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THE FUTURE OF WORK IS HYBRID

Could covid be the catalyst for organizations to implement a hybrid
workplace model?

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Master of Science Thesis

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Abstract

The pandemic has disrupted nearly every aspect of our lives, including tasks as fundamental as going to work. The change has brought with it both opportunities and challenges. The use of digital services to hold meetings, webinars and conferences has increased at an avalanche-like pace. Before the pandemic took hold, there was a more traditional view of work - with the general perception that work tasks should be performed in the office. As a stark contrast to this more traditional view of work, nearly 75 percent of Swedish workplaces was forced to switch to working remotely in a short time and many believe that this will lead to permanent changes in how Swedish offices are designed. There are numerous indications that most people want to continue working in offices in the future as well. On the other hand, the working life of the future is characterized by an increased demand for flexible solutions. Research exhibited that most organizational and work variables were considerably related with the outcome measures productivity and work satisfaction, while individual and household variables were significantly less correlated. For organizations, this is vastly beneficial, since organizational and work-related characteristic variables are far easier influenced by procedures and HR policies rather than individual work style and household factors.

The work-from-home trial period induced by the pandemic has evidently unveiled the vast number of organizations who have the capabilities to implement remote work on a permanent basis and that employees highly regard the opportunity to do so. Conversely, it correspondingly exhibited how imperative the office is for colleague interaction as well as collaboration and how immensely this have been longed for the past year. This study exhibits that the East Link Project in Stockholm, Sweden would save 182 000 SEK annually per employee working remotely 2 days per week due to reduced real estate, absenteeism, turnover, emissions, continuity of operations, and increased productivity. Further, it exhibited that the average project member would save 7 260 SEK annually due to fewer expenses, 128 hours due to reduced commuting and would sleep 59 hours more per year.

Acknowledgement

This thesis has been conducted at the Royal Institute of Technology in Stockholm and constitutes the final element for the MSc Programme in Real Estate and Construction Management.

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Stockholm, June 2021

Dahlia Baker

Examensarbete

Titel:	FRAMTIDEN FÖR ARBETE ÄR HYBRID - Kan Covid vara katalysatorn för organisationer att implementera en hybrid arbetsplatsmodell?
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Sammanfattning

Pandemin har haft verkan på nästintill samtliga aspekter av våra liv, inklusive uppgifter så fundamentala som att gå till jobbet. Omställningen har medfört både möjligheter och utmaningar. Tillämpningen av digitala tjänster för att hålla möten, webinarier och konferenser har ökat i en lavinliknande takt. Innan pandemin tog fäste förekom det en mer traditionell syn på arbete - med den allmänna uppfattningen att arbetsuppgifter bör utföras på kontoret. Som en skarp kontrast till denna mer traditionella syn på arbete tvingades nästan 75 procent av de svenska arbetsplatserna att på kort tid gå över till att arbeta på distans och många tror att detta kommer att leda till permanenta förändringar i hur svenska kontor är utformade. Mycket tyder på att de flesta också vill fortsätta arbeta på kontor i framtiden. Samtidigt som framtidens arbetsliv präglas av en ökad efterfrågan på flexibla lösningar. Tidigare studier visade att de flesta organisations- och arbetsvariabler var betydligt relaterade till produktivitet och arbetsnöjdhet, medan individuella och hushållsvariabler var betydligt mindre korrelerade. För organisationer är detta mycket fördelaktigt, eftersom organisatoriska och arbetsrelaterade karakteristiska variabler påverkas mycket lättare av procedurer och HR-policyer snarare än individuell arbetsstil och hushållsfaktorer.

Försöksperioden av hemarbete som förorsakats av pandemin har tydligt uppdagat det stora antalet organisationer som har förmågan att implementera distansarbete på permanent basis och att medarbetare i hög grad uppskattar möjligheten att göra det. Samtidigt exponerade det på motsvarande sätt hur essentiellt kontoret är för såväl kollegors interaktion som för samarbete. Denna studie visar att projekt Ostlänken i Stockholm, Sverige skulle spara 182 000 kronor per år och per anställd som arbetar på distans två dagar per vecka till följd av minskad frånvaro, omsättning, utsläpp, kontorsyta, kontinuitet i verksamheten och ökad produktivitet. Slutligen visade studien att den genomsnittliga projektmedlemmen skulle spara 7 260 kronor och 128 timmar årligen till följd av minskade kostnader och minskad pendling samt skulle sova 59 timmar mer per år.

Förord

Den här uppsatsen har skrivits på Kungliga Tekniska Högskolan i Stockholm och utgör det avslutande momentet för civilingenjörsexamen i Samhällsbyggnad vid Institutionen för Fastigheter och Byggande.

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1. Introduction

1.1. Background

The Covid-19 pandemic quickly altered the traditional office work as we have got accustomed to for the past decade and once crowded office buildings were diminished to rows of vacant desks. After that primary swirl, many started questioning if the office life as we know is the optimal arrangement or if organizations should consider implementing a new way of work where employees have the option to both work at the office as well as working remotely. Preceding the pandemic, the established percipience had been that offices were paramount to winning the war for talent, culture and productivity. Organizations competed intensely for superior real estate in urban centres around the world, and many focused on solutions that were seen to stimulate collaboration, such as open-office designs, co-working, densification and hoteling. Furthermore, there was evidence of substantial reluctancy from managers to allow employees to work remotely. Managers indicated worries as regards to employees' productivity and performance, technology and conformity with employment regulation. A multitude of the technical obstacles were demolished by the pandemic, thus leaving aversion based on managerial viewpoint and institutional customs (Aguilera et al. 2016; S. Williamson et al. 2020). Postpandemic, organizations will instead be challenged to discover novel ways of attracting, retaining and managing talent from a distance where flexibility, culture and collaboration will be top of mind. With the right solutions to implement the change, companies could save in on expensive rent costs, while increasing productivity as well as employee work satisfaction.

With the greatest remote work experiment underway, we are already seeing how remote team structures are being tested and obliging organizations to become more agile. The days of physically attending an office every day of the workweek are not probable to recommence once the pandemic has ended. Knowledge workers have become familiar to working remotely, and splitting time between home and office is predicted to become the new normal. Employees who want and can divide their time working remotely and at the office save three of their most valuable commodities, i.e., money, time and their health. The key drawbacks of remote work are the amalgamation of remote work with the organizational structure and strategy, as well as the remote workers motivation and control (Pérez et al. 2002). Felstead & Henseke (2017) further reports that remote work may cause difficulty for employees to sequester the world of work from other features of life when both worlds collide and imbricate.

This study will be conducted as a collaboration with the staff situated in Stockholm working with the East Link Project at the Swedish Transport Administration. The East Link Project is the first of three new main railway lines and the first part of the future high-speed railway from Stockholm-Malmö and Stockholm-Gothenburg. The East Link Project, which now resides at the regional office of the Swedish Transport Administration in Solna, were planned to move into their own project office on Kungsholmen in June 2021. However, because of the current pandemic, the move was paused as all employees has been working from home indefinitely since March of 2020. As the first part of the high-speed rail in Sweden, which will offer a

sustainable choice of transportation and be a strong competitor to the aviation industry, the East Link Project has a substantial focus on environmental sustainability. Thus, it is an impeccable project to pioneer in evaluating a new workplace model with focus on all aspects of sustainability. The project values environmental sustainability vastly and have high expectations for their new office to represent the sustainable choice of transportation they will offer.

Previous research opens for the opportunity to, combined with the insight of the pandemic, investigate the benefits and challenges of implementing a hybrid way of working, dividing the employees work time between the office and remote work.

1.2. Purpose and research questions

The aim of this study is to explore if a hybrid workplace model has the potential to disrupt a traditional office-centric workplace with focus on the aspects of economic, social and environmental sustainability. To do so, 2 sub-questions are to be answered:

1. What are the social, economic and environmental benefits and challenges of remote work?
2. Is offering employees to work remotely as well at the office a socially, environmentally and economically advantage for an organization in comparison to the prior traditional office-centric type of work?

1.3. Delimitation

To make the study more precise and to uphold its reliability, limitations have been set up to frame the researched questions. Primarily, the cost benefit analysis was calculated with regard to the East Link project with 150 employees situated in Stockholm, Sweden where real estate is more costly and more similar to international cities rather than other Swedish cities. As the study aims to explore a hybrid workplace model from both an employer and an employee perspective, both of these perspectives have been explored. However, in order to delineate the study, the perspective of property owners has not been studied. Moreover, only the combination of office work and Work-From-Home (WFH) have been studied and not the combination of office work and the regime Work-From-Anywhere (WFA). To delimit the study furthermore, the specifics of how to carry out a permanent hybrid regime as well as other future work trends postpandemic is not included.

1.4. Disposition

Chapter 1 – Introduction

The initial section includes background, purpose, research questions and delimitation.

Chapter 2 – Literature review

Presents previous research within the area that outlines the useful and relevant work to this study including a description of the history of remote work as well as the employer and

employee perspective on the future of remote work. Additionally, benefits and challenges of both remote work and a hybrid workplace model are presented.

Chapter 3 – Methodology

A description of the chosen methods which includes surveys and a cost benefit analysis, as well as a description of how the methods were performed in the research.

Chapter 4 – Results

A presentation of the findings that were conducted through the two surveys and a cost benefit analysis. The surveys include an extensive conducted at the Swedish Transport Administration regarding remote work during the pandemic and a complementary conducted at the East Link Project.

Chapter 5 – Analysis

The section where the results are analysed and discussed in relation to literature review and theory.

Chapter 6 – Conclusion

The last section contains conclusions, answers to the research questions, recommendations and suggestions for further research.

2. Literature review

During the pandemic, it has been estimated that about 81 percent of the global workforce has been affected by workplace alterations (Savic 2020). An abundant deal of excitement is being generated that the pandemic is fundamentally altering how we live and work, with prophecies that working from home will become 'the new normal'. Researchers have detailed that to alleviate resistance to change, organisations must plan for the change, encourage employee partaking and generate a climate of trust (Bailey & Raelin 2015). The swiftness of the pandemic destined that few of these aspects to oppose resistance were in place, augmenting the crisis for both employees and managers. Once the instant crisis has lapsed, aspects adding to resistance may recur, based on previous behaviour and norms (Williamson et al. 2020). Lewis & Campbell (2007) established that flexible working arrangements have been implemented progressively in the public sector and propose a 'drastic' approach to preserve flexible working arrangements.

2.1. History of remote work

Remote work (also called 'working from home', 'telework', 'teleworking' or 'telecommuting') is defined as "...a flexible work arrangement whereby workers work in locations, remote from their central offices or production facilities, with no personal contact with co-workers, but the ability to communicate with co-workers using ICT" (Di Martino & Wirth 1990).

An extensive alteration from traditional, office-centric work to remote work possibly commenced with the implementation of WFH policies in the 1970s, as rising petrol prices initiated by the 1973 OPEC oil embargo resulted in increased commuting costs. Those policies permitted employees to eschew physical offices in favour of their homes, coworking spaces, or other public locations such as libraries and coffee shops, for some days, on a regular part-time basis, or full-time, with the expectancy that they would occasionally come into the office. Employees were frequently moreover given control over their own schedules, permitting them to make time for errands, lunchtime exercise or school pickups without being considered shirking. They tended to take fewer sick days as well as saved time by commuting less (Choudhury 2020). Thanks to the introduction of the internet, personal computers, broadband connectivity, email, cell phones, laptops, videotelephony and cloud computing, the adoption of WFH augmented in the 2000s.

In recent years numerous organizations have permitted more employees to work remotely. Several have though reversed course preceding the pandemic, including IBM and Yahoo, requesting their employees to recommence office work in an attempt to spur more efficient collaboration. Simultaneously, other organizations progressed toward vaster geographic flexibility, permitting some, if not all, employees to work remotely. Nonetheless, the trial with fully remote work enforced by the pandemic has initiated most organizations to advantageously progress toward majority-remote, with less than 50 percent of employees working at an office.

Even before the pandemic, a minor group of organizations had taken this trend a step further, removing offices entirely and dispersing everyone, from entry-level newcomers to the CEO. GitLab, a tech-company, embraces this model at scale where their employees, including engineering, sales, personal management, executive roles and management, work remotely in more than 60 countries.

2.2. The future of remote work

Covid will most definitely have a permanent impact on office spaces and operations. From tighter cybersecurity measures to autonomous cleaning devices, CB Insights present some of the technologies influencing how the office could look postpandemic. Moving forward, many organizations will most certainly re-evaluate their corporate real estate footprint, whether that implicates downsizing or redistributing space to satellite offices. An entirely remote workforce seems improbable, given the benefits of collaboration, innovation and social connection that in-person working provides. Nevertheless, it will be imperative to design ideal conditions for employees to work remotely as well as in the office. To stay ahead of competitors, organizations will need to deliberate key investments across mobile cybersecurity tech, wellness, accessible HR tools, remote collaboration tools and workforce training programs for professional upskilling and development. CB Insights (2020) visualize a tech-enabled office in a postpandemic world in figure 1 below, where touchless entries and advanced remote collaboration tools may become a part of our future office space.

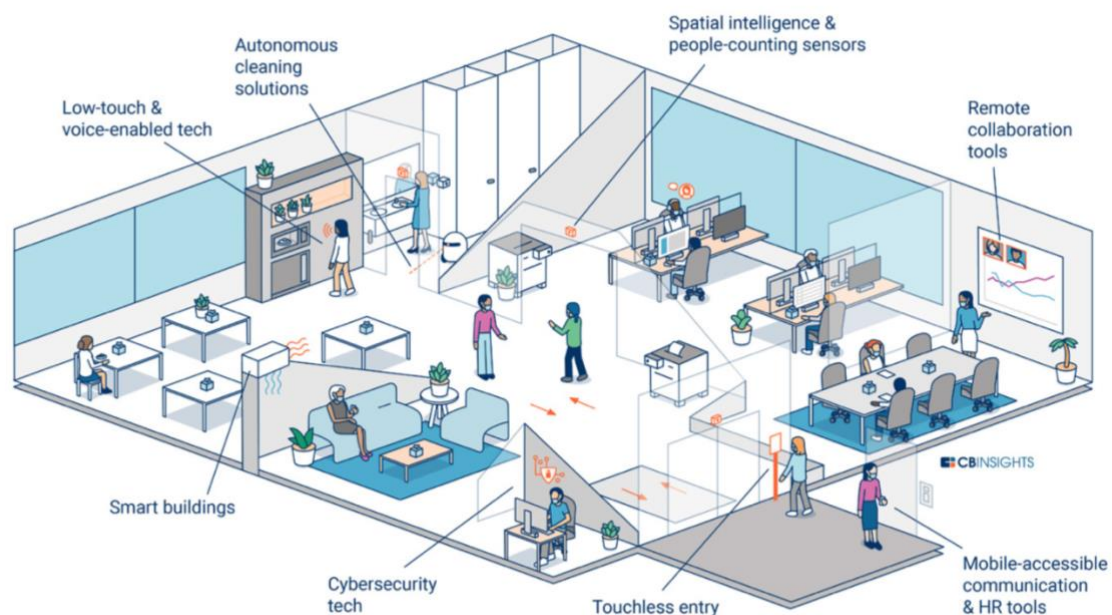


Figure 1. Reopening: The Tech-Enabled Office in A Post-Covid World (CB Insights 2020)

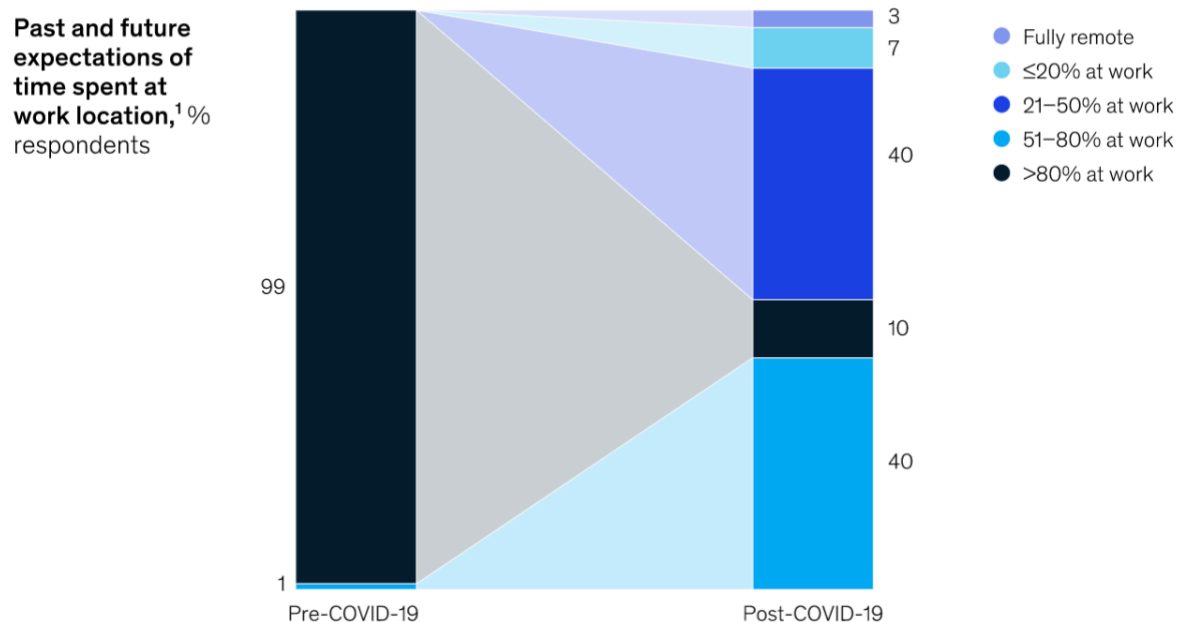
According to Prof André Spicer, from City University's Cass Business School, declaring the end of the office is not clear-cut. He predicts a radical decrease in the amount of time staff spend in the office, however in-office work will not be over for good since remote workers tend to get overlooked and tend not to get promoted as quickly.

