area.

Regarding the personal life, employees were provided with assistance for expenses for family trips and leisure activities, to encourage quality time with their loved ones improving work-life balance. Finally, Microsoft provided its workforce with assistance for social contribution expenses, such as volunteering, and providing a menu of initiatives for the employees to foster their community during their additional time off (Microsoft Japan, 2019a).

Data collection and analysis

Employee data was gathered conducting a survey at the end of the trial to assess the overall satisfaction with the policy and perception of changes in behaviour regarding work, family, and society. There were no initial data points to compare the employee’s point of view regarding the trial and no initial survey was conducted. Hence the questions assessed the individual’s perceived change due to the trial.

Instead, the company's performance was measured through the use of internal tools at the company, such as Microsoft Teams or printers in the offices, and company reports from previous years. The data analysis was conducted using Microsoft Workplace Analytics comparing the company's data after the trial with previous calendar year metrics (August 2018) or other comparable periods, like pre-trial (Microsoft Japan, 2019b). No qualitative data was shared by the company.

Indicators and outcomes

In order to measure the effects of the implemented policy, the company defined indicators related to improvements from the company’s and employee’s perspective. Table 8 summarises the indicators defined classified by vitality outcomes and their results.

Vitality Outcomes	Indicator	Perspective	Result
Individual Vitality	<i>Appreciation of the 4-day work week</i>	Employee	92.1% reported appreciation
Workplace Vitality	<i>Changes on Awareness/Behaviour on Work</i>	Employee	96.5% reported changes
Workplace Vitality	<i>“30 minute meeting” implementation rate</i>	Company	+46%
Workplace Vitality	<i>“remote meeting” implementation ratio</i>	Company	+ 21%
Workplace Vitality	<i>Personal network connections per day</i>	Company	+ 10%
Workplace Vitality	<i>Labour Productivity (sales/ # employees)</i>	Company	+ 39.9%
Home and Family Vitality	<i>Changes on Awareness/Behaviour on Life</i>	Employee	97.1% reported changes

Community Vitality	<i>Changes on Awareness/Behaviour on Life</i>	Employee	83.5% reported changes
Community Vitality	<i>Print Volume</i>	Company	-58.7 %
Community Vitality	<i>Electricity Consumption</i>	Company	-23.1 %

Table 8: Indicators defined to measure the success of Microsoft Japan's 4-day week trial. Source: (Microsoft Japan, 2019b)

Challenges or concerns

The company shared three main challenges faced during the trial (Microsoft Japan, 2019b):

1. Gap between employees/departments that effectively adopted the policy and employees/departments that were unsuccessful.
2. Some managers/departments still lack understanding of diversity in work styles.
3. Some employees/departments think that these challenges may cause trouble for customers, while others are positive about sharing this challenge with customers.

Conclusion

The results of the trial, in which employees reduced monthly hours by 25%, were remarkably positive considering all vitality outcomes, especially on productivity. This is a strong statement towards the importance of work-life balance, an area where Japan's workforce falls short. It is worth mentioning that besides the good results obtained in the trial, and the announcement of a future trial in the winter with some of the policies found in the summer edition, no more updates nor results were posted by Microsoft.

2.5.3.4 Implementation of 4-day week in Buffer

The organisation

Buffer is a social media management software company founded in 2010 in San Francisco, United States. The company operates fully remotely, with 84 workers distributed around the globe. From its inception, Buffer has differentiated itself by challenging conventional practices and cultivating a work environment that is both unique and fulfilling. Buffer's vision encompasses not only financial success, but also the happiness of their customers and team

members, as well as personal growth along the journey which has led the company to conduct several 4-day week trials (Buffer, n.d.).

The motivations

In response to the challenges posed by the Covid-19 pandemic in 2020, characterised by high levels of stress, widespread shutdowns, and unprecedented uncertainty, Buffer started thinking of options to help employees deal with these sudden changes. Consequently, the company conducted an internal survey in which 23% of employees reported feeling guilty to take time off to deal with the high level anxiety and 40% suggested that the best way for Buffer to help was to introduce a *short work-week* (Gascoigne, 2020).

Based on the results of this survey and the recent success of the world known 4-day week pilot implementations in Perpetual Guardian (2018) and Microsoft Japan (2019), Buffer decided to implement a one month trial. Joel Gascoigne, CEO and co-founder of the company, stated: *“This 4-day workweek period is about well-being, mental health, and placing us as humans and our families first. It’s about being able to pick a good time to go and do the groceries, now that it’s a significantly larger task. It’s about parents having more time with kids now that they’re having to take on their education. This isn’t about us trying to get the same productivity in fewer days. We are putting people over profit”* (Gascoigne, 2020).

After one month, the company was pleased to see that the trial had not only brought improvements in stress levels, work satisfaction, and autonomy, but also work related outputs. As a result, Buffer decided to start a more thorough pilot of a 4-day work week focusing not just on teammate well-being, but also on the firm’s long-term success.

The solution

From its first 1-month trial implemented in 2020, Buffer implemented a *100-80-100* 4-day week trial for all its workers distributed all around the World (Gascoigne, 2020). An important remark is the fact that the company already had some flexibility in place, for instance, they had already been experimenting with *Short Fridays* from 2019 (Seiter, 2019).

For smoother coordination within the teams, all employees from the same area agreed on which was the best day off based on their business needs. This was true for all employees, except for those in the Customer Service department, who had to alternate days in the different weeks to ensure coverage for all customers (Gascoigne, 2020). Additionally, if there was already a holiday during the week, that was considered the day off to avoid differences between different areas and make sure outcomes could be achieved.

From the initial trial until today, the company has been measuring and transforming the proposal to solve the challenges faced. At the end of the 6-month trial, the company decided to move to a permanent measure and brainstorming sessions were conducted to look for solutions for some of the challenges encountered in the trial, and new guidelines were set (Seiter, 2020). First and foremost, after the experimentation, the company found that the best solution was to define Fridays as the default day off for most areas, keeping no meetings or expectations on internal communications on that day. Furthermore, considering performance outputs, employees who were not meeting the objectives could choose or be asked to work on the 5th day. Finally, the work outcomes, including team's productivity, stress level, and ownership of work schedule, are evaluated quarterly to reiterate and make sure to keep the company's goals and keep employees satisfied (Miller, 2021).

Data collection and analysis

During the 1-month trial and 6-month pilots, the company conducted employee surveys on a monthly basis to get information on employee's perspective of the initiative (Gascoigne, 2020). Moreover, written feedback from employees and managers were gathered to understand individual experiences and work on emerging concerns (Seiter, 2020).

When the policy became permanent at the end of 2020, Buffer decided to start tracking company-wide goal achievement to measure the outputs instead of only employees' perspectives. Additionally, the results were analysed quarterly to introduce changes if needed (Miller, 2021).

Indicators and outcomes

During the 6-month trial, employees and managers' perspectives were gathered considering additional indicators regarding productivity. A summary of the defined indicators and their results can be found in Table 9 described below (Miller, 2021). Positive results indicate that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score).

After the implementation of the permanent policy from 2021, Buffer included company productivity measures to make sure the overall company goals were being met, as well as employee satisfaction with the policy, work-life balance perception, feeling of burnout, and adherence, intending to understand if most of the workforce had successfully adapted to a shorter work week or kept working on a 5-day week basis (Miller, 2022).

Vitality Outcomes	Indicator	Perspective	Result
Individual Vitality	<i>Stress Level</i>	Employee	Positive
Workplace Vitality	<i>Work Satisfaction</i>	Employee	No changes
Workplace Vitality	<i>Outputs based on area deadlines and goals</i>	Employee	Positive
Workplace Vitality	<i>Output based on area deadlines and goals</i>	Managers	Positive
Home and Family Vitality	<i>Autonomy and Flexibility</i>	Employee	Positive

Table 9: Indicators defined to measure the success of Buffer's 4-day week trial. Source: (Miller, 2021)

Challenges and Concerns

When the trial first started, the company gave flexibility to the departments to set the most convenient day to take off. This generated some inconveniences, getting feedback from their own employees stating: *"the biggest confusion to me was trying to remember/juggle who was off when, it would be great if we could decide on a particular day that we all take off"* (Seiter, 2020). The company learnt from this and decided to set Friday's as the default day-off for most areas in the company (Seiter, 2020).

Furthermore, in 2021, after almost two years of 4-day week schedules, the company saw signs of decreased employee engagement and team connections. This reduction is not necessarily directly tied to the short week schedule. However, being a fully remote company, the employees

report to miss the more frequent in person or remote hangouts or casual events like team building activities or company retreats. To address this issue, in 2022, the company committed to dive back into increasing face to face and remote meet-ups (Miller, 2022; Oladipo, 2023).

An important challenge the company faced was with their Advocacy Team employees who provided customer service. Initially, they implemented a rotating schedule to ensure coverage, but it led to administrative difficulties and made it hard for employees to plan their days off. As a solution, in the third month of the six-month trial, a new schedule was created ensuring that every week each employee was off three days in a row, on the same days each week. In spite of the efforts, this area was the only one that actually reported a decrease in productivity after the implementation of the 6-month trial. To deal with this issue, specific weekly productivity goals were set for employees in this area, giving them the flexibility to work on the 4-day week schedule as long as the outputs were met. As a result, in Q1 2021, customer satisfaction scores improved compared to the previous quarter, and one of the goals for the area was achieved, although the other one wasn't. Even if the situation was still not ideal, the iteration process to find a suitable solution is still in place. Like the rest of the teams in the company, employees have the option to work on the fifth day as an *overflow day* to cover for remaining workload (Seiter, 2020, Nyström, 2022).

Finally, although most of the employees report to have adopted the 4-day week schedule, there are still many employees who cannot take a full day off. In 2022, Buffer reported that 73% of the employees were conducting a *short work-week* (either 4-day week or 5 shorter working days). In 2023, this number increased to 78.8% of employees. Carolyn Kropprasch, Chief of Staff in the company, explained “... *we encourage teammates to work on that fifth day if they choose to or if needed, based on their workload or the team's needs. Working on the fifth day is not necessarily a failure of the system or a problem. It's just not expected or required like in a five-day work week environment*” (Oladipo, 2023).

Conclusion

Buffer has been working on a 4-day work week schedule for more than 3 years already, and periodically shares their experiences, including the benefits, as well as the challenges they have faced over the years and their approaches to solve them. Buffer's implementation of the 4-day week is described by the company as "*overwhelmingly positive*", with 90% of the employees reporting to want to continue with the 4-day week with no one stating that they would definitely like to discontinue the policy. Consequently, Buffer decided to shift to a 4-day workweek for the foreseeable future, always measuring the results and introducing changes to keep learning and continuously improving (Seiter, 2020). Although many challenges arised, the policy allows employees to have a better work life balance and still deliver the expected results. As it has done until now, the company plans to keep iterating to refine the approach and ensure the success from an employee and company perspective (Oladipo, 2023).

2.5.3.5 Implementation of 4-day week in Unilever New Zealand

The organisation

Unilever is a global consumer goods company known for its wide range of popular brands in food, beverages, cleaning agents, and personal care. It was established in 1929 from the merger of Margarine Unie and Lever Brothers. Today, the company counts brands in 190 countries and 148000 employees working in a mix of office-, lab-, production-, and field-based roles. The company has a strong commitment towards sustainability and responsible business practices. In fact, Unilever Australia and New Zealand (ANZ) has recently become a Certified B Corporation, demonstrating verifiable positive impact through policies across five areas: governance, workers, communities, customers, and the environment (Lockhart, 2022; Unilever, 2022).

The motivations

The 4-day week trial is one of the initiatives Unilever is driving as part of their social commitments launched in 2021 to provide all employees in the company with flexible

employment options by 2030 since this is key to attracting talent and having an engaged workforce.

The solution

Unilever New Zealand ran an initial 4-day work week trial from December 2020 to June 2022 (18 months) following a *100-80-100 model*. The 80 employees that participated in the trial could choose which day or set of hours suited them better to take off, in alignment with their teams and allowing continuity for the business (Unilever, 2022).

It is worth bringing attention to the fact that the implementation of the 4-day week trials is only a part of the flexible work arrangements the company is experimenting with. Other new FWAs include U-Work, an employment model which gives employees the freedom and flexibility to dip in and out of assignments and securing a regular income and benefits, hybrid working arrangements, and an in-house programme known as Flex Experiences. The latter, matches people with project opportunities in other business areas and locations to allow them experience different roles and build skills, without having to change their core role (Unilever, 2022).

To make the reduced working hours efficient enough to reach the same level of productivity, guidelines were given to the workforce to remove projects, processes, and protocols that added less value, ensuring they were able to free up time to work on key activities. Recommendations for change included less frequent but more efficient meetings, less reliance on emails and instead adopting more instantaneous communication softwares such as Microsoft Teams (Lockhart, 2022).

Data collection and analysis

The company partnered with the University of Technology Sydney (UTS) Business School to measure the trial through online surveys, business results, and in-depth interviews. In order to measure the effects of the implemented policy, the company defined indicators to gather

employees and stakeholders' point of view. Additionally, company reports were used to see the firm's overall achievements (Unilever, 2022).

Indicators and outputs

Table 10 summarises the indicators defined classified by vitality outcomes and their results. Positive results indicate that the trial provided a significant improvement in the indicator, while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score). No statistical analysis was shown in the reports.

Vitality Outcomes	Indicator	Perspective	Result
Individual Vitality	<i>Stress level</i>	Employee	Positive
Workplace Vitality	<i>Revenue</i>	Company	Positive
Workplace Vitality	<i>Job Engagement</i>	Employee	Positive
Workplace Vitality	<i>Absenteeism</i>	Company	Positive
Workplace Vitality	<i>Work-life conflict</i>	Employee	Positive
Workplace Vitality	<i>Work Deliverables on time and quality</i>	Stakeholders and Partners	Positive

Table 10: Indicators defined to measure the success of Unilever New Zealand's 4-day week trial. Source: (Unilever, 2022)

Challenges and concerns

Although the company reported to conduct a qualitative analysis and plan to implement the lessons learned to future trials, no information regarding these aspects was released till this day (May, 2023).

Conclusion

The 4-day week trial implemented in Unilever New Zealand was considered a huge success. So much so, the company has decided to extend the trial to the Australian branch to keep learning from an experience in a much bigger market. This trial began in the neighbouring country on November 14th 2022 and is expected to last 12 months under similar principles to the ones adopted in New Zealand (Unilever, 2022).

2.5.3.6 Implementation of 4-day week in Uplevel

The organisation

Uplevel is a software and analytics full-remote startup founded in 2018 in Seattle, United States. It offers a platform to help engineering teams improve productivity, collaboration, and effectiveness by providing valuable insights and metrics on team dynamics, individual performance, code quality, and project progress. With real-time dashboards, communication tools, and personalised recommendations, Uplevel empowers teams to make data-driven decisions, optimise workflows, and drive continuous improvement in their software development processes (Uplevel, n.d.).

The motivations

In recent years, many multiple-company 4-day week trials reported successful outcomes. Being an engineering insights startup focused on data analysis that looks for productivity and continuous improvement, Uplevel wanted to gather their own insights of this upcoming trend and decided to carry out their own trial (Uplevel, 2022).

The solution

In January 2022, the company started a three month trial of a pure *100-80-100* 4-day week policy allowing employees to take Friday off. In order to correctly implement the initiative, all the employees worked together to find solutions to possible limitations and concerns. For this reason, the company announced the policy change two months in advance and held brainstorming sessions for all the workforce to raise questions, think of solutions, and ultimately change the ways of working.

In order to minimise the impact towards customers, the company shared a formal communication letting them know how the company would operate and how to reach out on Friday. Within the customer service department, one person was on call on a rotation schedule. Besides this individual contributor, the rest of the employees had flexibility to choose whether they wanted to work on Fridays or not.

To be able to reduce the working hours, the company introduced many changes in the way they operated. For example, together with a “meetings expert” advisor, the company introduced changes such as reducing all meetings to 30 minutes unless specified reason, sharing meeting agendas to cover only the required topics, including no more than two people per team in a meeting, and sharing meeting actions after each meeting in order to make meetings more effective and inclusive. Moreover, Uplevel suggested employees to block 30 minutes daily available slots where other employees can get answers quickly, and two two-hours slots per week for team deep work (Uplevel, 2022).

Data collection and analysis

To gather employee’s perspective on the effects of the initiative, the company developed monthly and shorter bi-weekly surveys. It is worth mentioning that each team had the freedom to create their own metrics to measure success and protocols in a way that adapted to their workflow (Uplevel, 2022).

Indicators and outcomes

Uplevel defined success measures to define whether the trial should be extended. Although no numerical targets were set, indicators and expected variations were defined. Table 11 summarises the indicators, targets and results obtained. No statistical analysis was highlighted by the company (Uplevel, 2022).

Vitality Outcomes	Indicator	Perspective	Target	Result
Individual Vitality	<i>Burnout</i>	Employee	Reduce or maintain	Achieved
Workplace Vitality	<i>Work on weekends</i>	Employee	Reduce or maintain	Achieved
Workplace Vitality	<i>Employee Attrition</i>	Company	Reduce or maintain	Achieved
Workplace Vitality	<i>Employee morale</i>	Employee	Increase or maintain	Achieved
Workplace Vitality	<i>Socialisation with coworkers</i>	Employee	Increase or maintain	Achieved
Workplace Vitality	<i>Sales</i>	Company	Achieve company goals	Achieved
Workplace Vitality	<i>Customer engagement</i>	Company	Achieve company goals	Achieved
Home and Family Vitality	<i>Work-life balance</i>	Employee	Increase or maintain	Achieved

Table 11: Indicators defined to measure the success of Uplevel’s 4-day week trial. Source: (Uplevel, 2022).

Challenges and concerns

Even with all ad-hoc policies implemented to redesign the way of working, employees reported that during the first month they “*felt the crunch to hit our goals in fewer days*”. However, while the pilot evolved, they reported to start working and making decisions faster adapting to the new proposed work schedule. Furthermore, about 40% of the employees reported to still have to work on Friday, but only for a few hours, and with the relief to have the extra time for household or administrative activities, or spend more time with their loved ones or in personal hobbies (Uplevel, 2022).

Conclusions

Uplevel’s 4-day week trial is another success story, being able to keep all their indicators in line with their expectations. At the end of the 3-month period, all the employees reported interest in continuing with the new schedule. It was easy for the company to decide to move to an extended trial, looking to continuously improve the 4-day week policy and work more effectively while the business goals are being met (Uplevel, 2022).

3 Methodology

3.1 Objectives

This research aims to explore the current implementation of *4-day work week* policies, including *short work-weeks* and *compressed work-weeks*. Driven by this objective, the following research questions are investigated:

1. *Which is the current situation regarding the implementation of 4-day week arrangements in the world, and in particular, in the Italian territory?*
2. *Which are the outcomes of the implementation of 4-day week policies?*
 - a) *How does the 4-day work week impact employees' wellbeing?*
 - b) *How does the 4-day work week impact companies' productivity and employees' perception of their workplace?*
 - c) *How does the 4-day work week impact employees' work-life balance?*
 - d) *How does the 4-day work week impact communities and the environment?*

In order to address these questions, this study comprises two main parts. In the first place, a comprehensive **literature review** was conducted aiming at understanding the evolution towards the present situation regarding these policies, the reported outcomes of implementation and experimentation conducted around the globe, and mapping the extension of the implementation of these policies.

Secondly, **empirical research** involving interviews with companies currently implementing or experimenting with these new flexible work time arrangements were conducted to gain insights about their motivations, challenges, and experiences. Given the lack of research regarding this topic in the Italian territory, these interviews were crucial to map the current situation in this country.

This thesis aims to contribute to the existing literature by providing a comprehensive overview of the 4-day work week, synthesising the findings from previous trials and offering insights into the current landscape of this new flexible work time arrangement in the world, and in particular in Italy. The research findings will help shed light on the potential benefits and challenges associated with the 4-day work week.

3.2 Methodology of the literature review

The literature analysis conducted for this study was divided into two distinct parts: background, context, and theoretical frameworks; and deep mapping and understanding of the current situation regarding the 4-day week. The first part, focused on the theoretical background and context that led to the growing interest towards these new flexible work time arrangements. In particular, it aimed to gain a comprehensive understanding of Flexible Working, including its definition and theoretical framework, and the underlying reasons that led to its emergence, such as the Covid-19 pandemic and the work crises that arose from it, namely the Great Resignation, Quiet Quitting, and the Great Regret.

This analysis consisted of an exhaustive search of academic papers, books, and articles, performed by using online resources including Google Scholar, research platforms such as ResearchGate, and creating queries in Scopus. A total of 56 sources were examined to ensure a comprehensive understanding of the history of working hours, the current context in the work environment, the concept of Flexible Working, and the impacts of traditional flexible work arrangements.

The second phase of the literature analysis focused specifically on the current implementation of new flexible work time arrangements around the world. Although initially we wanted to focus on a wider variety of policies, including unlimited vacations, given the lack of academic research on this topic, it was decided to shift the focus only to 4-day work week initiatives, deep diving into worldwide implementations. In this phase, we tried to understand which were the companies applying these policies and what were the outcomes of such. In order

to properly analyse the outcomes in a systematic way that would allow us to draw comparisons between companies and countries we used the model developed by E.J. Hill in which 4 vitality outcomes are defined: individual, home and family, workplace, and community vitality (Hill et al., 2008).

Once again, an exhaustive search of academic papers was conducted including web searches and online queries. To dive deep into the implementation and results of multi-company trials conducted around the world, the organiser's official webpage, Four Day Week Global, was used as a primary resource. Instead, the most renowned individual company trials and governmental initiatives were analysed considering papers, newspaper articles, companies' web pages and annual reports. Considering these two parts of the literature review, a total of 147 sources were examined.

In order to map the current situation of companies implementing the 4-day week policy around the world, an extensive database was constructed including a total of 446 companies. This comprehensive repository was built by scraping websites using a Python script. Three main sources were considered, Build Remote, 4 Day Week.io, and 4dayweek.co.uk, which contain lists of companies implementing or offering jobs with 4-day week policies.

Once all the companies were included in the database, a manual check was conducted to ensure the reliability of the information provided, leaving only the companies for which additional sources verified the policy. Furthermore, supporting data was collected to assess the companies' industry, size, type of 4-day week implemented (based on the classification provided in section 2.3) and, if available, the year in which the policy was implemented.

Considering the particular focus in the Italian territory, an even more thorough investigation was conducted exploring companies' websites and newspaper articles to gather a comprehensive list of Italian organisations that have recently adopted this policy.

In conclusion, a comprehensive literature analysis was conducted to explore the concept of Flexible Working and specifically investigate the implementation and outcomes of the 4-day

week policy. This built a strong foundation to answer the research questions and allowed us to conduct a detailed assessment of the impacts reported by the companies experimenting a 4-day work week and map the current implementation of these policies FWTAs worldwide, and in particular on the Italian territory.

3.3 Methodology of the empirical research

As previously mentioned, the situation in Italy regarding the implementation of a 4-day work week is currently quite confusing, as the concept is not yet well-defined in the country. In this way, it was challenging to find comprehensive information on this topic online, mainly because many companies have only recently started adopting such measures or are still in trial phases. As a result, these initiatives have not gained significant public attention. Moreover, for those companies that we did find information online, the information available regarding the type of policies being applied, motivations and results was very limited.

Consequently, for the Italian specific case, an even more thorough investigation was conducted exploring companies' websites and newspaper articles to gather a comprehensive list of Italian organisations that have recently adopted this policy. Furthermore, a survey conducted by the Smart Working Observatory of Politecnico di Milano in 2022 also provided insights about companies that claimed to apply a 4-day work week without any media coverage.

In this way, in an effort to gather relevant data, we reached out to company representatives via email to set up interviews to better understand their experiences and perspectives on the 4-day work week. For those companies that expressed interest, interviews were scheduled.

