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SCHOOL OF BUSINESS AND ECONOMICS

MASTER`S THESIS

EFFECTS OF DIGITAL REMOTE WORK ON JOB SATISFACTION

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ABSTRACT

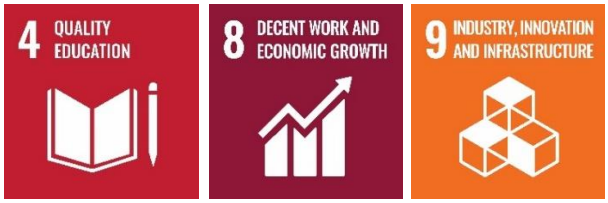
The underlying idea behind this research is to investigate the relationship between digital remote work and job satisfaction. Since the appearance of COVID- 19 pandemic digital remote work as a model experienced a massive growth. The research relies on previous literature on the topic which has been increasing in scope and depth rapidly following the increased popularity digital remote work has been experiencing over the past years. This research particularly focuses on investigating whether there exists a positive correlation between digital remote work and job satisfaction, investigating different demographic characteristics in attempt to determine correlation with remote work preference and determine whether remote workers experience workplace engagement.

The research uses data gathered from 135 respondents, each with a certain level of digital remote work experience. The research aims to bring value in the establishment of future workplace dynamics and help organizations in achieving improved efficiency with talent attraction and talent retention. The results are based on a survey divided into four segments related to demographics, remote work background and experience, remote work and job satisfaction and workplace engagement. The data relies on personal details and assessment of each remote worker on each of the four segments. The results are expressed through descriptive statistics, ordinal regression and theoretical analysis of the available data.

The findings show a positive correlation between digital remote work and job satisfaction as a system of variables of remote work parameters against which job satisfaction is measured. The study also tests the correlation between specific demographic characteristics and digital remote work preference. The overall findings, with a single exception suggest that there is no significant correlation between the demographic characteristics and digital remote work preference. The data on workplace engagement doesn`t provide clear and consistent results. The research finds that opportunities for digital remote work are highly preferred in contrast to traditional work model. The combination of traditional work model and a level of salary raise also shows inferior results compared to opportunities for digital remote work. In regards to preferred work model, results show a strong preference of a hybrid model of work.

KEY WORDS: digital remote work, remote work, work from home, job satisfaction, workplace engagement

SUSTAINABLE DEVELOPMENT GOALS



POVZETEK

Temeljna ideja te raziskave je proučiti razmerje med digitalnim delom na daljavo in zadovoljstvom pri delu, pri čemer je digitalno delo na daljavo od začetka pandemije COVID-19 doživelo izjemno rast in raziskava temelji na hitro rastoči literaturi o tem področju. Preučuje, ali obstaja pozitivna povezanost med digitalnim delom na daljavo in zadovoljstvom pri delu ter analizira različne demografske značilnosti z namenom ugotavljanja povezanosti s preferencami glede dela na daljavo in preverjanja vključenosti delavcev v delovno okolje. Raziskava uporablja podatke 135 anketirancev z izkušnjami z digitalnim delom na daljavo, njen cilj pa je prispevati k oblikovanju prihodnje dinamike delovnega okolja ter izboljšati učinkovitost organizacij pri pridobivanju in zadrževanju talentov. Rezultati, predstavljeni s pomočjo deskriptivne statistike, ordinalne regresije in teoretične analize, temeljijo na anketi z demografskimi podatki, ozadjem in izkušnjami z delom na daljavo, zadovoljstvom pri delu ter vključenostjo v delovno okolje, pri čemer podatki vključujejo osebne značilnosti in ocene anketirancev. Ugotovitve kažejo na pozitivno povezanost med digitalnim delom na daljavo in zadovoljstvom pri delu ter preverjajo povezanost med določenimi demografskimi značilnostmi in preferenco digitalnega dela na daljavo, pri čemer splošni rezultati – z eno samo izjemo – kažejo, da pomembne povezanosti ni, medtem ko podatki o vključenosti v delovno okolje ne zagotavljajo jasnih in doslednih rezultatov. Raziskava ugotavlja, da so priložnosti za digitalno delo na daljavo izrazito bolj zaželene od tradicionalnega modela dela, tudi tradicionalni model z zvišano plačo kaže slabše rezultate, medtem ko rezultati glede preferiranega modela dela izkazujejo močno naklonjenost hibridnemu modelu.