2.2.1. Employer perspective on the future of remote work

In a survey conducted by Fastighetsvärlden in September 2020, 29 of the Stockholm area's largest office tenants were asked about how they reason regarding their long-term needs for real estate. A common stance regarding telework is that it has worked surprisingly well during the pandemic and that the probability of the organizations to revert to the previous office-centric type of work is low. Instead, the need for more meeting- and collaboration solutions and fewer desks is a probable development.

According to McKinsey (2021) organizations are clear that postpandemic working will be hybrid. After that though, specifics get hazy. The majority of organizations have only begun to think through and articulate the details of how to implement a more permanent mix of remote work and office work for all roles that are non-essential to perform on-site. Nine out of ten organizations state they will be combining remote and on-site working in a survey of 100 executives across geographies and industries. The survey confirms that customer satisfaction and productivity have increased during the pandemic. Preceding the pandemic, the majority of organizations mandated employees to devote most of their time in the office. Now as the pandemic eases, executives state that the hybrid regime will become far more common. The majority of which expect that (for all roles that are not essential to perform on-site) employees will be in the office between one to four days per week.

In the post-COVID-19 future, C-suite executives expect an increase in hybrid work.



¹Question: What level of remote working (for roles typically associated with being office-based) does your organization have?

Figure 2. The future will be more hybrid (McKinsey 2021)

Founder and CEO of Zoom, Eric Yuan, predicts that artificial intelligence will bring a physical aspect of video calls and allow for people to, in future, be able to smell coffee and feel their hands being shaken in their virtual space. Yuan further believes that many workers will not return to the traditional office after the pandemic full-time, instead the world will become a hybrid workplace (Kleinman 2020). Moreover, James P. Gorman, CEO of Morgan Stanley said the bank will have “much less estate” and chief of Barclays said, “The notion of putting 7,000 people in a building may be a thing of the past,”

Remote work has been a vast success for both employers and employees. The shift in optimistic attitudes toward remote work is evident. In December 2020, 83% of employers state the shift to remote work has been successful for their organization, compared to 73% in June 2020. Further, less than one in five executives state they wish to return to the office as it was pre-pandemic. The rest are contending with how extensively to extend remote work options, with just 13% of executives ready to let go of the office completely. Meanwhile, 87% of employees say the office is important for building relationships and collaborating with team members and, which is their top-rated needs for the office (PWC 2021). There’s no consensus on the optimal balance of workdays in the office vs. at home. 68% of executives say a typical employee should be in the office at least three days a week to maintain a distinct company culture once pandemic concerns recede, while 55% of employees would prefer to be remote at least three days a week (PWC 2021).

Lastly, real estate portfolios are in transition as 87% of executives presume to make alterations to their real estate strategy over the next 12 months. These plans include opening more satellite locations and/or consolidating office space in premier locations. Over the next three years, while numerous executives expect to reduce their office space, 56% presume to need more. These varied outcomes indicate that some organizations are preparing to reinvest the remote work dividend in novel ways in order to generate a special experience in the office (PWC 2021).

2.2.2. Employee perspective on the future of remote work

Several surveys have been conducted since the beginning of the pandemic regarding the employee perspective on remote work and the future office post-covid. Netigate conducted a survey in January of 2021 that exhibited how Swedish employees want employers to handle remote work after the pandemic. The survey is nationally representative, meaning that the respondents have an even distribution of gender, age, region, income level and so on. Participating in the survey was 2055 randomly selected individuals who work full-time or part-time at workplaces around Sweden.

70% of those who works from home enjoy doing so, and the size of the home has no clear effect on how well you generally enjoy working from home. Postpandemic, 73% want to work both from home and from a regular workplace. 39% state that they can imagine working only from home after the spread of infection has ceased and 24% can imagine working only from a regular workplace. When asked to define the perfect balance between remote work and work

from a regular workplace, the results come close to 50%. Those who live far from their regular workplace see a slightly greater positive effect of remote work in terms of concentration, work-life balance and work satisfaction. They can also to a greater extent imagine working from home 100% after the pandemic. Further, many Swedish employees see the benefits of remote work. 51% believe that working from home has gotten better and better over time. The effect of remote work is assessed less positively by older employees than by younger ones. Older people (50+) feel to a lesser extent that they have become more productive and respond to a lesser extent that the various aspects have been positively affected by homework than younger people (especially <40). Women thrive better than men with remote work. Women are also more positive about working from home after the pandemic. Furthermore, women feel to a greater extent that their productivity, concentration opportunities, work life balance and work satisfaction have been positively affected by homework (Netigate 2021).

64% of respondents believe that the use of digital aids has had a positive impact on remote work. 71% of all respondents believe that companies will be more digital postpandemic. 54% also see clear benefits of planning their own work tasks during the day and 48% experience more balance in life as a whole (work-life balance). The most negative aspects of homework are that they lack social cohabitation with colleagues, they believe that internal communication has a negative impact with remote work and 30% believe that the cooperation between departments has had a negative impact. The vast majority of employees in Sweden believe that the pandemic has changed the circumstances for what working life and workplaces look like, even after the spread of infection has ceased. 73% answer "Yes" to the question: "Imagine what working life will look like when the COVID-19 pandemic is over. Do you think working life will have changed compared to what it was before the pandemic?". 79% of all respondents believe that organizations will be more flexible after the pandemic. 78% believe that organizations have received a positive boost when it comes to digitization. 75% want the organization they work for to be more flexible when it comes to work performed remotely. 25% believe that it has worked well in the past (Netigate 2021).

The Swedish Association of Graduate Engineers asked 17 900 of their members about their work environment during the pandemic. The physical distance to colleagues generally gives a reduced feeling of belonging and context. The answers indicate that the important social work environment has become a challenge. Even worse is that a large proportion of younger people answer that they now have a feeling of depression and reduced motivation. The signals are immediately ominous, now that the work is to be located at home. To notice is that a relatively large proportion of women in the middle of their careers answer that homework provides a better balance in life. At the same time, women to a greater extent than men state that they have pain in the body (The Swedish Association of Graduate Engineers 2021).

In a survey conducted in October 2020 by Castellum, 1007 professional office workers aged 18-65 all over Sweden were asked about their view on the future of office design. The survey shows that employees under 25 prefer an open landscape while people between age 26 and 64 years want to work in smaller office spaces themselves or with their closest colleagues (Castellum 2020). Furthermore, respondents stated that the service most want is competence development in the form of training, courses and seminars (see Figure 3). Health-related

aspects such as access to health and medical care and access to a gym are also highly valued.

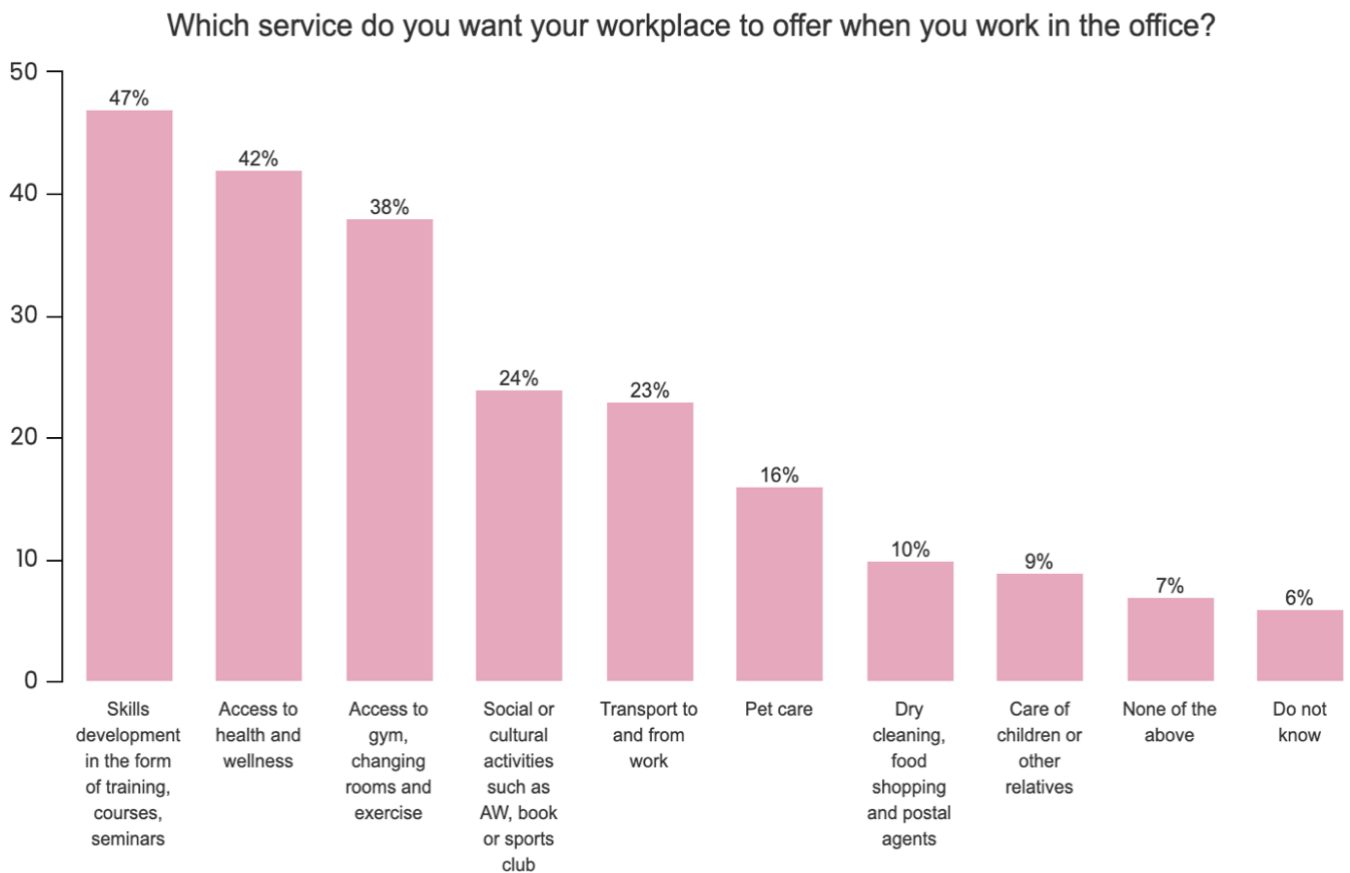


Figure 3. Most valued office-services (Castellum 2020).

According to new research, almost half of Australian and New Zealand workers are probable to quit their current position if they are not offered adequate flexibility in a postpandemic environment. Some 47% of employees surveyed stated they would probably resign rather than return to a rigid schedule. Provided a choice between flexibility of hours and location, 52 percent favoured flexibility with when they work, compared with 40 percent who preferred it for where they work (Heath 2021). In a survey conducted by PWC (2021) exhibit that employees with the least amount of professional experience (0-5 years) are more probable to want to spend more time at the office. 30% of the least experienced employees prefer working remotely no more than one day a week vs. just 20% of all respondents. Furthermore, they are also more probable to feel less productive while working remotely (34% vs. 23%) and are more probable to value training programs or meeting with managers than their more experienced colleagues.

2.2.3. Future of office design

It is currently clear that many people lack the social interaction that usually takes place in an office, and that the office's social function will continue to be important. A job has gone from being something that you perform in a specific place to being a task that can be solved regardless of location. Gospic (2021) believe that the offices that are created over the next five to ten years need to be constructed in a way that meets our social needs and has the right

conditions for people to be able to perform their jobs efficiently and at the same time feel good.

If one look at an even longer time horizon and if emerging technology becomes further sophisticated, it is not unreasonable to assume that people will meet digitally to a greater extent in digital rooms. People will meet as digital avatars, where technology makes it possible for them to physically feel someone else's touch, even if it takes place digitally. Examples of this can already be seen today. In Tokyo, people with serious muscle diseases, which make them paralyzed, can do jobs in restaurants and cafes with the help of robots. With the help of modern technology, a person lying at home in his bed can perform chores somewhere else completely by controlling a robot. Nonetheless, Gospic (2021) believe that real, physical, meetings will continue to be important in the future as well. Organizations need to decide which aspects they want the premises to promote. The vast majority of companies today want to promote health, innovation and learning. This is also something that is in demand by people.

The modern human is equipped with the same brain capacity today as 40,000 years ago but must at the same time function in a fundamentally different environment. The caveman had a love for nature and research shows that indoor environments that create an outdoor feeling reduce our stress hormones and increase our mental well-being. At the same time, there is much to suggest that the working life of the future will be more flexible than before and that many people will at least partially work remotely. In addition, companies will need to adapt to new trends at a higher rate than before. This presents companies with completely new challenges. The technology will therefore be central for organizations that want to promote learning. In addition, learning will increasingly take place digitally due to data collection, which makes learning more individualized. Gospic (2021) believe that offices will be equipped with completely white rooms that are for learning and that these rooms will be adapted for technologies such as Virtual Reality (VR) and Augmented Reality (AR).

Another thing that affects the design of the offices of the future is the incipient realization that completely open landscapes often do not promote a particularly efficient or healthy work environment. One such example is offices where you have simply set up desks and chairs together with computer screens in a long row, without any varying elements in the room. An optimal workplace instead offers different solutions and also does not look the same everywhere. People who need to work undisturbed should be able to do this, in the meeting rooms you should have access to technological aids that optimize efficiency, and all rooms should vary in both appearance and feel (Castellum 2020). The discussion about open office landscapes compared to individual offices feels almost like an eternal debate. Often people between the ages of 18 and 25 are more positive about open office landscapes, while people who are older are more negative about it. This is probably due to the fact that younger people today have grown up with being constantly interrupted, while older people have not. A common prejudice is that younger people are therefore better at multi-tasking than older people, but this is not true. On the contrary, research shows that all people who are to perform, regardless of age, need concentration to be able to do this. No brain is connected in such a way that it can easily handle constant disturbances. The difference is that people with increasing age and

more experience often develop a deeper self-insight and thus realize their limitations. Self-insight often affects people's answers to this question (Gospic 2021).