It is worth noting that as part of this empirical analysis, we made an effort to contact company representatives from other countries where the 4-day work week has been successfully implemented to be able to compare the Italian situation with the rest of the world and also gather insights on what Italian companies might be missing. This would help in identifying potential factors contributing to Italy's delayed progress and uncover valuable lessons from other

countries' experiences. Despite our efforts, we only received an answer from two British companies whose policies are described in detail in section 4 of this thesis, together with the information gathered in the rest of the interviews. Although it is a small sample, these interviews were key to comparing Italian firms with the leading country with regards to 4-day week policies.

The interview phase took place between April 24th and May 26th, 2023. During this period, we had the opportunity to conduct 14 formal interviews with various company representatives including CEOs, general directors, and Human Resources managers from organisations experimenting with 4-day week initiatives.

In order to standardise the interview process across all participants, a scheme was formulated including a set of predetermined questions encompassing all the essential aspects to be covered (Appendix). The interviews started with an initial presentation of the organisation, followed by a detailed explanation of the 4-day week policy including the motivations, particular characteristics, barriers, and measurement of results. Finally, we assessed if the policy was part of a broader Smart Working project and future expectations about Flexible Working.

By adhering to the established scheme, we aimed to maintain uniformity in the data collection process and enhance the reliability of our findings, allowing us to make meaningful comparisons across each case. However, these interviews were carried in a semi-structured way meaning that the interviewees were guided throughout the process but, as relevant topics were mentioned, freedom to deviate from the scheme was granted.

The interviews conducted as part of this study were carried out in a virtual format due to geographic constraints. The duration of each interview ranged from 30 minutes to an hour, depending on the availability of the interviewee and the significance of the topics discussed. A researcher from the Smart Working Observatory skillfully guided these interviews, assuming the role of the interviewer. Additionally, one of us was always present acting as an observer, taking meticulous notes, and asking insightful questions when necessary. All interviews were recorded

with the interviewees' consent, allowing us to review them later and ensure that no crucial information was overlooked. Once the interview phase concluded, we proceeded to write a business case for each company providing a detailed description of their respective initiatives, which are presented in the following section. It is important to note that all the representatives from the participating companies agreed to be cited and have their content published as part of this study.

4 Empirical research

4.1 Objective

The information presented up to this point in the thesis derives from the existing body of literature concerning work culture and the adoption of 4-day work week policies. However, we deemed it of great importance to contribute to the literature on this topic by not only conducting a comprehensive literature analysis, but also conducting empirical research.

The empirical research aims to provide valuable insights about the firms' stimuli, obstacles, and overall experiences when implementing these new flexible work time arrangements. Additionally, this research intends to fill the lack of consolidated information regarding the current adoption of 4-day week policies in the Italian territory.

4.2 Data sample

Initially, when selecting the sample to conduct the interviews we focused on companies that implemented a 4-day week on a global level. Table 12 provides a detailed overview of the 13 interviewed companies, including company characteristics such as industry, base country, and size, standardised under the definitions provided in section 2.5.3.

It is worth mentioning that an additional company was also interviewed, but it was decided to remove it since the description provided during the meeting of the FWTA implemented did not align with the scope of this study. Furthermore, preliminary interviews were conducted with seven companies operating in Argentina. However, no further interviews were coordinated since the policies implemented were not considered within the scope of this research.

Company	Industry	Base Country	Size
Aldia	Non-profit	Italy	Extra Large
Awin	Marketing	Italy	Extra Large
Blink	Technological	United Kingdom	Small

Carter & Benson	Consulting	Italy	Small
Etra	Multiutility	Italy	Extra Large
Intesa San Paolo	Finance	Italy	Extra Large
Lavazza	Manufacturing	Italy	Extra Large
Literal Humans	Marketing	United Kingdom	Small
Methodos	Consulting	Italy	Medium
Realcable	Manufacturing	Italy	Medium
Rigoni d'Asiago	Manufacturing	Italy	Medium
TeamSystem	Technological	Italy	Extra Large
Unilever Italia	Manufacturing	Italy	Extra Large

Table 12: List of interviewed companies with their industry, base country, and size

As can be seen in Table 12, the majority of the interviewed companies are based in Italy. This can be attributed to the fact that this thesis was conducted in collaboration with the Smart Working Observatory of Politecnico di Milano which helped increase the response rate of Italian companies. Given that this institution is well known within the Human Resources community in the Italian territory, many more companies accepted to participate in the study. Additionally, this collaboration eased the contact with many firms that had already participated in earlier studies or events organised by the Smart Working Observatory. The inclusion of two British companies presents a great point of comparison to better understand how the Italian policies differ from implementations in one of the leading countries regarding 4-day week adoptions.

Diving into the characteristics of the interviewed companies, 7 of the 13 considered organisations are classified as extra large. This presents a different perspective than the one analysed in the literature review, in which the majority of the companies were classified as small or medium in size.

Finally, the sample of companies included in this study encompasses a diverse array of industry sectors, such as technology, marketing, manufacturing, finance, consulting, and non-profit. This diverse representation across industries provides valuable insights about the implementation and impact of flexibility policies across a wide range of sectors in Italy. Notably, out of the 13 companies analysed, four of them operate within the manufacturing sector. This

specific inclusion is particularly insightful, considering that the manufacturing sector is often regarded as one of the most challenging sectors to implement time flexibility policies. The presence of these four companies allows for a deeper understanding of the different variations of the 4-day week policies implemented within this sector.

4.3 Business cases

In this section, we present business cases summarising the findings of the conducted interviews. Following the same structure as the one applied for individual company trials analysed from the literature, each case is organised into seven distinct sections: the organisation, the motivations, the solution, data collection and analysis, indicators and outcomes, challenges and concerns, and conclusions. A deeper analysis of the results from these cases is done in section 5.2 in aggregation with the rest of the governmental, multi-company, and individual-company findings coming from the literature review classified by vitality outcomes.

4.3.1 Implementation of 4-day week in Blink

The organisation

Blink is a company based in the United Kingdom, founded in Norwich in 2016 self-defined as “*specialist eCommerce SEO agency with a particular focus on data science*”. The company currently has 18 employees distributed around the United Kingdom. The core principles for the organisation, which are a key part of the company’s competitive advantage, are high efficiency, providing an inclusive environment, and personal and professional development.

The motivations

Considering Blink’s fundamental values, the company has become a pioneer in flexible working arrangements, among which we find a 4-day week schedule. This initiative was motivated since Sam Wright, the company founder, noticed that employees’ productivity and concentration on Fridays was lower than the previous days of the week. From its implementation, this policy has helped keeping extremely high employee retention, allowing to

keep the valuable talent to grow the business and provide a distinguished service. These results have become one of the main reasons to maintain the policy overtime.

The solution

In 2018 the company decided to implement a 4-day week policy, reducing the working hours of its 5 employees from 40 to 32hs a week, being Friday the predetermined day off. Although at the time the term was not year coined, this policy represents a true *100-80-100 model*.

After trying the policy for a few months and noticing positive results, the company decided to make the policy permanent and since then, all the new employees adopted this working schedule. Furthermore, considering that Blink's contracts are stipulated by hours instead of days or months, these were easily modified to reflect the new schedule. The only significant change observed since the adoption of the new contract was a slight reduction in paid time off since this is calculated over the hours specified in the contract.

While time passed, the policy became more flexible adapting to each employee's needs. Although most of the personnel decide to take Fridays off, some prefer to distribute the hours within the week to adjust their schedule to their individual circumstances, implementing *shorter working days*.

Data collection and analysis

To gather employee's perspective, the company conducts regular surveys. Instead, company level results are obtained from the comparison of company reports overtime. However, no statistical analysis was reported to check the significance of the effects.

Indicators and outcomes

Table 13 summarises the indicators defined classified by vitality outcomes and their results. Positive results indicate that the trial provided a significant improvement in the indicator,

while negative indicates a detrimental effect (regardless if this means an increase or decrease of the specific score).

Vitality Outcomes	Indicator	Perspective	Result
Workplace Vitality	<i>Job Satisfaction</i>	Employee	Positive
Workplace Vitality	<i>Productivity</i>	Company	Positive
Workplace Vitality	<i>Employee Retention</i>	Company	Positive
Home and Family Vitality	<i>Work-life Balance</i>	Employee	Positive

Table 13: Indicators defined to measure the success of Blink's 4-day week trial.

The challenges and concerns

Given that the company offers employees the possibility to work fully remote, the superposition of this policy with the 4-day week has generated some challenges. The lack of physical presence has led to a decrease in productivity since the individuals are constantly receiving notifications due to required communication with other employees through online tools that distract them from their main tasks. As most of the roles in the company are data analysts and data scientists, deep concentration is required to come up with solutions to the presented problems.

To address this concern, a new policy called *office hours* was implemented to decrease the interruptions and be able to focus. The *office hours* policy sets timeframes in which the employees can communicate with each other or with external providers. The first and last half-hour of the day are reserved for the employees to communicate with each other (9-9:30 and 17-17:30), while 3 hours a day are devoted for other internal calls and meetings with clients (12:30-15:30). The selection of the *offline* and *online hours* was based on empirical studies that suggest that the morning is better for extended periods of concentration. This does not mean that the working time is reduced, it is just meant to increase concentration time for employees to perform deep thinking and analysis, which is the core of the service offered by Blink (Macnamara, n.d.).

This initiative was implemented to try to boost productivity even further by decreasing the constant interruptions inevitably generated by remote working. Although the policy has

alleviated some of this pain, the founder reports that there is still a lot to do to fully eliminate this problem.

The reduced working hours and remote working can also affect employees' social interaction. With the objective to increase employee engagement and coordination, which ultimately leads to an increase in productivity, the company frequently generates spaces for interaction. Remote sessions with games are held biweekly to relax and enjoy some time with co-workers, as well as face to face team building activities held once a month.

Conclusions

To conclude we might say that, although there are still lots of challenges to keep improving productivity, the 4-day week implementation has brought Blink many side benefits that allows the company to keep one of its main assets, its workforce, satisfied and loyal. Additionally, being one of the first companies to implement these new flexible work arrangements, long before the renowned 4-day week UK Pilot conducted in 2022, brought lots of media attention, increasing brand recognition without any marketing investment.

4.3.2 Implementation of 4-day week in Literal Humans

The organisation

Literal Humans is a digital marketing company founded in the United Kingdom in 2020, offering a wide range of services to its clients, including digital and content marketing, branding, web design, and social media marketing. Currently, it is composed of a team of 10 people primarily based in the United Kingdom, and some team members located in other countries such as Spain, the United States, Taiwan, and Zimbabwe.

The motivations

As Literal Humans emerged during the Covid-19 pandemic, remote work has always been the norm within the company. The company aims to promote employee well-being and recognizes the importance of flexible work arrangements on this matter. Bearing in mind the

evolving needs of individuals in the organisation and the challenging situation in the job market, the company decided to participate in the World's largest 4-day week trial.

The solution

Literal Humans was one of the sixty-one companies that participated in the 2022 study organised by 4-Day Week Global to analyse the benefits of implementing a 4-day work week in the United Kingdom. The company implemented a pure *100-80-100* 4-day work week, reducing working hours from 40 to 32 without salary reductions. Fridays were designated as the day off, and managers actively encouraged team members to use this extra time to pursue personal interests.

A careful training plan was carried out before the roll-out of the initiative, and a performance management system was introduced to support employees during the trial not only about work-related aspects, but also about their wellbeing. Moreover, communication with team members was constant to ensure they were satisfied and engaged. This open and honest communication allowed the founders to understand the employees' needs and determine how to support them both at work and in personal matters.

Data collection and analysis

The company didn't define any internal quantitative indicators nor conducted surveys to gather data from their employees. However, the constant communication with employees on a weekly basis to address their needs served as valuable feedback. Of course, company data and employee data was tracked by the 4-day week organisation carrying out the pilot.

Indicators and outcomes

The indicators used in this trial are the ones reported in the United Kingdom's multi-company organised trial, as Literal Humans was one of the firms engaged in it. Although, the company itself did not conduct analysis nor defined targets to assess its particular situation. The company representative reports perceived positive improvements in employee satisfaction and well-being. The company co-founders also reported additional side benefits noting not only

an increase in the number of job applications, but also an improvement in the quality of candidates as work flexibility is becoming a fundamental requirement for workers.

Challenges and concerns

During the trial, the company realised that the “one-size-fits-all” initiative is not always the best. Some particular cases, for instance, parents of young children said that they would prefer to take two afternoons off instead of a whole day to reduce childcare costs. In the future, the company is considering offering employees flexibility regarding the day of the week they take off to adapt to the particular needs of its diverse workforce.

Additionally, in order to address the possible reduced engagement and interaction with other colleagues due to the combination of remote work and 4-day week policies, the co-founders actively encourage in-person interactions among employees facilitated through a tool called "Hubble Pass". This platform provides employees with access to numerous coworking spaces worldwide, to organise face-to-face meetings and promote collaboration.

Conclusion

Literal Human’s implementation of the 4-day week marks another success story. As a result, once the trial period concluded, the company decided to permanently implement this measure. Benefits were seen in employees’ health, motivation, and engagement with the company. During the conducted interview, the company co-founders stated that “*employees often cite the 4-day workweek as one of the things they appreciate most about the company*”. Finally, being one of the first companies to implement this policy, brand recognition and talent attraction has been also positively affected generating a win-win situation for both the organisation and its workforce.

4.3.3 Implementation of 4-day week in Methodos

The organisation

Methodos is an Italian change management consulting firm founded in 1979. With a team of 60 people and headquartered in Milan, Methodos focuses on management training, cultural change management, and other human resources consulting services.

The motivations

The decision to implement the 4-day week initiative at Methodos was driven by several key factors. Firstly, during the pandemic, this concept gained significant interest and became a widely discussed topic. Consequently, Methodos, being a consulting company advising businesses on change management, saw the 4-day work week as a potential future requirement that clients might demand. By implementing this policy internally, they aimed to gain direct experience and knowledge to pass on to their clients.

Secondly, the initiative emerged from employee feedback, as many individuals mentioned the desire to extend the flexible working practices already present in the company. Methodos prioritises the well-being and work-life balance of its employees and recognized that reducing working hours could improve their quality of life while further enhancing high levels of engagement, retention, and attraction. Thus, the introduction of the *shorter work week* aimed to provide people with a better work-life balance while maintaining the same level of productivity and service to clients.

The solution

Methodos introduced the 4-day work week policy through a gradual and experimental approach. The policy would only be maintained if production levels and objectives were met. With this in mind, all employees were encouraged to change their work approach to increase productivity and sustain this flexibility initiative beneficial to both individuals and the organisation.

In February 2022, the initiative was launched as a pilot project within one of the six teams within the organisation, consisting of approximately 12 people. Replicating a pure *100-80-100 model*, the work week was reduced from 40 to 32 hours with no change in salary. Employment contracts were not updated as this was an ongoing experiment. However, individuals were asked to sign a release form for insurance purposes.

During the year, each one of the six teams rotated and experienced this work arrangement for a period of about two months. Different alternatives were tested, such as having a fixed day off or the freedom to choose a day off within the work week. Although only one team adopted the 4-day workweek at a time, the others were exploring how work dynamics changed when colleagues were absent. Workshops were organised during this period to facilitate the sharing of experiences, best practices, and solutions. The initial experimentation period lasted until the end of 2022.

In early 2023, the company entered a second phase of experimentation involving all workers simultaneously. Although it is not yet a permanent policy, it undergoes continuous review and updates, aiming to identify best practices while always prioritising the achievement of company objectives.

Data collection and analysis

Since the beginning of the trial, weekly feedback was collected by employee surveys sent to all employees. In the first phase of experimentation, a dedicated survey was conducted also for employees not doing the 4-day week with the purpose to understand if the other teams were impacted by the absence of other colleagues. However, no statistical analysis was reported to check the significance of the effects.

Indicators and outcomes

Methodos established key performance indicators (KPIs) and set target values to monitor the impact of the 4-day work week. These KPIs and their targets are summarised in Table 14.

Although no targets were set, the company also reported that the policy improvements regarding employee retention and attraction.

Vitality Outcomes	Perspective	Indicator	Description	Target	Result
Workplace Vitality	Employee	<i>Participation</i>	% of employees who reported could manage their workload effectively to genuinely benefit from the time reduction	80%	Achieved
Workplace Vitality	Employee	<i>Job Satisfaction</i>	scale from 1 to 10	8/10	Achieved
Workplace Vitality	Employee	<i>Work Quality</i>	scale from 1 to 10	8/10	Achieved
Home and Family Vitality	Employee	<i>Work-Life Balance</i>	scale from 1 to 10	8/10	Achieved
Workplace Vitality	Employee	<i>Completion of Planned Activities</i>	Percentage of successfully completed activities compared to those planned for the week	90%	Achieved
Workplace Vitality	Employee	<i>Internal Relationships</i>	Relationships with colleagues improved, worsened, or remained unchanged	Unchanged	Achieved
Workplace Vitality	Employee	<i>Customer Relationships</i>	Relationships with clients improved, worsened, or remained unchanged	Unchanged	Achieved
Workplace Vitality	Company	<i>Productivity</i>	Overall company goals	100%	Achieved

Table 14: Indicators defined to measure the success of Methodos' 4-day week trial.

Challenges and concerns

During the first months of the trial, the company gave flexibility for workers to choose which day off was better for them. This degree of flexibility quickly started to generate challenges since it was very hard to coordinate meetings with the uncertainty of who was taking the day off. Consequently, the company concluded that the most effective solution was allowing employees to choose whether to have their day off on Mondays or Fridays to ensure continuity in activities and communication during the middle of the week but also providing some level of flexibility.

Conclusion

The results of the experiment at Methodos were largely positive. Surveys and feedback indicate that individuals appreciate the new organisational structure and experience improvements in work-life balance. The company has also observed positive outcomes in terms of productivity and customer relationships. These positive findings to the company are

reinforced by the decision to keep implementing the 4-day work week, always as an experimentation subject to the achievement of the abovementioned targets.

4.3.4 Implementation of 4-day week in Awin

The organisation

Awin is an affiliate marketing company founded in Berlin in 2000 that offers solutions to help any business grow, operating across sectors such as retail, travel, finance and telco, connecting brands and consumers in over 180 countries worldwide. Part of Axel Springer and United Internet, together with ShareASale and Commission Factory, the Awin Group has 17 offices worldwide, over 1300 employees, 270000 publishers, and 25000 advertisers.

The motivations

Prior to the Covid-19 pandemic, no Smart Working or flexibility initiatives had been introduced at Awin. However, the arrival of the pandemic forced the sudden introduction of remote working for all employees. During lockdown, the introduction of forced home working led to some reflections on the quality of life of employees. Fearing that having employees working from home 8 hours a day in front of the computer and often sharing the workspace with spouses, small children or other family members, would lead to negative effects not only for the company, but also for the employees' mental health, the company decided to reduce the working week.

As a result of the positive results achieved, the initiative was later extended and became a permanent company policy, with the aim of promoting the well-being and job satisfaction of employees, enabling them to have a better work-life balance and greater autonomy in their work decisions.

The solution

During the Covid-19 pandemic, Awin's managers decided to carry out a six month *4.5-day work week* pilot for their entire workforce without a salary reduction (36 hrs per week).

This measure aimed to assist employees in coping with the stress and anxiety that many were facing during the strict quarantine and isolation periods. When the pilot ended, six months later, managers were amazed by the increase in productivity and decided to carry out a second trial for 18-months reducing the working hours even further to achieve a *4-day work week* (32 hrs per week). The results turned out to be positive and the company decided to make what they call “the Flexi-Week” policy permanent in all their offices.

Data collection and analysis

In order to evaluate the success of this policy, the first thing done was to compare the generated gross profits from 2019 to 2022. Moreover, to gather employee’s perspective, the company conducted surveys in 17 office locations across Europe, the United States, and Brazil asking questions about wellbeing, work-life balance, job satisfaction, and quality of work.

An important point to note is that the policy is under constant review and, in fact, the Italian offices conduct surveys every fortnight to find out how employees feel.

Indicators and outcomes

In order to measure how successful the policy was the company analysed the indicators seen in Table 15. Regarding the employee perspective, the reported results were positive as the majority of voters said that not only they felt like their health, wellbeing, productivity and quality of work, and work-life balance had improved. However, this was only the employees’ perception at the end of the trial, no statistical analysis nor before and after comparisons were made.

Vitality Outcomes	Perspective	Indicator	Result
Individual Vitality	Employees	<i>Health and wellbeing</i>	Positive
Workplace Vitality	Company	<i>Annual Gross profit</i>	+13%
Workplace Vitality	Company	<i>Employee turnover</i>	-33%
Workplace Vitality	Company	<i>Sick leave days</i>	-21%
Workplace Vitality	Employees	<i>Job satisfaction</i>	Positive
Workplace Vitality	Employees	<i>Quality of work</i>	Positive
Home and family vitality	Employees	<i>Work-life balance</i>	Positive

Table 15: Indicators defined to measure the success of Methodos’ 4-day week trial.

Challenges and concerns

Although the initiative proved to be a great success, the company's main concern was that it would have a negative impact on customer satisfaction, as the reduction in working hours could lead to their needs being inadequately met. However, the facts proved otherwise: service and customer relations improved enormously, proving that employee welfare and customer satisfaction are not mutually exclusive.

Conclusion

The results of the experiment were extremely positive as surveys and feedback indicate that individuals appreciate the new organisational structure and are, in consequence, experiencing improvements not only in their wellbeing, but also in terms of the work they do. Furthermore, 85% of staff said that “Flexi-Week” played a significant role in the decision to stay at Awin (Ruzgar, 2023). The company has also observed positive outcomes in terms of productivity and customer relationships: *“What started initially as a six-month trial has proven to be one of the most transformative initiatives we’ve seen in the history of the company,”* said Adam Ross, CEO of Awin. *“Over the course of the last year and a half, we have not only seen a tremendous increase in employee wellness and wellbeing, but concurrently, our customer service and relations, as well as talent relations and retention, have also improved. Our team members are our most important asset, and by emphasising their wellbeing we have simultaneously improved the way we show up for customers across the board.”* (Ruzgar, 2023).

4.3.5 Implementation of 4-day week in Lavazza

The organisation

The Lavazza Group, which originally started as a small shop in Turin in 1895, has become a leading coffee company operating in more than 90 countries with over 4000 employees. The Group operates with a keen focus on sustainability and well-being of its people, promoting a healthy and inclusive work environment that embraces diversity as a value and a source of growth and supports the communities in which it operates.

The motivations

In order to make the organisation increasingly flexible, enhancing the well-being and satisfaction of its employees, Lavazza Group started introducing Smart Working initiatives in Italy in 2017, after the Law 81/2017 was sanctioned providing a definition of this concept. Since then, the Smart Working policies in the Group have expanded globally and became more innovative overtime, aiming to develop an organisational model that offers a good balance between personal and professional life, while maintaining a high quality standard based on trust in its people and a goal-oriented work system that stimulates autonomy and responsibility.

The solution

In January 2023, with six years of experience in a comprehensive Smart Working project, Lavazza Group introduced a new supplementary agreement, signed with the Representative Trade Union (RSU) of the Management Center, introducing several innovations, including the experimentation of a *short work week*, in particular *short Fridays*. This policy allows employees to leave three hours earlier on Fridays, reducing the regular 40-hour work week to 37. This policy is expected to be seasonal, implementing it for 15 weeks per year, from May to September, and will be first applied this year.

Besides many Smart Working policies adopted in the organisation, the traditional flexible work time arrangement known as *flexitime* is also available for employees. This policy provides workers with an hour and a half range to start and end their work day, and adaptive lunch breaks from 45 minutes to 1.5 hours depending on the teams' needs in the particular day.

Data collection, analysis, and outcomes

The introduction of the *short-Friday* initiative is considered a part of the comprehensive Smart Working project aiming to continuously improve the work environment. The main driver behind the conglomerate of policies has been productivity, measured through the company's revenue. Lavazza has observed that since the initial implementation of Smart Working project, this KPI has remained constant or has even increased. However, as the new flexible work time

arrangement was very recently introduced, the company has not yet measured its impact. The Group expects that as the other policies, this one will bring no significant changes in performance.