KLJUČNE BESEDE: digitalno delo na daljavo, delo na daljavo, delo od doma, zadovoljstvo pri delu, zavzetnost na delovnem mestu.

CILJI TRAJNOSTNEGA RAZVOJA



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LIST OF ABBREVIATIONS

WHO – World Health Organization

EU – European Union

WFH - Work from home

VPN – Virtual Private Network

PPP – Purchasing power parity

GDP – Gross domestic product

CIT - Critical incident technique

df – Degrees of freedom

Sig. – Significance level

Asymp. Sig. – Asymptotic Significance

Std. - Standard

1 INTRODUCTION

The past years, following the advancements in technology along with globalization have produced an increasing trend of a new format of conducting job activities known as digital remote work. This has been especially the case since the appearance of the COVID–19 pandemic, which has served as a catalyst for the increasing popularity of remote work across various sectors and industries. Due to the necessities to limit human contact, recommended by institutions such as World Health Organization (WHO), as well as other healthcare authorities and followed by regulations, many people were forced to perform their work responsibilities through digital remote work. As a result, many companies and organizations found themselves in a situation being practically obliged to change and adapt their work models. Therefore, in order to address the challenges posed on the work model and limit human interaction as much as possible many companies, organizations and institutions shifted towards a digital remote work model to maintain operations and keep their employees and other stakeholders safe (Makridis & Schloetzer, 2022). The advancement of technology has played a pivotal role in this process, as digital remote work is largely technology-based endeavor and relies on support of information systems.

There are a range of terms associated with the idea of digital remote work including, working from home, remote working, teleworking and telecommuting. The concept of digital remote work generally refers to performing one`s work responsibilities at a site outside of the regular workplace facilitated by information systems (Kurland & Bailey, 1999).

Digital remote work by its nature enables employees to perform their job with greater flexibility, provides opportunities for greater job autonomy and significantly reduces physical location dependency, or in some cases completely eliminates location dependency. However, it also raises concerns about its impact on job satisfaction and overall well-being of employees and the organization as a whole.

Investigating and addressing these concerns in regards to the relationship between digital remote work and job satisfaction can bring value to better understanding new challenges arising in the job market. Moreover, better understanding of these challenges may help companies adapt in order to be more competitive in attracting new talent, retaining existing talent and improve the overall well-being of their workforce.

In addition to gaining a competitive advantage in the market struggle for talent acquisition and retention, an improved insight on these challenges may bring organizations added business value. More specifically, digital remote work as mentioned significantly reduces location dependency. Therefore, an organization which incorporates and is able to optimize digital remote work into its work model faces a potentially reduction in costs, specifically fixed costs such as the cost for standard office space. Moreover, the restrictions or challenges which would normally exist in employing talent geographically less accessible are largely addressed with the introduction of digital remote work. This means that an organization has

the opportunity to access a much larger pool of talent with much less or no geographical restrictions and as a result achieve competitive advantage.

The thesis aims to provide a better understanding of digital remote work starting by providing a chronological framework of the history of this work model leading up to the recent rapid digitalization. Moreover, underlying the wide general impact in regards to digital remote work caused by the pandemic circumstances and how the academic research to date has investigated the topic. The thesis describes digital remote work and job satisfaction along with other related concepts to provide a more detailed understanding of the topic investigated. Moving forward, by understanding the relationship between digital remote work and job satisfaction the thesis aims to provide some guidelines for future decision making on how work models ought to be organized, particularly in managing resources, talent attraction and retention.

The motivation behind this research comes as a result of the dilemma on how to proceed in the future and what work model is ought to be the better practice. Lately, with normalization of social interactions in what can be referred to as a post-pandemic period, the norm for social distance has faded. Therefore, organizations are generally no longer bound to restrictions in organizing their work models in a non-traditional manner. However, the experience itself has shed light on a large scale to a new, less conventional, more modern way of work, the digital remote work model. As a result, nowadays, a dilemma is being presented in the face of many organizations regarding how to organize their work model in the future. Organizations face the decision to either return to the well-known, well-defined, traditional model, or continue with a less conventional approach to work unlocked by digital remote work models. Further evidence for this dilemma can be found in the increasing popularity of different versions of hybrid models. This trend can be interpreted as intertwining of both remote and traditional models as a form of examination of the two models in order to determine which one works better for an organization. Or possibly find the optimal balance between the two that can deliver the desired competitive advantage for an organization in managing resources, as well as attracting and retaining talent in the future.