2.3. Remote work benefits

There are various studies in the literature that explore the benefits of remote work. (Kurland & Bailey 1999; Shin et al. 2000; Pérez et al. 2002; Felstead & Henseke 2017; Bao et al. 2020). The key advantages of remote work, according to the literature, comprise increasing productivity and work satisfaction of employees as well as saving costs relating to real estate. Remote work provides improved work-life balance for employees and offers them more flexible working time. Additionally, remote work offers benefits to a diverse talent pool that live further away or might not have been otherwise available, such as transgender people (Ford et al. 2019), the disabled (Spark 2017) and neurodiverse (Lister 2021).

2.3.1. Productivity and work satisfaction

Various studies have investigated the impact of remote work on productivity, numerous which reported that remote work has a positive impact on the productivity (Vittersø 2003; Collins 2005; Bloom et al. 2013). Coenen and Kok (2014) discovered that remote work has a positive influence on the performance of innovative product development through facilitating cross-functional cooperation, inter-organizational participation and knowledge sharing. Kazekami (2020) discovered that appropriate remote work hours increase productivity, however when remote work hours are too extensive, productivity will decrease. Further, remote work increases life satisfaction, and life satisfaction improves productivity. Also, remote work increases work satisfaction and happiness, but happiness and work satisfaction do not affect productivity. Kazekami's study moreover shows that the productivity increase of remote work is larger for employees whose commuting time is more than one hour or commute by crowded buses or trains during rush hours.

In a survey conducted by Harvard Business Review and The Energy Project including over 20 000 employees, merely 18 percent stated they had time for strategic or creative thinking. Research has consistently exhibited that remote work considerably reduces energy and time drains like these and thus increases productivity. In a global survey conducted by Kamouri & Lister (2020) 2 500 participants answered questions regarding how much of their commute time employees spent working and the number of unwanted interruptions at the office vs. at home. Respondents stated they saved 35 minter per day due to less interruptions at home. An extensive range of prepandemic studies exhibited that remote workers spend approximately half the time they would have otherwise spent commuting, actually working. Results from the Global Work from Home Experience Survey by Kamouri & Lister (2020) were similar. Employees said they voluntarily worked an average 47 percent of the time they would have otherwise spent commuting.

Bloom et al. (2013) conducted a remote working experiment at CTrip, a 16,000- employee, NASDAQ-listed Chinese travel agency. Employees who volunteered to work from home were randomly assigned to WFH or in the office for 9 months. Remote working led to a 13%

performance increase, of which about 4% was from more calls per minute (attributed to a quieter working environment) and 9% was from working more minutes per shift (fewer sick-days and breaks). Remote workers moreover experienced less turnover and reported improved work satisfaction. However, their promotion rate conditional on performance fell. Due to the success of the experiment, CTrip introduced the alternative to work remotely to the whole organization and allowed the experimental employees to re-select between the home or office. Fascinatingly, over half of them switched, which led to the gains from remote work nearly doubling to 22%. This highlights the benefits of learning and selection effects when adopting modern management practices like WFH. However, those included in the experiment were all call centre employees whose work is highly individual based. van der Lippe & Lippényl (2019) states that the key to efficiency and cooperation in an organization with employees working in teams is interaction with colleagues, and that it is a challenge to construct teams in which employees who solely work remotely can work efficiently and remain the same productivity as those who work at an office. Coenen and Kok (2014) found that remote work had a positive influence on team performance if face-to-face communication was adequate.

National Equity Fund measured a 50 percent rise in productivity after implementing a remote work program and Apollo Group measured a 34 percent surge in productivity following the introduction of remote work (Lister 2021). Neufeld & Fang (2004) found that remote work productivity was positively associated with attitudes and beliefs, situational factors and social factors, and unassociated with individual factors. Moreover, Neufeld & Fang (2005) reported that the furthestmost crucial determinants of WFH productivity were attitudes and beliefs about remote work as well as social interactions with manager family members. In turn, the most critical determinant of employees' attitudes and beliefs were social interactions with colleagues, manager and family members.

Felstead & Henseke (2017) found evidence that supports the social exchange theory with remote workers working harder, doing unpaid work and/or putting in further effort in return for the prospect to revise when and where they work. Additionally, the study exhibit that remote workers are also *ceteris paribus* more satisfied, dedicated and enthusiastic with their job than their conventionally positioned counterparts. However, remote workers do find it challenging to distinguish a line between home and work as forecasted by border theory. In a recent study, emails and meetings were analysed from 3.1 million people across 16 global cities. DeFilippis et al. (2020) reported that the duration of the average workday increased by 48.5 minutes, or 8.2% as well as an increase in emails. Nonetheless, employees may not have operated unceasingly during the workday and may instead have generated more flexible schedules to account for daily disruptions. Lastly, Gallus research exhibits those employees who work remotely are more highly engaged than those who do not (Lister 2021).

2.3.2. Competitive advantage

A benefit of a WFH arrangement is that organizations can differentiate themselves in a competitive marketplace by being superior at appealing talented employees (Kossek & Thompson 2016). Lee & Kim (2018) additionally reported increased employee engagement when implementing the option to work remotely and Kazekami (2020) explains how remote

work may reinvigorate the countryside areas distant from the work prospects of urban areas and allows parents to balance childcare and work or elder care for a family member, thus being beneficial for both organizations and employees due to the integration of work and caring responsibilities (Hyman et al. 2005). Sullivan & Lewis (2001) and Hartig et al. (2007) also reported that remote work is acknowledged as a substantial opportunity for employees with children. Other advantages that may provide organizations a competitive advantage include increased staff motivation, better control over time schedule and better work-life balance (Moretti et al. 2020; The Balance Careers 2020).

Previous findings exhibit substantial age-related dissimilarities in perceived remote work benefits, whereas younger employees appreciate remote work farther and considers it as a foundation for liberty to plan time and work autonomy (Earle. 2003; A. Nakrošienė 2019). In the introduction of remote work in organizations, managers have a significant role for a positive outcome of the initiative. Manager support was evidently correlated to perceived career opportunities and manager trust was discovered to be a significant antecedent of the general satisfaction with remote work (Makarius and Larson 2017). Conclusively, by being able to hire from anyplace and employ populations that otherwise may not have been available (i.e. the disabled, caregivers and neurodiverse) organizations can enhance diversity and extend the talent pool (Spark 2017).

2.3.3. Improved health

Reported health advantages of working from home includes reduced stress, improved sleep, more time for exercise, healthier food choices as well as reduced work-life conflict. According to Hallman et al. (2021) on days the staff worked remotely, they slept on average 34 minutes longer when than the days they worked in the office. Since sleep deprivation is a growing public health problem, this is a positive aspect of remote work. Also, the staff are equally productive and moving, standing and sedentary behaviours did not alternate noticeably during remote work compared to working at the office. Furthermore, 40 percent of participants in a remote working experiment stated that they were less stressed when working from home (Moretti et al. 2020). Vittersø 2003 also reported reduction of psychological stress as well as better concentration from employees working remotely.

2.3.4. Reduced absenteeism

Nakrošienė (2019) found that the prospect to work when a person is sick increases remote workers satisfaction with remote work. This indicates that remote work may be a suitable solution for organizations to the challenge of presenteeism, which refers to attending work while ill, which is connected to further productivity decrease than absenteeism (Johns 2010). Thus, remote work makes it feasible for workers to accomplish their work obligations and their desire to endure in a competitive environment, even if they are sick. The opportunity to work remotely may lessen depression and correlated psychological problems highly correlating with presenteeism on the individual level (Conti and Burton 1994).

Most individuals who call in sick are in fact not as nearly 70 percent of unscheduled absences are due to stress, family or personal issues or simply being sick of work according to Lister (2021). Case studies exhibit that the option to work remotely can reduce absenteeism by between 26 to 88 percent. BBC saw a 26 percent reduction in stress-related absences amongst home-based employees and Apollo found an 88 percent reduction in unapproved absences following the introduction of WFH options. Thus, remote work reduce absences as remote workers are less exposed to sick co-workers, are able to handle personal appointments without taking a full day off, are exposed to fewer environmental and occupational hazards, are sometimes able and willing to return to work (at home) more quickly following surgery, extended illness or the birth of a child and may be happy to work when they are not feeling well enough to go to the office. Further, remote workers are happier in their jobs and therefore less likely to take mental health days, can avoid stress of frequent interruptions, office politics and commuting. Lastly, remote workers often report exercising more, eating healthier and sleeping better (Lister 2021).

2.3.5. Continuity of operations and reduced voluntary turnover

Working remotely permits employees to continue operating in the event of a disaster. As the pandemic hit and people were abruptly mandated to work remotely, those who had previously done so were capable to return to productivity far more rapidly than those who had not. This will not be the last disaster that will force an alteration in where we work. Even something as simple as a nearby fire or a snowstorm can be costly if employees are not prepared to work remotely.

Lister (2021) report that the cost of losing an employee range between 10 and 213 percent of the salary. Past the cost of finding a replacement, separation, lost productivity and training, turnover could result in a loss of co-workers, morale, organizational memory and customers. It can also disrupt team dynamics, stall new customer on-boarding and cause project delays. Novel hires also come with vast risk of not working out as nearly 40 percent quit before their first anniversary. The possibility to work where and when they want has for long been utmost desired for most employees. Merely months into the pandemic, research showed that a majority of those working remotely wish to continue to do so at least one day a week postpandemic whereas a third would forego up to 5 percent for the opportunity and closely a quarter say they would take a pay cut over 10 percent of salary. The option to work remotely have exhibited to augment the retaining and desirability of talent, not simply because it is exceedingly valued by employees, but because it enlarges the talent pool.

2.3.6. Reduced real estate

Following the last recession, numerous organizations tried to decrease their real estate costs by reducing the amount of space devoted to each employee. According to Lister (2021) various did so by diminishing enclosed offices and private spaces in favour for big open spaces. For most though, this unfortunately came at the cost of lost productivity. As organizations anticipate their return to the office, they are progressively dedicated to designing spaces and places where people actually long to work. The combination of office work and remote work not only allows the employer to reduce real estate costs, it also improves productivity and increases

their agility. An employer paying 75 000 SEK would save nearly 15 000 SEK per half-time remote worker per year if they decreased their office space by just 20% per every half-time remote worker. Fascinatingly, while organizations frequently implement remote work as a cost reduction strategy, they usually find its real value lies in the human capital benefits.

2.3.7. Reduced commuting and saved costs

One advantage that was especially cherished by employees was the saved commuting time to the office (Moretti et al. 2020). Aside from the risks related with driving, extensive commutes deprive people of valuable time for sleep, exercise and time with friends and family. Irrespective of the means of transportation, extensive commutes have been associated to increased stress, poor heart health, reduced productivity and energy, a vaster risk of hypertension and obesity, anxiety, and depression. Lister (2021) details that the average U.S. employee spends the equivalent of 28 days a year in traffic and for the coarsely 20 percent of workers whose one-day commute surpasses 60 minutes per day, the annual toll is over 60 days a year. Lister further reports that a typical employee can save between 5 280 SEK and 52 800 SEK a year due to reduced costs for meals and beverages, transportation and parking, serendipity spending at work (e.g. gifts, lunch time shopping, football pools) as well as work clothes and dry cleaning. The numbers are net of extra at-home food and home energy on days employees are working remotely. Some people are able to further reduce their expenses by moving to a less expensive area or getting rid of a car. Likewise, costs of business travel, fleet vehicles, entertainment and parking can be reduced for the employer (Lister 2021).

2.3.8. Environmental benefits

Just a few weeks into the pandemic, the world was announcing enhanced air quality and have thus given us the opportunity to truly realize the disparity lessening our office usage and commuter travel can have on the environment (Lister 2021). The most substantial benefit of a hybrid model for the environment is the decrease of employee commuting by car to the office, thus lowering emissions and reducing pollution. The average newly produced passenger vehicle emits about 122 CO₂ as of 2019 (Lejda et al. 2021) and the cost of carbon pollution is estimated as 828 SEK/ t CO₂ (Stern & Stiglitz 2021). In Stockholm, the average vehicle speed depends considerably on time of the day. Fu & Jenelius (2018) measured the average speed in Stockholm inner city as a function of day in figure 4 below. Solid line exhibits average across a weekday and the dotted line demonstrates the +/- mean standard deviation of speed a weekday.

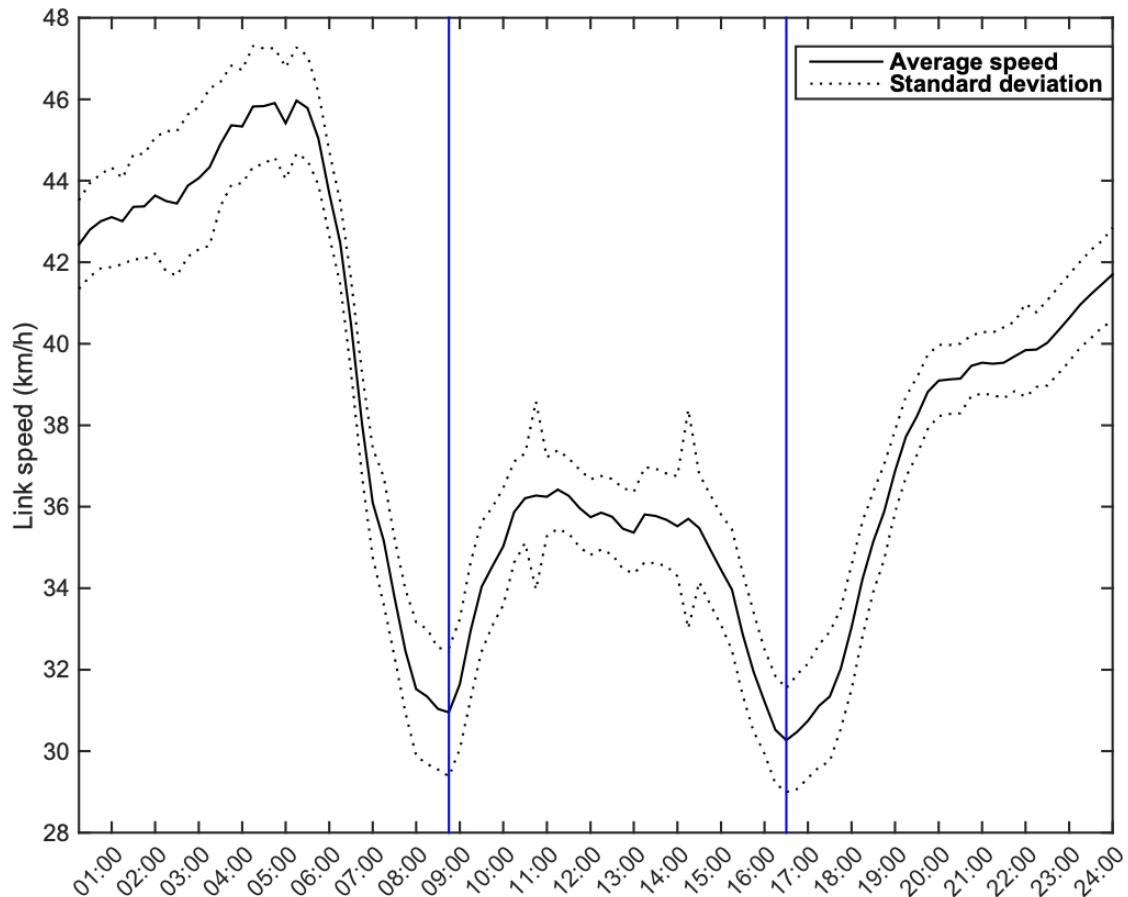


Figure 4. Average vehicle speed on a weekday in Stockholm inner city (Fu & Jenelius 2018).