From the employees' perspective, the Group has not conducted specific surveys to test the effects of the Smart Working project nor in particular for the *short-Friday* policy. However, it has been noted on multiple occasions through discussions between HR Business Partners and People Managers, as well as through feedback provided in surveys on related topics, such as Diversity and Inclusion policies, that employee satisfaction has increased.

Challenges and concerns

Considering that the trial has just started, no challenges related to the implementation of the *Short Friday* initiative were discussed during the interview.

Conclusion

Lavazza's case presents a clear example of a company trying to constantly revise its working schemes and policies, prioritising not only the economic success of the organisation, but also the well-being of its employees. Demonstrating a proactive approach, Lavazza Group was a pioneer in implementing its initial Smart Working policies in 2017. This comprehensive project has been key to allow the company to gradually adopt more innovative flexible work arrangements that contribute to their employees' well-being without sacrificing the Group's performance.

4.3.6 Implementation of 4-day week in Intesa Sanpaolo

The organisation

Intesa Sanpaolo is a globally recognized Italian banking group that was formed as a result of the merger between Banca Intesa and Sanpaolo IMI in 2007. However, the bank's origins date back to its establishment as Istituto Bancario San Paolo di Torino in 1583. With over 3600

branches and 13.6 million customers, Intesa Sanpaolo is the leading banking group in Italy and is among the top banking groups in Europe (“Intesa Sanpaolo Group”, 2023).

Besides its significant presence in the financial industry, Intesa Sanpaolo is also recognized for its strong commitment to environmental, social, and governance (ESG) issues. The bank has made notable progress in promoting social impact and has a robust focus on climate-related initiatives. Notably, Intesa Sanpaolo is one of the few European financial institutions that have adopted all of the primary United Nations sustainability initiatives in the financial sector (“Intesa Sanpaolo Group”, n.d.).

The motivations

Always concerned with the work-life balance of its employees, the company applied Smart Working policies in Italy before the concept was defined and regulated by law in 2017. Apart from caring for employees’ wellbeing, the company aims to stay ahead of organisational changes and positioning itself as the “bank of the future”. Although the company has been implementing Smart Working initiatives for many years, the path that led to the project “New Way of Working” began during the global state of emergency given during the Covid-19 pandemic.

The "New Way of Working" project initially emerged as an urgent response to the Covid-19 pandemic in 2020. However, in 2022, it was integrated into the company's comprehensive Business Plan for the period of 2022-2025. This project has the objective to increase employee retention and talent acquisition, by implementing policies regarding the optimization of investments, redesign of workspaces, diffusion of collaboration tools and positive ESG impacts.

The solution

Within the "New Way of Working" framework, in 2022, the company unveiled a series of innovative policies, one of which involved the introduction of the 4-day week initiative which started in January 2023. This new policy gives workers the possibility to work 9 hours per day

for 4 days a week, which would classify the policy as a *compressed work-week 4/10* although the number of hours worked is 9 not 10 due to shorter working hours in the standard Italian contract in this industry.

Employees who decide to adhere to this policy, work a total of 36 hours a week instead of the 37.5 regular hours without having a decrease in their salaries. It is worth mentioning that the policy is optional, so workers who don't want to do it, can opt to work during the regular 5-day week. Moreover, the employees that adhere to the policy are free to decide which day of the week they will not work, and they can also choose not to follow the policy every week as long as they align with their whole team.

Since the implementation of the compressed work week is considered a personal request by the employees, there is no need to change the contracts of those workers who decide to adhere. Workers who decide not to adhere to the “New Ways of Working” can still enjoy the benefits of the previous flexibility measures such as the *flextime* policy which allows workers to start their day at any time between 7 and 10 am and adapt the endtime accordingly.

Data collection and analysis

Intesa Sanpaolo gives extreme importance to evaluating the impact of all implemented policies in the company's performance, but also in other aspects related to the environment and to employee wellbeing. To assess the effects of these measures, a survey was conducted in 2020 to gather insights on the subject of Smart Working. Furthermore, in 2022, two additional surveys were carried out to specifically examine employee well-being, engagement, and motivation.

Indicators and outcomes

Due to the fact that the compressed work week was recently implemented, its impacts are not yet properly quantified. However, the first evaluation of the “New Ways of Working” project was conducted at the end of 2022 and the company representative reports it had extremely positive results.

Challenges and concerns

No challenges related to the implementation of the 4-day week policy were raised during the interview. This could be addressed to the years of experience of the company in implementing Smart Working, flexibility, and other sustainability policies in the company.

Conclusion

Although this is not an example of a pure 4-day working week model, Intesa Sanpaolo is actively pursuing adaptations and changes to its working schedule and has embarked on experimental measures aimed at achieving a slight reduction in total working hours per week. By doing so, the company demonstrates its commitment to fostering a healthier work-life balance and creating a more sustainable and fulfilling work environment for its employees.

4.3.7 Implementation of 4-day week in Unilever Italy

The organisation

Unilever is one of the world's leading suppliers of Beauty & Wellbeing, Personal Care, Home Care, Nutrition, and Ice Cream products, with sales in over 190 countries. The company has 127000 employees distributed around the world. Unilever's vision is to be the global leader in sustainable business and to demonstrate how purpose-led, future-fit business models drive superior performance for which it has a long tradition of being a progressive and responsible business. To achieve this goal, the company's sustainable business strategy focuses on improving people's health, confidence and wellbeing, and contributing to a healthier, fairer, and more socially inclusive world.

The motivations

In line with the company's sustainability mission, Unilever has always put employees first by striving to provide them with a healthy environment at all times and giving importance to individual growth. Unilever is constantly looking for new initiatives to increase employee well-being and ensure its continuous improvement. In this direction is the recently introduced

4-day week initiative, which aims to provide employees with more free time, allowing them to devote themselves to hobbies and domestic or personal activities that might be difficult to do at the weekend, creating a better work-life balance.

The solution

The Italian subsidiary took the initiative to implement a Smart Working project 7 years ago, well ahead of its time, allowing employees to work remotely. Following the pandemic, more flexibility policies were implemented. The most recent updates concern the introduction of 'free Fridays' to be trialled during the upcoming summer of 2023, following a pure *100-80-100 seasonal* policy.

The initiative will be piloted in Italian offices during the summer of 2023 for a period of four months and will apply to employees with administrative profiles. This initiative will be added to the all-year rebound '*Short Friday*' initiative, which has been in place at Unilever since the introduction of the first Smart Working project, and offers workers the possibility to end their working day at 1 pm on Fridays taking advantage of unused leave. This latter policy is not considered a part of the new FWTAs since it is part of the regular paid time off employees already owned.

At Unilever, the successful implementation of these flexibility policies results from their belief in working based on objectives, although a 9-to-6 flexible schedule is still indicative of the suggested working hours. This approach means that as long as employees fulfil their assigned tasks and the team remains aligned, there is no requirement for them to be connected during specific hours. The emphasis is placed on achieving goals and maintaining productivity, granting employees the freedom to work in a way that best suits them.

Finally, one of the most significant aspects of Unilever's experience is the company's proactive approach to providing change management courses to managers and ensuring that employees are well informed about how these policies are implemented. Unilever prioritises continuous learning and development, offering 'learning days' that allow all employees to

participate in workshops and other relevant activities with the aim to invest in personal development and show the workplace their value in the business. These efforts are supported by continuous communication, clear guidelines, and regular feedback channels, which enable employees to embrace and adapt to new ways of working with confidence.

Data collection and analysis

In order to collect data and analyse the impact of the Smart Working policies introduced long ago in the company, Unilever conducts regular employee surveys concerning mental health, well-being, and level of satisfaction with new initiatives.

Indicators and outcomes

Considering that the seasonal 4-day week was not yet implemented, the outcomes are still unknown. However, the survey responses from employees to the Smart Working project that started seven years ago show positive results regarding health, well-being, and satisfaction with the company. Although Unilever does not have specific metrics on productivity improvements resulting from these measures, the company representatives suggest that it has remained strong and expect the *free Fridays* policy to be a success.

Challenges and concerns

No challenges related to the implementation of the *short work-week* policy were discussed during the interview since the policy has not yet been implemented. However, given the company's long experience in the implementation of Smart Working initiatives they don't expect any major challenges.

Conclusion

Unilever in Italy stands out among many other Italian companies when it comes to implementing time flexibility measures. With a progressive approach to work-life balance and employee well-being, Unilever is now expanding their Smart Working policies to new FWTAs

to explore their impacts on the business and allowing employees to better manage their personal and professional commitments.

4.3.8 Implementation of 4-day week in TeamSystem

The organisation

TeamSystem was born in 1979 in Pesaro, Italy. It is one of the leading companies in the market of digital solutions for business management for companies and professionals. Today, the firm counts with 3000 employees, mostly based in Italy and with some presence in Spain. The company has quickly grown from various acquisitions, having the personnel distributed in more than 100 sites in the Italian territory.

The motivations

One of the core values of the company is innovation, which they describe as “*the aptitude for designing and making new things and new ways of working , experimenting with creative solutions and learning from mistakes. It means anticipating change and valuing everyone's intuitions , constantly following up on new projects with a curious and open gaze even outside the organisational reality and involving the entire TeamSystem ecosystem*”. This has always been a key aspect within the company, leading to implement many flexible work arrangements along time without fear of making mistakes. The Covid-19 pandemic in 2020 has also accelerated the need to search for innovation in their ways of working. The 4-day week initiative arised from the leadership team, and was then validated by an internal employee survey.

The solution

In 2021, TeamSystem included three different policies from which employees could choose to best address their needs: *No Flex*, *Flex Base*, and *Flex Next*. These policies are complete Smart Working packages. As its name indicates, the *No Flex* policy does not provide any type of flexibility in terms of place nor time.

Flex Base gives employees the opportunity to do 40% (60% for some specific roles) of its monthly work remotely. Employees are free to choose which days to work from home within a monthly basis as long as they align with their manager. Although some employees asked and obtained exceptions to work from abroad, employees are required to work remotely within the Italian territory to avoid insurance issues.

Finally, the *Flex Next* policy gives the participants the possibility to do 60% (80% for specific roles) of the time remotely. Additionally, employees working hours are reduced from 40 to 36 with a payment reduction (except for lower-tier employees who keep their salaries intact) redefining the contracts as part-time agreements. The default half-day off is Friday afternoon to improve coordination and collaboration. To avoid inconveniences with the employees who choose the *Next Flex* policy, TeamSystem discourages Friday afternoon meetings.

Although it is true that the salaries are reduced, TeamSystem's implementation of the 4-day week is not a cost reduction policy, but rather focused on the wellbeing of employees. For those employees who adhere to the *Flex Next* option, the company provides support and access to wellbeing programs for employees to benefit during their extra time off.

Besides the reduction in hours, the company also provides all of its workforce with *flexitime*, allowing flexible hours at the start and end of the day, as long as no meetings are conducted beyond 8:30 and 18:30.

To enable this flexible working policies within the company, even before Covid, the company has taken many actions regarding Change Management. Initially, cross-cutting and structured training programs were put in place to reach common language and skills. Once a base level was achieved, they continued with the introduction of performance management processes, accompanied by training, and formalised company values.

Data collection and analysis

Since 2018, the company has implemented an employee satisfaction monitoring tool, sending weekly surveys in which employees answer about their well being and job engagement.

Indicators and outcomes

Although the company did not define specific indicators nor targets to measure the specific success of the policy, Stefania Pesola reported during the interview that Net Promoter Score (NPS) and well-being scores measured in the company surveys have increased since the introduction of the policy. Additionally, employees constantly give positive feedback about the flexibility within the company and the freedom of choice.

In addition, with regards to productivity levels, the company representative suggests that the company goals are still being met placing no concerns. Besides, the phenomenon of the "Great Resignation" has had little impact on them, with a lower resignation rate than the market average, which they address to the new flexible work arrangements implemented.

Furthermore, the company closely measures policy adoption, reporting 53% of employees joining the Flex Next initiative, a number that is in constant growth. TeamSystem is proud to say that 100% of the leadership team and front-line managers have adopted the policy. For the rest of the workforce, 95% has adhered to Flex Base or Flex Next as a whole.

Challenges and concerns

Some employees have reported that for their personal situation, other schedules were preferred over the *short Friday*. The company has demonstrated to be open to look for an ad-hoc solution to fit their needs and is flexible to other arrangements.

One of the main challenges faced by the company is that of onboarding people who are more resistant to change. Concerns were raised about workload, worsening of quality of life, and economic issues based on the payment reduction. To have a gradual adoption process, the company gives freedom for all employees to see how the policy works for those who decide to implement it. However, the Flex base policy is only a definite time policy ending in summer 2023, while the Flex Next is indefinite, with the objective to, in the long-term, bring all employees to the new ways of working.

Conclusions

TeamSystem is very satisfied with the adoption curve of the policy, knowing that it is hard to introduce radical changes, and giving freedom for employees to join when they feel they are ready, having the possibility to see the success story of their colleagues who have already adopted it. Stefania reports that this is a starting experiment and they don't discard moving to greater time reductions, but giving a soft start is also a good approach not to force those who are still resistant to change.

4.3.9 Implementation of 4-day week in Etra

The organisation

Etra is a public multi-utility Italian company that employs 1047 workers and operates mainly in the northeast in the Bassano Area, the Alta Padovana and the Padua urban belt. In these territories, the municipalities entrust Etra with the management of the water, gas, and waste management services since it first started operating in 2006. Etra provides services reaching more than 70 municipalities and 600 thousand Italian citizens.

The motivations

Consistent with the nature of the services provided, Etra places significant emphasis on sustainability, ensuring the sustainable use of resources and the prevention of pollution. Furthermore, a fundamental principle of the company is to prioritise the well-being and work-life balance of its people. Etra actively engages in communication campaigns and implements policies that promote gender equality and inclusion, ensuring that the working environment is the best possible. Overall, the last few years have marked a significant period of growth and development for Etra, with the implementation of several flexibility measures aimed at improving employee well-being and work-life balance. Although initially introduced separately, the company is working to integrate all the implemented initiatives that will be to provide a comprehensive plan to improve the quality of work and life for employees.

The solution

Before the Covid-19 pandemic, Etra employees in the gas and water areas, both administrative and operational, already had in place a *Short Friday* initiative. This policy is classified as a *compressed work-week short Friday*, since the company restructures the 38.5 working hours in the standard contract to give employees half a day off. The hours are scheduled as follows: two days a week employees work from 8 a.m. to 5.15 p.m. (with an hour lunch break); two days a week from 8 a.m. to 5.30 p.m. (with an hour lunch break); and Fridays from 8 a.m. to 1 p.m. It is worth noticing that the waste management sector did not count with this flexibility measure.

After the Covid-19 pandemic, more flexibility initiatives were introduced to complement the pre-existing short Friday policy. Firstly, a soft *flexitime* was introduced, giving employees the freedom to leave or enter work up to 15 minutes later or earlier than stipulated in the contract. On request and in the event of special needs, this flexibility can be extended by up to 2 hours, for the duration of one year, renewing the request annually. In addition, a *Time in Lieu (TOIL)* policy has been implemented giving workers the possibility of using overtime hours as holiday or extra leave within the next two years. An ethical fund was also established for all areas in the company, with the possibility of donating and receiving unused leave and holiday hours for special needs for those who had used them up (e.g. sickness, caregiving).

Data collection and analysis

Due to the fact that the company has been implementing the short Friday working schedule almost from the beginning, specific indicators to measure its benefits have not been created. Similarly, no specific indicators were defined when the new flexibility policies were implemented, but the directors used the change in the productivity rate as the main measurement.

Indicators and outcomes

As previously mentioned, the only parameter checked in order to measure the direct impacts of the flexibility policies implemented was the change in the productivity rate. Etra

representatives reported a positive change in productivity since the implementation of the new initiatives after the pandemic. Furthermore, although no surveys were conducted to gather employees' perspective the company representatives indicated that the workforce reported to value the new measures. It is worth mentioning that these outcomes do not refer to the specific implementation of the short Friday policy since the company has implemented this policy from the early beginnings and has not measured its impacts.

Challenges and concerns

During the interview, no specific concerns regarding the flexible working plan were raised. However, the directors expressed their willingness to extend the policy to the waste management sector, not currently in the scope of the policies. Although implementing flexibility initiatives to these workers is something challenging due to the nature of the job, Etra remains committed to exploring potential solutions and finding a way to introduce greater flexibility for these employees. In fact, the company has recently started a pilot in a specific site reducing the waste management workers' schedule from 6 days to 5.

Conclusion

Overall, the past few years have marked a significant period of growth and development for Etra, as various flexibility measures were implemented aiming to enhance employee well-being and work-life balance. It is interesting to see that the first policy implemented in the company was that of a compressed work week, while traditional FWTAs were adopted after the pandemic. Etra's efforts to find innovative ways to introduce flexibility for operational employees in its different sectors highlights their dedication to fostering a progressive and adaptable work environment.

4.3.10 Implementation of 4-day week in Carter & Benson

The organisation

Carter & Benson is an executive and middle management headhunting company that provides strategic planning and consulting services. Since its foundation in 2003, it has supported important companies from various sectors at both national and international level, assisting in projects aimed at enhancing resources, asserting leadership, and achieving business growth. The company currently has around 25 employees based in Milan, Italy.

The motivations

Given that people are at the centre of their business, the company's main objective is to promote employee well-being, satisfaction, and motivation. For this reason, the company has introduced many flexibility policies over the years, among which we find the *short work-week*. In fact, this is considered part of a broader Smart Working project, with the first initiatives linked to place flexibility introduced in 2006, allowing employees to work remotely even when the concept was not widely spread.

The solution

In January 2020, a pilot program of *short work-week* was introduced under the *Short Friday* concept. In other words, the working hours were reduced granting half a day off per week maintaining the salary. The policy was not restricted to Friday afternoons, employees were free to choose when and how to use it, including accumulating hours from different weeks to take longer time off. In January 2021, the policy was extended to a full day off, adopting a *pure 100-80-100* model, and made permanent.

Carter & Benson has always been a pioneer with respect to flexibility policies. Since 2006, when the concept of remote work was almost unknown, the company implemented a policy that allowed employees to work remotely with full autonomy and maximum flexibility. There were, and still are, no regulations regarding how many days an employee can work from home. However, the organisation has always encouraged employees to balance remote work and

office work, as going to the office is essential for coordination, interactions, and personal and team growth within the company.

Before its early implementations of flexibility measures, the company had to focus on building trust and developing leadership skills. Without a foundation of trust between the manager and the collaborator, there can be no autonomy or independence, which are essential for a successful implementation of any flexible work arrangement. For this reason, over the last years, the company has undergone organisational transformations, such as transitioning to objective-based work and adopting an approach based on goal achievements rather than employee control.

Data collection and analysis

The company doesn't have any formal process to gather data regarding the effect of the policies implemented.

Indicators and outcomes

Although the company does not quantitatively measure the results of the initiative, the benefits in terms of employee well-being, engagement, reputation, and employer branding are evident, says the company representative. Having a happy workforce strongly influences the quality of work they perform, resulting in high customer satisfaction. Additionally, the results can be seen in reduced absences, increased retention, and talent attraction. Although productivity has slightly decreased, the company can recover about 10% of production through investments in technology to support activities and another 10% through new hires that compensate for the 20% reduction in working time.

Challenges and concerns

One of the main obstacles to introducing the 4-day week policy was the rigidity of the standard Italian commercial contract that the company adopts which states that employees in this sector should work 40 hours per week. To avoid legal complications, Carter & Benson's

contracts state that employees work 40 hours as in any commercial contract, but specify that eight hours per week are "gifted".

Conclusion

Carter & Benson has always been a pioneer in the implementation of innovative flexible work arrangements, starting decades before the topic became a trend. Thanks to the comprehensive Smart Working project targeting leadership, technology, and flexibility of place and time, it is not surprising that the firm has successfully transitioned to a pure 4-day work week that puts employees' well-being over the company's productivity.

4.3.11 Implementation of 4-day week in Realcable

The organisation

RealCable was founded in 1991 in Pordenone, Italy and is one of the leading companies in the subcontracting of electrical wiring, electromechanical assembly of electrical panels, and low voltage electrical panels for almost all industrial sectors, both nationally and internationally. The company has a workforce of 50 production workers and 15 administrative employees.

The motivations

Recognizing the huge importance of human resources in the quality of its products, RealCable considers employee satisfaction to be extremely significant. The company is committed not only to provide employees with a good economical compensation, but also to creating a good work environment and a healthy work-life balance. With this goal, the company began considering flexible working hour policies for their production employees.

The solution

In October 2022, the RealCable held an internal referendum to understand employees' preferences regarding the restructuring of working hours during the week to have a "short Friday" while maintaining a 40-hour workweek. All 50 employees in the production area expressed a preference for flexible working hours: working from 7 am to 4:30 pm from Monday

to Thursday and from 7 am to 11 am on Fridays. After such a positive reaction from the workforce, the *compressed work week with a short Friday* initiative was implemented for all production employees. It is worth mentioning that as the referendum showed that all workers agreed, the initiative was made mandatory, allowing the closure of the production site on Friday afternoons.

Data collection and analysis

To measure the results of the initiative, two months after implementation, the company conducted a survey among employees. The company's perspective was measured by analysing the production.

Indicators and outcomes

The feedback received was very positive, with high employee satisfaction. As an additional benefit, the spread of this innovative measure in the manufacturing sector served as an important attraction lever, as many people expressed interest in working for the company.

One of the main concerns before implementation was productivity, as studies suggest that working longer hours (9 hours a day instead of 8 hours) increases fatigue, leading to more errors and decreased performance. It was a pleasant surprise to discover that productivity did not decrease, but actually increased. Company representatives suggest that this could be due to increased employee satisfaction and motivation, as well as an improved work-life balance.

Lastly, due to the new flexible working hours, the production facility is closed on Friday afternoons, resulting in energy savings. Although not quantified, this not only reduces costs but also provides environmental benefits by reducing CO2 emissions.

Challenges and concerns

Realcable employees operate under the standard Italian metalworker contract, which states a 40 hour work-week. The company reports that introducing a time reduction is not possible due to the rigidity of these legal agreements.

Moreover, although the company is trying to extend the policy to white-collar workers, it has not yet found a way to implement it, as the barrier to introduction lies in the need to be available to communicate with external suppliers who operate according to traditional hours, from 9 am to 6 pm, Monday to Friday.

Conclusion

Realcable demonstrates that innovation in flexible work arrangements is also possible in sectors in which outputs are strictly linked to working hours, such as the manufacturing sector. Even if the policy implemented does not account for time reductions, many benefits were reported from both the employees and company leaving a positive precedent for an industry in which many are afraid to get on board of new FWTAs.

4.3.12 Implementation of 4-day week in Aldia

The organisation

Aldia is a social cooperative founded in 1977 in Pavia. The motto of this non-profit organisation is 'People for People', and their main objective is to accompany people at all stages of their lives by offering different types of assistance: psycho-pedagogical, social-assistance, educational, and health services in the areas of childhood, minors, elderly, people with disabilities, psychiatry, and distress. Aldia currently has 3000 employees, 90 of whom work in offices throughout the country, while the others provide services to members.

The motivations

Consistent with its organisational motto, Aldia has always worked to provide the best possible environment and working conditions for its people, offering flexible working conditions that adapt to their needs. Being a non-profit organisation, it is difficult for the company to compete with others in the market in terms of economic benefits. For this reason, and to ensure flexibility and a better work-life balance for workers, Aldia has developed a number of flexibility initiatives, including the compressed work-week.

The solution

In 2016, Aldia adopted a new working schedule for office workers (about 90 people). This schedule defines working days from 8.30 a.m. to 6 p.m. from Monday to Thursday and from 9 a.m. to 1 p.m. on Fridays, thus covering the 38 hours per week stipulated in the contract. This policy can be classified as a *compressed work-week Short Friday*. In addition, *flexitime* was also implemented, allowing employees to adjust the start time, lunch break, and end time by half an hour.