1.1 Purpose of thesis

The main purpose of the research is to gain insight on the relationship between digital remote work and job satisfaction. Furthermore, it strives to understand whether digital remote work is the preferred way of work among employees and determine which way work should be organized onwards to increase job satisfaction.

1.2 Goal of thesis

The goal of the thesis is to examine the effects that remote work has on job satisfaction. More specifically to determine how remote work correlates to job satisfaction.

1.3 Research questions

Research question 1: Is there a positive correlation between remote work and job satisfaction?

Research question 2: Is there a correlation between specific demographic group and remote work preference?

Research question 3: Do remote workers experience workplace engagement?

2 HISTORY OF REMOTE WORK

This section covers the overall history of digital remote work including chronological evolution, key concepts addressed in the thesis, social and technological challenges as well as the most recent implications of the pandemic in respect to digital remote work.

Andrei placed the concept of remote work and it`s early development in the 1960`s and 1970`s (Andrei, 2022). This means that conceptualization and early development phase come in line with the development of early computer systems. Therefore, further supporting the idea that digital remote work is strongly connected to information technology and information systems. Even though in the early stages computer systems were very large in size and centralized, requiring employees to physically access them, the idea of performing you work tasks outside of a central office was spawned. In her work, she credits Jack Nilles for having coined the terms “telework” and “telecommuting” in 1975. Both terms are closely related and often interchangeable with digital remote work.

The concept continued to progress alongside other technological milestones. With the introduction of IBM 5100 in 1975, the first portable computer the stage was set for finally making work transferable outside the office. Later on, another technological milestone continued to helps this concept grow with the release of Osborne 1 in April 1981, considered the first true laptop to make it to the market.

With all of these advances making their mark for the foundations that enabled digital remote work, the pivotal breakthroughs did not come until the 1990`s. In the year 1990. Tim Berners – Lee launched the World Wide Web and shortly after that in the early 1990`s was a period of commercialization of the internet which enabled communication and sharing of data

across vast distance. The 1990`s were a period of rapid increase in the usage of personal computer, as well as the advent of mobile phones. These advances in hardware, combined with the introduction of new collaborative software created the favorable conditions that made digital remote work more and more feasible.

Andrei (2022) argued that it was around this time that some companies such as IBM and AT&T among the first recognized the value and potential in regards to flexibility and cost savings. As a result, they had started to experiment with digital remote work arrangements within their organizations.

In regards to institutional and legislative context, digital remote work was recognized by the European Commission in the late 1990`s and early 2000`s as a potential tool for enhancing employment within the information society. Notably, the European Union (EU) adopted the so called "Framework Agreement on Telework" with the aim of setting guidelines in regards to telework conditions across its member states. This framework agreement has provided significant help in shaping the legal landscape of digital remote work within the EU, promoting the usage of information systems as a tool to facilitate work outside traditional work environments.

The institutional and legislative phases throughout recent history have been crucial in paving the way for how digital remote work is being practiced today. The phases of institutional and legislative evolution involve: recognition of digital remote work as a legitimate form of employment, creation of regulatory frameworks and continuous adjustments in order to keep up with the pace with technological advancements and changing workforce needs.

In the 1990`s the European Commission adopted political recommendations with the purpose of integrating telework into the labor market. The initiative was meant as a tool to boost employment and also adapt to the emerging digital economy. The pilot projects aimed at exploring the feasibility and effectiveness of teleworking.

The 2000`s were marked by the Lisbon Strategy, an ambitious endeavor introduced by the European Council. The goals of the Lisbon Strategy were directed towards making the EU the most competitive and dynamic knowledge-based economy by the year 2010. The role that telework was introduced in this strategy for, was in the context of modernizing labor markets, enhancing productivity and improving the work/life balance. With an emphasis on the need to adapt working practices to technological advancements, telework was introduced as a trend. Moreover, another significant historical milestone was the Framework Agreement on Telework. That was an agreement reached in 2002, between European social partners, employer`s organizations and trade unions. Negotiation took place between September 2001 and July 2002 with a focus on establishing a standardized understanding of telework across the EU member states. According to the agreement, telework is defined as form of organizing and preforming work using information technology, where the work could be conducted outside of the employer's premises on a regular basis. The goal was to provide a legal and practical foundation for telework, addressing the issues of employment conditions, data privacy and protection, as well as health and safety.