2.3.9. Societal benefits

Beyond the benefits mentioned above, remote work offers various societal benefits that range beyond employees and organizations directly. For example, the pandemic provided us the prospect to truly realize the alteration lessening our office usage and commuter travel can have on the environment. Just a couple weeks into the pandemic, the world was reporting improved air quality (Lister 2021).

Other societal benefits of remote work include:

- Reduce the housing crisis through repurposing of office space
- Raise the standard of living in rural and disadvantaged areas
- Help revitalize communities where industry changes have created severe job shortages
- Create fuller employment for the disabled and rural populations
- Reduce wear and tear on transportation infrastructure
- Increased productivity among non-tele-commuters by reducing travel times
- Reduce pollution from road work and office construction
- Improved emergency responsiveness
- Reduce terrorism targets of opportunity

- Further reduce travel through widespread use of virtual technologies
- Decrease our dependence on foreign oil

2.4. Remote work challenges

Whilst the benefits of remote work, e.g., increased productivity, better concentration, increased staff motivation and reduction of psychological stress, may be appealing for numerous organizations to contemplate its application, the inadequacies such as mental demands and fatigue, communication difficulties, cost of working from home, strains regarding to monitoring performance, unsuitability with all works, social isolation and no distinct parting between work and home tasks (Moretti et al. 2020; The Balance Careers 2020) should be attended when/if remote work is applied (Kotera & Vione 2020).

2.4.1. Productivity and work satisfaction

Since employees in most workplaces need to work together, performance may also depend on whether colleagues are working from home and not solely on the individual employee. In a study aiming to improve the understanding regarding how WFH affects outcomes for team performance as well, van der Lippe & Lippényi (2019) studied co-workers in nine European countries. The study included 11,011 employees in 869 teams in 259 establishments and display how employees and co-workers WFH was linked to the individual and team performance.

First, the study found that the performance of individual employees increases when their colleagues are not working from home. For the functioning of the individual employee, the extent to which co-workers' work from home seemed to be consequential. The greater the percentage of co-workers WFH, the worse the performance of the employee (van der Lippe & Lippényi 2019). When co-workers cannot exchange critical information, working together gets more challenging (Knights and McCabe 2003). This finding demonstrates that remote work implementations may have consequences for individual-level performance and thus it is imperative to take into account how employees impact each other and how they utilize each other's knowledge and skills. This finding is in line with the literature that WFH leads to intensification of workload (Felstead & Henseke 2017). It will take more effort on the part of the individual employee to utilize their knowledge and skills, since co-workers are not directly available. This indicates that digital presence cannot fully compensate for corporeal presence viewed from perspective of the co-work. According to Boell et al. (2016) this is also dependent on the nature of work and relates to the role of ICT and the wider literature of WFH.

Secondly the study exhibited that when co-workers WFH, the reported team performance from the manager was inferior. Managers rate team productivity higher when co-workers WFH no more than one day per week. Hence underlining the indication that managers want to monitor employees, and they have further opportunities to do such when employees work less from home (van Dyne et al. 2007). This reflects the manager's will to govern and demonstrates that there are difficulties when co-workers are WFH. This is especially significant when organizations contemplate implementing flexible WFH arrangements.

Moreover, a study conducted by Baker et al. (2007) evaluated the effect on WFH of multiple influences from the organization, work, individual and household spheres within a group of experienced WFH employees. The specified variables were elected from preceding literature suggesting that they were probable to be correlated to WFH outcomes. Within the organizational characteristic variables, characteristics considerably associated with satisfaction, but not with productivity, include human resource support, technical support, training of others and manager's trust. Variables considerably associated with productivity, but not with satisfaction, included employer financial support. From the work side, the two variables concerned with providing feedback to the WFH professionals had the utmost consistent effect and was significantly correlated to both work satisfaction and productivity. Task identity, i.e. a work consisting of entire pieces of work, is likewise beneficial. Contradictory to other studies, Baker et al. (2007) presented non-significant correlations in teamwork in comparison to working at the office. Remarkably, neither individual or household variables correlated to either productivity or work satisfaction. Further surprisingly, training for WFH employees was non significantly related to WFH outcomes (Baker et al. 2007).

A significant variable for satisfaction, but not for perceived productivity, is manager's trust. Trust and control are generally contrasted. Research shows that lack of trust can create problems because trustworthy followers are probable to respond negatively to controlling managers (Maclagan 1983, Dose & Klimoski 1995, Ferris et al. 1995). Scarcer controls are necessary in a trusting environment, which is consistent with WFH, where fewer controls are obtainable (Baker et al. 2007). Gallup research shows employees who work remotely are more highly engaged than those who do not. Remote work compels managers to manage by what people achieve, rather than the number of hours they spend in the office, something that has not ever been a suitable measure of performance.

2.4.2. Inequality

There are continued gender gaps at home and in the workplace. At work, women receive lower salaries, obtain scarcer promotions than men and are underrepresented in corporate leadership positions (Bolotnyy & Emanuel, 2018; Fransen et al, 2012; Cook & Glass, 2014; Glass & Cook, 2016). At home, women devote more time on household tasks such as childcare and housework (Geist 2010). While these gender gaps might suggest lowered work satisfaction and productivity in women compared to men, the literature presents little or no gender variances in these work-related outcomes prepandemic (Banarjee & Perrucci 2010; Bönnte & Krabel 2014; Robb & Watson 2012; Westover 2012). This is possibly because women draw help from several sources (e.g., childcare facilities) to deal with household tasks without sacrificing their work satisfaction and productivity. However, after remote work was implemented due to lockdown, women reported lower work satisfaction and productivity than men. (Feng & Savani 2020).

Bonacini et al. (2020) explores how a future rise in remote work would be correlated to alterations in labour income levels and inequality. The analysis revealed that a positive shift in remote work feasibility would be correlated with an increase in average labour income,

however this potential benefit would not be equally dispersed amongst employees. An increase in the feasibility to work remotely would benefit male, older, high-paid and high-educated employees. Thus, remote work risks aggravating precedent inequalities in the labour market, particularly if it is not appropriately regulated. Lastly, Bradbury-Jones & Isham (2020), explicate that children and their mothers are predominantly susceptible to the risk of domestic violence and that during a short time span, countries who introduced lockdowns, domestic violence unanimously increased rapidly. Indicating that the mass efforts to save lives during the pandemic have put women in abusive relationships further at risk as perpetrators have a greater freedom to act without consequence or scrutiny. In Sweden where lockdown was never implemented, but where the majority of the workforce was relocated to working remotely, domestic violence against women increased by 4% in the first half of 2020 compared with the year before.

2.4.3. Mental health

Employees working from home frequently witness increased negative emotions and irritability, which were ascribed to social isolation, anxiety, stress and the inability to share problems at work and discover potential solutions with colleagues (Mann & Holdsworth 2003). This in turn influences productivity, work-life balance and well-being (Grant et al. 2013). Additionally, a potential downside of remote work is the risk of employees feeling as they are in exile and thus become needy towards their bosses. Catching the attention of their manager becomes their primary job (Hafermalz 2020).

2.4.4. Physical health

In comparison to the workplace, the home environment is probable to be faulty in several aspects. Specifically, the lack of ergonomic office furniture may hinder the implementation of a healthy posture and may foster the commencement of musculoskeletal (MSK) disorders (Pillastrini et al. 2010; Will et al. 2018). Working in a sedentary position for extended periods of time escalates the risk of low back pain (LBP) and/or neck pain (Côté et al. 2008; Baker et al. 2018).

Moretti et al. (2020) examined the impact of remote work musculoskeletal (MSK) issues. The study included 51 remote workers, and neck pain was referred by 23.5% of remote workers and low back pain (LBP) by 41.2% of them. LBP and neck pain exacerbated by 47.6% respectively 50% of remote workers. Remote workers with MSK issues reported lower work satisfaction. Consequently, the study showed that the home environment seems to be inadequate in the remote worker population. With an increased risk for MSK and mental health issues, specifically affecting the spine. By addressing these issues, organizations can drastically reduce risks for health, thus, improving work satisfaction, productivity and reducing cost (Moretti et al. 2020).

In a report regarding the work environment of their members, the Swedish Association of Graduate Engineers reports that a surprisingly small proportion of respondents have a completely arranged home workplace with adapted chair, lighting and computer equipment. A

small proportion have severe work-related stress problems i.e., a lot of pain in the body. Stress disorders (MSD musculoskeletal disorders) are a common cause of sick leave. The fact that the survey highlighted that engineers have pain in the body from the design of the workplace in the home is an early signal that organizations need to take the home environment of employees seriously since it is the employer's responsibility to design the home workplace in order to prevent stress problems (The Swedish Association of Graduate Engineers 2021).

Working remotely since the beginning of the pandemic has possibly been the primary experience for most employees of remote work. One benefit of which includes the new liberty in regard of choice of clothing. Chapman & Thamrin (2020) conducted a prospective cohort study to examine if and thus how employee's productivity and mental health would be affected if wearing a pyjama while working from home. Results show that wearing pyjamas while WFH was not correlated with lower productivity but was however associated with declined mental health. More participants who wore pyjamas during the day at least one day a week stated that their mental health had worsened while WFH, see below.

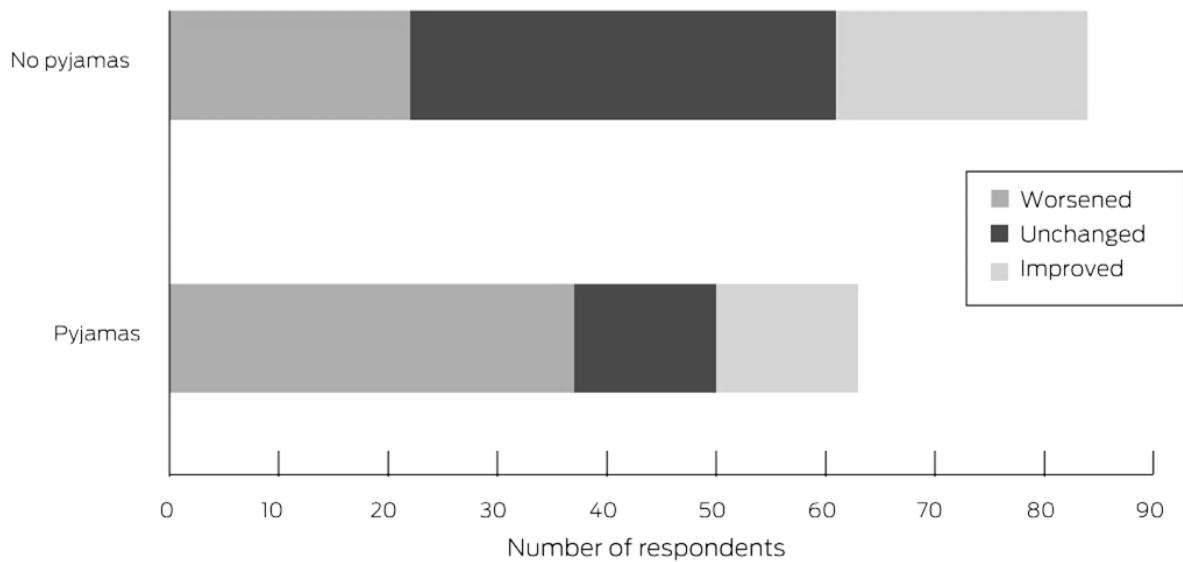


Figure 5. Wearing pyjamas and changes in mental health of survey participants (Chapman & Thamrin 2020)

Lastly, according to Nakrošienė (2019), a suitable workplace at home strengthened the general satisfaction with remote work, perceived benefits of remote work, increased productivity and career opportunities. This indicates that the establishment of a proper working place at home ought to be assumed as a significant matter in the telework arrangement (De Croon et al. 2005; Nakrošienė 2019).

2.4.5. Managerial attitudes

The adverse influence of WFH on performance as mentioned earlier elucidate why organizations in an exemplary position to encourage it, such as IBM, Yahoo!, HP, Best Buy and Bank of America, actually discourage it. A possible source of pressure on top managers to discontinue their support for WFH arrangements may be the presence of direct managers

who are not very positive about their team members working regularly from home (van der Lippe & Lippényi 2019). Some top managers have even dropped their organizations' WFH programs (Weinert et al. 2014). Additionally, it may be rather challenging to, in certain regions, accomplish an apposite management culture to support WFH. For example, it has been stated that national cultures may play a role in determining the manager's response when employees wish to WFH as the response varies depending on the manager's inclination to delegate trust and power to WFH employees (Peters & den Dulk 2003; Baker et al. 2007).

Research suggests that newcomers are less likely to be trusted to work remotely in comparison to longer tenured employees. A hybrid workplace model may be offered as a practice to specifically attract employees with young children since it can be a sustainable option for professional women and men with preschool children who want to continue their careers. Madsen (2003) found that employees who work remotely report lower levels of work family conflict. Lastly, concern about career advancement and visibility is quite common amongst WFH employees (McCloskey & Igarria 2003). Implementing a WFH model within an organization's culture may overcome some of these possible difficulties of WFH as well as ensuring the management culture us one of support and trust (Baker et al. 2007).

2.5. Hybrid workplace model

Employees who worked a hybrid remote work model valued the experience highly, with approximately 75 percent considering remote working had a positive effect on their work satisfaction. A hybrid workplace requires communication, trust, connection, collaboration and recognizing that we are all individuals with diverse habits and needs. An organization can let go of a few chosen truths and instead focus on what is right for the people, the business and the environment. In addition, insurance readiness, tax and labour law need to be considered when introducing a hybrid workplace model. Another issue to be solved before implementing a remote workplace model is how much of their time employees should work remotely and how much of it should be spent in the office.

2.5.1. Benefits of a hybrid workplace model

Since the pandemic upended the traditional office-centric work culture, various major organizations have shifted to more permanent remote-work policies. Remote work provides numerous prospective advantages for organizations comprising employee retention, productivity improvements, increased work satisfaction and other forms of competitive benefit. With the purpose to examine employee and manager perceptions on remote work productivity and wellbeing, Bentley et al. (2013) surveyed over 1800 employees across 50 organizations and almost 100 team and HR managers. Employees were questioned regarding their remote work experience and managers were interviewed on matters such as outcomes, attitudes, remote work policy and processes with an emphasis on support for remote work, remote work productivity, and wellbeing outcomes.

Hybrid remote workers (1-3 days per week) was perceived by managers as embodying a suitable balance between the flexibility offered and the necessity for employees to be present in the office to connect with the organization and interact with colleagues. The study discovered compelling evidence of the positive advantages of remote work for both the organizations as well as the individual employee. Furthermore, the study found that a hybrid remote work model endorsed increased work satisfaction and productivity, with hybrid workers performing superiorly to those who do diminutive or no remote work. These conclusions were reinforced by discoveries from both the online survey as well as from manager interviews, with managers voicing high levels of satisfaction with their remote workers productivity. By not commuting 2-3 days of the week, a typical employee can save money due to reduced costs for: Transportation and parking, work clothes and dry cleaning, meals and beverages. Further employees may reduce their costs by moving to a less expensive area or getting rid of a car.

2.5.2. Challenges of a hybrid workplace model

A hybrid workplace model may have an inclusion problem, according to Sid Sijbrandij, CEO of web development platform GitLab, and critic of the hybrid model. Sijbrandij calls hybrid remote work “the worst of both worlds”. GitLab itself has a fully remote workforce, it pays for employees to rent coworking or office space should they want it, and to visit each other for work. Sijbrandij argues that under a hybrid model, a head office will always have a disproportionate share of power, and office regulars will have the edge over home workers. If inefficiently designed, this kind of arrangement would have neither the egalitarianism that fully remote workforces can aim to nor the interaction of face-to-face work (BBC 2020).