This flexibility initiative was applied long before the introduction of Smart Working initiatives in 2020 following the Covid-19 pandemic. This new project introduced a hybrid working model establishing two days per week of remote work for office workers. On remote working days, employees are free to choose where they work from, as long as they keep to standard working hours in order to be able to work synchronously with other colleagues

Data collection and analysis

As the new FWTA was implemented long ago based on the company values, the company did not conduct quantitative measurements to assess the specific impacts of their implementation. However, they maintained a continuous focus on productivity rates as a general indicator to monitor the effects of these policies.

Indicators and outcomes

No change in productivity was observed, neither as a result of the introduction of the compressed work-week nor of remote working. Moreover, the company noted that these initiatives are a significant factor that has helped the company to grow and attract talent during its exponential growth from 1300 employees in 2019 to almost 3000 in 2023.

Challenges and concerns

No challenges related to the implementation of these measures were discussed during the interview. This could be attributed to the long-standing presence of flexibility measures within Aldia and its strict link to the company values.

Conclusion

Aldia serves as an example of an Italian non-profit organisation that leverages FWAs to enhance the limited benefits a non-profit organisation can provide to its employees to compete in the labour market. This case highlights the positive outcomes that can be obtained from flexibility policies regarding talent attraction without sacrificing the company's productivity.

4.3.13 Implementation of 4-day week in Rigoni d'Asiago

The organisation

Rigoni d'Asiago is an Italian group active in the food industry and known for the production of organic honey, jams and nut spreads based in Asiago, in the region of Veneto. The production plant is in Foza, with a logistics and storage centre in the Verona area in Albaredo d'Adige. The company employs more than 150 people and cooperates with companies that share its philosophy.

One of the fundamental principles of the company is its commitment to sustainability, social and ethical business practices, which includes a deep respect and appreciation for every employee. Rigoni d'Asiago constantly provides internal training opportunities for its staff and encourages open communication with senior management to make sure employees are satisfied with their jobs.

The motivations

The implementation of the short Friday policy at Rigoni d'Asiago was primarily driven by the expressed desires of the employees themselves. By paying attention to the needs and

preferences of the workforce, Rigoni d'Asiago demonstrates a commitment to fostering a workplace environment that values and prioritises well-being and motivation.

The solution

Before the Covid-19 pandemic, a request from the financial team arrived asking the top management for “short Fridays”, allowing employees to leave work early on the last day of the week. The company heard this request and launched a pilot involving only the financial department during the summer period. Upon conclusion, given the positive outcomes of the trial, the request was incorporated as a permanent policy encompassing all non-productive departments at both the Asiago and Albaredo d'Adige offices.

This initiative allows a 1 hour reduction from the overall schedule (39 hours per week instead of 40) and the possibility of rescheduling the other hours over 4 days per week. For example, working 8.5 hours from Monday to Thursday and leaving by 2 p.m. on Friday without taking a lunch break. This policy can be classified as a *compressed work-week Short Friday*.

Furthermore, a new Smart Working and Flexibility initiative was launched in July 2022, which aimed to solidify the measures that were initially established during the pandemic, as the company recognized that these were preferred by the employees. This initiative is oriented not only towards the introduction of remote working, but also towards the application of the concepts of agility and flexibility in work as a whole. Before the adoption, an initial research phase was carried on in order to fully understand what Smart Working meant and how it could be applied to satisfy the specific needs and peculiarities of the company. Moreover, in order to introduce the Smart Working culture within the workforce, training sessions were organised explaining its meaning, the changes needed within the company, and the implementation plan.

In parallel, the company is implementing a cultural transformation process by developing a leadership programme in cooperation with 12 executive directors. Empowering employees is a cornerstone of Smart Working and flexibility. Consequently, the programme not only emphasises on leadership skills, but also focuses on developing strategies to promote employee autonomy

and empowerment. The company recognises that transparency and dialogue with its employees is a key aspect of the project's success and encourages open and continuous dialogue.

Data collection and analysis

Instead of relying on quantitative measurements to assess the specific impacts of their implementation, the company took a qualitative approach, engaging in conversations with employees to understand their desires and explore ways to enhance the policies implemented.

Indicators and outcomes

Although the company did not define any quantitative indicators to measure the benefits of the implemented policies, they are certain that this is a necessary shift to adjust to the workforce's needs. This proactive approach, centred on open communication and employee feedback, allowed the company to gather valuable insights and identify areas for improvement based on the experiences and perspectives of their employees.

However, a recent survey was conducted in April 2023 through HSE Stress Indicator Tool investigating areas that included clarity of role, correct workload, autonomy and support. The survey was carried out on a sample that included 25% of white collar workers and it revealed positive outcomes across all areas, with ratings ranging from 3.5 to 4.1 on a scale of 1 to 5.

Challenges and concerns

One of the main challenges that directors have been experiencing since the implementation of these initiatives is that, even if these came from listening to the employees, there is still some resistance. This mainly comes from employees and managers who have grown accustomed to traditional work arrangements and that may be hesitant to embrace changes in their work habits needing more time and effort to adapt to the new work environment. Nevertheless, the company believes that it is essential to help all employees understand the considerable advantages Smart Working has to offer, not just for their work-life balance, but also for the overall success of the company.

Conclusion

The implementation of these policies is a clear example of how Rigoni d'Asiago tries to hear the needs of its employees and to come up with a solution that adjusts to the circumstances. By prioritising direct dialogue with employees, the company demonstrated its commitment to creating a workplace that aligns with their needs and aspirations. Although some resistance is present, the company enjoys the benefits from the successful implementation of flexibility policies integrated in a comprehensive Smart Working project.

5 Results

In this section, a comprehensive analysis of the outcomes derived from both the literature review and the empirical research is presented with the objective of providing an insightful exploration of the implementation of 4-day week policies. The analysis is divided into two main sections. The first one provides a mapping of the current situation of the implementation of such policies worldwide, with a dedicated sub-section portraying in detail the Italian situation. The second section, provides a detailed review of the reported outcomes from the application of 4-day week policies studied from available literature as well as from the conducted interviews.

5.1 Adoption of 4-day week policies worldwide

In this section, an extensive overview of the global landscape concerning the implementation of 4-day week policies is presented, diving deeper into the geographical distribution, industry sector, and size of the companies implementing it. Additionally, a special analysis is conducted to dive deeper into the adoption of 4-day week initiatives in the Italian territory. This analysis lies on the valuable insights obtained from the eleven Italian companies with which we conducted interviews.

5.1.1 Global overview

This study was conducted based on the exploration of a custom-built database involving a total of 446 companies worldwide that have applied 4-day week initiatives, either in organised trials or individual implementations. This curated repository includes information about the organisations, such as their base country, size, and industry sector, as well as specific data about the policies implemented, including the launch year and type of initiative considering the classifications provided in this thesis. This information was used to analyse how the 4-day week policies are distributed around the globe, as well as the kind of companies that are more frequently adopting it.

Firstly, we started by analysing the type of policies implemented according to the classification provided in this thesis. As can be seen in Figure 20, six companies that report a 4-day week policy (1.3%) come from initiatives where the time reduction is accompanied by a salary cut, which in fact are *part-time* positions and not new flexible work time arrangements. Hence, these won't be considered in the following analysis, leaving a total of 440 organisations, which is still a big enough sample.

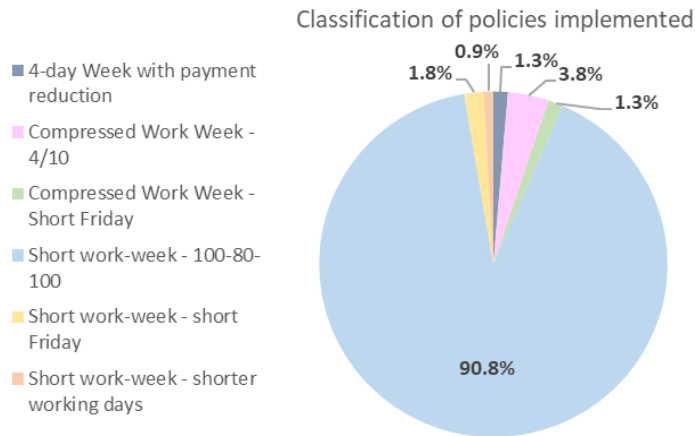


Figure 20: 4-day week policy by type of policy implemented considering organised trials and individual companies. Sample size: 446 companies

Another important insight obtained from Figure 20 is the high percentage of companies implementing the pure 4-day work week, also known as *100-80-100 model*. It is important to highlight that for the companies that adopted the policy as part of a 4 Day Week Trial (34%) it was assumed that their implementation was a *100-80-100 model*. However, as can be seen in Figure 21, considering only the individual companies that implemented 4-day week policies (290 organisations), the 100-80-100 type is still by far the most widely spread initiative. For this reason, this type of policy will be analysed with greater detail later in this chapter.

It is interesting to see how the ranking regarding the implementation of the 4-day week initiatives changes when studying the number of companies vs the number of companies per million habitants at a country level. Figure 23.a shows the ranking considering the simple count of 4-day week policies by country, in which the United Kingdom and the United States are the most developed by far. Instead, Figure 23.b shows the ranking considering the number of companies implementing the 4-day week by million habitants. In this last case, the United Kingdom continues to be the leader, however it is closely followed by Iceland, Ireland, and New Zealand, and the United States falls behind in the list. When comparing the maturity level within the different countries, comparisons including Italy must be considered cautiously due to the higher number of initiatives found in this nation due to the particular focus of this study.

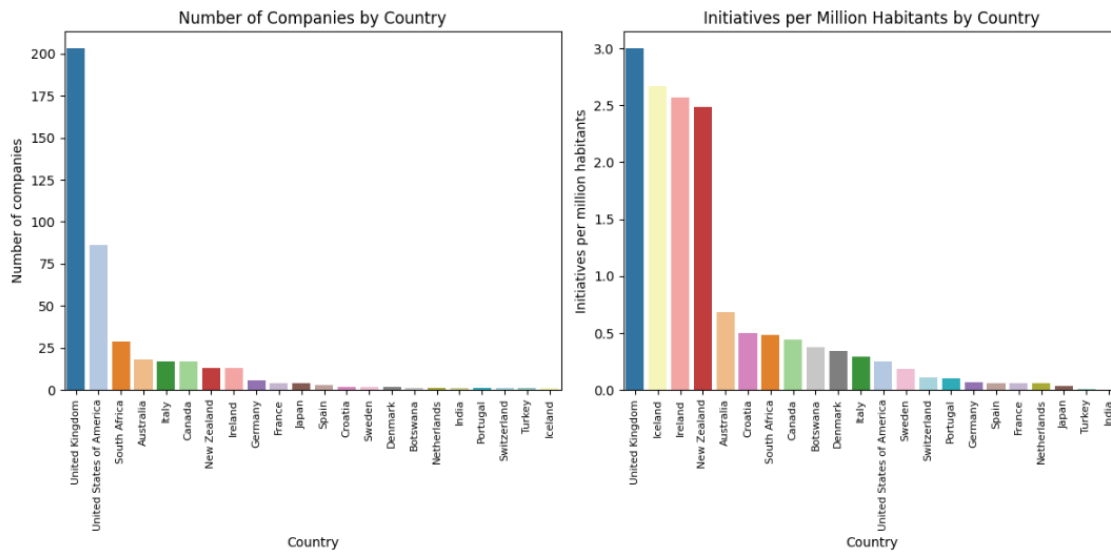


Figure 23.a: Ranking by country considering number of total companies implementing 4-day week policies. Sample size: 426 companies

Figure 23.b: Ranking by country considering number of total companies implementing 4-day week policies by million inhabitants. Sample size: 426 companies

Furthermore, when analysing only the 290 companies that implemented individual trials, outside of the 4-Week Global or Iceland trials, the distribution concentrates even more in Europe (62%) and North America (32.8%), with just a few in Oceania (3.4%) and Asia (1.7%), and no companies in Africa nor Latin America (Figure 24). It is worth noticing that given the focus in Italian territory, the number of companies adopting 4-day week policies in this country (17)

might be overrepresented with respect to other nations, inflating the proportion in Europe as well.

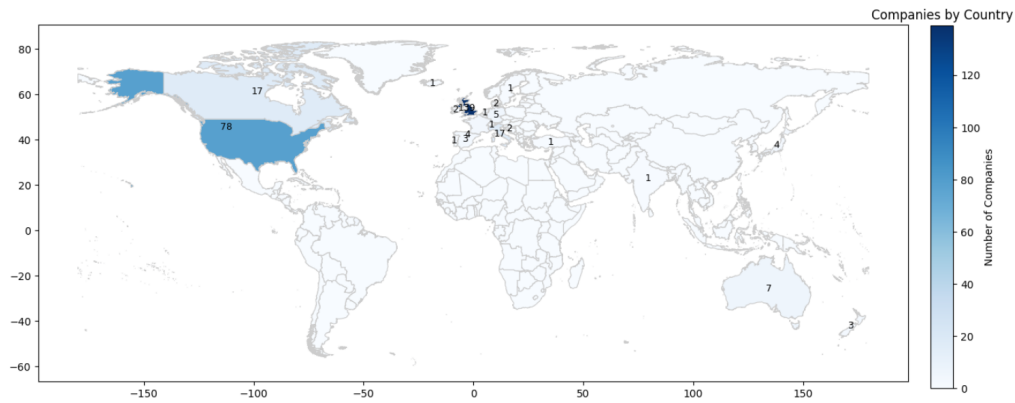


Figure 24: World map showing number of individual companies applying 4-day week policies. Sample Size: 290 companies

When considering only the single-company implementations, once again the ranking of countries with greater adoption of 4-day week initiatives experiences big variations when analysing the absolute number of companies versus the ones per capita (millions), evidenced in Figure 25. When considering individual company implementations only, Iceland takes the first place outperforming the United Kingdom in the per capita index. Additionally, other countries in which the implementation seemed insignificant when evaluating absolute numbers, such as New Zealand, Croatia, Canada, Ireland, Italy, Denmark, and Australia, turn to outperform the United States. Once again it is worth mentioning that the comparison between Italy and the rest of the countries might not be fair due to deeper focus on this market.

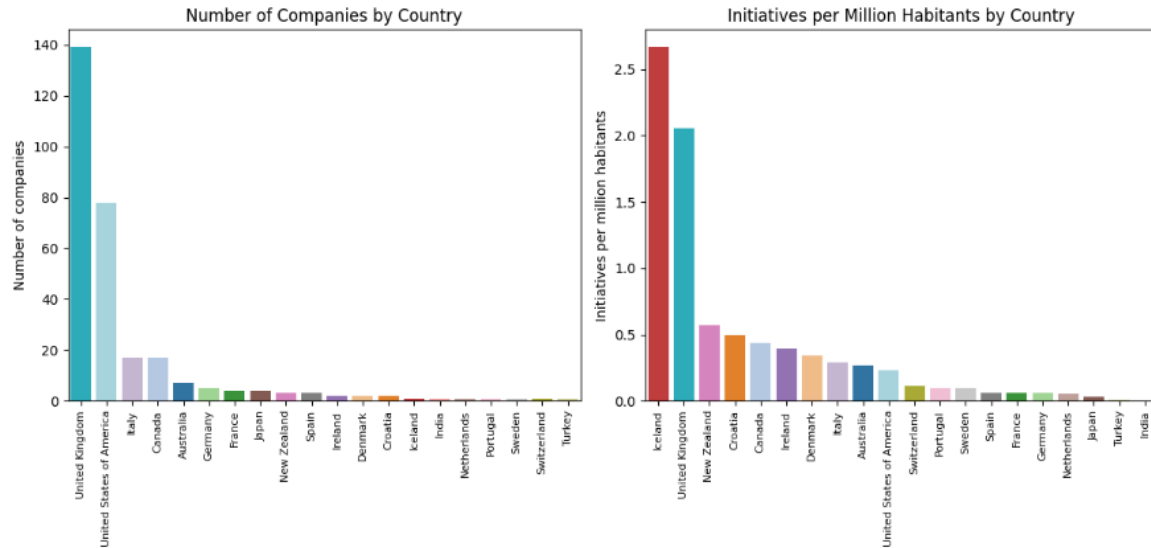


Figure 25.a: Ranking by country considering number of individual companies implementing 4-day week policies. Sample size: 290 companies

Figure 25.b: Ranking by country considering number of individual companies implementing 4-day week policies by million habitants. Sample size: 290 companies

To conclude, on a geographic level, the United Kingdom and the United States are by far the most evolved countries when it comes to the absolute number of 4-day week policies applied, both considering the total companies and single company adoptions. However, taking into consideration the population, the United Kingdom is still within the leaders in the ranking, however the United States falls behind many smaller countries like Iceland, New Zealand, and Ireland.

Pure 4-day week models

Considering the high percentage of 4-day week policies that correspond to a pure 100-80-100 4-day week policy, we deemed it important to understand the adoption of these initiatives within each country. Countries were classified into three categories according to the percentage of companies implementing a pure 4-day week 100-80-100 model. The status of a country is defined as green (high ratio) if more than 75% of the implementations correspond to 100-80-100 models; yellow (moderate ratio) if between 75% and 50% of the adopted initiatives are pure 4-day work weeks; and red in case the proportion is lower than 50% (low ratio). It is worth mentioning that this classification is hard to deem reliable for countries with low number

of initiatives. For this reason, Table 16 is ordered considering the number of initiatives in each country, from most to least reliable results. Once again it is highlighted that it was assumed that the pure 100-80-100 model was adopted in all the companies that were part of organised 4-day week trials as suggested by Four Day Week Global (4 Day Week Global, n.d.).

Country	Status	Number of companies with 4-day week	Number of companies with 100-80-100	Percentage 100-80-100
United Kingdom		203	193	95%
United States of America		86	79	92%
South Africa		29	29	100%
Australia		18	17	94%
Canada		17	15	88%
Italy		17	6	35%
New Zealand		13	13	100%
Ireland		13	12	92%
Germany		6	5	83%
France		4	4	100%
Japan		4	3	75%
Spain		3	3	100%
Croatia		2	2	100%
Denmark		2	2	100%
Sweden		2	2	100%
Botswana		1	1	100%
Iceland		1	1	100%
Netherlands		1	1	100%
Portugal		1	1	100%
Switzerland		1	1	100%
Turkey		1	1	100%
India		1	0	0%
Total		426	391	92%

Table 16: Classification by country of number of companies (organised trials + single companies) worldwide applying 4-day week policies and companies applying pure 100-80-100 model. Companies are ordered regarding the reliability of data given the sample size. Status indicates: green: countries with +75% pure 100-80-100 models; Yellow: countries with between 50-75% pure 100-80-100 models; Red: countries with less 50% pure 100-80-100 models

As a first important outcome obtained from this analysis, we see that considering individual and organised trials, 92% of the 426 companies analysed worldwide are applying a pure 100-80-100 model. Additionally, it is easily noticeable that Italy has the lowest ratio of pure 4-day week initiatives, which could be addressed to the deeper research to find companies implementing 4-day week policies in the country. Other possible explanations will be given with more detail when analysing the interviewed companies in the following section. Although Japan

and India are also below the 75% threshold, the number of policies analysed is not enough to drive any conclusions.

It is interesting to see that the United States and the United Kingdom, which have a big enough sample, have a very high adoption of the pure 4-day week model. In South Africa, all of the companies analysed come from the organised trial in this country, hence by assumption all of them adopt a *100-80-100 model*.

If we analyse only the single-company implementations, the percentage of *100-80-100* policies adopted is reduced in the overall level (88%), but still shows a high pure 4-day week adoption ratio. Considering each country, the majority maintains their status, as can be seen in Table 17, except for Ireland in which the ratio drops from high to low. However, the sample is not big enough to deem this change significant or reliable.

Country	Status	Number of companies with 4-day week	Number of companies with 100-80-100	Percentage 100-80-100
United Kingdom		139	129	93%
United States of America		78	71	91%
Canada		17	15	88%
Italy		17	6	35%
Australia		7	6	86%
Germany		5	4	80%
France		4	4	100%
Japan		4	3	75%
New Zealand		3	3	100%
Spain		3	3	100%
Croatia		2	2	100%
Denmark		2	2	100%
Ireland		2	1	50%
Iceland		1	1	100%
India		1	0	0%
Netherlands		1	1	100%
Portugal		1	1	100%
Sweden		1	1	100%
Switzerland		1	1	100%
Turkey		1	1	100%
Total		290	255	88%

Table 17: Classification by country of number of individual companies worldwide applying 4-day week policies and companies applying pure 100-80-100 model. Companies are ordered regarding the reliability of data given the sample size. Status indicates: green: countries with +75% pure 100-80-100 models; Yellow: countries with between 50-75% pure 100-80-100 models; Red: countries with less 50% pure 100-80-100 models

Finally, we can conclude that when analysing the portion of companies in each country reporting the implementation of 4-day week initiatives, most of them refer to the pure 4-day week given by the 100-80-100 model. The Italian case differs from this tendency and will be analysed in the following section, but it is worth noticing that this could be due to the exhaustive research done to look for new flexible work time arrangements in this nation. Hence, a wider variety of policies were found. The other countries reporting low *100-80-100* adoption ratio cannot be considered reliable due to the small sample size.

5.1.1.2 4-day week implementation by company characteristics

In this section, we will analyse the different policies implemented according to company characteristics, including company size and industry.

To begin with, we conducted a detailed examination of the industry sectors of the companies implementing 4-day week initiatives. As it was not possible to retrieve the industry information for all of the 440 firms since some companies participating in organised trials opted to remain anonymous, the industry analysis considers 411 companies. Industry sectors were standardised into 15 categories.

Figure 26 shows that more than 60% of these new FWTAs are implemented among companies within the technology, professional services, and marketing and advertising sectors. This can be addressed to the fact that most roles in these companies are knowledge-based, hence the implementation of time reductions are easier since productivity is not directly linked to the number of hours worked.

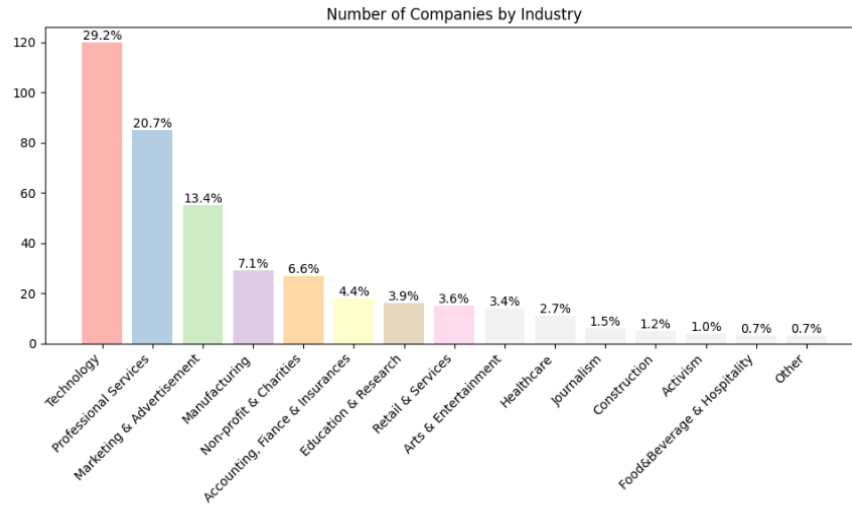


Figure 26: Companies implementing 4-day week policies by industry type. Sample size: 411 companies.

What might be surprising to see is that the fourth position is occupied by manufacturing companies. This information should be taken with caution since the policy could be implemented to administrative workers and not to the whole workforce. However, even if this was the case, it shows a positive aspect of these companies as they have conducted a successful dissociation between the production sites and administrative areas. Finally, we can see that non-profit and charities are also within the top-5 which can be attributed to the fact that since these companies cannot compete in terms of economical benefits, flexible work arrangements might be used to compensate for that miss.

When analysing the implementation of 100-80-100 models, the distribution among industries remains almost unchanged, except for a 1.2 percentual points decrease in the manufacturing sector that leads to a fall to the fifth position in the ranking (Figure 27). This is natural since from the information gathered in the interviews, manufacturing companies applying 4-day week policies on the production areas typically opt for *compressed work-weeks* since the company performance is directly linked to the hours worked. However, 16 of the 21 (76%) manufacturing companies within the sample are implementing *short work-weeks*, meaning that most of the firms in this sector are experimenting with time reductions.