The key provisions of the agreement were as follows:

- Voluntary basis: telework was established as a voluntary arrangement between an employee and employer, preventing mandatory imposition unless mutually agreed.
- Equal treatment: teleworkers were to have the same rights as their on-site colleagues.
- Health and safety: employers were meant to ensure that working conditions met the health and safety standards. Including appropriate equipment and adequate ergonomics.
- Data protection: the agreement emphasized the importance of protecting personal data. Meant to ensure that employers respect privacy and establish clear polices for data handling.

The implementation of the agreement across EU member states initially went without the necessity of national legislation, but through a mechanism of social dialogue. However, the agreement set a baseline for regulation of telework that can further be adopted in the national context. In accordance to this baseline many countries went on to implement regulation for telework depending on their market needs and their legal systems. Based on their legal systems in regards to telework, countries fall into one of two categories. In the first category are countries with specific legislation regarding telework. These were countries that adopted more direct regulations on telework insisting more on formal agreements and obligations specific to telework. Among these countries are: Germany, France, Spain etc. On the other hand, the second category is comprised of countries that took a more indirect approach to regulation of telework such as Denmark, Sweden, Irelands etc. Their approach was to introduce telework related regulations through general labor laws and existing agreements. While the first category focused on introducing more telework specific, clearer guidelines and regulations, the second category relied more on the collective bargaining and company level agreements to set the terms for digital remote work.

With the appearance of the COVID-19 pandemic the (International Labour Organization, 2020) released a guide “Teleworking during the COVID-19 pandemic and beyond”. Which included a set of best practices for employers and policy makers. These guidelines and the International Labor Organization played a very significant role in shaping the policies for regulating digital remote work throughout the pandemic on a global scale. The guidelines emphasized the importance of clear telework agreements, protections of employee rights, as well as measures that prevent and protect employees from health and safety risks which are associated to prolonged remote work.

An EU agency, named Eurofound (Eurofound, 2022), which focuses on improving working and living conditions conducted extensive studies throughout the pandemic in order to assess the impact of telework in the European labor market. The results showed that during peak up to 40% of employees in the EU were remote workers.

In brief summary, according to the work of Andrei (2022) on the history of digital remote work, as well as information contained in the guide “Teleworking during the COVID-19

pandemic and beyond", (International Labour Organization, 2020) it seems evident that digital remote work has evolved throughout the years. What has started as a niche concept in earlier years, has evolved into a well-regulated employment practice across the EU.

2.1 Key concepts

This section offers a brief explanation of some key concepts addressed throughout the thesis.

Digital remote work: the practice of performing one`s job activities from a location outside of their standard work environment, like an office supported by information systems.

Job satisfaction: the subjective evaluation of an employee for the degree of positive emotional state derived from the appraisal of his job experience.

Information systems: a type of system that involves information resources, including hardware, software, data and network infrastructure organized to accomplish specific functions within an organization.

Telecommuting/teleworking: terms synonymous with digital remote work in the literature.

Traditional work model: a work model where an employee is required to perform his full job activities at a standard workplace location, like an office.

Hybrid work model: a sub model of digital remote work where employee works part of his working hours outside of a standard working location, like an office, supported by information systems

Work from home: a form of digital remote work where an employee uses their place of residence as the main location for conducting work related activities.

Workplace engagement: the degree of involvement and enthusiasm of an employee in relationship with their work and workplace.

Perceived autonomy: the degree to which an individual perceives his or her actions as a result of his and her own free will, without external interference in a certain situation.

Job flexibility: flexibility in work schedule and flexibility in performing job activities

Remote work intensity: frequency or the amount of time spent working remotely

Knowledge workers: individuals who rely on theoretical and analytical knowledge often acquired through formal education or training to perform their job activities.

When speaking about remote work and job satisfaction it is important to address the meaning of these concepts. Some of the earlier works such as (Locke, 1976) describe job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences".