Bentley et al. (2013) discovered some minor adverse effects for hybrid remote work, particularly greater perceived social isolation and stress/strain. It is necessary that there potentially adverse impacts are attended through the providing of peer, organisational and technical support, as all were demonstrated to decrease the adverse impacts of remote working on stress, social isolation and work/family conflict, whilst increasing work satisfaction and productivity. T. Bentley et al. (2013) further emphasised the necessity for affirmative managerial attitudes to remote work, ICT support and enhanced technology training.

2.5.3. Organizations implementing a hybrid workplace model

As early as in June 2020, Kissflow, a global SaaS product company based out of Chennai, announced a new hybrid work model called REMOTE+ for their employees. REMOTE+ is described as a new hybrid work model, based on feedback shared by the teams, that allows employees to enjoy the benefits of both remote work and in-office work. Kissflow believes that in addition to time and cost save, a hybrid work model will increase loyalty, extend the talent pool and lower the employee turnover (Kissflow 2020).

Some of the key highlights of the 'REMOTE+ model is:

1. The organization has given the freedom for teams to choose between hybrid work or in-office and every team will decide to choose between the two.

2. Every team is expected to work in-office for one week each month.
3. Employees who are not from the city are encouraged to move back to their hometowns to strengthen family/social bonds, contribute to the local community and decrease expenses.
4. The company will provide accommodation for those who travel into the city during the one week of in-office work.
5. Monthly meetups will be hosted, meant for socializing to build and strengthen cross-team relationships.
6. A quarterly conference will be hosted, where all teams will come together to showcase their work milestones achieved and will also include learning and fun sessions.
7. Off-site trips will be organized every quarter.
8. Teams will explore tech tools that can facilitate design discussions and informal chats.
9. Productivity will be measured against objectives rather than initiatives. This will reinforce freedom and autonomy by pushing control to the team level instead of centralizing it.
10. The organization will make a conscious effort to hire employees who thrive in a remote work environment.
11. The organization will contribute considerably to help employees set up comfortable home-office infrastructure.

Another company that has reconsidered their workplace model is Spotify who in February 2021 Spotify announced their new workplace program called “Working from Anywhere” as the future of working at Spotify. With the mindset that “Work isn’t somewhere you go, it’s something you do” the company will, with the start in summer 2021, give all their 6,550 global employees the liberty to work where they work best, wherever that may be. The decision is motivated by the belief that some are more productive at home, some more at the office. And that most people are the utmost effective and content when given options on where to work. Further, the streaming giant trusts that they will be capable to work with the very best people for the job, irrespective of what country or city they call home as well as the company will become a more diverse workplace that can flex with the employees as their aspirations and lives alter (Lundström et al. 2021).

Spotify presents the program as work remixed. Employees, together with their manager, firstly choose the location they would like to live at for the next year. Then they choose their work mode, i.e. where they wish to spend their time; whether that is a Spotify office, a co-working space, their own home or a mix of both the office and at home (Lundström et al. 2021). Lastly, Spotify will be redesigning numerous of its physical offices to accommodate employees’ preferences for lounging areas, silent spaces and shared-desk spaces (Ward 2021). Spotify recognises their flexible approach as a vast advantage, and has previously launched a global “Flexible Public Holiday benefit” which allowed employees to make day-off trades, i.e. work on a day that is a public holiday in the country where one is employed and then take out an alternative workday as holiday instead when it correlates ones beliefs, values and celebration

calendar as preferred. An initiative that has shown to be highly appreciated and roughly one holiday per five employees was switched in the seven-month evaluation. Additionally, since work is conducted on another day than the one initially intended, the benefit is cost-neutral for the organization. And concerning the extra admin required, Spotify explain it is equivalent to the work needed to get a cup of coffee from the machine down the hall (Westerdahl 2018).

Salesforce, a company that specializes in customer relationship management (CRM), similarly announced they will never return to the 9-5 workday and will provide three new options for the staff: office-based, flex and fully remote. The reason for the policy change was based on employee wellness surveys that Salesforce have been conducting since the beginning of the pandemic. The flex option will permit employees to work at the office up to three days per week for tasks that are more challenging to do over video calls, such as presentations, customer meetings and team collaboration. Further, the company stated that most of its staff globally would have a flex schedule. The fully remote option will be reserved for those employees that work in positions that do not oblige being present in a physical office or those who do not live close one of the company's offices. Finally, only a small amount of their 49,000 employees would work in the office four to five days each week (Hartmans 2021). The change to how employees work will result in a change to Salesforce's offices as well. Going forward, the physical offices will be redesigned as "community hubs" with collaboration and breakout spaces and leaving the previous rows of desks in the past (Hartmans 2021). At Twitter, those employees whose tasks do not require a physical presence will be permanently allowed to work remotely, postpandemic. (Ward 2021).

3. Methodology

First and foremost, a literature study of previous research has been conducted including, inter alia, the benefits and challenges of remote working and the traditional office-centric type of work has been executed as well as a compilation of prior research as regards to employees' attitudes and notions towards remote work. Second, a questionnaire was executed to explore employees view on remote work and was a basis for the cost benefit analysis lastly conducted investigating benefits and costs of a hybrid model.

3.1. Reviewing the literature

When gathering information for the literature review, a systematic and clear structure to the research was used, as recommended by University of Bedfordshire (2018). The information was primarily retrieved from journal and library databases such as KTH Primo and Google Scholar, as well as from company, institution and newspaper websites. In order to categorize the articles pertinent to the subject the sources were distributed in diverse subtopics based on keywords and areas of research. Moreover, the original sources of the articles were assessed in order to evade misperception and to preserve accurateness of the information collected. Lastly, the pertinent key points of each article were summarized and distributed to where they would fit in the thesis itself.

3.2. Approach

According to Saunders et al. (2016) the proper choice of research method varies depending on the aim and characteristics of the research. There are two categories of fundamental approaches to research, the quantitative and the qualitative approach. The former comprises the generation of data in quantitative form which can be subjected to quantitative analysis in a rigid fashion and is the approach of which has been chosen for this study. Quantitative research is most frequently associated with a deductive approach, where the focus is on using data to test a theory and is the approach selected for this study. Lastly, the East Link Project in Stockholm was chosen as a case-study for the complementary survey as well as the cost benefit analysis.

The East Link Project was chosen since the project members were planned to move into a new office space in Q2 of 2021 and all desired features of the office was detailed in terms of location, design and size, however the signing of contract got paused indefinitely because of the pandemic. Additionally, the project values environmental sustainability vastly and therefore has high expectations for their new office which go in line with the purpose of this thesis to explore if a hybrid model is a suitable alternative with the focus on all aspects of sustainability.

3.3. Data collection

Questionnaires are the most customary method of collecting data from a sample of individuals. Questionnaire is a list of questions each with a range of answers and is a format that allows standardized, relatively structured data to be collected about each of a large number of cases. Nowadays, questionnaires are frequently utilized at all levels of social research, from students and community projects to sizeable international surveys. The common factor about these surveys is the formulation of a set of questions which will assist the researcher to answer research questions or test a hypothesis.

3.3.1. Questionnaire remote work

The Swedish Transport Administration conducted a work environment questionnaire in November 2020 to examine the employees' experiences during the current pandemic in order to obtain a basis for continued work with the work environment, employeeship and leadership. The survey covered all aspects of the workplace environment during the pandemic including productivity, physical- and mental health, managerial experiences etcetera. Additionally, it covers the managerial attitudes of WFH and perceived opportunities to exercise their leadership during the pandemic and helped the organisation gather experience and highlight what is beneficial today and what can be improved moving on. The questionnaire includes 7128 participants of which 6352 has worked remotely the past year and consists of up to 60 questions.

3.3.2. Complementary questionnaire

In order to accurately comprehend the conditions for this case-study and properly realize the cost benefit analysis, a complementary questionnaire aimed to the project members of the East Link Project situated in Stockholm who will be relocating to a new office postpandemic was conducted. The questionnaire explores the project members perception of remote work as well as gathers information about potential time- and cost savings of remote work. The complementary questionnaire consists of nine questions, of which eight of these have structured answers and the last one is an open question which gather semi structured data.

Questions asked in the complementary survey:

1. How do you enjoy working from home?
2. How have you perceived your productivity during the pandemic?
3. What are the most significant benefits of working in an office?
4. What are the most significant disadvantages of working in an office?
5. How do you usually get to the office?
6. How long is your travel time to the office?
7. How much money do you save by working from home? (e.g., petrol, parking, SL-card, lunch, dry cleaning etc.)
8. How many days per week would you prefer to work from home postpandemic?

9. Is there something you would like to add?

The number of respondents for the complementary survey was 103 out of a total of 149 people, which means that the response rate was 69 percent.

3.4. Cost benefit analysis

According to T. Bentley et al. (2013) scarcely any organizations had committed in any form of cost benefit analysis relating to remote work, yet numerous organizations proclaimed an aspiration to take part in more precise and formal calculations in regard to costs and savings associated to remote work. I therefore have also conducted a cost benefit analysis to analyse the option for an organization to enable employees to divide their time between working remotely and working at an office. By summing up the benefits of the action and then subtracting the costs associated with taking that action, this thesis can provide an informed basis for organizations whether a hybrid regime is a worthwhile opportunity to pursue. The cost benefit analysis will include an extensive calculation to identify savings relating to real estate, reduced voluntary turnover, reduced absenteeism, work satisfaction and lower employee turnover as well as costs associated to ensuring a proper work environment at home. Two cost benefit analysis have been conducted, one from perspective of the employer and the other from the perspective of the employees.

3.5. Analysis of data

As previously described, data have been collected from two different surveys and when the data is collected, the process of analysing the data commences. The data collected in the surveys have subsequently been compiled in Excel and then the most significant variables have been demonstrated by illustrations to be analysed. The open-ended question was separately analysed and summarized by text. The collected data is presented in the chapter "Results". The complementary survey was distributed by e-mail and the response rate for the was 69 percent.

3.6. Research Ethical Considerations

It is of greatest significance that research is done with ethical considerations since this truly exhibits the genuineness of the author and how the research has been approached. Bell & Bryman (2015) demonstrations four main areas that ought to be contemplated when working with research. The key area of those four for this thesis is whether deception is involved. It is moreover important for the quantitative research that has been conducted as it is significant that the data here is not deceptive. Additional areas that are emphasized by Bell & Bryman (2015) are lack of informed consent, harm to participants and invasion of privacy.

It has been considered imperative to follow these ethical guidelines for the research to be considered as ethical without there being challenges to the validity of the data gathered through

the diverse research methods. In the questionnaire, all answers were anonymous, and all of the questions had a distinct connection to the research subject as to avoid any invasion of privacy as well as keeping the topic to the respondents' professional experience. The choice of data, handling of data and presentation of data has been done with the greatest care and with the help of third parties to avoid any form of deception.

3.7. Reliability and validity

Reliability is a central matter regarding the quality of the research undertaken in a study. In quantitative research reliability is frequently characterized by reproducibility. In order to be able to draw conclusions from the results of a study the observer must be able to repeat the research and reach alike outcomes. Hence, reliability plays a central role in the configuration of the model utilized in this thesis. It refers to the approach used to gather the data as well as which methods that has been used in processing and evaluating the data (Saunders et al. 2016).

The cost benefit principle states that we should only take those actions whose benefits exceeds their costs. For most, this principle's rationality makes it arduous to envisage how anyone could oppose. Nonetheless there are still numerous outspoken critics of the principle, many of which contend that cost benefit analysis is improper as a matter of principle. According to Frank (2000), some people find the principle generally unconvincing. In his article "Why is CBA so controversial?" Frank examines various conventions assumed by cost benefit analysts that do seem to generate deceptive prescriptions. The conclusion being that critics have fallen short to propose convincing arguments that cost benefit analysis is objectionable as a matter of principle, however a number of the methods used by cost benefit analysts may yield systematically biased prescriptions.

People who vision their ethical varieties in cost benefit terms need likewise concept their own estimations of the pertinent benefits and costs. The evident apprehension is that their estimations may be self-serving. 94 percent of college professors consider themselves to be more productive than their average colleague. More than 90 percent of all drivers are positive they are above the average driver. More than 99 percent of high-school students believe they exceed the average student in terms of their capability to get along with other people. The similar forces that make us overemphasize our abilities can be anticipated similarly to distort the estimations that underlie our ethical conclusions (Frank 2000). Therefore, in order to conduct an un-biased cost benefit analysis, it is crucial to be aware of and eliminate the preference that may distort the analysis prescriptions.

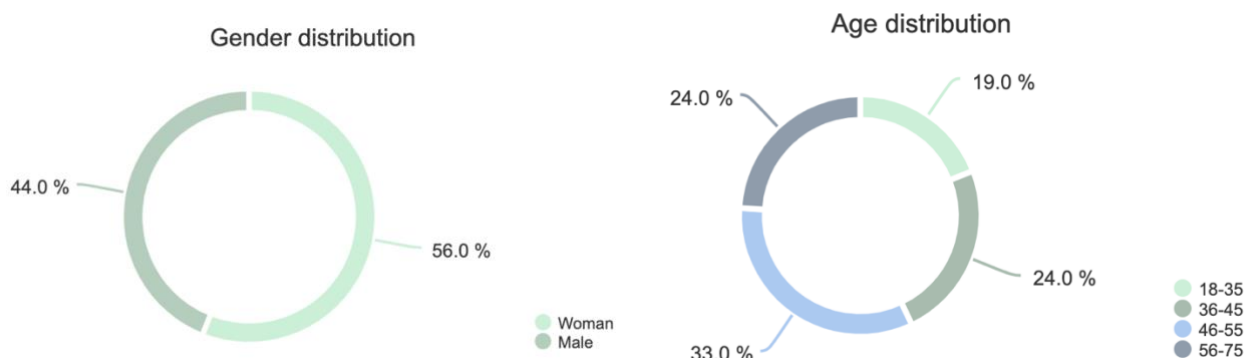
4. Results

4.1. Questionnaire remote work statistics

A survey provides a snapshot of a current situation, and the most important work environment work takes place in dialogue between employees and the manager, as well as between colleagues. We are each other's work environment and during the pandemic it is extra important, says Johanna Anemyr Jansson, unit manager at HR work environment.

4.1.1. Gender and age distribution

The participants of the survey were distributed by 56% women and 44% men. Furthermore, the majority of respondents were of the ages between 46-55 (33%) followed by ages 36-45 and 56-75 both at 24%. Lastly, the smallest age category was of the ages 18-35 at 19%.



Graph 1. Gender distribution.

Graph 2. Age distribution.

4.1.2. Remote work employee perspective

A vast majority of the employees who work remotely states that it works well, except when it comes to social contacts and the ergonomic work environment at home. Further, it is reported by 85 percent of participants that technology and IT equipment for digital meetings have worked well.

The results indicate that 31 percent of respondents have experienced that their opportunity to plan and structure their work during the pandemic have increased, while 16 percent state that it instead has decreased. 37 percent state that their opportunity to perform tasks during the pandemic has increased, whereas 19 percent state it has decreased. Moreover, 46 percent of respondents indicate that their opportunity to focus on their tasks has increased while 18 percent state it has decreased. 50 percent have perceived their opportunity to collaborate with colleagues have decreased, while 7 percent thinks it has increased. Additionally, 76 percent indicate that their social contacts with co-workers during the pandemic has decreased while 21 percent state they have not experienced any difference.

As illustrated in table 1 below, remote work was fairly uncommon pre-pandemic, where the majority rarely worked remotely (35%). Nonetheless, 30% worked remotely a few times a month and 17% did so 1-2 days per week. Lastly, 15% of employees states they never worked remotely pre-pandemic and only 3% worked remotely more than 1-2 days per week.