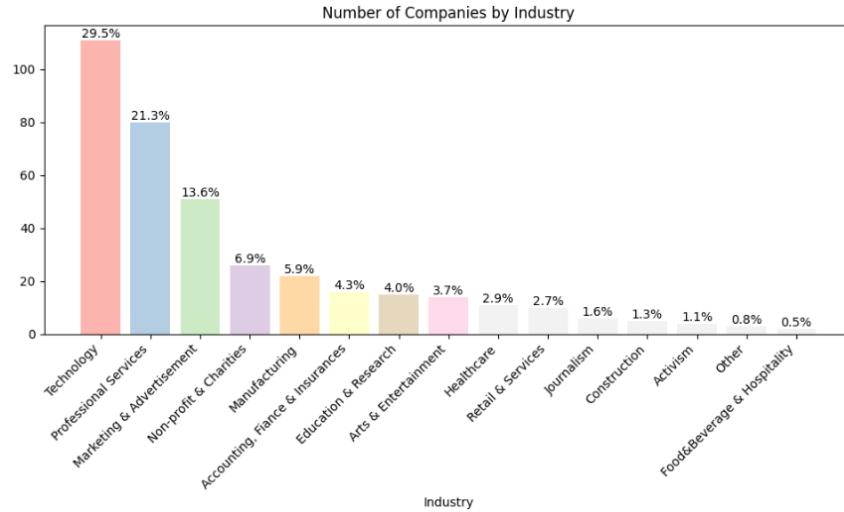


Figure 27: Companies implementing 100-80-100 policies by industry type. Sample size: 376 companies.

Another interesting aspect to consider when analysing companies’ characteristics is the distribution of 4-day week policies according to company sizes. The organisations were classified into 5 categories according to the number of employees summarised in Table 18.

Size	Number of employees
Extra Small	<10
Small	11 - 49
Medium	51 - 249
Large	250 - 499
Extra large	> 500

Table 18: Standard classification of company sizes

Considering all the 4-day week policies (as well as when analysing the 100-80-100 implementations since no big differences are seen in this case), the highest adoption level is seen in small companies, representing more than half of the total (51.1%). This could be attributed to the fact that it is easier to attract talent in small companies by providing these kinds of initiatives than competing with salaries or curriculum opportunities offered by larger companies. Additionally, the implementation in small companies is easier to implement. It could be expected to have a higher percentage of extra-small companies applying 4-day work-week policies, however two possible explanations are given to this fact. In the first place, a lower number of these companies might be present in the market, hence the analysed sample is smaller by

construction. Secondly, it is possible that such small companies have less visibility when doing online searches.

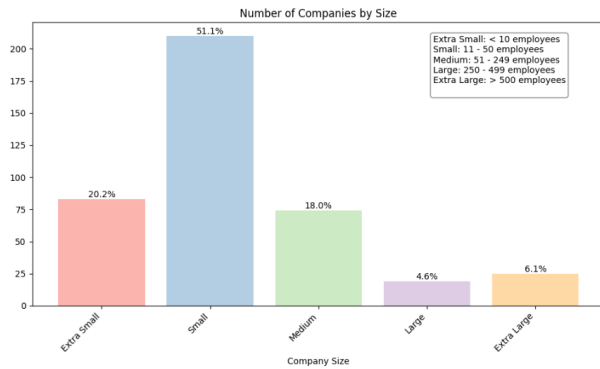


Figure 28.a: Companies implementing 4-day week policies by industry type. Sample size: 411 companies.

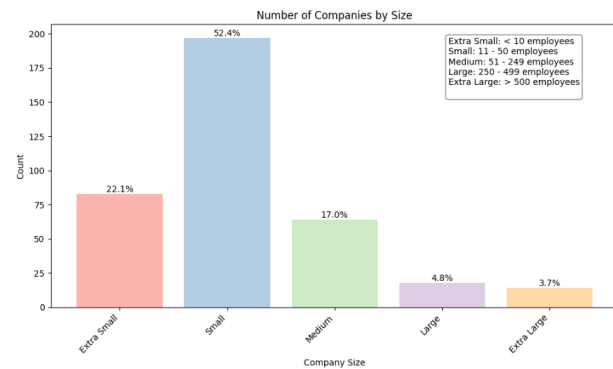


Figure 28.b: Companies implementing 100-80-100 policies by industry type. Sample size: 376 companies.

5.1.2 Italy

In order to address one of these thesis' objectives, in particular that of mapping the current implementation of 4-day week policies in the Italian territory, we interviewed eleven Italian companies that have begun experimenting with this new flexible work time arrangements. Thanks to this empirical research, a deeper analysis can be conducted for these organisations. Yet, it is important to mention that given that the sample size is small, these conclusions cannot be extrapolated to other territories. Besides the interviewed companies, the comprehensive database included information regarding other seven Italian companies implementing 4-day week initiatives. However, these won't be considered in this analysis since no more information than the one aggregated in the previous section is available.

Table 19 provides a description of the companies analysed in this section, including the information about the policies implemented showing the classification, hours worked per week, starting year, maturity of the initiative, if it is mandatory for the employees to adopt it, and existence of a broader Smart Working programme.

Company	Industry	Classification of the initiative	Working hours per week	Year	Mandatory / Guideline	Payment reduction	Maturity	Broader Smart Working project
Aldia	Non-profit	Compressed Work Week - Short Friday	38	2016	Guideline	No	Permanent Policy	Yes

Awin	Marketing	Short work-week - 100-80-100	32	2019	Guideline	No	Permanent Policy	Yes
Carter & Benson	Consulting	Short work-week - 100-80-100	32	2018	Guideline	No	Permanent Policy	Yes
Etra	Multiutility	Short work-week - short Friday	38.5	Not specified, pre Covid	Mandatory	No	Permanent Policy	Yes
Intesa San Paolo	Finance	Compressed Work Week - 4/10	36	2022	Guideline	No	Initial Trial	Yes
Lavazza	Manufacturing	Short work-week - short Friday	37	2023	Guideline	No	Initial Trial	Yes
Methodos	Consulting	Short work-week - 100-80-100	32	2022	Guideline	No	Extended Trial	Yes
Realcable	Manufacturing	Compressed Work Week - Short Friday	40	2022	Mandatory	No	Permanent Policy	No
Rigoni d'Asiago	Manufacturing	Compressed Work Week - Short Friday	39	Not specified, pre Covid	Guideline	No	Permanent Policy	Yes
TeamSystem	Technological	4-day week with payment reduction	36	2021	Guideline	Yes	Permanent Policy	Yes
Unilever Italia	Manufacturing	Short work-week - 100-80-100	32	2023	Guideline	No	Initial Trial	Yes

Table 19: List of interviewed Italian companies including the main characteristics of the implemented policies

To begin with, considering the company characteristics, a great variety of industries are included in this sample, considering firms from IT, marketing, manufacturing, finance, consulting and non-profit. It is interesting to see that the manufacturing sector comprises the largest group, consisting of 4 out of the 11 companies. Considering the company size, 7 out of the 11 companies are considered extra large companies with more than 500 employees. However, this does not indicate that the 4-day week policies reach all of the workforce. More information on the company characteristics can be found in section 4.2 when the interview sample was described.

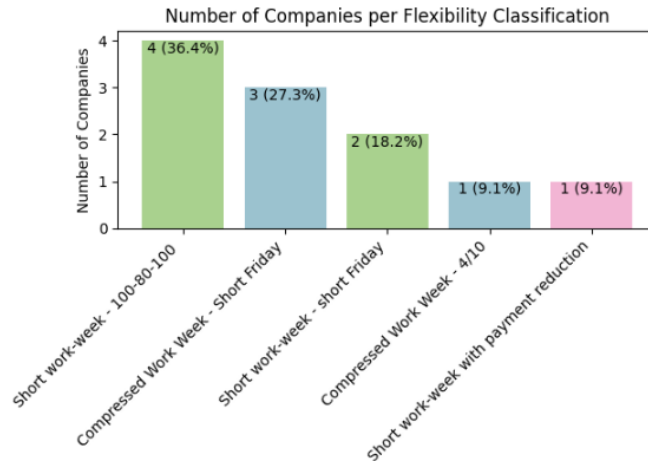


Figure 29: Number of Italian companies per flexibility classification. Sample size: 11 companies

Moving on, we analyse the different types of policies adopted by the interviewed companies. As can be seen in Figure 29, the pure 4-day work week is the most implemented policy with 4 out of the 11 companies applying this model (36.4%). Overall, a total of 6 companies are implementing time reductions, adopting a *short work-week* model, while 4 companies (34.4%) are implementing *compressed work weeks*, meaning that the traditional working hours are compacted into fewer days. The explanation behind the high ratio of companies that do not provide time reductions could be addressed to the strict laws that regulate the contract hours in some industry sectors in Italy, as mentioned by many of the interviewees. This restriction might be driving the time flexibility in the Italian labour market behind other European countries.

Finally, one of the interviewed companies reported implementing the 4-day week, however, employees who choose to adopt this working schedule experience a corresponding reduction in payment. According to the classification provided in this thesis this should be considered a *part-time* job instead of a 4-day week. Nevertheless, unlike in the worldwide analysis where policies with payment reductions were not considered, in this particular case, this company will be kept in the analysis. This is justified by the deeper understanding that we could get of the initiative during the interview, suggesting that in spite of the payment reduction, the

organisation provides the employees who chose to adopt the policy other side benefits to improve their wellbeing.

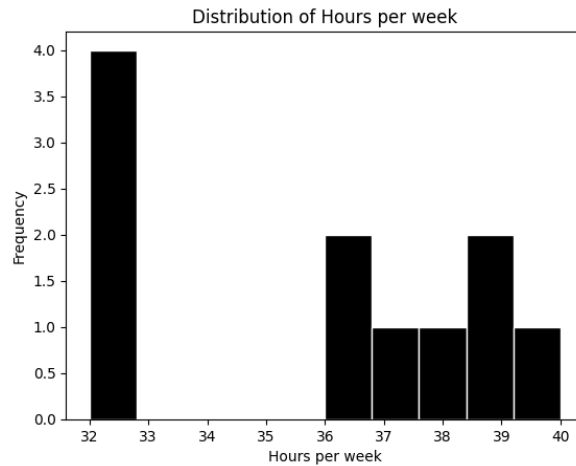


Figure 30: Histogram showing the distribution of hours per week. Sample size: 11 companies

Furthermore, Figure 30 exhibits a histogram providing an overview of the distribution of working hours per week from the interviewed Italian companies. Only 4 companies are working 32 hours, which corresponds with the 4 previously mentioned firms applying the pure *100-80-100 model*. The rest of the companies are still working at least 36 hours per week, which can be due to a lower percentage time reduction or specific contract agreements that are generally between 36 and 40 hours. This can be attributed to the absence of an organised trial pushing the labour market to implement more significant time reductions, as well as the rigidity of some standard contracts in the country that do not allow to easily reduce the working time.

Based on the working time and types of policies adopted, we can observe that Italy exhibits a wide range of new flexible work time arrangements. This can be attributed to the lack of organised trials or governmental incentives, as well as the lack of revisions of the labour laws that bring obstacles to the companies willing to experiment with new FWTAs. Consequently, organisations are conducting experiments independently, adapting and refining their approaches as circumstances evolve and needs arise, and complying with the outdated country regulation.

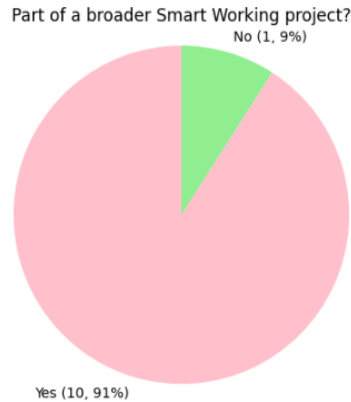


Figure 31: Companies that have a broader Smart Working project in Italy. Sample size: 11 companies

Moving forward with the analysis, we deemed it important to analyse if the implementation of 4-day week policies were part of broader Smart Working programs. We consider that the initiative is part of a program if the company is undergoing other transformations together with the time flexibility implementation, such as space flexibility, digital technologies, or change management initiatives. As can be seen in Figure 31, all the companies except one have implemented supplementary Smart Working policies besides the 4-day week. Italian employers recognise the need for change and are trying to offer greater flexibility to their employees by implementing comprehensive plans that encompass various aspects of the work life. This is a very important insight since the success in the implementation of such disruptive changes in an organisation is highly dependent on the adaptation to the new context, for which a comprehensive Smart Working program is usually required.

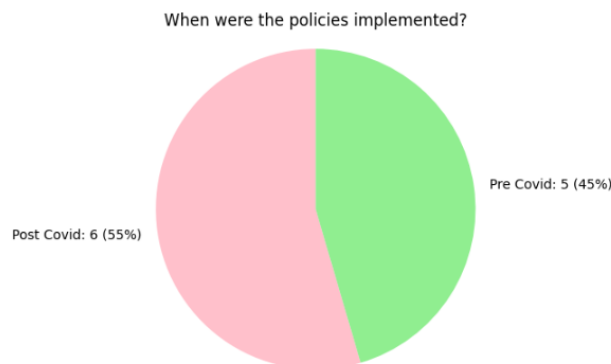


Figure 32: Distribution of implementation of 4-day week policies in Italy overtime. Pre covid is before 2020. Sample size: 11 companies

Furthermore, considering the change in the work context due to the emergence of the Covid-19 pandemic, we studied when the policies were implemented. Figure 32 shows that in 6 out of the 11 companies (55%) the policies were implemented during or after 2020 incentivized by the changes in the working paradigms. It is surprising to see that in 5 out of the 11 companies (45%) the 4-day week policies were implemented before the Covid-19 pandemic. This could be related to the high proportion of the companies analysed that have implemented the new flexible work time arrangements together with other Smart Working initiatives, which were incentivized in the country by the passing of the Smart Working law in Italy in 2017.

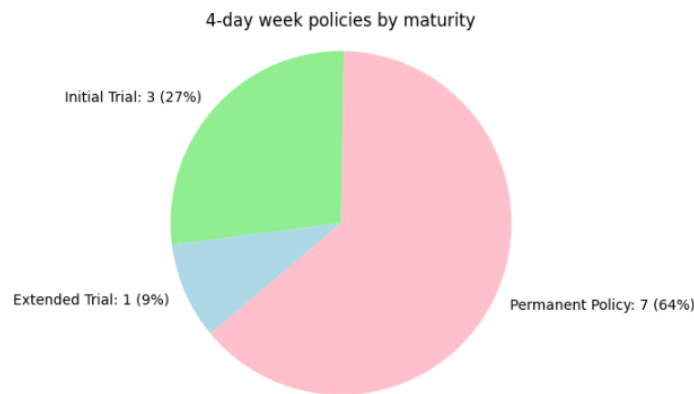


Figure 33: Maturity of of 4-day week policies in Italy Sample size: 11 companies

In addition, we analysed the maturity of the policies implemented, which were categorised into three groups. 3 companies are considered in an *initial trial*, which means that they have just started experimenting with the 4-day week policies conducting a first temporary pilot to assess the effects on the organisation. As can be seen in Figure 33, 1 company has already conducted a pilot round, and although the outcomes were positive, they still consider to be under an *extended temporary pilot* to make sure that the positive effects can be maintained and experiment different variations of the policy to keep continuously improving it. Finally, 7 out of the 11 interviewed Italian companies have *permanently adopted* the 4-day week policies. This is a positive sign indicating that the organisations consider their situation has improved since the implementation of the policy, and concluded that this could become part of the standard benefits for the affected roles within the organisation or those who are willing to adopt it.

Finally, we analysed whether the FWTAs implemented were mandatory or guidelines, giving the employees freedom of choice to implement them. This is a fundamental aspect to consider since the *self-determination theory* suggests that people prefer to have control over their actions rather than simply following orders as it gives them a sense of autonomy which encourages them to take responsibility and feel more engaged with the company. In other words, employees who have no control over their working schedules feel less motivated, leading to lower levels of commitment to the organisation (Berkery et al., 2017).

Out of the 11 companies interviewed, 9 have opted to implement the policies as *guidelines*, granting their employees the freedom to choose whether to adhere to them or not. Conversely, the remaining 2 companies, Realcable and Etra, have made these policies *mandatory*, fixing a new work schedule for the employees reached by the policy. However, in the case of Realcable, the implementation came from a bottom-up approach, with all the employees agreeing that this was their preferred schedule. Hence, it can be concluded that this is still an employee-driven FWTA. In Etra's case, the policy was implemented long ago as part of the company benefits, but the company representatives did not report any concern from the employees towards this rigidity.

To conclude, we can say that the diffusion of 4-day week policies in the Italian territory is still behind other countries like the United Kingdom. This could be due to the lack of organised trials in the country that pave the way for the job market to adapt to the new standards and improve the time flexibility conditions offered to employees. Additionally, the lack of revision of the Italian standard contracts in some industries are acting as barriers towards the adoption of more flexible policies. However, many pioneer companies have started adopting these new flexible work time arrangements, even before the change in paradigm given by the covid pandemic with different variations that fit their particular needs.

5.2 Impacts of 4-day week implementation

This section provides an aggregated summary of the effects of the implementation of the 4-day work week, both from the literature review and the interviewed companies. The impacts are classified according to the four vitality outcomes following the flexibility model defined by E. J Hill: individual vitality, workplace vitality, home and family vitality; and community vitality (Hill et al., 2008). This approach also addresses in a very structured way the answers to research question 2:

Which are the outcomes of the implementation of a 4-day week policy?

- a) How does the 4-day work week impact employees' well-being?*
- b) How does the 4-day work week impact companies' productivity and employees' perception of their workplace?*
- c) How does the 4-day work week impact employees' work-life balance?*
- d) How does the 4-day work week impact communities and the environment?*

5.2.1 Individual vitality outcomes

The individual vitality outcome refers to the effects generated by the implementation of 4-day week policies on employees' general well-being, addressing the research question 2) *a) How does the 4-day work week impact employees' well-being?*. As a quick answer to this question, we can confidently say that these new FWTAs bring positive results on employees health and well-being.

To begin with, the results obtained from the multi-company trials showed a positive correlation between the implementation of *shorter work weeks* and individual vitality outcomes. Starting with the UK trial conducted in 2022, 39% of employees reported feeling less stressed than before the trial, while 48% reported no change, and only 13% reported an increased stress level. The same trend is reflected by looking at the burnout rate: only 22% reported higher burnout scores, while 71% expressed lower levels of burnout. Finally, 43% of employees also

reported an improvement in mental health, while 16% suggested a decline, and the remaining reported no changes (Autonomy, 2023).

Furthermore, Iceland's trials suggested that well-being at workplaces such as offices, schools, and outdoor jobs increased for the 4-day week participants, while it remained the same in control groups. Symptoms of stress were also reduced in workplaces where shorter hours were implemented, while no significant changes were shown in control groups (Autonomy, 2021).

Moreover, considering the trials conducted in 2022 involving 33 American and Irish companies, results regarding stress and burnout showed a statistically significant decrease due to the trial. In fact, on a 1-5 scale from never to all the time, reported work stress declined from 3.15 before the trial to 2.95 after the trial. 34% of the participants reported being less stressed, while nearly 17% of employees experienced an increase in stress, with the remainder reporting no changes. In addition, 67% employees reported lower levels of burnout, compared to 20% who reported higher burnout scores. Finally, the average mental health score also reported a statistically significant increase, moving from 3.03 at the beginning of the trial to 3.33 at the end measured on a 1-5 scale (Schor et al., 2022).

Finally, the recently published results from the Australasian trial involving 26 companies, reported that 64% of employees experienced reductions in burnout, 38% felt less stressed on a 4-day week, and anxiety fell for a third of the sample with significant increases observed in people's physical and mental health. Furthermore, 35% had fewer sleep problems and 36% reported an increase in workout frequency, with overall results including also an increase in workout duration by 20 minutes per week contributing to a healthier lifestyle (4 Day Week Global, 2023).

Moving on to single-company 4-day work-week implementations available in the literature, evidence also shows positive improvements regarding individual vitality outcomes. The first individual private company trial of a 4-day work week held by Perpetual Guardian in 2018 provides very optimistic insights. Data gathered from the employees' perspective shows statistically significant improvements on life satisfaction, health satisfaction, and stress levels

after the trial. Additionally, the employees' perception regarding the organisations' support and concern for their well-being and safety also showed a significant increase during the trial, even if the starting levels were already higher than New Zealand's average, which could be due to a positive impact by the announcement of the trial itself (Haar, 2018).

Considering Buffer's case, in 2023, after more than 3 years implementing a 4-day work week at Buffer, 100% of employees reported burnout had either decreased (73.1%) or remained unchanged (26.9%) since the policy was introduced. Additionally, 99.1% of the employees reported to be less stressed (Oladipo, 2023). Aligned with these results, Unilever's trial in New Zealand recently reported that stress dropped 33% thanks to the new FWTA (Lockhart, 2022). In addition, Collective Campus's shorter working days results reported all employees feeling great (7 or above on a scale of 10) at the start of each day during the trial, and no signs of anxiety or rush at the end of short working day (Glaveski, 2018 , "Collective Campus", 2018)

Considering the implementation of new FWTAs in the interviewed companies, the company representative at TeamSystem reported that the Net Promoter Score (NPS) and well-being scores had increased since the introduction of the policy. The company representative at Awin also indicated that employees had reported positive changes regarding health and wellbeing. In line with these results, the company representative at Rigoni d'Asiago reported that in a recent survey answered by the white collar workers adopting the compressed work week, the HSE Stress Indicator has improved. However, none of these results were statistically tested. The rest of the companies interviewed did not formally define nor analyse any indicators for individual vitality outcomes. However, all of them reported an increased perception of well-being on their employees based on company surveys, interviews, or casual communication within colleagues.

To conclude, the provided evidence states that the implementation of new flexible work time arrangements (FWTAs), in particular the different versions of *4-day work-weeks*, bring significant improvements in well-being to the vast majority of the employees. The positive

results highlighted by all the analysed cases are not only important considering the individuals' perspective, but also considering the global economy. The World Health Organization (WHO) estimates that mental health issues currently cost around 1 trillion US dollars a year to the global economy (Baruffati, 2023). Hence, a significant saving could be achieved if the outcomes reported in this analysis were replicated on a broader scale.

5.2.2 Workplace vitality outcomes

The workplace vitality outcome refers to the effects generated by the implementation of 4-day week policies mainly on the companies' productivity, which is strongly influenced by employee retention, absenteeism, or job satisfaction. This aspect can be used to address the research question 2) b) *How does the 4-day work week impact companies' productivity and employees' perception of their workplace?*. As a quick answer to this question, we can say that these new flexible work time arrangements have shown no negative changes on companies' productivity, even reporting improvements in some cases. Instead, the employee satisfaction, engagement, and perception of their workplace have been positively influenced. However, some companies did experience some difficulties in the implementation of the policies to get to these positive benefits.

To start off, the overall results of the multi-company trials show a positive reaction from both employees and companies that implemented *shorter work-weeks*. Considering the 146 companies that participated on the 4-day Week Global organised trials in the United States and Ireland, United Kingdom, and Australasia, 93 have confirmed to move on permanently or with extended trials of the 4-day week policy. Additionally, 70% of the total employees indicated that they would require between 10 to 50% more pay to go back to a five-day schedule, 13% said they'd require more than 50%, and 13% said that no amount of money could convince them to give up the 4-day week (Lockhart, 2023a).

In the United Kingdom trial, the change in weighted revenue from the beginning to the end of the trial remained almost the same, increasing by 1.4% on average. Considering the

employees' point of view, 48% reported feeling more satisfied with their jobs compared to the beginning of the trial. Likewise, there was a decrease in the likelihood of employees leaving their jobs, with 30% of employees feeling less likely to change jobs (Autonomy, 2023).