Historically speaking the work arrangement that we refer to as remote work, digital remote work, telecommuting etc. has been originally defined by Jack Niles according to Kurland & Bailey (1999) and was a reference to working from a remote location away from a standard office or work site.

Teleworking and telecommuting are also terms that appear across the literature and are often used interchangeably. Nevertheless, there are still some who argue against this claiming that there are differences between the two and should not be used interchangeably. For instance, according to (Garrett & Danziger, 2007) telework represents a broader concept consisted of four dimensions which are: time distribution, information technology, work location and diversity of employment. Whereas telecommuting, according to (Ellison, 2004) as a term is more specific and is in reference to completion of work at a remote location with the purpose of decrease in commuting time.

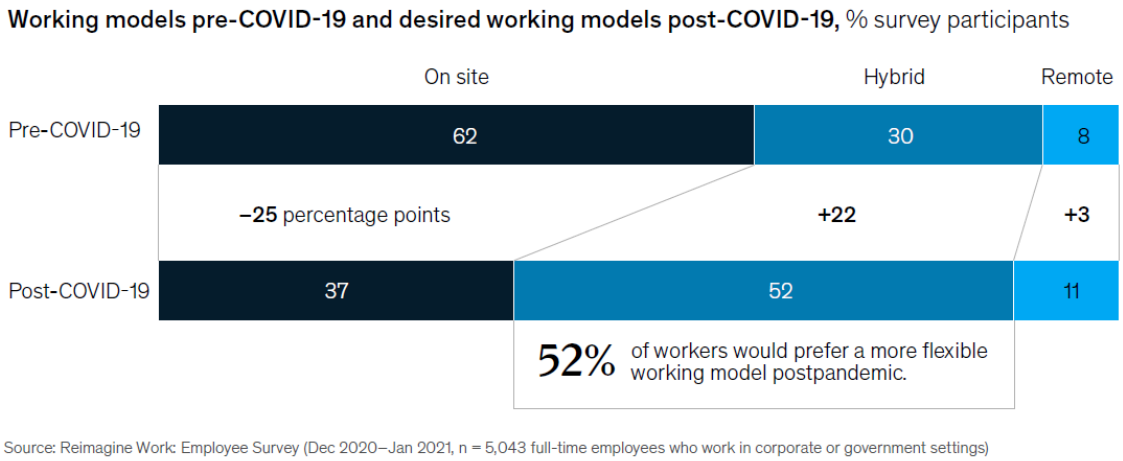
There are a range of terms associated with the idea of digital remote work including working from home, remote working, teleworking and telecommuting. The concept of remote work generally refers to performing one`s work responsibilities at a site outside of the regular workplace facilitated by information systems. According to (Allen et al., 2015) working remotely refers to when someone works either part, or all, of their regular work time in their primary place of residence.

2.2 Effects of COVID-19 pandemic

Even though digital remote work is a relatively new concept, its increased instant popularity caused by the COVID-19 pandemic, has naturally increased the interest among academics and researches to investigate this topic deeper.

As mentioned consistently, the pandemic caused by COVID-19 has had a significant impact on the growth of digital remote work, however to this point addressed in more general terms. To illustrate better the effects caused by this impact we can look at a survey investigating the inclination towards digital remote work of employees, in light of what can be described as approaching the middle of the pandemic. The survey results are displayed in Figure 1.