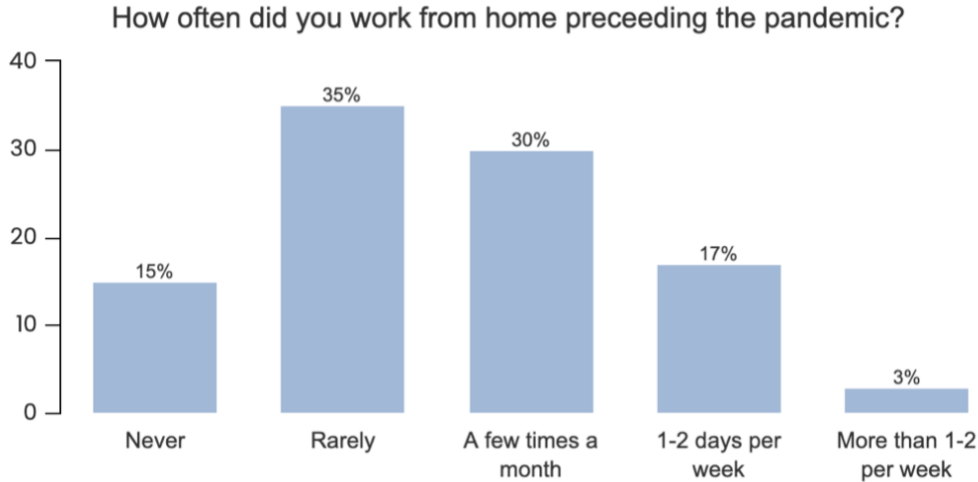


Table 1. Remote work pre-pandemic.

Table 2 demonstrates that 37% of employees perceives their work-life balance to have improved, 25% perceives it to have decreased while the majority (38%) indicate it to be the same as before.

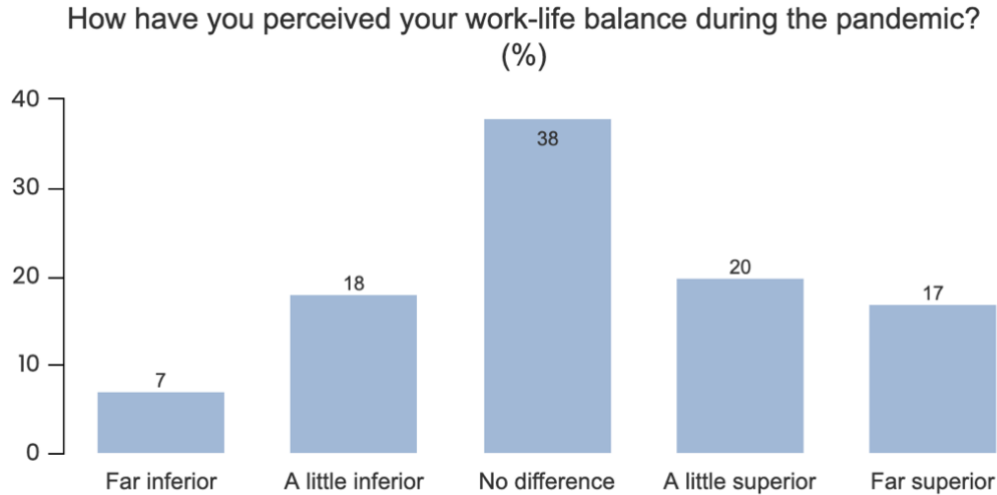


Table 2. Perceived work-life balance during pandemic.

Regarding the home environment, as can be seen in table 3, most respondents have had an overall positive experience. A vast majority (91%) state they have been able to work undisturbed. 78% state they have had a good workplace at home and 82% indicate they have had a good IT equipment. Moreover, 60 percent wants to replace more physical meetings with digital meetings and 47 percent wants to travel less for work post-pandemic.

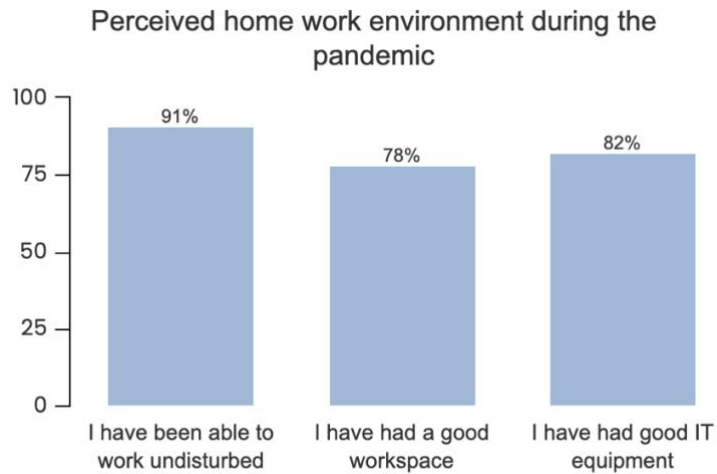


Table 3. Perceived home environment during pandemic.

As indicated by table 4 below, 50% of participants would wish to work remotely more often if work allowed. 8% of respondents do not wish to work more remotely postpandemic if work allowed, while 7% state they have no opinion of the matter.

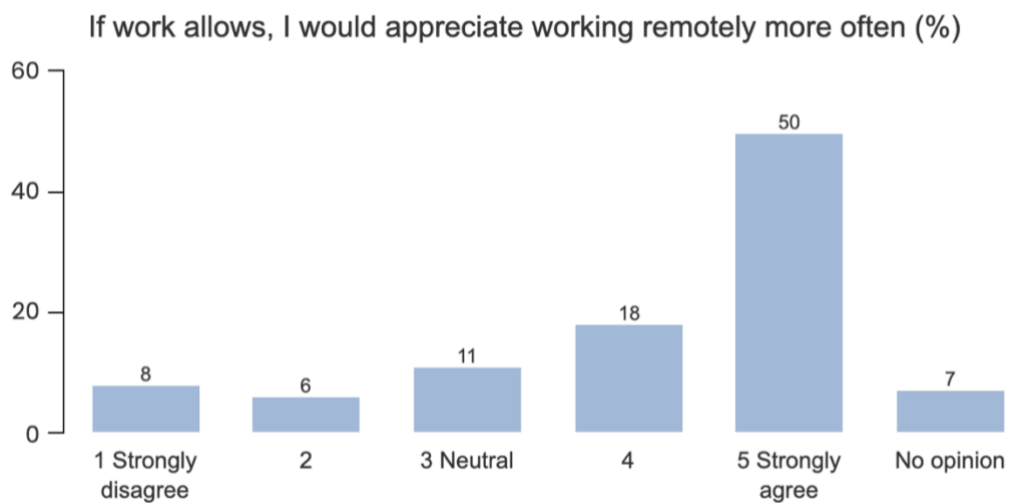
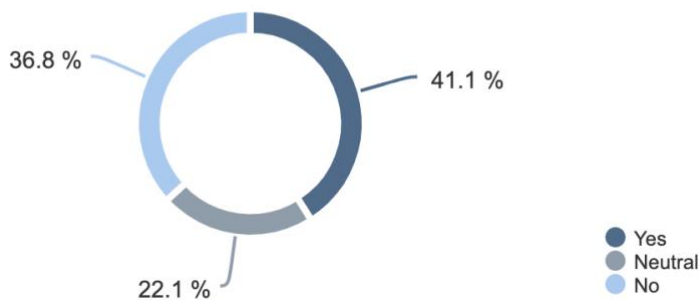


Table 4. Remote work postpandemic.

As illustrated in graph 3, the majority of respondents have experienced decreased creativity (41.1%) due to fewer physical meetings. Nevertheless, almost 37% have not experienced decreased creativity which is more in line with previous research while 22% remained indifferent.

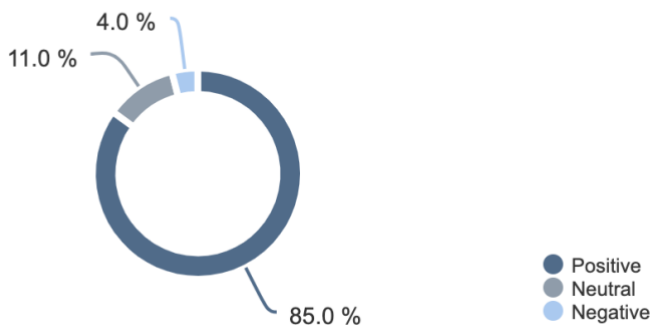
Have you experienced decreased creativity due to fewer physical meetings?



Graph 3. Decreased creativity.

Graph 4 below demonstrates that a vast majority of respondents (85%) have experienced their opportunity to solve their tasks in an adequate way during the pandemic. 11% of participants state it has remained unaltered and a minority (4%) of employees indicate their opportunity to solve tasks has been negatively impacted.

How have you experienced your opportunity to take responsibility for solving your tasks in an adequate way?



Graph 4. Solving tasks during the pandemic.

4.1.3. Remote work managerial perspective

Below the managerial experience of remote work during the pandemic is illustrated. Compared to the overall positive experience of remote work from the employee perspective where the majority are satisfied with the dialogue they have with their manager, managers have experienced more self-reported difficulties. Table 5a and 5b exhibit percentage of managers who have experienced that their opportunities have been negatively impacted by the pandemic to exercise eight different parts of their leadership.



Table 5a. Managerial experience during the pandemic.

Managers experience more challenges than employees, including the fact that it is more difficult to exercise leadership and that their work environment has deteriorated. Two challenges highlighted are to develop the group as well as to assess individual employees' need for support.



Table 5b. Managerial experience during the pandemic.

4.1.4. Mental and physical health

Results show that 68 percent of respondents perceives that the ergonomic work environment has worsened during the pandemic. Further, 37 percent state their mental health has deteriorated during the pandemic while 24 percent state it has improved. The physical well-being has increased according to 31 percent of respondents and decreased by 31 percent as well. The opportunity to be physically active have increased for 41 percent of respondents and decreased according to 27 percent.

How have you experienced your mental health during the pandemic?

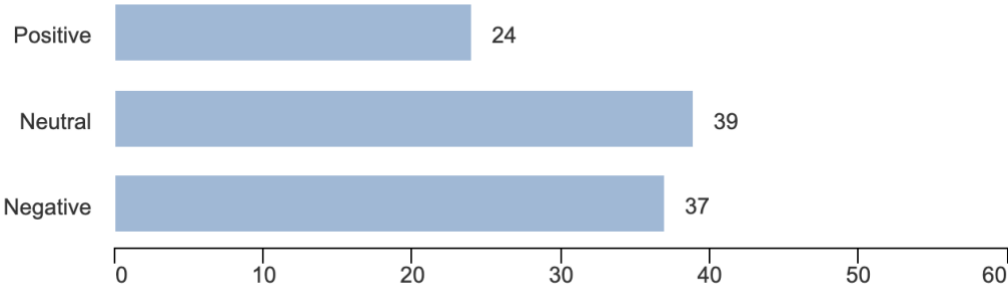


Table 6. Perceived mental health during pandemic.

How have you experienced your physical well-being during the pandemic?

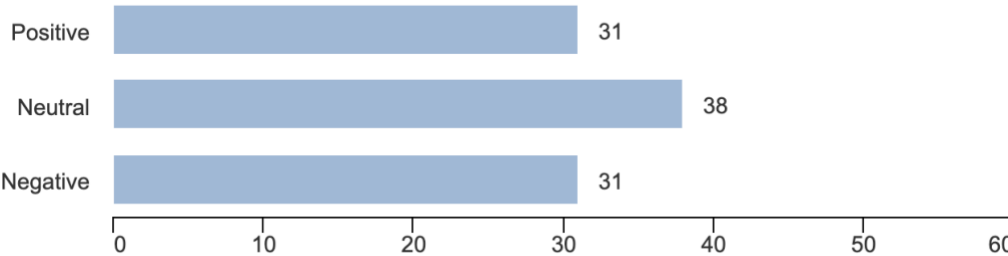


Table 7. Perceived physical well-being during pandemic.

How have you experienced the opportunity to be physically active during the pandemic?

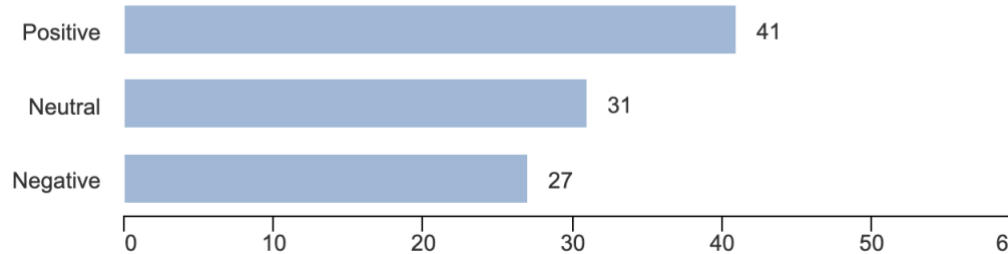


Table 8. Perceived opportunity to be physically active during pandemic.

4.1.5. How the Swedish Transport Administration views working life post-pandemic

Both leadership and employees need to be developed for teleworking, according to Niclas Lamberg, HR director at the Swedish Transport Administration. Two thirds of the Swedish Transport Administration's staff work remotely from home. Even though there was a certain habit of teleworking in the past, the past year has contributed with many lessons that the Swedish Transport Administration brings with it to working life postpandemic. Since the Swedish Transport Administration activated its crisis management in March last year, around 7,500 employees, two thirds of the workforce, have worked remotely with the home as a starting point. A year of telework has therefore given many experiences. This is stated by Niclas Lamberg, HR director at the Swedish Transport Administration. He explains how the organization went through different phases during the year, all with different challenges to wrestle with. The big challenge right now however is that this situation has become more or less permanent and we actually do not know when we will go back to something that is more normal.

Since the turn of the year, employees therefore receive a subsidy of SEK 10,000 to buy their own equipment that they need to create a good working environment at home. The subsidy will be taxable, but the Swedish Transport Administration see it as a good opportunity for employees to equip their home office. It gives greater flexibility and then we as a business do not need to own those products, he explains. The efforts during the year have largely been about practical issues such as the work environment, safety and communication. The first phase was marked by concern and rumours. Then it was important to create some form of security in how they as an organization handled the situation and that the employees could trust that the information was correct and honest.

In the next phase, the physical work environment was in focus. Since the employees largely work in activity-based offices, everyone had the opportunity to pick up an IT package with a screen, keyboard, mouse and a docking station immediately when it went over to telework. When this later entered a more permanent phase, those who wanted to borrow a chair from the office. After the summer, when many realized that homework would continue, it became important to provide tools to deal with boredom. The Swedish Transport Administration therefore invested heavily in communicating via the intranet and has been careful that everyone finds answers to their questions there. In addition, they have worked with motivation-raising activities, but also employee forums where they reflected on the situation and captured views and suggestions.

Despite the fact that the employees were more or less thrown into a completely new situation, it seems as if the vast majority think that remote work has worked well. In the employee surveys conducted by the Swedish Transport Administration, there are also many who want to be able to continue working partly from home when the pandemic one day is over. Niclas Lamberg says that they have already begun to prepare for the new workplace postpandemic and states that the remote work is here to stay. He further explains they are now looking at developing agreements so that employees and managers can control how they want the telework to work

in a clearer way. In addition, they have started to think a little differently about the office as a workplace. Niclas Lamberg says that in the future they think that different offices can function in different ways. Some will function as they do today, i.e., activity-based offices. Others can be designed more as meeting hubs where employees from different parts of the country can converge for meetings. In addition, they want to open up more remote workplaces in the offices so that an employee can, for example, choose to work in an office closer to their home. Of course, all of this presupposes increased competence in remote work, for both managers and employees. Both parties have a responsibility to ensure that remote work succeeds and that they have a good dialogue with each other, and they plan on develop both leadership and employeeship for remote work.