In addition, the results obtained from the trials carried out in Iceland showed that productivity didn't decrease with the reduction of working weeks, remaining unchanged in most cases or even increasing in some organisations. Employee surveys also showed positive changes in the workplace, such as an increase in support from colleagues, less confusion over roles at the workplace, and a higher sense of independence and control over the pace of work (Autonomy, 2021).

Similarly, in the multi-company trials conducted in the United States and Ireland, the revenue weighted by company size increased by 8.14% with respect to pre-trial values. Employees' perception of their productivity also reported an increase. The average score when asked about their productivity compared to their lifetime best increased from 7.17 before the trial to 7.83 at the end of it, on a scale from 0 to 10. Furthermore, job satisfaction scores also increased from 7.34 to 7.62 on a 0 to 10 scale. However, no analysis was reported to verify the significance of these effects (Schor et al., 2022).

In the most recent trial conducted by 4-day week Global in Australasia, companies rated the impact of the 4-day week to attract new employees at an 8.3/10, with productivity scoring a 7/10, and performance 6.8/10. Moreover, 54% of employees self-reported an increase in their productivity compared to their lifetime best. In addition, absenteeism rates fell significantly, with a 44.3% decline in the number of sick and personal days taken per employee per month, and average resignation rates fell by 8.6% (4-day Week Global, 2023). It is worth noticing that no statistical analysis were reported in either of the multi-company trials.

Shifting the focus to the single company trials, Perpetual Guardian did a very thorough investigation regarding workplace vitality outcomes. From the employee perspective, satisfaction, engagement, and retention reported statistically significant improvements, even if the pre-trial scores for these job attitudes were very high compared to global and New Zealand's

average scores, suggesting that these perceptions might have already been influenced due to the trial's announcement. Consequently, the pre and post-trial surveys were compared to employee surveys before the trial's announcement, providing confidence and support to this hypothesis. Additionally, Perpetual Guardian's findings show that production, measured considering supervisors' point of view regarding employees' performance, had no statistically significant changes. However, supervisors saw their teams doing aspects of their jobs better, reporting statistically significant improvements in punctuality, support to other colleagues, creativity, and surprisingly, customer service (Haar, 2018). Christine Brotherton, Perpetual Guardian's Head of People and Capability at the time of the trial, stated that "*The feedback from our external clients, both corporate and individual, has been very positive, with a number of them beginning similar discussions with their own staff*" (Perpetual Guardian, 2019).

Microsoft Japan's one month trial in 2018 reported an outstanding increase of 40% in productivity. In addition, 96.5% of employees reported to have experienced a significant change towards work behaviours and attitudes, especially on awareness and actions towards efficiency and effectiveness. Moreover, there was a 46% reduction in meeting time, 21% increase in remote meetings, and 10% increase in network interactions among the personnel (Microsoft Japan, 2019b).

Similarly, the results from Uplevel's three month trial conducted in the same year suggest that product delivery volume actually increased, both looking at the overall number of tickets completed and the estimated effort/complexity for each one. Moreover, during this quarter they onboarded more customers than any other quarter to date. Besides losing one day of work, *Deep Work time* increased for almost all teams and meeting hours and their average length showed a small decrease (Uplevel, 2022). Employees also reported improvements in their perceived productivity, work satisfaction, time spent in professional development, and meeting relevance. In the report including the results of the trial, the company stated that "*Many people shared that they were motivated to work harder and to optimise for shorter, more effective bursts of work*" (Uplevel, 2022). In a similar way, in Awin, 70% of employees reported that the quality of their

work had improved since the adoption of the 4-day working week and 92% of them reported being more productive at work (Ruzgar, 2023). Furthermore, Methodos also reported the improvement of various workplace vitality metrics during the interviews. After applying the 4-day work week, 80% of employees reported that they could manage their workload effectively and genuinely benefit from the time reduction, increasing their job satisfaction.

Consistent with these findings, Unilever New Zealand's trial showed strong positive results compared to the defined business targets, reporting revenue growth, with the vast majority of staff reporting feeling engaged, and absenteeism dropping 3% (Lockhart, 2022). Awin stated that the sick leave days decreased by 21%, while the annual gross profit increased by 13%. An unexpected positive result was also obtained by Aldia, who expected to see productivity decreases due to fatigue in the longer days of the *compressed work-week*. However, the company representatives were excited to see that this was not the case, in fact they documented a productivity increase. Instead, Collective Campus's shorter working days reported more conservative results showing no difference in outputs, with no employees reporting signs of piling up work nor compromising the company's goals (Glaveski, 2018 , "Collective Campus", 2018).

Workplace vitality outcomes were not only positive regarding employees and the firms' perspective. In Unilever, 100% of the consulted stakeholders and partners agreed that the New Zealand team completed work on time and maintained high quality standards (Lockhart, 2022). These results were aligned with those reported by Awin, who expressed improved customer service and relations, as well as positive change in the quality of work. Moreover, Methodos suggested to have achieved their strict work targets, maintaining the customer relationships, achieving 100% of the company goals, and delivering work rated over 8/10 considering its quality.

During the interview process, many company representatives highlighted that one of the main benefits of the 4-day week implementation was related to company branding, employee retention, and talent attraction. Although no numerical values or analysis were mentioned, Blink,

Carter & Benson, RealCable, and Methodos indicated higher employee retention and talent attraction; Literal Humans noted an increase in the number of job applications and brand recognition; TeamSystem suggested that the “Great Resignation” had lower impact on the firm, reporting lower resignation rates than the average in the market; and Aldia stated that the implementation of the 4-day week policy was a significant factor to attract talent during an accelerated growth period of the company. Awin was the only interviewed company that quantified these aspects, mentioning a 33% decrease in employee turnover.

When considering Buffer’s case, after the 100-80-100 6-month trial in 2020, the company reported to have sustained productivity levels based on feedback from employees and managers. 34% of the employees felt more productive than when they had a five-day work week, nearly 60% felt equally as productive, and only 7% felt less productive (Miller, 2021). Two years after switching to the new schedule, 91% of the employees reported to be happier and more productive working on the 4-day work week, with the remaining 9% being neutral (Miller, 2022).

However, this implementation was not seamless. During the first year of the policy implementation, the overall employee satisfaction in Buffer stayed constant, which felt like a positive outcome considering the context given by the “Great Resignation”. However, at the end of 2021, the company declared to have decreasing engagement scores, which might be one of the downsides of operating both a remote and 4-day work week systems, leaving less time for employee social interaction (Miller, 2022) and causing some employees to feel isolated from their teammates (Oladipo, 2023). Similar concerns regarding the implementation of a 4-day work week policy for full remote workers were also raised by Blink and Literal Humans when interviewed. Another downside of the simultaneous implementation of both flexibility policies frequently mentioned during the interviews was that of a slight reduction in productivity due to the constant interruption by notifications from communicating with colleagues, reducing the concentration time to focus on problem solving.

In spite of these challenges, after 5 years of implementing the 4-day week, Blink's representative reported during the meeting that *“the time reduction encouraged the workforce to be more productive and obtain the same production level than before. What's more, that production even increased”*. Additionally, although the policy was implemented with the objective to raise productivity, many side benefits were obtained. One of the most remarkable ones is that after the initial challenges to keep high employee satisfaction due to adoption of fully remote and 4-day week policies, employee engagement scores are now extremely high thanks to the implementation of dedicated spaces for employee interaction and socialisation. In the interview the company's founder stated that *“the average employee satisfaction based on an internal survey conducted in 2022 was 9.5/10. These results are evident when considering employee retention. Even if other outcomes are difficult to quantitatively measure, it is easily seen that this increase in employee loyalty and wellbeing is due to an improved work-life balance”*. This shows that an integrative program, considering not only flexibility but Smart Working as a whole, is key to solve the possible challenges of implementing multiple FWAs.

Although in most of the companies the implementation of the 4-day week was smooth, besides the above mentioned cases in full remote companies, firms with strong customer service duties also had a rough path. One case was that of the Advocacy team at Buffer, who had to iterate different versions of the 4-day week for a year to get to a solution that satisfied the employees as well as the customers. A similar case was reported by a company that participated in the UK organised trial. Furthermore, an engineering company in the same multi-company pilot had to drop the experimentation due to impossibility to adapt to the new schedules without falling behind. This shows that there is no one-size-fits all 4-day week policy. Companies who want to leverage the astounding benefits of these new FWTAs need to rethink their structure, implement conscious management and cultural changes, and be patient to find the solution that fits their peculiarities.

To conclude, the provided evidence suggests that successful and well thought implementations of 4-day week policies bring, in the worst case scenario, no negative changes in

productivity. However, most of the companies reported not only increased productivity outcomes but also work quality and customer relationships. Additionally, the innovative policies that give employees more autonomy are rewarded with an increased satisfaction and loyalty, decreased turnover, and increased talent attraction. Nonetheless, companies offering fully remote positions or operating in industries such as customer service or production should make a careful evaluation of the policy implemented and tailor it to the companies' peculiarities to enjoy these benefits. The adoption of comprehensive and integrative Smart Working initiatives is key to success.

5.2.3 Home and family vitality outcomes

The home and family vitality outcome refers to the effects generated by the implementation of 4-day week policies on employees' work-life balance, addressing the research question 2) *c) How does the 4-day work week impact employees' work-life balance?*. As a quick answer to this question, we can confidently say that these new flexible work time arrangements bring positive results on employees' work-life balance. In this section, we will provide support to this answer by summarising the main findings in the previously mentioned trials.

Starting with the results obtained in the multi-company trials, compelling evidence is provided confirming that 4-day week initiatives have a positive impact on home and family vitality outcomes. Considering the trial carried out in the UK, 60% of employees reported that balancing work with care responsibilities had become easier and 54% reported that they were feeling less tired to do household chores. In addition, work-life balance also improved, reporting scores of 2.9 before the trial, and 3.78 after it, considering a scale that went from 1 to 5 (Autonomy, 2023). However, no statistical analysis was mentioned to assess the significance of this variation.

Positive changes were also informed in home and family outcomes when considering the multi-company trial conducted in 2022 involving American and Irish companies. Work-life balance experienced a significant improvement, surging from 2.98 prior to the trial to 3.76

afterwards, measured on a scale ranging from 1 to 5. Similarly, when employees were asked how easy it was to combine work with care responsibilities on a scale from 1 to 5, the average went from 2.90 before the trial to 3.76 after it. Additionally, in this trial Autonomy also measured a reduction in childcare cost, which was not considered in other organised trials. The average response indicated a slight decrease, reflected by a score of -0.2 on a scale where 0 indicated no changes, -1 signified a decrease and 1 denoted an increase in costs (Schor et al, 2022). Once again, no statistical analysis was mentioned in the report.

The most recent multi-company trial carried on in Australasia suggested that 65% of the employees were more satisfied with their leisure time whilst on a 4-day week and almost half of the workforce reporting a decrease in work-life conflicts (4-day Week Global, 2023). It is worth mentioning that the organisation did not report the percentage of employees who replied negatively to these measures or indicated no changes.

Moving on to the single-company trials, more evidence supporting the positive impact of new FWTAs on home and family vitality outcomes is provided. To begin with, Perpetual Guardian's pre-trial score in work-life balance was close to New Zealand average, while the post-trial score reflected a statistically significant improvement. Furthermore, leisure satisfaction reported a very strong increase after the trial (Haar, 2018). In the qualitative research, Perpetual Guardian's employees reported mainly using their day off to do administrative work or household chores, allowing them to fully relax and enjoy their weekend by doing more activities for themselves or spending more time with their loved ones. Additionally, many employees reported that the extra day off during the week allowed them to participate in school activities with their children, increasing their quality time spent together (Perpetual Guardian, 2019). Mark Jephson, General Manager for Corporate Trusts at Guardian Trust affirmed that "*The benefit of a flexible work policy is that you'll know people will want to work for your organisation because you've created a high-performing at-work culture which also offers a really good work-life balance*" (Perpetual Guardian, 2019).

In addition, in Microsoft Japan's 100-80-100 policy experiment, 96.1% of employees reported changes towards awareness or actions considering work-life balance, indicating the importance of spending time with their family and taking vacations and rest. Moreover, employees' use of *Wellness Points* provided by the company increased 1.7 times compared to the same period in the previous year, mostly for sports, leisure, and domestic travel. The company also reported an increase in long term vacations contributing to reduction of overwork issues in Japan. However, only 11.3% of the indicated awareness and actions taken were expected to have medium and long term effects in the company (Microsoft Japan, 2019b).

Uplevel's 4-day week trial also showed positive changes on home and family vitality outcomes, as employees reported an improvement in their work-life balance driven by an increase in their ability to rest, exercise, and engage in fun activities (Uplevel, 2022). Furthermore, after 3 years in the 4-day week policy, 61.5% employees at Buffer suggested that they find it easier to balance work and life (Oladipo, 2023) while Unilever's New Zealand 18 month trial results suggested that work-life conflict fell by 67% (Lockhart, 2022).

Finally, considering the implementation of new FWTAs implemented in the interviewed companies, Blink's representative stated that "*employees report that their child care spendings have decreased, which not only brings an economical benefit, but also the joy of spending more time with their loved ones*". Methodos also reported to have achieved its target of employee work-life balance with a score over 8/10. As for the rest of the companies, none of them defined numerical indicators for home and family vitality outcomes. However, most of them reported an increased perception of work-life balance on their employees based on company surveys, interviews, or casual communication within colleagues.

To conclude, the provided evidence shows that the implementation of new flexible work time arrangements (FWTAs), in particular the different versions of *4-day work-week*, bring significant improvements in work-life balance, with all the companies that measured this aspect reporting positive effects.

5.2.4 Community vitality outcomes

The community vitality outcome refers to the effects generated by the implementation of 4-day week policies on the community and on environmental sustainability, addressing the research question 2) *d) How does the 4-day work week impact communities and the environment?*. Given the difficulty to measure these aspects, most of the trials did not report any metrics regarding this aspect. However, the ones who did, indicated very positive changes toward sustainability.

Starting with the multi-company trials, the UK trial didn't report results on these outcomes. Instead, the pilot conducted in 2022 involving 33 companies mainly from the US and Ireland revealed positive changes due to reduced commuting to the workplace. In this case, respondents who reported commuting to work by car fell from 56.5% before the trial to 52.5% after the trial, while commuting time fell from 3.56 to 2.59. Additionally, no changes in domestic or international travels were reported. Moreover, the pilot also provided positive impacts on the community, revealing that volunteering increased by 0.15 hours per week, showing that the employees are willing to give back some of their gained time (Schor et al, 2022).

Furthermore, the Australasian trial conducted in 2022 involving 26 companies reported that the average time spent commuting fell by 36 minutes per person per week during the trial. Also in this case there were no signs of “*travel rebound*”, contradicting the common concern among critics who assert people will increase their carbon footprint by spending their extra free time travelling. In addition, 42% of employees reported to carry on more environmentally friendly activities during the trial, such as walking and cycling rather than driving (4-day Week Global, 2023). It is worth mentioning that no statistical analysis was reported to assess the significance of these effects in the multi-company organised trials.

Considering single-company trials, Perpetual Guardian's quantitative research showed a very strong statistically significant improvement in employees' overall satisfaction with their involvement in their local communities (Haar, 2018). In the qualitative research, employees also reported working with a community group or a charity to give back on their day off, and Jarrod

Haar, a Professor of Human Resource Management at the Auckland University of Technology that collaborated during the trial stated “*this shows the potential benefits beyond an organisation and its employees and their families – schools, wider community benefits – the potential appears wide-ranging*” (Perpetual Guardian, 2019).

In addition, Microsoft Japan accomplished meaningful achievements regarding community vitality outcomes on a company level, reducing electricity consumption by 23.1% and print volume by almost 60%. Additionally, 83.5% of employees reported changes in awareness and actions towards society and community activities (Microsoft Japan, 2019b).

Finally, considering the implementation of new FWTAs in the interviewed companies, RealCable reported that, due to the new flexible working hours, the production facility is closed on Friday afternoons, resulting in cost savings related to energy consumption. Although not quantified, this not only reduces costs but also provides environmental benefits by reducing CO2 emissions. As for the rest of the interviewed companies, none of them defined nor analysed any indicators for community vitality outcomes.

In conclusion, there is not much evidence to give a conclusive answer to the research question “*How does the 4-day work week impact communities and the environment?*” due to the fact that the majority of the companies are not able to measure these impacts. Literature suggests that the main reason for this lack of data collection in this area is that most of the existing calculators regarding carbon emissions are not oriented to short-term changes. Hence, the short trials are not long enough to reach adequate conclusions.

6. Conclusions

This chapter presents the conclusions obtained from the conducted analysis together with the contributions made to both the research and managerial literature. Finally, the limits and future research opportunities are indicated.

6.1 Conclusions of the analysis

This thesis focused on understanding the level of adoption and impacts of new flexible work time arrangements, more specifically the 4-day week, in different companies worldwide, with a particular focus in Italy. With this objective, two main research questions were asked whose answers are provided in this section.

***RQ1:** Which is the current situation regarding the implementation of 4-day week arrangements in the world, and in particular, in the Italian territory?*

The findings reveal that Europe and North America emerge as the frontrunners in implementing this policy, with 320 and 106 companies adopting 4-day week policies respectively. Following next is Oceania, with 31 companies embracing the 4-day work week. Low levels of experimentation were found in the rest of the continents. However, a multi-company organised trial has recently started in South Africa, putting Africa ahead of the other. This discrepancy between continents may stem from various factors, including the absence of government support or incentives, as well as the lack of multi-company organised trials that lead the way to the new ways of working.

When diving deeper into the countries implementing these policies, we can clearly identify leading nations. In Europe 203 of the 320 (63%) companies are based in the United Kingdom. A significant contributing factor is likely to be the world's largest 4-day week trial organised by 4 Day Week Global (4DWG) in 2022. However, even when excluding the companies that took part in organised trials, the country still maintains a substantial advantage over all the other nations in terms of the number of companies implementing a 4-day work week

policy. This could be addressed to a spillover effect of the 4DWG trial, influencing other companies not participating in the pilot and starting to reshape the standard ways of working in the United Kingdom.

In North America, 81 of the 106 (76%) companies applying 4-day week policies are in the United States. This could be explained by two main reasons. In the first place, due to the high number of technological firms situated in the country, which is one of the sectors in which these types of flexibility policies are easier to implement. Secondly, given the lack of governmental regulation regarding paid time off or benefits for the employees, employers in the United States are more willing to adopt these new flexible work time arrangements which provide increased wellbeing and work-life balance for employees without sacrificing the company's objectives.

In this way, when only considering the number of policies being applied in each country, the United Kingdom and United States hold a great advantage compared to other countries. However, this ranking changes when considering the number of companies implementing the 4-day week by million inhabitants. In this last case, the United Kingdom continues to be the undoubted leader, but it is closely followed by Iceland, Ireland, and New Zealand, leaving the United States behind in the list. This repositioning is thanks to governmental initiatives encouraging 4-day work weeks in these countries as well as multi-company organised trials that push the labour market to update the standard ways of working fixed in the Industrial Revolution.

When considering only the single-company implementations, the United Kingdom is still the leader when considering the absolute number of companies adopting the policy. However, the ranking changes when analysing the ones per million inhabitants. In this case, Iceland takes the first place outperforming the United Kingdom. Additionally, other countries where the absolute number of companies applying 4-day week policies seemed to be insignificant, such as New Zealand, Croatia, and Canada, turned out to outperform the United States by almost double the companies adopting 4-day week policies per capita.

When looking at a global level, the majority of the companies are applying what was defined as the *100-80-100 model*. In fact, only in 3 of the 21 analysed countries the ratio between the companies applying the “pure” model and the total number of companies applying 4-day week policies is less than 75%. However, there is only a big enough sample to rely on this analysis for Italy, since Japan and India have less than 5 companies implementing the policy. This number shows that the 100-80-100 model is being implemented in many companies worldwide of different sizes and industries, challenging the common belief that such flexible policies are exclusively viable for companies of specific sizes or within particular industry sectors.

Finally, we analyse the particular case of Italy. Although the terms “Smart Working” and “Flexible Working” have been around in the country for many years, the country still falls way behind when considering the adoption of the 4-day week. Given the deeper analysis in the Italian territory, it is not fair to compare the number of policies implemented in this country with the nations. Nonetheless, Italy still falls behind, taking the 11th position in the ranking of 4-day week policies per million inhabitants.

When considering the adoption of the “pure” 4-day week, only 36.4% of the 11 interviewed Italian companies are applying the *100-80-100 model*, which is approximately a third of the ratio of companies applying *100-80-100* policies in the United Kingdom (95%). Moreover, 34.4% are applying different *compressed work-week* arrangements, meaning that traditional working hours are maintained the same but compacted into fewer days. This could be explained by two main reasons. In the first place, this can be attributed to the absence of an organised trial that, with a spillover effect, pushes the labour market to implement more of these initiatives and with more significant time reductions. Secondly, many of the interviewed company representatives explained the adoption of *compressed work-weeks* instead of *short work-weeks* to the strict labour laws that define the working contracts in many industry sectors. Italian companies face a significant obstacle when redefining employment contracts for their workforce as labour law in the country is very rigid and creates legal and administrative barriers

that are hard to overcome. In this way, due to the absence of comprehensive guidelines at a national level, Italian companies seeking to introduce greater flexibility for their employees are customising the policies based on their specific requirements.

RQ2: Which are the outcomes of the implementation of the 4-day week?

In order to answer this question, we can take a look at the impact on each of the defined vitality outcomes. By assessing the impact on these specific dimensions, we can gain a comprehensive understanding of the overall consequences of the implementation of the 4-day work week policy on employers and employees.

a) How does the 4-day work week impact employees' well-being?

Evidence shows that, overall, the various forms of the 4-day work week bring remarkable benefits for the well-being of employees, with employees reporting improvements in health, stress, and burnout indicators, as well as increased workout frequency and duration. According to the literature, these improvements in employees' health can lead to benefits from the company perspective as well. When employees experience improved well-being, their productivity, motivation, and overall job satisfaction tend to increase, impacting the organisational success, fostering innovation, reducing turnover, and enhancing overall performance.

b) How does the 4-day work week impact companies' productivity and employees' perception of their workplace?

Evidence suggests that the implementation of the 4-day work week does not lead to significant changes in productivity, with some companies even reporting improvements in this aspect. On the other hand, these new flexible work time arrangements aimed at giving employees greater autonomy, have shown positive effects for employers and employees on other work related aspects, such as increased job satisfaction, enhanced loyalty, reduced turnover and absenteeism, and improved talent attraction.

The implementation of 4-day week policies was not always smooth, with some companies reporting some challenges to get to the above mentioned benefits. Organisations that offer fully remote positions should take a careful approach and consider additional policies to

foster employee interaction and avoid employee isolation. Additionally, companies in the manufacturing and customer service industries should consider gradual and ad-hoc policies integrated with broader Smart Working programs that fit the company's operations to reach a successful 4-day week policy that benefits employees and the company.

c) How does the 4-day work week impact employees' work-life balance?

With no doubt, work-life balance was one of the most positive outcomes reported by companies implementing 4-day week policies. By reducing the work week, even only for a couple of hours or, in the best case, an entire day, employees gain valuable time to prioritise personal commitments, recover from stressful work situations, invest in hobbies, and spend more time with their loved ones.

d) How does the 4-day work week impact communities and the environment?

Due to the low number of companies reporting community and environmental outcomes, the impacts of 4-day week implementations on the environment remains inconclusive. Unfortunately, many companies face challenges in measuring the environmental effects on short-term trials. However, the few companies that measured this aspect reported reduced energy consumption, lower carbon emissions from commuting, and decreased resource utilisation. Additionally, employees suggested investing more time on sustainable lifestyle choices, such as engaging in eco-friendly activities or adopting greener commuting options. To gain a clearer understanding of the environmental impact of a 4-day work week, future research and collaboration among stakeholders are crucial.

All points considered, we can confidently say that the implementation of the 4-day week creates positive impacts not only from an employee point of view but also from an employer point of view. The 4-day week helps in improving employees' wellbeing and work-life balance making it a valuable policy in today's labour landscape shaped by The Great Resignation and Quiet Quitting. From an employer standpoint, it is important to remark that, contrary to concerns about reduced productivity, the evidence suggests that the 4-day week does not result in a decline in output. In fact, by creating a work environment that values employee satisfaction and

recognizes the importance of work-life balance, employers can unlock the potential for enhanced productivity and a more engaged workforce.