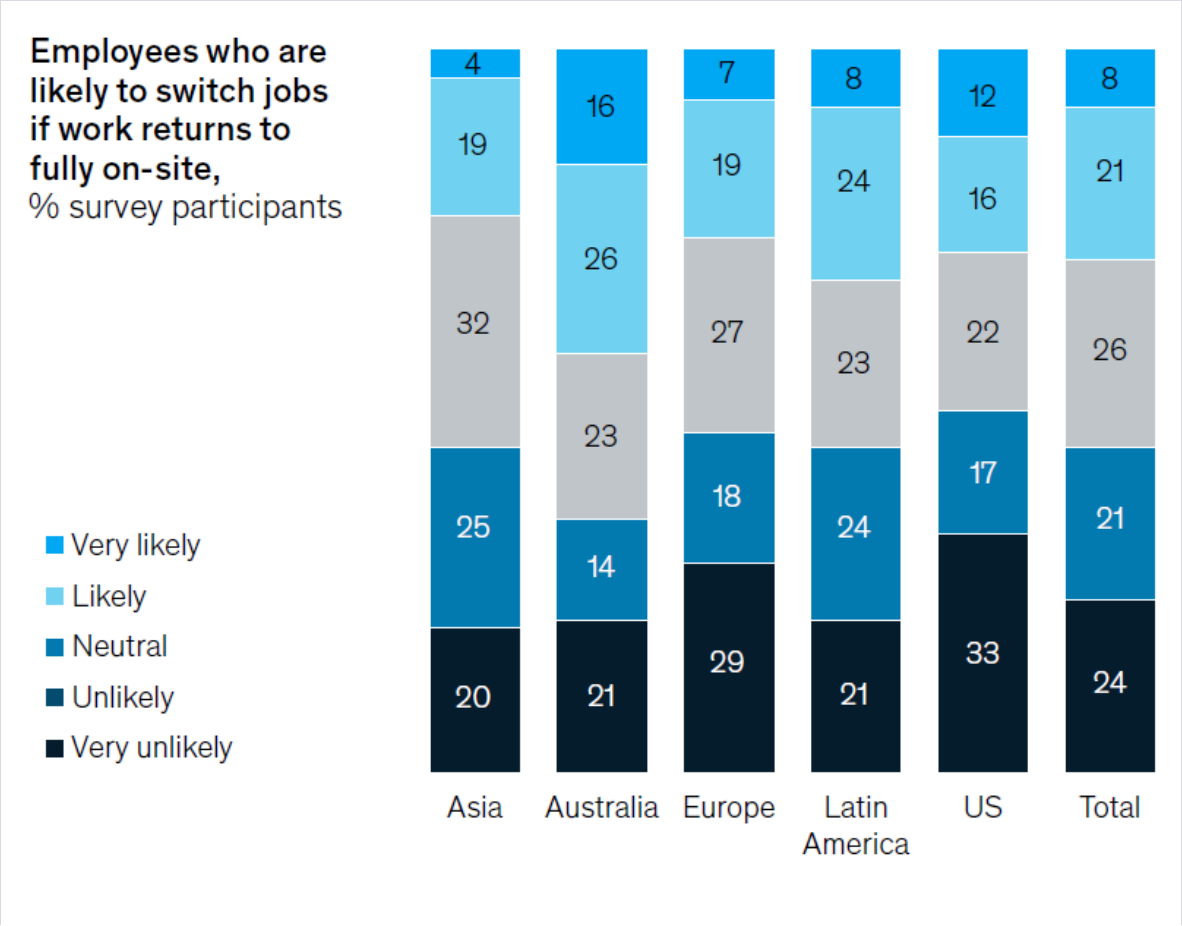
Figure 1: Pre-pandemic models vs. post-pandemic preference



Source: McKinsey & Company (2021).

Furthermore, looking into related data additional evidence can be found from a survey examining the talent implications of organizations choosing to return to fully on-site working model after the pandemic. Figure 2 provides a graphic representation illustrating the number of respondents expressed in percentage across different regions that are likely to switch jobs if work returns to traditional model requiring them to work fully on-site.

Figure 2: Employees who are likely to switch jobs if work return to fully on-site



Source: McKinsey & Company (2021).

The survey results clearly demonstrate that the dominant preference of employees has shifted from work on site before the COVID-19 pandemic to hybrid or fully remote work after the pandemic. This shift in preference is important for organizations as failure to adapt may lead to problems with attracting talent and retaining existing employees. The pandemic itself in a manner dictated the framework by which job should be conducted in accordance to guidelines provided by authorities on health issues. However, this evidence suggests that the trends leaning towards digital remote work are expected to continue in the future, independent of health guidelines and regulations. Consequently, this would put organizations refusing to adopt a strategy to address this challenge in an unfavorable position of losing competitive advantage.

As mentioned, the results presented in Figure. 2 illustrate the percentage of employees who are likely to switch jobs if their organizations decide to return to fully on-site job model. The overall results show that almost 30% of employees have stated they are likely to switch jobs if their organization decides on a fully on-site model. This would result in an organization risking the retention of almost 1/3 of their total workforce.