Niclas Lamberg believes that the readjustment functioned so well due to the fact that even before the pandemic they had a partial habit of remote work and digital meetings. But the past year of extreme remote work means that they can now take steps that they did not think would have been possible just over a year ago. Among other things, they are now reviewing their meeting strategy where physical meetings are no longer the first choice. Lastly, Lamberg explains that the organization have talked about reducing travel for a long time, but never expected it possible to reduce travel to such an extent. The organization have learned that the vast majority of meetings can be held digitally and in the guidance they are now fabricating, it becomes clear how one should think about travel in the future.

4.1.6. Development opportunities regarding digital meetings

Furthermore, the Swedish Transport Administration have studied development opportunities regarding its digital meeting services. Listed below are some of the most prioritized measures that may be internalized further on.

- Ensure that when one is invited to an external meeting (for example Teams, Zoom and Webex) the tool works as intended and it is easy to connect as a participant.
- Make sure that employees have access to the right support.
- Initiatives regarding sizeable meetings. Mainly through resources that can assist with technical support and in roles such as moderator and producer.
- Ensure higher quality of audio and video at digital meetings.
- A traffic network solution for work with sensitive and security-protected information. Also, a backup solution for meeting services that can be used during longer disruptions.
- There is a need for a central owner for digital meetings and a strengthened coordinated management with the user in focus.
- Implement support tools that guide the user about where to store sensitive information in real time and security class the information digitally.
- Continue to monitor the market for cloud services with a focus on digital meeting services.

4.2. Complementary questionnaire statistics

The complementary questionnaire consisted of nine questions, of which eight of these have structured answers and the last one is an open question which gather semi structured data. Advantages of flexibility is the possibility to pick up children from leisure time, more free time and easier to exercise at lunch as you do not need to shower before you start working again.

4.2.1. Remote work during the pandemic

The results of the complementary survey indicate that, as seen in table 9, 54.4% of the East Link project members enjoy working from home, 30.1% remain indifferent and 15.5% report they do not enjoy working from home.

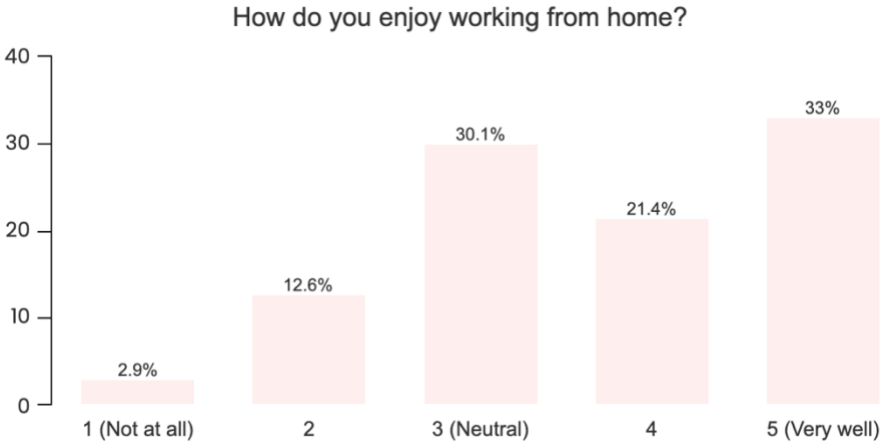


Table 9. Perceived work satisfaction during pandemic.

Further 51.4% of the employees perceives an improved productivity during remote work, one third indicate it has remained unaltered and 15.5 state it has worsened. Finally, 80.7% of participants would prefer to work 2-3 days from home postpandemic and almost 8% say they would wish to work fully remotely.

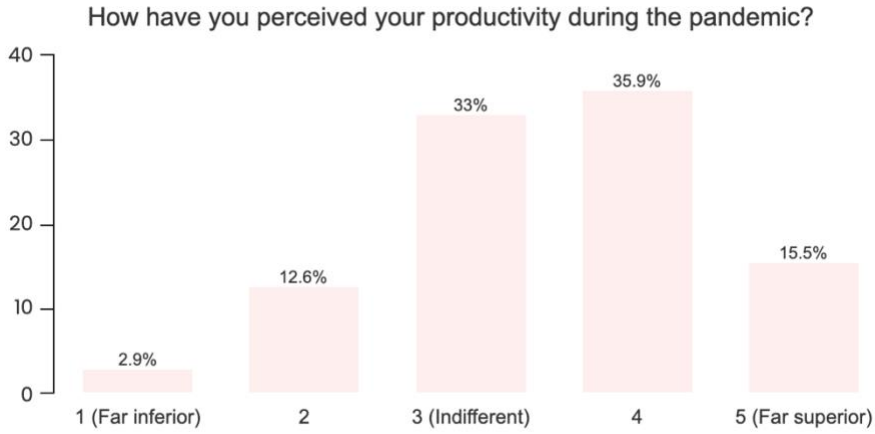


Table 10. Perceived productivity during pandemic.

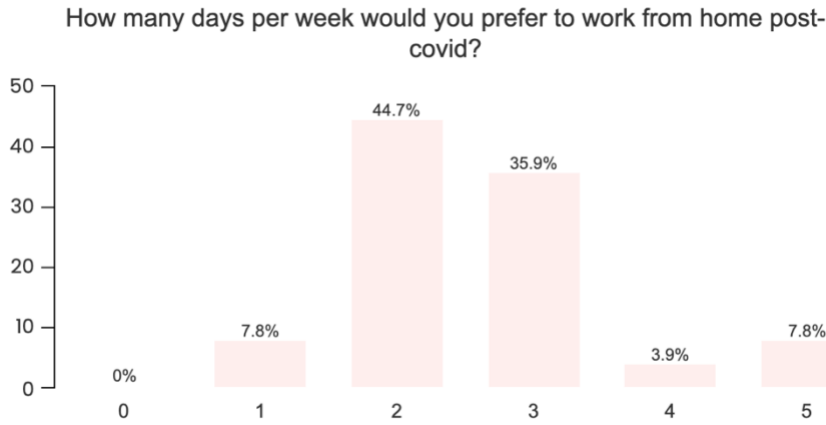


Table 11. Preferred number of remote days postpandemic.

4.2.2. Benefits and challenges of office work

In table 12 and 13 below the most significant benefits and challenges of office work is exhibited. Primary benefits comprise the collaboration (92.3%) and social interaction (89.3%) with colleagues. Main disadvantages include commuting time (93.2%), major expenses (69.9) and less sleep (52.4%).

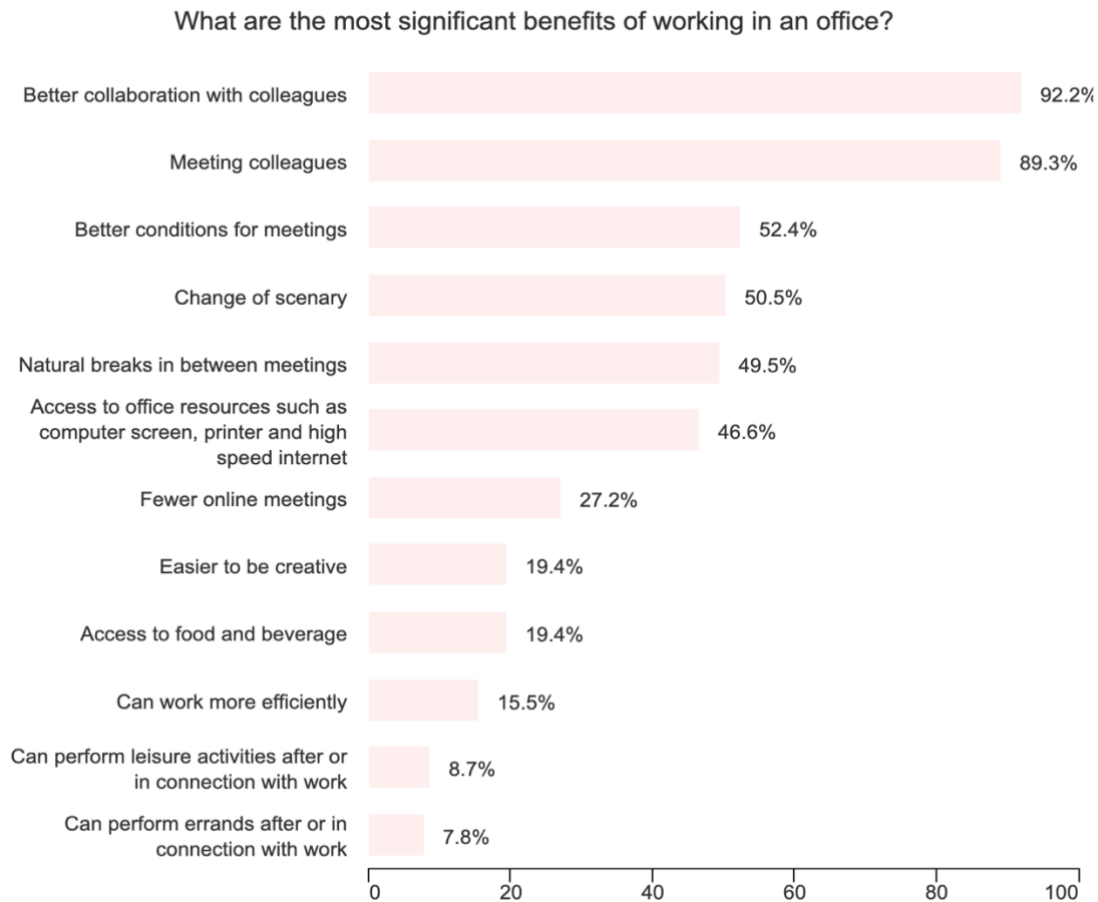


Table 12. Most significant benefits of office work.

What are the most significant disadvantages of working in an office?

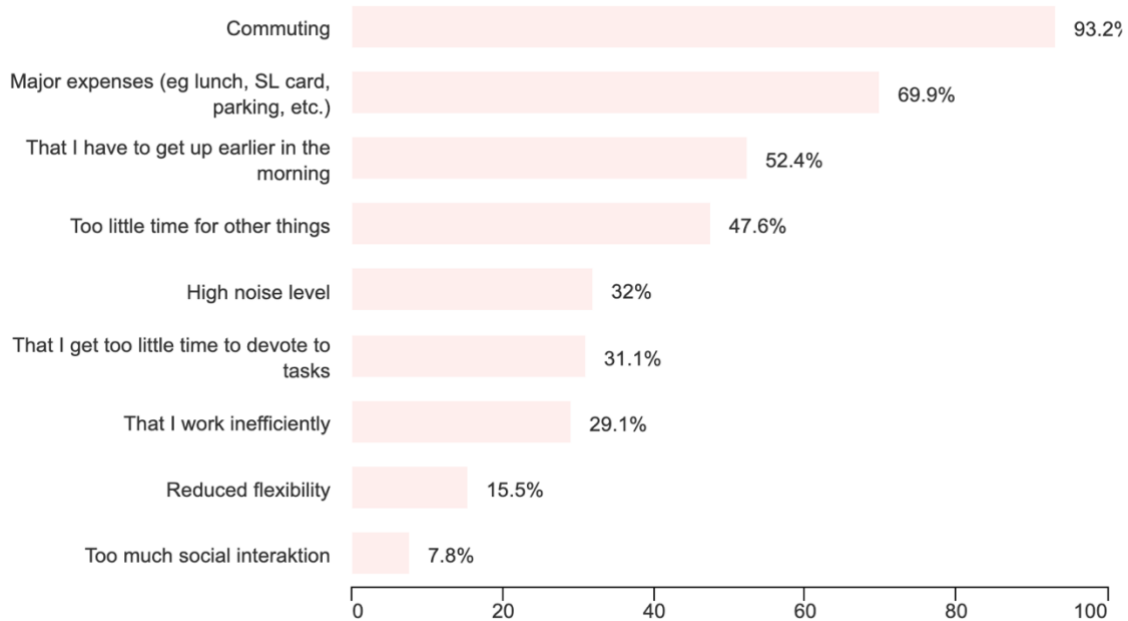


Table 13. Most significant challenges of office work.

4.2.3. Time and cost savings of remote work

The results in table 14 below demonstrates that the majority of employees saves around 1001-2000 SEK by working from home and that the average cost savings per month is 1 650 SEK per month for the East Link project members.

How much money do you save by working from home? (e.g., petrol, parking, SL-card, lunch, dry cleaning etc.)

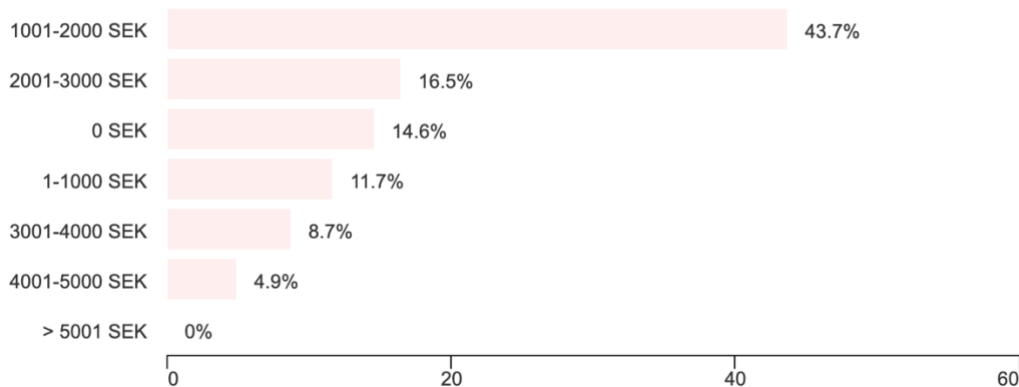


Table 14. Saved expenses of remote work.

The results further exhibit, as seen in table 15, that public transportation is by far the most common mode of transport (53.4%) followed by Car (23.3%), Bike/Walking (19.4%) and lastly Train (3.9%).

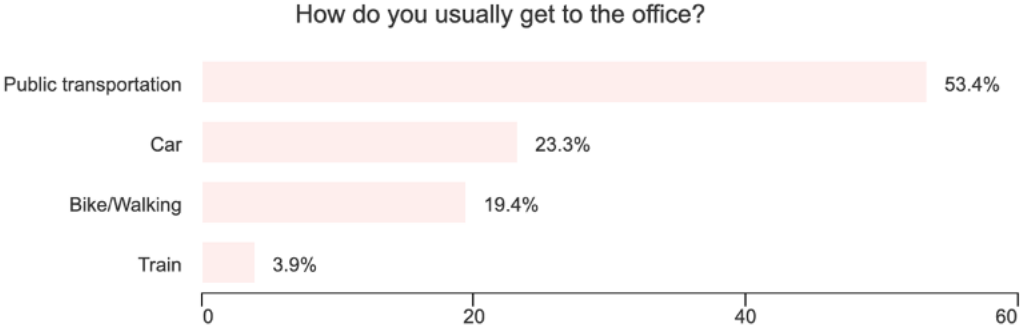


Table 15. Mode of transport to the office.

Moreover, table 16 below indicates that the most common travel time to the office is 10-20 minutes (28.2%), followed by 30-40 min (23.3%) and 40-50 min (18.4%). 16.5% state their travel time is more than 60 minutes and 0% said their travel time was less than 10 minutes. Furthermore, the average commute time to the office for employees is 37 minutes.