In conclusion, the adoption of a 4-day workweek, together with other flexible and Smart Working mechanisms, could be a solution to today's work scenario. As employee expectations evolve towards a more flexible working environment, companies may find themselves in a position where it becomes necessary to adopt such policies in order to remain competitive in the market to retain and attract talent.

6.2 Contributions

This thesis provides meaningful contributions to the research community as well as to governments and organisations willing to implement and foster the 4-day week policies. In particular, 5 aspects are considered: clarification of the terms “4-day week”, “short work-week”, and “compressed work-week”; an extensive custom-build database and further analysis of the current adoption of the 4-day week worldwide; a clear understanding of the challenges faced by Italian companies that are causing the nation to fall behind on the implementation of new flexible work time arrangements; a comprehensive overview of the most renowned experimentations of 4-day week policies indicating the peculiarities of the policies, the guidelines to successfully implement them, and the challenges faced; and finally, an exhaustive overview of the reported impacts of 4-day week implementations.

Firstly, this study establishes clear definitions for the terms “4-day week”, “short work-week”, and “compressed work-week”. Given the lack of academic extensive research regarding this topic, during our exploration, we recognized the lack of standardised terminology and precise conceptual understanding for the different versions of new flexible work time arrangements implemented. This lack of definitions presented an obstacle when analysing the impacts and adoption of 4-day week policies around the globe. By offering precise definitions and conceptual clarity, our work lays a solid foundation for future studies to correctly classify the

policies adopted and conduct a deeper analysis on the impacts of the different types of policies implemented.

Once a clear notion of the scope of the 4-day work week and the different types of policies included, an analysis of the current adoption of these policies is possible. Significant challenges were faced when collecting data due to the scarcity of reliable sources aggregating information about companies implementing these new flexible work time arrangements including company characteristics and peculiarities of the policies. The present study makes a substantial and valuable contribution to the research community by providing an extensive database and posterior mapping of the current worldwide situation concerning the implementation of the 4-day week policies in companies across various industries, sizes, and regions, filling a void in the existing body of literature. This also provides a valuable resource to serve as a starting point for future researchers interested in exploring the 4-day work week and its rapid evolution over time.

Moreover, thanks to the qualitative empirical research conducted, considering interviews with 11 Italian companies, this study contributes to understanding the particular situation of the pioneering companies adopting 4-day week policies in Italy and the barriers that position this nation way below in the ranking. This research provides different alternatives adopted by the companies to surpass these obstacles and action points required by the Italian government to encourage the adoption of new FWTAs and improve the international competitiveness of the Italian job market.

Furthermore, a meaningful contribution from this study relies on the standardised overview presented of the most famous 4-day week implementations available in the literature, including governmental policies, multi-company trials, and single-company experimentations. This research not only provides a qualitative overview of the worldwide situation, but also presents valuable insights for the managerial literature as it provides clear examples of successful implementations of the 4-day week, including lessons learnt and challenges faced during the

process. In this way, our thesis offers managers concrete cases to inspire them and pave the way to the adoption of these policies. In addition, governmental policies may inspire other nations to accelerate the adoption of these policies and provide benefits to the workforce without sacrificing the country's and company's productivity.

Finally, this research provides a comprehensive overview of the benefits associated with the implementation of 4-day week policies considering employees' well-being, work-life balance, work and community satisfaction. Additionally, the effect on the companies' perspective considering productivity, employee absenteeism, retention, attraction, and possible cost savings and environmental sustainability. This work provides companies that are hesitant on implementing the policies an extensive review of the qualitative and quantitative benefits and challenges that these types of policies could lead to. In this way, through these insights, managers can make informed decisions regarding the implementation of 4-day week policies and maximise its potential.

In conclusion, this thesis provides significant contributions to the research community and stakeholders interested in implementing and promoting 4-day week policies. It provides clear definitions for key terms, establishes an extensive database on global adoption, highlights challenges faced by Italian companies, presents examples of successful implementations, and offers a comprehensive overview of the reported benefits. By addressing gaps in terminology, data availability, and understanding of the policies, this research sets a foundation for future studies and provides valuable insights for managers and governments alike. Overall, the findings and analysis presented in this thesis contribute to the existing literature, enabling informed decision-making and facilitating the realisation of the potential advantages associated with 4-day week policies.

6.3 Limitations and future research

The following section outlines the limitations of the analysis conducted in this thesis regarding the implementation of a *4-day week*, considering three main areas: confusion around

the *4-day week* concept, overrepresentation of Italian companies, and the statistical limitations of the results reported in the analysed trials.

In the first place, the term *4-day week* is widely used in the literature, but there is significant confusion and ambiguity surrounding its precise definition and scope. While many refer to the *4-day week* as the pure model known as 100-80-100, where employees work four full days instead of the traditional five, others use the term to encompass compressed work arrangements where the traditional working hours are compressed into four days without any reduction in overall working time. Additionally, some initiatives labelled as *4-day week* involve a reduction in salaries proportional to the decrease in working days, essentially transforming them into part-time policies rather than novel flexible work time arrangements. This lack of clarity and inconsistency in terminology complicates the understanding and analysis of the *4-day week* concept, making it challenging to compare and synthesise findings across studies.

Secondly, it is important to acknowledge that this thesis exhibits a certain degree of bias when it comes to the implementation of *4-day week* policies in Italy. This bias is primarily a result of the thesis's objective to delve deeply into Italian companies implementing the policy, as it aligns with our affiliation with Politecnico di Milano and the collaboration with the Smart Working Observatory in this academic institution. Consequently, the analysis places a significant emphasis on Italian initiatives, which inevitably leads to an overrepresentation of the country in comparison to other nations. While this bias is acknowledged, it is essential to interpret the findings in the broader context of the thesis's objectives and geographical constraints.

Finally, many statistical concerns regarding the reliability and scalability of the reported outcomes of the different 4-day week trials should be taken under close consideration. Earlier this year, the European Commission published a paper raising several concerns regarding the validity of the trials, including issues linked to the data collection process and the sample, the causality analysis, and the transparency in the reporting, (Cuello, H., 2023).

In the first place, the conducted trials aim to investigate cause-and-effect relationships between the policies implemented and many outcomes considering employees and companies' outcomes. However, if there are other factors that may influence a correlation between a treatment and an outcome, the overall correlation cannot be interpreted as a causal effect. In fact, the non-experimental evaluation methods used in the 4-day week trials, pre-post comparisons and self-selected participants, are considered as weak to address causality since they usually violate the underlying assumptions.

On the one hand, pre-post comparisons seasonal variations, trends, or external factors can greatly influence the results, even more in short-term pilots as the ones analysed. On the other hand, the self-selected companies participating in the trial can lead to a positive bias and non generalizable results since the population is not representative of other companies less willing to implement the changes. This could be even more evident when analysing employees' perspective on the trials of companies that implemented the policy following a bottom-up approach, with the initiative coming from their own workforce. The self-reported data collection process contributes to this bias, since employees may report more positive impacts to encourage the company to continue with the policy.

The small self selected samples analysed may also threaten the external validity of the analysis, making it difficult to generalise the obtained results to a wider population with less motivated employees, or even industries poorly represented. As seen within the analysis, most of the companies participating in the trials come from technological, professional services, or marketing and advertising firms, linked to knowledge-based roles, which are by definition better suited to adopt the 4-day week policies since the productivity does not depend on the hours worked.

Moreover, most of the evaluated studies are not conducted by academic research entities which undergo rigorous and transparent reporting standards before publication. This contributes to most of the examined reports showing only results that had positive effects, avoiding

information regarding outcomes of interest that did not show the expected results or the portions of the sample that report negative impacts. Reliability issues in the reported outcomes also come from the fact that most pilots do not report basic statistical information on the results, such as the statistical significance (p-value) or confidence intervals. Consequently, some reported results could be caused by random sampling error. On top of this issue, as the size of the effects are not measured accurately and the results are not classified by the type of policy implemented, making no distinction between companies implementing short work-weeks and their different time reductions or compressed work-weeks, it is inferred that all types of policies considered equally effective. This is probably not representative of the real situation, in which possibly companies implementing more flexible initiatives have bigger effects, and other less flexible policies have lower effects that might not be significant, but on the aggregated results, overall improvements are reported.

Last but not least, the European Commission's study addresses the fact that no information is provided regarding the costs of implementing the trials, such as the consulting, training, mentoring, or managerial changes to drive the initiatives. Hence, considering most of the companies report no significant effects on productivity, the inclusion of costs in the equation could lead to negative return on investments (Cuello, H., 2023).

In conclusion, the positive results reported from the analysis of the 4-day week should be considered with caution due to the limitations of this study, including the blurry definition of the 4-day week concept, the overrepresentation of the Italian territory, the absence of cost analysis, and the weak statistical reliability and scalability of the analysed trials. These limitations highlight the importance of further research to clarify the concept, broaden the geographical scope, consider cost implications, and improve the statistical rigour of future studies. By addressing these limitations, a more comprehensive understanding of the 4-day week policy can be achieved, leading to more informed decision-making regarding its implementation.

Bibliography

1. Hubstaff. (2023). *Working Hours: The History of Tracking and Measuring Working Hours*. Retrieved from <https://hubstaff.com/time-tracking/work-hours>
2. Giattino, C. (2020, December 4). *Working Hours*. *Our World in Data*. Retrieved from <https://ourworldindata.org/working-hours>
3. Lee, S. (2023, June 6). *40-hour work week: The history and evolution*. Retrieved from <https://www.cultureamp.com/blog/40-hour-work-week>
4. Costa, D. L. (2000). The Wage and the Length of the Work Day: From the 1890s to 1991. *Journal of Labor Economics*, 18(1), 156–181. <https://doi.org/10.1086/209954>
5. Luxton, E. (2016, March 4). Does working fewer hours make you more productive?. World Economic Forum. Retrieved from: <https://www.weforum.org/agenda/2016/03/does-working-fewer-hours-make-you-more-productive/>
6. De Jong, E. (2020, May 20). Jacinda Ardern flags four-day working week as way to rebuild New Zealand after Covid-19. The Guardian. Retrieved from: <https://www.theguardian.com/world/2020/may/20/jacinda-ardern-flags-four-day-working-week-as-way-to-rebuild-new-zealand-after-covid-19>
7. Lund S., Madgavkar A., Manyika J., Smit S., Ellingrud K., Meaney M., Robinson O., (2021). The future of work after COVID-19. McKinsey & Company. Retrieved from: <https://www.mckinsey.com/featured-insights/future-of-work/the-future-of-work-after-covid-19>
8. Türkes M.C., Vuta D.R.(2022). Telework: Before and after COVID-19. *Encyclopaedia 2022*, 2, 1370–1383. <https://doi.org/10.3390/encyclopedia2030092>
9. Smart Working Observatory of Politecnico di Milano. (2022). Smart Working: il lavoro del futuro al bivio. Retrieved from: <https://www.osservatori.net/it/prodotti/formato/raccolte-tematiche/raccolta-smart-working-lavoro-futuro-al-bivio>
10. World Health Organization. (2019, May 28). Burn-out an “Occupational phenomenon”: International Classification of Diseases. Burn-out an “occupational phenomenon”: International Classification of Diseases. <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>
11. Threlkeld K. (2021, March 11). Employee Burnout Report: COVID-19’s Impact and 3 Strategies to Curb It. Retrieved from: <https://www.indeed.com/lead/preventing-employee-burnout-report>

12. World Health Organization (2022). WHO guidelines on mental health at work. Geneva: World Health Organization; 2022. ISBN 978-92-4-005305-2
13. Future Forum. (2023, February 15). Future Forum Pulse Winter Snapshot - Future Forum. Retrieved from: <https://futureforum.com/research/future-forum-pulse-winter-2022-2023-snapshot/>
14. Adams T. & Nguyen T. (2022). Mind the Workplace 2022 Report: Employer Responsibility to Employer Mental Health. Mental Health America, Alexandria VA.
15. Hetler, A. (2023, March 1). The Great Resignation: Everything you need to know. Retrieved from: WhatIs.com. <https://www.techtarget.com/whatis/feature/The-Great-Resignation-Everything-you-need-to-know>
16. Fuller, J. (2022, March 23). The Great Resignation Didn't Start with the Pandemic. Harvard Business Review. Retrieved from: <https://hbr.org/2022/03/the-great-resignation-didnt-start-with-the-pandemic>
17. Iacurci, G. (2023, February 1). 2022 was the 'real year of the Great Resignation'. CNBC. Retrieved from: <https://www.cnbc.com/2023/02/01/why-2022-was-the-real-year-of-the-great-resignation.html>
18. Tessema, M. , Tesfom, G. , Faircloth, M. , Tesfagiorgis, M., & Teckle, P. (2022) The "Great Resignation": Causes, Consequences, and Creative HR Management Strategies. Journal of Human Resource and Sustainability Studies, 10, 161-178. doi: 10.4236/jhrss.2022.101011
19. Osservatorio HR Innovation Practice (2023). Vita, lavoro, felicità: disegnare una nuova relazione tra organizzazione e persone. Osservatorio HR Innovation Practice Politecnico di Milano
20. Newport, C. (2022, December 29). The Year in Quiet Quitting. The New Yorker. Retrieved from: <https://www.newyorker.com/culture/2022-in-review/the-year-in-quiet-quitting>
21. Klotz A. C. & Bolino M. C. (2022, September 15). When Quiet Quitting Is Worse Than the Real Thing. Harvard Business Review. Retrieved from: <https://hbr.org/2022/09/when-quiet-quitting-is-worse-than-the-real-thing>
22. Harter, B. J. (2023, May 17). Is Quiet Quitting Real? Gallup.com. Retrieved from: <https://www.gallup.com/workplace/398306/quiet-quitting-real.aspx>
23. AllBusiness (2022, December 19). Quiet Quitting Is A Sign Of A Deeper Problem—Here's What It Means. Forbes. Retrieved from: <https://www.forbes.com/sites/allbusiness/2022/12/19/quiet-quitting-is-a-sign-of-a-deeper-problem-heres-what-it-means/?sh=b4182594aabe>
24. Fleming S. (2021, June 2). Survey: 40% of employees are thinking of quitting their jobs. World Economic Forum. Retrieved from: <https://www.weforum.org/agenda/2021/06/remote-workers-burnout-covid-microsoft-survey/>

25. Aratani, L. (2023, January 5). While some say quiet quitting is over, the spirit of it may carry into 2023. The Guardian. Retrieved from:
<https://www.theguardian.com/money/2023/jan/02/quiet-quitting-trend-2023-great-resignation>
26. Jackson, A. (2023, February 2). 80% of workers who quit in the 'great resignation' have regrets, according to a new survey. CNBC. Retrieved from:
<https://www.cnbc.com/2023/02/02/80percent-of-workers-who-quit-in-great-resignation-regret-it-new-survey.html>
27. "Joblist" (2022, July 12). Q2 2022 United States Job Market Report. Retrieved from: Joblist.
<https://www.joblist.com/jobs-reports/q2-2022-united-states-job-market-report>
28. "Paychex" (2023, January 16). Employee Regret After the Great Resignation. Paychex. Retrieved from:
<https://www.paychex.com/articles/human-resources/exploring-the-great-regret>
29. "The Smart Working Observatory" (2023). The Smart Working Observatory: 2023 Research. Osservatori Digital Innovation Della School of Management Del Politecnico Di Milano. Retrieved from:
<https://www.osservatori.net/en/research/active-observatories/smart-working>
30. "Ministero del Lavoro e delle Politiche Sociali" (2017). Smart working. Ministero del Lavoro e delle Politiche Sociali. Retrieved from: <https://www.lavoro.gov.it/strumenti-e-servizi/smart-working/Pagine/default.aspx>
31. "Flexibility.co.uk" (2015). The Smart Working Handbook (2nd ed.). Retrieved from:
<https://flexibility.co.uk/product/the-smart-working-handbook-new-edition/>
32. World Economic Forum. (2022). The Good Work Framework: A new business agenda for the future of work. Retrieved from: https://www3.weforum.org/docs/WEF_The_Good_Work_Framework_2022.pdf
33. Kelliher, C., & Anderson, D. (2008). For better or for worse? An analysis of how flexible working practices influence employees' perceptions of job quality. *International Journal of Human Resource Management*, 19(3), 419–431. <https://doi.org/10.1080/09585190801895502>
34. Hill, E. J., Grzywacz, J. G., Allen, S. F., Blanchard, V. L., Matz-Costa, C., Shulkin, S., & Pitt-Catsoupes, M. (2008). Defining and conceptualizing workplace flexibility. *Community, Work & Family*, 11(2), 149–163. <https://doi.org/10.1080/13668800802024678>
35. "The Chartered Institute of Personnel and Development" (2022, December). Flexible Working Practices. Retrieved from: <https://www.cipd.org/ie/knowledge/factsheets/flexible-working-factsheet/#title2>
36. International Labour Organization. (2016). What are part-time and on-call work? (2016, November 11). Retrieved from:
https://www.ilo.org/global/topics/non-standard-employment/WCMS_534825/lang-en/index.htm

37. Berkery, E., Morley, M., Tiernan, S., & Peretz, H. (2020). From start to finish: Flexi-time as a social exchange and its impact on organisational outcomes. *European Management Journal*, 38(4), 591–601.
<https://doi.org/10.1016/j.emj.2020.02.003>
38. Arevalo, L. M., & De Jong, C. (2015). Unlimited Vacation Policies: Their influence on employees [MA thesis]. Lund University. Retrieved from:
<https://lup.lub.lu.se/luur/download?func=downloadFile&recordId=7369132&fileId=7369936>
39. "4dayweek.io." (2021, September 26). The Ultimate Guide to the 4 Day Work Week (2021). Retrieved from:
<https://4dayweek.io/blog/the-ultimate-guide-to-the-4-day-work-week-2021>
40. Manpower Research and Statistics Department. (2019). Labour Market Report Second Quarter 2019 (ISSN 0219-2527). Ministry of Manpower Republic of Singapore. Retrieved from:
https://stats.mom.gov.sg/iMAS_PdfLibrary/mrsd-Technical-Note-Short-Work-week-and-Temporary-Layoff-LMRQ219.pdf
41. Chung, H. (2022). A Social Policy Case for a Four-Day Week. *Journal of Social Policy*, 51(3), 551–566.
<https://doi.org/10.1017/s0047279422000186>
42. Austin-Egole, I. S., Iheriohanma, E., & Chinedu, N. (2020). Flexible Working Arrangements and Organizational Performance: An Overview. <https://doi.org/10.9790/0837-2505065059>
43. Berkery, E., Morley, M., Tiernan, S., Purtill, H., & Parry, E. (2017). On the Uptake of Flexible Working Arrangements and the Association with Human Resource and Organizational Performance Outcomes. *European Management Review*, 14(2), 165–183. <https://doi.org/10.1111/emre.12103>
44. Janssen, D., & Nachreiner, F. (2004). Health and psychosocial effects of flexible working hours. *Revista De Saude Publica*, 38(suppl), 11–18. <https://doi.org/10.1590/s0034-89102004000700003>
45. Uglanova, E., & Dettmers, J. (2018). Sustained Effects of Flexible Working Time Arrangements on Subjective Well-Being.
<https://www.springerprofessional.de/en/sustained-effects-of-flexible-working-time-arrangements-on-subje/12334530>
46. Rachmaliya, N. S., & Efendy, H. (2017). Analysis of Employee Performance, Organization Culture, Work Satisfaction and Organization Commitment. *Human Resource Research*.
<https://doi.org/10.5296/hrr.v1i1.11740>
47. Gallup, 2020. State of the American Workplace. Retrieved from:
<https://www.gallup.com/workplace/238085/state-american-workplace-report-2017.aspx>
48. Altındağ, E., & Siller, F. (2014). Effects of Flexible Working Method on Employee Performance: An Empirical Study in Turkey. *Business and Economics Journal*, 05(03). <https://doi.org/10.4172/2151-6219.1000104>

49. Shagvaliyeva, S., & Yazdanifard, R. (2014). Impact of Flexible Working Hours on Work-Life Balance. *American Journal of Industrial and Business Management*, 04(01), 20–23. <https://doi.org/10.4236/ajibm.2014.41004>
50. Hill, E. J., Erickson, J. J., Holmes, E. K., & Ferris, M. E. (2010). Workplace flexibility, work hours, and work-life conflict: Finding an extra day or two. *Journal of Family Psychology*, 24(3), 349–358. <https://doi.org/10.1037/a0019282>
51. Rojo, P. (2019, February 6). Work-life balance policies: a profitable move for businesses. Ie University. Retrieved from: https://ie.edu/insights/articles/work-life-balance-policies-profitable-move-for-businesses/?adobe_mc=MCMLD%3D70913570308100722541194026993327194644%7CMCORGID%3DCEE1F70B5936D5B30A495EA3%2540AdobeOrg%7CTS%3D1682934547
52. Byron, K. L. (2005). A meta-analytic review of work–family conflict and its antecedents. *Journal of Vocational Behavior*, 67(2), 169–198. <https://doi.org/10.1016/j.jvb.2004.08.009>
53. Hood, C. (2009, April 14). Mobility Strategy, Carbon Footprint and the Bottom Line. Retrieved from: <https://www.slideshare.net/CorenetHouston/mobility-strategy-final>
54. Oseland, N., & Webber, C. (2012). Flexible Working Benefits Collated Evidence and Case Studies. Retrieved from: <https://www.workplaceunlimited.com/2012%20WPU-OP-01%20Flexible%20Working%20Benefits.pdf>
55. "Glassdoor", 2019. 14 Cool Companies With Unlimited Vacation. Glassdoor Blog. Retrieved from: <https://www.glassdoor.com/blog/cool-companies-with-unlimited-vacation/>
56. Collier, D. M., & Rozen, H. (2020). An Instructional Case: Making the Case for Unlimited Vacation Days at Altech. *Accounting Education*. <https://doi.org/10.1108/s1085-462220200000024012>
57. Chen, I. (2020, March 5). Chipotle tests unlimited paid time off for some employees. *L.A. Business First*. Retrieved from: <https://www.bizjournals.com/losangeles/news/2020/03/05/chipotle-tests-unlimited-paid-time-off-for-some.html>
58. Röcklinger, D. (2020). Unlimited Vacation Policy [MSc thesis]. Johannes Kepler University. Retrieved from: <https://epub.jku.at/download/pdf/4917072>
59. Google Searches for "Unlimited vacations". Google Trends. Retrieved April, 2023, from <https://trends.google.com/trends/explore?date=2004-01-01%202023-01-04&q=unlimited%20vacations&hl=es>
60. Hedges, J. N. (1971). A look at the 4-day workweek. *Monthly Labor Review*, 94(10), 33–37. Retrieved from: <http://www.jstor.org/stable/41838141>