Obviously, there is the limitations to be considered in a survey where other factors lack, such as financial compensation and other work conditions which would influence employee's decision to stay. This would mean that not necessarily all of the employees that have stated they would leave an organization in these circumstances would truly decide to leave, especially if other factors are favorable for the decision to stay. However, the results do implicate that remote work is an important condition which would influence the decision of an employee regarding their future in an organization.

(Kaushik & Guleria, 2020) offered an interesting conceptualization of the impact of COVID-19 pandemic on digital remote work. Namely, their paper refers to the concept of work from home (WFH), a term falling under the umbrella of digital remote work and arguably the main form of remote work during the pandemic. In regards to conceptualizing the impact of the pandemic on the work from home model the paper classifies the adoption of this model as something it refers to as a "forced experiment". The reasoning behind this classification lies in the idea that the work from home model suddenly became forced upon more reluctant sectors. The paper explains that due to the fact that work from home heavily relies on information systems, prior to the pandemic the model was mainly present among small number of sectors, in mainly Information Technology (IT) related industries. Whereas other sectors are referred to as reluctant sectors due to very little to no experience with work from home prior to the pandemic. This primarily refers to sectors which fall under the non-IT category, but were heavily influenced by the limitations imposed as a result of the pandemic. This would include industries such as: tourism, hospitality, airlines, manufacturing, education, financial services and others. All of these sectors falling into the non-IT category rapidly moved to work from home model in order to maintain operations. Sectors which were historically heavily reliant on physical office attendance like finance and other

professional services were in need of rapid implementation of adequate digital tools to support them in remote collaboration. According to the paper industries such as hospitality, airlines and manufacturing initially struggled in adopting a work from home model. Many companies operating within these sectors were not properly equipped to support digital operations. As the pandemic forced them to explore remote work solutions wherever feasible to do so, departments such as administration, human resources and other support functions, moved to work from home model in order to maintain business continuity.

2.3 Technological and social challenges

As the shift toward digital remote work occurred all of a sudden and without sufficient time to adapt, it is perhaps no surprise that multiple challenges in regards to implementation arose. Kaushik & Guleria (2020) have described some of those challenges in their work, where they classify them by nature as being social and technological.

Access to necessary technology: one of the challenges of technological nature appeared as a result of not all employees having equal access to the necessary technologies. Not all employees had equal access to laptops, desktops, webcams and high-speed internet as basic tools for efficient remote work. Therefore, companies were obliged to make rapid adaptation and procure the necessary equipment for employees which imposed additional costs and logistical challenges.

Infrastructure limits: this would involve challenges related to connectivity, access to high-speed internet connection, access to certain cloud services from a specific location etc. These challenges are usually related to employees which reside in areas that might not have the required coverage. Moreover, this involves the challenge of people who do not have the proper conditions to work from home.

Digital literacy: as the pandemic imposed the mentioned “forced experiment” particularly for industries where the use of certain digital tools was not that common prior, the digital literacy can be a challenge. This involves the challenges for employees to adapt to work from home when they are insufficiently familiar with certain technologies. This means increased level of necessary training sessions and additional IT support throughout the process.

Cyber security: when working remotely, employees access company data, resources and networks sometimes from devices that may not possess the same security measures as office systems do. Increase in remote access exposes the organization to vulnerabilities of cyber attacks. Therefore, organizations had to implement stronger cyber-security protocols and implement better security procedures, VPN`s, encrypted communication etc. in order to mitigate the security risks. Another aspect of the cyber security threats is the social aspect, more specifically employee awareness. As the shift was introduced rapidly, organizations didn`t have much time to educate their employees how to recognize cyber security threats,

for example" phishing emails. The lack of training on safe online practices puts the organizations at a higher risk of compromising sensitive data.

Additional challenges manifest through a more socio-cultural character of an organization.

Monitoring and control challenges: many organizations traditionally relied on office presence for monitoring employees. The shift to work from home has been particularly challenging for managers who are keen on McGregor`s Theory X – which suggests that employees need close supervision. The shift contributed to the focus on more result-oriented approach rather than micro-management practices.

Trust and collaboration barriers: these barriers can be considered as closely related to employee engagement. Trust issues pose a challenge for employees that are in the habit of being in close contact with their colleagues and managers. Therefore, being somewhat disconnected from them raises concerns of being excluded from key decisions and being overlooked for promotions. Moreover, the team collaboration element faced barriers by limitations of physical proximity. Many organizations rely on face-to-face contact and spontaneous collaborations as a way to generate new ideas, stimulate creativity and boost innovation. This means that organizations faced the challenge of adopting proper digital collaborative frameworks.