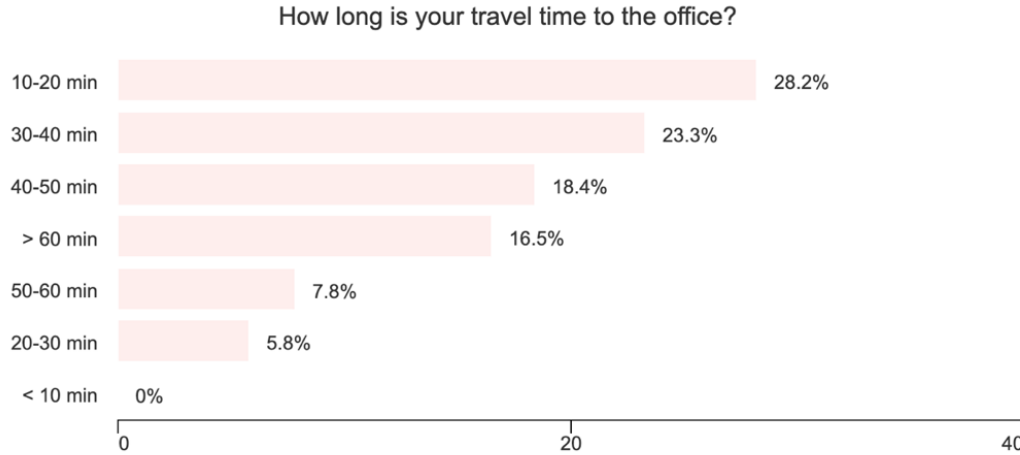


Table 16. Travel time to the office.

4.3. Cost benefit analysis

Two separate cost benefit analysis have been conducted to analyse the option for an organization to enable employees to divide their time between working remotely and working at an office. One is from perspective of the employer and the other from the perspective of the employees. The cost benefit analysis comprises an extensive calculation to identify savings relating to real estate, reduced voluntary turnover, reduced absenteeism, work satisfaction and lower employee turnover as well as costs associated to ensuring a proper work environment at home. Some factors though, even though we know it is valuable, are difficult to monetize.

4.3.1. Economic benefits and costs

Economic benefits of a hybrid model include:

Increased productivity - On an average salary of 1,000,000 SEK, an employee costs an employer 8 SEK/minute. Assuming that employees save 35 minutes/day on remote workdays by less interruptions, and they voluntarily work on average of 47 percent of the time they would have otherwise spent commuting (74min), the productivity of a remote workday would increase by 70 min per person. The productivity would thus result in 15% increase on remote days, resulting in an average of 6% productivity increase per year and person.

Reduced real estate – Including reduced electricity usage. Assuming a rent level of 5 000 SEK and a decrease of 20% real estate, lowering sqm/per employee from 15 sqm to 12 sqm.

Reduced absenteeism – Assuming annual absenteeism rate of 10days/year, a reduction of just 30% adds an extra three days of annual productivity.

Reduced voluntary turnover – Including increased loyalty, enhanced diversity, extended talent pool, increased engagement. Assuming a cost of turnover of at 75 percent of annual compensation – the middle of the range suggested by HR – experts, and average unwanted turnover of 7 percent – a reduction in voluntary turnover by 10 percent.

Continuity of operations – Assuming that employees are unable to work due to unforeseen external parameters one day per year and employee.

Economic costs of a hybrid model include:

Costs for home office furniture and technology – Assuming the employer pays an extra 10 000 SEK per year and employee.

4.3.2. Social benefits and costs

Social benefits of a hybrid model include:

Financial savings – Assuming that employees save 1 650 SEK per month and employee, resulting in an average cost save of 7 260 SEK per year and employee.

Time savings – Assuming that employees save 74 min round-trip on remote workdays, resulting in an average time save of 128 hours per year and employee.

Improved sleep – Assuming that employees on average sleep 34 minutes more on remote workdays, resulting an average of 13.6 minutes more sleep per day and employee and thus 59 hours of more sleep per year and employee.

4.3.3. Environmental benefits and costs

Environmental benefits of a hybrid model include:

Lower emissions and reduced pollution – The most substantial benefit for the environment is decrease of commuting by car to the office 2 days per week by 23.3 percent of employees. As the average new passenger vehicle emits about 122 CO₂ per km, assuming the average speed of the vehicle as 32 km/h and 74 minutes less in traffic 2 days a week results in 116 700 less CO₂ emissions per year and employee. The social cost of carbon is estimated as 828 SEK/ t CO₂ resulting in social cost save of 96 600 SEK per year and employee.

No environmental costs of a hybrid model.

4.3.4. Assumptions

What is the total number of employees who will work remotely?	150
How many days a week, on average, will they work remotely?	2
How many days will employees work per year?	260
What is the average cost of real estate per person in SEK?	75 000
What is the average salary per employee in SEK?	1 000 000
What is the average travel time single trip in minutes?	37
What is the average expenditure per month in SEK?	1 650
What is the per person cost for home office furniture and technology?	10 000 SEK
How many days per year are the majority of employees unable to work due to unforeseen weather, traffic, or other temporary impediments?	1
How much do you expect remote work to:	
- Increase productivity	6%
- Reduce real estate	20%
- Reduce absenteeism	30%
- Reduce voluntary turnover	10%
-	

4.3.5. Calculation – Employer perspective

Annual Employer Benefits

- Increased productivity	9 000 000 SEK
- Real Estate	2 250 000 SEK
- Absenteeism	1 730 000 SEK
- Turnover	768 000 SEK
- Continuity of operations	594 000 SEK
- Lower emissions	14 500 000 SEK
Total Employer Benefits	28 842 000 SEK
Annual Employer Costs	
Home Office Furniture and Technology (amortized)	1 500 000 SEK
Net Annual Employer Savings	27 342 000 SEK
Net Annual Savings Per Remote Worker	182 000 SEK

4.3.6. Calculation – Employee perspective

Annual Employee Benefits per employee:

- Financial savings	7 260 SEK
- Time savings	128 h
- Improved sleep	59 h

4.3.7. Results

The calculation above demonstrate that the Swedish Transport Administration saves 182 000 SEK annually on average per employee working remotely 2 days per week. Further, the calculation above exhibit that by working remotely 2 days per week, the average employee on the East Link Project saves 7 260 SEK due to fewer expenses, 128 hours by not commuting and sleeps 59 hours more per year.

5. Analysis

The hit to global productivity since the beginning of the pandemic in March 2020 would have been devastating, if the majority of the world's employees had not been able to work remotely. A job went from being something that you perform in a specific place to being a task that can be solved regardless of location and the pandemic exhibited that remote work arrangements are not only conceivable, but desirable. Organizations will most likely question long-held conventions about the role of the office and how work should be done. More and more employers are now instead looking for offices with access to services and amenities that make employees' everyday lives easier - both at work and in private and that promote social collaboration and interaction.

There is no one size fits all solution for a hybrid regime, the answer instead differs depending on where offices are located currently, which roles are significant, what talent is required and how much collaboration is needed for excellence, among other factors. Even within an organization, the solution might be different across businesses, functions and geographies, so the process of deciding what will be desired in the future must include the aspects of real estate, technology, human resources, and the business. Difficult choices will appear, and a leader must be permitted to drive the effort across individual functions and businesses. Perpetual change will additionally necessitate continuous alterations based on how well the effort is working overtime as well as remarkable change-management skills. A hybrid regime allows for recruiting for a broader region, enabling regional enlargement without any investments in infrastructure. Another aspect though is that increased remote work will affect the society is the cost of individuals not eating out as much or paying for public transportation as before.

Results of the remote work survey exhibit that 68 percent of respondents perceives that the ergonomic work environment has worsened during the pandemic, which is identified by previous research as a factor to remedy early on in order to avoid musculoskeletal (MSK) disorders, low back pain (LBP) and/or neck pain from occurring. Further, 37 percent state their mental health has deteriorated during the pandemic while 24 percent state it has improved. The physical well-being has increased according to 31 percent of respondents and decreased by 31 percent as well. The opportunity to be physically active have increased for 41 percent of respondents and decreased according to 27 percent. The variations in perceived mental and physical health can depend on various factors, with the pandemic being one of them. The social isolation of people who live on their own and whose social contacts have deteriorated both by not attending the office and not being able to work out at gyms or meet friends and family as before, may affect their mental health negatively. Another reason can be as simple as what the person is wearing, as Chapman & Thamrin (2020) reported that the mental health of people wearing pyjamas at home during workhours decreased at a far larger extent than for those who did not wear pyjamas.

Research emphasized that the main benefits for employees were saved time, money and improved health. This is confirmed by the complementary survey where project members of the East Link project have on average saved 1 650 SEK and 24.7 hours per month and person by working remotely and reduced commuting and saved expenses were also reported as the prime disadvantages of office work. Moreover, Hallman et al. (2021) reported that remote workers slept on average 34 minutes longer than when they worked in the office which is affirmed by the survey where 52.4% indicate they are sleeping more when working remotely.

In line with the research, results of the complementary survey conducted indicate that during remote work, productivity increased for 54.4%, remained unaltered for 30.1 percent and decreased for 15.5% of project members. The cause for the declined productivity is perchance, as previous research has exhibited, the absence of social interaction and collaboration with colleagues, which is confirmed by the complementary survey to be the primary challenges of remote work. Project members further stated that the office offers superior conditions for meetings and provides for a change of scenery. Whilst remote workers valued their work setting greater than non-remote workers, they described considerably more ergonomics problems generally in comparison to non-remote workers. These discoveries advise employers to particularly considerate the ergonomics aspects of the home office by either providing home office assessments or instruction for remote workers on how to accomplish an ideal remote working environment (Bentley et al. 2013). Lastly, in view of the reducing participation in the workforce due to an aging population, measures that increase the ability to participate in the labour market are of strategic importance to the economic development on a nation (Baker et al. 2007).

An interesting result of the remote work survey is the difference in how employees and managers feel that the managers have delivered during the pandemic. Managers in the remote work survey did not perceive remote work as optimistically as employees do, which is consistent to the literature review. Managers reported it challenging to exercise leadership, develop the group and to assess individual employees' need for support. And while employees are generally satisfied with the dialogue with their manager, managers are not happy with their ability to exercise good leadership during the pandemic. Supposedly because many managers might miss the spontaneous meetings, to see their employees in everyday life. It creates an insecurity and a feeling of not being enough. This can be remedied by boosting the managers and by inspirational lectures where the managers receive more tools to lead at a distance.

Furthermore, costs for employees to purchase larger homes and faster broadband have not been calculated in the analysis as the standard broadband in Sweden is considered sufficient for work and the size of employees' homes did not affect neither productivity or work satisfaction and is thus not an obligation for adequate remote work.

Despite the broad embrace of a hybrid regime, most organizations have not detailed nor articulated the specifics of the implementation of a permanent mix of office and remote work for those employees where on-site office work is non-essential. Many employees may be feeling anxious as a result, thus the sustainability of hybrid remote work gains may depend on

how well managers address this anxiety. The potential benefits outlined in this thesis will not just occur by allowing employees to work remotely. Managers will need to stand fully behind whatever path chosen for their organization and demonstrate it with their actions. This will necessitate an investment in time rethinking work policies, processes and practices as well as in the patience and energy that will be required to shift organizational culture and reframe mindsets. Finally, it could require a financial investment in the alteration process, reshaping the places and spaces of work, as well as providing employees with the tools and technologies needed for an efficacious implementation.

The WFH trial period induced by the pandemic has clearly unveiled the vast number of organizations who have the capabilities to implement remote work on a permanent basis and that employees highly regard the opportunity to do so. However, it correspondingly exhibited how imperative the office is for colleague interaction as well as collaboration and how immensely this have been longed for.

6. Conclusion

The purpose of this study has been to explore if a hybrid workplace model has the potential to disrupt a traditional office-centric workplace with focus on the aspects of economic, social and environmental sustainability. To answer the purpose, the conclusion is divided into our two research questions.

1. *What are the social, economic and environmental benefits and challenges of remote work?*

This study exhibits numerous benefits and challenges of remote work and with the pandemic eliciting the greatest remote work experiment in modern time, most individuals have now experienced a variety of these. Benefits comprise increased productivity, work satisfaction, competitive advantage, improved health, continuity of operations, improved health and lower emissions. Further benefits include reduced real estate, commuting, employee costs, absenteeism and voluntary turnover. If implemented deficiently, challenges of remote work comprise reduced productivity and work satisfaction, increased inequality and worsened physical and mental health.

2. *Is offering employees to work remotely as well at the office a socially, environmentally and economically advantage for an organization in comparison to the prior traditional office-centric type of work?*

The cost benefit analysis demonstrated that the East Link Project would save 182 000 SEK annually per employee working remotely 2 days per week. Further, exhibited that the average project member would save 7 260 SEK annually due to fewer expenses, 128 hours by reduced commuting and would sleep 59 hours more per year. With the right approach, technologies, organizational processes and, furthestmost essentially, leadership, many more organizations, functions and teams could go all or mostly remote. The question is not whether a hybrid model is feasible but instead what is required to make it feasible. The short answer of which is management. If the majority of senior managers are working at the office, then employees would be drawn there to get face time. Nonetheless, if managers support synchronous and asynchronous communication, problem-solving, brainstorming as well as encourage virtual socialization, mentoring, teambuilding, ensure regulatory compliance, invest in, enforce data security and set an example by engaging in remote work, hybrid organizations could certainly emerge as the future of work.

6.1. Recommendations

To optimize the benefits of a hybrid workplace model, management should:

1. Trial remote work arrangements in one part of their organisation, or within a single team, and evaluate its benefits prior to contemplating extensive application of remote working

2. Ensure consistent evaluations of remote working policies, arrangements, and contracts to distribute best outcomes from management and remote worker perspectives
3. Provide suitable training for remote workers and managers of remote workers
4. Offer support in setting up a home office.
5. Distribute sufficient technology/ICT support for remote workers
6. Provide excellent support for remote workers from their line managers
7. Quantify the economic, environmental and social contributions of remote work to the organisation and society.
8. Communicate early how your organization views remote work postpandemic.
9. Research and surveys exhibit that employees prefer to work remotely when they need to focus and in a regular workplace when they want to be creative and social. Create conditions for being creative and social in the workplace
10. Collect feedback from employees, how it works for them today and what support they need from home. Make employees involved in how the organization visualize its future workplace.
11. New employees benefit from working at the regular workplace during start-up. Onboarding is most advantageous from the regular workplace.
12. If the organizations are looking for new skills, it can now recruit from a wider region.
13. Focus on quality and results, where the work is conducted is not of importance.
14. Ideally all employees working in the same field would be in the office on the same days.
15. Consider how meetings are planned during the day, natural breaks even if one works remotely.
16. Transparent communication is also critical and group meetings should be held in a completely distributed way with everyone on their own device. This solution cuts down on the side conversations and everyone can be seen and heard, avoiding the distant conference table and the vague faces.
17. The more individually an employee work, the more she can work remotely.
18. If a hybrid model is introduced in an organization, it is crucial for management to follow the regime in order for it to be successful.

6.2. Suggestions for future research

A recommendation for future research regarding this subject could be to do a case-study on a previously office-centric organization that have implemented a hybrid workplace postpandemic to explore the benefits and challenges occurred after the alteration.

Moreover, another example of a future study could be to compare the implementation on a hybrid regime on a minor organization and a greater one. For example, a start-up knowledge-work company in the tech sector that may be well positioned to adopt such a model compared to a sizable and mature organization.

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8. List of Appendices

8.1. Appendix A: Complementary questionnaire questions

Questionnaire questions in Swedish:

1. Hur trivs du med att arbeta hemifrån?
2. Hur har du upplevt din produktivitet det senaste året jämfört med innan pandemin?
3. Vilka är de största fördelarna med att arbeta på kontor?
4. Vilka är de största nackdelarna med att arbeta på kontor?
5. Med vilket transportsätt tog du dig till kontoret pre-covid?
6. Hur lång restid har du till kontoret?
7. Hur mycket sparar du per månad genom att arbeta hemifrån? (t.ex. bensin, parkering, SL-kort, lunch, kemtvätt, etc.)
8. Hur många dagar i veckan skulle du vilja arbeta hemifrån post-covid om du fick välja själv?
9. Finns det något du önskar tillägga?

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