61. Paul, K. (2019, November 8). Microsoft Japan tested a four-day work week and productivity jumped by 40%. The Guardian. Retrieved from:
<https://www.theguardian.com/technology/2019/nov/04/microsoft-japan-four-day-work-week-productivity>
62. Bateman, K. (2022). New study shows 4-day working week to be a success. World Economic Forum. Retrieved from: <https://www.weforum.org/agenda/2022/01/four-day-week-work-life-balance-trial/>
63. Autonomy. (2023). The results are in: The UK's four-day week pilot. Retrieved from:
<https://autonomy.work/wp-content/uploads/2023/02/The-results-are-in-The-UKs-four-day-week-pilot.pdf>
64. Google Searches for "4 day week" . Google Trends. Retrieved April 1, 2023, from
<https://trends.google.com/trends/explore?date=all&q=%224%20day%20week%22&hl=es>
65. Cambridge Dictionary. (n.d.). Flexitime. In dictionary.cambridge.org dictionary. Retrieved May 6, 2023, from:
<https://dictionary.cambridge.org/dictionary/english/flexitime>
66. 4 Day Week Global. (n.d.). 100-80-100. 4 Day Week Global. Retrieved April 4, 2023 from:
<https://www.4dayweek.com/100-80-100>
67. Cambridge Dictionary. (n.d.). Work-life balance. In dictionary.cambridge.org dictionary. Retrieved May 6, 2023, from: <https://dictionary.cambridge.org/dictionary/english/work-life-balance>
68. Boccoli, G., Sestino, A., Gastaldi, L., & Corso, M. (2022). The impact of autonomy and temporal flexibility on individuals' psychological wellbeing in remote settings. Sinergie Italian Journal of Management, 40(2), 327–349. <https://doi.org/10.7433/s118.2022.15>
69. Henley Business School. (2019). Four Better or Four Worse? Henley Business School. Retrieved from:
<https://assets.henley.ac.uk/defaultUploads/Four-Better-Four-Worse-Henley-Business-School.pdf>
70. "Businesswire" (2018, September 4). The Case for a 4-day Workweek? Nearly Half of Employees Worldwide Could Do Their Jobs in 5 Hours or Less Each Day. Businesswire. Retrieved from:
<https://www.businesswire.com/news/home/20180904005448/en/The-Case-for-a-4-day-Workweek-Nearly-Half-of-Employees-Worldwide-Could-Do-Their-Jobs-in-5-Hours-or-Less-Each-Day>
71. Autonomy. (2021). Going Public: Iceland's Journey to a shorter working week. Autonomy. Retrieved from:
https://autonomy.work/wp-content/uploads/2021/06/ICELAND_4DW.pdf
72. Ibbetson, C. (2019, September 23). Do employers support a four day working week? YouGov. Retrieved from:
<https://yougov.co.uk/topics/economy/articles-reports/2019/09/23/business-backs-four-day-working-week>
73. Nicola, S. (2021, March 2). Tell Your Boss the Four-Day Week Is Coming Soon. Bloomberg.com. Retrieved from:
<https://www.bloomberg.com/news/articles/2021-03-02/four-day-work-week-gains-popularity-around-the-world#xj4y7vzkg>

74. Torres, M. (2021, August 25). 4 Reasons We Should Have 4-Day Workweeks, According To Research. HuffPost UK. Retrieved from:
https://www.huffingtonpost.co.uk/entry/four-day-workweek-research_l_6075b007e4b08f435f253a68
75. Agovino, T. (2020, June 20). The Phenomenon of the Four-Day Workweek. SHRM.
<https://www.shrm.org/hr-today/news/all-things-work/pages/four-day-workweek.aspx>
76. Smith, M. (2023, April 14). 4 countries that are embracing—or experimenting with—the 4-day workweek. CNBC. Retrieved from:
<https://www.cnbc.com/2023/04/14/countries-that-are-embracing-or-experimenting-with-a-4-day-workweek.html>
77. Ellis, M. (2018, November 6). The Four-Day Work Week: Why It Works. zapier.com. Retrieved from:
<https://zapier.com/blog/four-day-work-week/>
78. "Federal Public Service Employment, Labour and Social Dialogue". (n.d.). Working time and rest periods. Federal Public Service Employment, Labour and Social Dialogue. Retrieved from:
<https://employment.belgium.be/en/themes/international/posting/working-conditions-be-respected-case-posting-belgium/working-time-and>
79. Chini, M. (2022, June 7). Risk of burnout increased sharply during Covid-19 pandemic. The Brussels Times. Retrieved from:
<https://www.brusselstimes.com/234849/risk-of-burnout-increased-sharply-during-covid-19-pandemic>
80. Institut national d'assurance maladie-invalidité. (n.d.). Incapacité de travail de longue durée : Combien de burnouts et de dépressions de longue durée ? Quel coût pour l'assurance indemnités ? Institut national d'assurance maladie-invalidité. Retrieved from:
https://www.inami.fgov.be/fr/statistiques/indemnitees/Pages/incapacite-travail-longue-duree-combien-burnouts-depressions.aspx#Une_augmentation_de_46%C2%A0%_de_burnouts_et_de_d%C3%A9pressions_de_longue_dur%C3%A9e_en_5%C2%A0ans
81. "Loyns & Loeff". (2022, August 11). Four-day work week in Belgium. Loyns & Loeff. Retrieved from:
<https://www.loynsloeff.com/insights/news-events/news/four-day-work-week-in-belgium/>
82. Hurst, L. (2022, November 21). Workers in Belgium can now switch to a four-day week - but they won't be working fewer hours. Euronews. Retrieved from:
<https://www.euronews.com/next/2022/11/21/workers-in-belgium-can-now-switch-to-a-four-day-week-but-they-wont-be-working-fewer-hours>
83. "Statistics Iceland". (2022, April 7). Activity rate increased by 1.4 percentage points in 2021. Statistics Iceland. Retrieved from: <https://statice.is/publications/news-archive/labour-market/labour-market-2021/>

84. Eurostat. (2023, April 27). Hours worked per week of full-time employment. Eurostat. Retrieved from:
<https://ec.europa.eu/eurostat/databrowser/view/tps00071/default/table?lang=en>
85. Icelandic Confederation of Labour. (n.d.). Icelandic labour law. Icelandic Confederation of Labour. Retrieved from: <https://www.asi.is/vinnurettarvefur/vinnurettur/icelandic-labour-law/>
86. Norbury, P., & Bownas, G. (2019). Business In Japan a Guide To Japanese Business Practice And Procedure (1st ed.). ISBN 9780429048258. Available at:
<https://www.routledge.com/Business-In-Japan-a-Guide-To-Japanese-Business-Practice-And-Procedure--/Norbury/p/book/9780367168261>
87. Jung, L. (n.d.). National Labour Law Profile: Japan. International Labour Organization. Retrieved from:
https://www.ilo.org/ifpdial/information-resources/national-labour-law-profiles/WCMS_158904/lang-en/index.htm
88. Edlin, G., & Golanty, E. (2012). Health & Wellness (11th ed.) Biblio. ISBN 13: 9781449687106
89. Saiidi, U. (2018, June 1). Japan has some of the longest working hours in the world. It's trying to change. CNBC. Retrieved from:
<https://www.cnbc.com/2018/06/01/japan-has-some-of-the-longest-working-hours-in-the-world-its-trying-to-change.html>
90. International Labour Organization. (2013, April 23). Case Study: Karoshi: Death from overwork. International Labour Organization. Retrieved from:
https://www.ilo.org/global/topics/safety-and-health-at-work/resources-library/publications/WCMS_211571/lang-en/index.htm
91. Yasuzawa, H. (2021, February 22). Labor Law Japan: Revisiting the Compulsory 5-days Paid Leave rule - Boyd & Moore Executive Search. Boyd & Moore Executive Search. Retrieved from:
<https://www.bmes.com/labor-law-japan-revisiting-the-compulsory-5-days-paid-holiday-rule/>
92. Westfall, S. (2021, June 24). Japan proposes four-day workweek as idea gains purchase amid pandemic. Washington Post. Retrieved from:
<https://www.washingtonpost.com/world/2021/06/24/japan-four-day-work-week/>
93. Smith, M. (2023, April 14). 4 countries that are embracing—or experimenting with—the 4-day workweek. CNBC. Retrieved from:
<https://www.cnbc.com/2023/04/14/countries-that-are-embracing-or-experimenting-with-a-4-day-workweek.html>
94. Seputyte, M. (2022, April 21). Lithuania Offers Four-Day Week for Parents of Young Children. Bloomberg.com. Retrieved from:

- <https://www.bloomberg.com/news/articles/2022-04-21/lithuania-offers-four-day-week-for-parents-of-young-children?sref=P6xXtEaF&leadSource=uverify%20wall#xi4y7vzkg>
95. O'Loughlin, H. (2022, October 24). Does Lithuania Have A 4-Day Work Week? (Status: Partial). Buildremote. Retrieved from: <https://buildremote.co/four-day-week/lithuania/>
96. Domenech, R. (2019). The Spanish Productivity Puzzle. BBVA Research. Retrieved from: https://www.bbvaresearch.com/wp-content/uploads/2019/04/RafaelDomenech_VP_ENG-3.pdf
97. Kassam, A. (2021, March 15). Spain to launch trial of four-day working week. The Guardian. Retrieved from: <https://www.theguardian.com/world/2021/mar/15/spain-to-launch-trial-of-four-day-working-week>
98. Lizana, J. A. (2022, December 12). El Gobierno ofrecerá 150.000 euros a las pymes para reducir la jornada laboral a 4 días: durante mínimo. Genbeta. Retrieved from: <https://www.genbeta.com/actualidad/gobierno-ofrecera-150-000-euros-a-pymes-para-reducir-jornada-laboral-a-4-dias-durante-minimo-2-anos-solo-70-empresas>
99. "La Moncloa". (2023, May 17). 41 empresas optan a probar la semana laboral de cuatro días. LaMoncloa. Retrieved from: <https://www.lamoncloa.gob.es/serviciosdeprensa/notasprensa/industria/Paginas/2023/170323-empresas-programa-piloto-jornada-4-dias.aspx>
100. "elEconomista". (2023, April 9). Valencia aplica la jornada laboral de 4 días desde el lunes a modo de prueba. elEconomista.es. <https://www.economista.es/empleo/noticias/12219434/04/23/valencia-aplica-la-jornada-laboral-de-4-dias-desde-el-lunes-a-modo-de-prueba.html>
101. Savage, B. M. (2017, February 8). What really happened when Swedes tried six-hour days? BBC News. Retrieved from: <https://www.bbc.com/news/business-38843341>
102. "The Swiss Times". (2023, March 16). Zurich will trial a 35-hour workweek. The Swiss Times. Retrieved from: <https://theswisstimes.ch/zurich-will-trial-a-35-hour-workweek/>
103. Glatthard, J. (2020, July 7). How hardworking are the Swiss? SWI swissinfo.ch. Retrieved from: <https://www.swissinfo.ch/eng/business/how-hardworking-really-are-the-swiss-/45879644>
104. Joly, J. (2023, February 23). Four-day week: Which countries have embraced it and how's it going so far? Euronews. Retrieved from: <https://www.euronews.com/next/2023/02/23/the-four-day-week-which-countries-have-embraced-it-and-how-s-it-going-so-far>
105. "4 day week". (n.d.). United Arab Emirates 4 Day Work Week (2023). 4dayweek.io. Retrieved from: <https://4dayweek.io/country/united-arab-emirates>

106. Agence France-Presse (2021, December 8). UAE cuts working week to four-and-a-half days and moves weekend. The Guardian.
<https://www.theguardian.com/world/2021/dec/07/uae-cuts-working-week-and-shifts-weekend-back-a-day>
107. Schor, J. B., Wen F., Orla K., Guolin G., Bezdenezhnykh T., & Bridson-Hubbard N. (2022). The Four Day Week: Assessing Global Trials of Reduced Work Time with No Reduction in Pay," Four Day Week Global, Auckland, NZ. Retrieved from: <https://www.4dayweek.com/us-ireland-results>
108. Lockhart, L. (2023). New legislation to pilot four-day week in Boston, Massachusetts. 4 Day Week Global. Retrieved from: <https://www.4dayweek.com/news-posts/boston-legislation>
109. "Takano". (2023, March 1). Congressman Takano Reintroduces 32 Hour Workweek Act. Takano. Retrieved from:
<https://takano.house.gov/newsroom/press-releases/congressman-takano-reintroduces-32-hour-workweek-act>
110. Abril, D. (2023, May 24). Workers want a four-day week. Why hasn't it happened? Washington Post. Retrieved from: <https://www.washingtonpost.com/technology/2023/05/24/4-day-work-week-united-states/>
111. Randstad. (2022). A new era in the #howwework revolution. Randstad. Available at:
https://www.randstad.com/s3fs-media/rscom/public/2022-04/Randstad_Workmonitor_2022.pdf
112. Gazzetta Ufficiale. (2017, June 13). Retrieved from:
<https://www.gazzettaufficiale.it/eli/id/2017/06/13/17G00096/sg>
113. Bronstein, A. (n.d.). National Labour Law Profile: Republic of Argentina. International Labour Organization. Retrieved from:
https://www.ilo.org/ifpdial/information-resources/national-labour-law-profiles/WCMS_158890/lang-en/index.htm
114. Christian, A. (2023, March 19). Four-day workweek trial: The firms where it didn't work. BBC Worklife. Retrieved from:
<https://www.bbc.com/worklife/article/20230319-four-day-workweek-trial-the-firms-where-it-didnt-work>
115. 4-Day Week Global. (2023). Experimenting Australasia with a 4 day week in Australasia. 4-Day Week Global. Retrieved from: <https://www.4dayweek.com/anz-2023-pilot-results>
116. Lockhart, C. (2023, February 1). 4-day week experiment set to go in South Africa with 29 companies signed up for March pilot kick off. 4 Day Week Global. Retrieved from:
<https://www.4dayweek.com/news-posts/4-day-week-south-africa-trial>
117. "Perpetual Guardian". (2023, January 6). About Us | Perpetual Guardian. Retrieved from:
<https://www.perpetualguardian.co.nz/about-us/>

118. Perpetual Guardian. (2019). Guidelines for an outcome-based trial – raising productivity and engagement. Retrieved from <https://www.4dayweek.com/download-white-paper>
119. Haar, J. (2018, June). Overview of the Perpetual Guardian 4-day (paid 5) Work Trial. 4 Day Week Global. Retrieved from <https://www.4dayweek.com/research-prof-jarrood-haar-quantitative-research>
120. "Collective Campus". (n.d.). Retrieved from: <https://www.collectivecampus.io/about>
121. Glaveski, S. (2018). Our 9 to 3 Workday Experiment. Retrieved from: <https://www.collectivecampus.io/blog/our-9-to-3-workday-experiment>
122. "Collective Campus". 6 Hour Workday Experiment. (2018) . Retrieved from <https://collectivecampus.typeform.com/report/x1OgzS/JC2qmbbXsh4Gv7X0>
123. Microsoft. (2022). Achieving More. Impact Summary. Retrieved from: <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE5b9S0>
124. Microsoft Japan. (2019a, April 22). 働き方改革の加速に向けて、「ワークライフチョイス」を推進する自社実践プロジェクトを本年夏に実施. Retrieved from <https://news.microsoft.com/ja-ip/2019/04/22/20190422-ms-worklifechoice2019/>
125. Microsoft Japan. (2019b, April 22). 働き方改革の加速に向けて、「ワークライフチョイス」を推進する自社実践プロジェクトを本年夏に実施. Retrieved from <https://news.microsoft.com/ja->
126. "Buffer". (n.d.). Buffer: All-you-need Social Media Toolkit for Small Businesses. Retrieved from: <https://buffer.com/about>
127. Gascoigne, J. (2020). We're Trying a 4-Day Workweek for the Month of May. Buffer Resources. Retrieved from: <https://buffer.com/resources/4-day-workweek/>
128. Seiter, C. (2019). We Tried 'Half-Day Fridays.' Here's How It Went. Buffer Resources. Retrieved from: <https://buffer.com/resources/half-day-fridays/#first-what-s-a-summer-friday->
129. Seiter, C. (2020). Buffer Is Moving to a 4-Day Workweek for the Rest of 2020. Buffer Resources. Retrieved from: <https://buffer.com/resources/4-day-workweek-2020/>
130. Miller, N. (2021). 4-Day Work Weeks: Results From 2020 and Our Plan for 2021. Buffer Resources. Retrieved from: <https://buffer.com/resources/4-day-workweek-2021/>
131. Miller, N. (2022). Over a Year: Here's How The Four Day Workweek is Going at Buffer. Buffer Resources. Retrieved from: <https://buffer.com/resources/four-day-workweek-at-buffer/>
132. Oladipo, T. (2023). Data From Three Years of Working a Four Day Work Week. Buffer Resources. Retrieved from: <https://buffer.com/resources/four-day-work-week-update/>
133. Nyström, Å. (2022). How We Serve Our Customers While Working a 4-Day Work Week. Buffer Resources. Retrieved from: <https://buffer.com/resources/customer-advocacy-4-day-workweek/>

134. Lockhart, C. (2022). Unilever Australia and New Zealand expands four day week trial – 4 Day Week Global. 4 Day Week Global. Retrieved from:
<https://www.4dayweek.com/news-posts/unilever-australia-amp-new-zealand-expands-four-day-work-week-trial-following-encouraging-results>
135. "Unilever". (2022, February 13). Four-day work week trial to start in Australia. Unilever. Retrieved from:
<https://www.unilever.com/news/news-search/2022/fourday-work-week-trial-to-start-in-australia/>
136. "Uplevel". (n.d.). Home - Uplevel. Retrieved from: <https://uplevelteam.com/>
137. Uplevel. (2022). Uplevel 4-day Workweek Playbook. Retrieved from:
https://uplevelteam.com/wp-content/uploads/2022/05/Uplevel_Playbook-4-Day-WW-Playbook_FINAL.pdf
138. 4 Day Week Global. (n.d.). 4 Day Week Global. Retrieved from: <https://www.4dayweek.com/>
139. O'Loughlin, H. (2023). 307 Companies With 4-Day Work Weeks (June 2023). Buildremote. Retrieved from:
<https://buildremote.co/four-day-week/4-day-work-week-companies/>
140. "300+ Companies with a 4 Day Work Week" - 4dayweek.io (2023). (n.d.). Retrieved from:
<https://4dayweek.io/companies>
141. 4 Day Week Employers | 4 Day Week. (n.d.). 4 Day Week. Retrieved from:
<https://www.4dayweek.co.uk/employers>
142. Macnamara, J. (n.d.). Why we're limiting our online hours. Blink. Retrieved from:
<https://www.blinkseo.co.uk/blog/why-were-limiting-our-online-hours/>
143. Ruzgar, S. (2023, February 27). Awin Permanently Implements Flexi-Week Amid Trial Success. Awin. Retrieved from:
<https://www.awin.com/gb/news-and-events/awin-news/awin-flexible-work-week#:~:text=As%20part%20of%20the%20Awin%27s,days%20and%20two%20half%20days.>
144. "Intesa Sanpaolo Group". About Us - Intesa Sanpaolo. (2023). *Intesa Sanpaolo Group*. Retrieved from:
<https://group.intesasanpaolo.com/en/about-us>
145. "Intesa Sanpaolo Group". Sustainability | Intesa Sanpaolo. (n.d.). *Intesa Sanpaolo Group*. Retrieved from:
<https://group.intesasanpaolo.com/en/sustainability>
146. Baruffati, A. (2023). 4-Day Work Week Statistics 2023: Trends and The Future Perspectives. Retrieved from
<https://blog.gitnux.com/4-day-work-week-statistics/>
147. Cuello, H. (2023, April). Assessing the Validity of Four-day Week Pilots. EU Science Hub. Retrieved from:
https://joint-research-centre.ec.europa.eu/publications/assessing-validity-four-day-week-pilots_en#details

Appendix

Interview scheme used to conduct interviews in English

THE COMPANY	
I would start by asking you to describe your organisation	Points to touch: <ul style="list-style-type: none"> • Main activities • Industry Sector • Number of employees and operating countries • Locations: how many locations, where they are located • Interviewee's role in the company
THE MOTIVATION	
What are the needs that prompted your organisation to introduce Smart Working? How does Smart Working fit in with the organisation's strategic priorities?	Some possible needs to be investigated: <ul style="list-style-type: none"> • Talent attraction / retention leverage • Enhancing the territory • Improving organisational performance and efficiency • Improving well-being and work/life balance
THE SOLUTION	
When was the project launched? Does the project have a name? At the moment, how widespread is the Project in the organisation? Were you inspired by other projects /experiences from other companies?	Investigate: <ul style="list-style-type: none"> • Number of employees carrying out Smart Working (check whether all workers with compatible tasks are included or not) • Type of workers involved (white collar, blue collar, call centre, customer service, front office, other) • How blue collar/customer interaction functions are involved (which specific policies and which supporting technologies) • Excluded professional profiles: why are they not involved and what other initiatives, if any, are planned for them?
PROJECT DESCRIPTION	
What policies have you introduced? How did you regulate the initiative? Have you foreseen bonuses/reimbursements for those who work remotely?	Policy contents <ul style="list-style-type: none"> • Maximum/minimum days per month for remote work • Introduction of time flexibility initiatives (e.g. on-call time slots, ...) • Introduction of short week/shortened working hours/unlimited holidays initiatives • Flexibility of location: which spaces are allowed and how, whether there is the possibility of working remotely for long periods and/or doing so from abroad. • If the company is international: are the policies the same in other countries? Regulation <ul style="list-style-type: none"> • Stipulation of individual/union agreements • Rules on the right to disconnect • Introducing Smart Working etiquette and what it involves • Presence of bonuses/welfare/benefit services (e.g. meal vouchers, employee support initiatives) available to employees
In terms of technologies, which ones have you introduced to support Smart Working?	Investigate: <ul style="list-style-type: none"> • Technological equipment provided to people (hardware, software) • Adaptation of corporate infrastructure / digitisation of processes • Adoption of innovative technologies and scope of use (AI, Virtual Reality, augmented reality, metaverse, robotics) • Introduction of technologies for monitoring/enhancing well-being and engagement • Space-related technologies: apps for booking stations, AI-based sensors, videoconferencing • Use of analytics

<p>In terms of workspaces, have you concluded/initiated/planned their redesign? Why?</p> <p>Have you conducted any actions to promote off-site work and enhance the city/territory?</p>	<p>Investigate:</p> <ul style="list-style-type: none"> Needs underlying redesign Adoption of desk sharing logics Types of spaces present <p>Investigate:</p> <ul style="list-style-type: none"> Conventions or reimbursements for employee work in coworking spaces Creation of coworking spaces within the organisation that are also open to outsiders Creation of hubs on the territory from which employees can work as an alternative to headquarters City/territory integration initiatives
<p>Have you set up training and change management courses to accompany the introduction of Smart Working?</p> <p>How was the initiative communicated within the organisation?</p>	<p>Investigate:</p> <ul style="list-style-type: none"> Topics addressed by the training and to whom it is addressed (distinguishing between hard and soft training) Initiatives envisaged in the change management plan Timing of change management paths <p>Investigate:</p> <ul style="list-style-type: none"> Internal events to communicate/inform about the initiative Internal project communications
<p>What other initiatives related to the Smart Working project are there? (Sustainability, DE&I, well-being and engagement...)</p>	<ul style="list-style-type: none"> Description of sustainability-related initiatives (e.g. mobility projects, internal awareness programmes...) Description of Diversity, Equity & Inclusion initiatives (e.g. support for parenthood, support for caregivers, inclusion of people with disabilities through the adoption of particular working models, ...) Description of initiatives related to wellbeing and/or engagement (e.g. introduction of pathways for promoting wellbeing and increasing engagement, ...)
<p>BENEFITS AND IMPACT OF THE INITIATIVE</p>	
<p>How is the Smart Working initiative monitored?</p> <p>Have specific KPIs been identified?</p> <p>[For time flexibility pilot projects] What are the expected results to make the experiment a permanent initiative?</p>	<p>Investigate which KPIs were identified, how they were measured and any results achieved/expected with regard to:</p> <ul style="list-style-type: none"> Individual Vitality (e.g. health, depression, burnout, life satisfaction) Home and family vitality (work-life balance, marital satisfaction and stability, parenting and child behaviour, fertility, and time spent in childcare and housework, social life) Workplace vitality (employees' productivity, organisational commitment, retention, morale, and satisfaction and are also associated with lower absenteeism and turnover) Community vitality (environment e.g CO2 emissions saved, energy savings)
<p>What critical issues were found?</p> <p>What do you think is the most innovative aspect of your project and why should it succeed?</p>	
<p>FUTURE OF FLEXIBLE WORKING</p>	
<p>What is your vision for the future of the world of work in terms of flexibility?</p>	<ul style="list-style-type: none"> Do you think that in 10 years all companies should implement initiatives like these and the 4-day-week/ hs of reduced work should be the new norm? Do you have other projects in mind that you would like to introduce with regard to time flexibility but do not yet have the structure to do so/ are there legal barriers? What are the barriers and plans?