Work/Life balance: One of the most common challenges arising from a work from home arrangement is blurring of the borders between personal life and professional life. When the home and the office are one and the same it is more difficult to establish the border between work and personal life. Therefore, employees are at a higher risk of overwork and burnout, as well as the sense of being always "on-call". Moreover, employees that have children, also faced the challenge of balancing house chores, childcare, home schooling, etc. All of this contributes to additional stress and difficulties in time management.

Psychological impacts: work from home can contribute to feeling of isolation, due to lack of informal conversation, coffee breaks, personal meetings. Moreover, issues with workplace engagement due to feeling of being disconnected from the company`s culture and their peers. The sense of comradery that contributes to job satisfaction. This is especially challenging for employees that normally thrive in social environments. Isolation also contributes to increased risk of anxiety and depression, as well as the feeling of being excluded from decision-making processes.

Nevertheless, despite all challenges that came along with a shift towards a work from home model due to the pandemic, plenty of benefits can be identified as a result of it. In their paper Kaushik & Guleria (2020) have covered some of those benefits that were the product of companies adopting a work from home model during the pandemic. Some of them include:

Ensuring business continuity: probably the biggest benefit for businesses in light of lockdowns and restrictions was that work from home ensured continuing of their operations. Without the possibility for work from home and the technological support it relies on, many

companies would have been forced to discontinue operations entirely, leading to greater economic damage.

Adaptability: the crisis demonstrated first hand that many companies have the capacity to respond and adapt to crisis and shift to new working models to continue operating though sometimes in different capacity.

Cost reductions: the shift allowed companies to save costs, such as costs related to rent, utilities, certain office supplies and other overheads. As a result, those funds could be transferred to other use, such as employee benefits, improving digital infrastructure and obtaining hardware and necessary digital tools to successfully implement a new digital remote work model. Moreover, there is a reduction of costs for employees related to transport and reduced stressed from daily commuting.

Increased flexibility: shift to the work from home model provided employees with more control over their workday. Employees were able to better manage their personal and professional responsibilities. Particularly employees that have children were able to better allocate time for house chores and childcare. Furthermore, there is the question of work/life balance. Even though challenging for some, to many employees it gave them better balance by eliminating some time, such as time spent in transport, giving them more time they could spend with their families. Again, this has been particularly significant for working parents, that got the opportunity to structure their days better.

Productivity benefits: contrary to what were initial concerns, some studies suggest that certain employees, demonstrated higher levels of productivity while working from home. This has been particularly the case with certain job roles such as customer service and IT support. The study refers to Adam Grant's Nick Bloom experiment which showed that if you let call centers work from home, they are 13% more productive.

Improved focus and higher autonomy: the flexibility derived from a work from home model results in a higher autonomy and improved focus. As employees don`t have to comply to strict office structures they are able to work in their most productive hours and in environments that they feel most comfortable in.

Environmental benefits: on a larger scale, the reduced number of people travelling to work shifting to a work from home model contributed to lower levels of traffic and consequently reduced air pollution. Reduced traffic means less emissions and companies reduced usage of energy and water within office spaces. Therefore, shifting to a work from home model also resulted in what can be described as an added value due to its environmental benefits.

3 PREVIOUS RESEARCH ON REMOTE WORK AND JOB SATISFACTION

This section covers the work done by researchers in the past on topics related to digital remote work and job satisfaction.

Kaushik & Guleria (2020) explain that the shift toward work from home model had significant benefits to employee morale and increase in job satisfaction.

3.1 Benefits of remote work impacting job satisfaction

One of the biggest morale boosters coming as a result of remote work model is autonomy. This model relies more on a trust-based system that empowers employees to manage their own time, incorporating a higher sense of ownership of their tasks and responsibilities.

Another aspect of the impact of work from home on employee morale and job satisfaction is customization of the work environment. Normally employees are working in offices which are pre-set in a way. The layout is relatively standardized, employees are confined to a shared space. In more details, certain elements such as lighting intensity, ambient noise levels and other distractions are generally set. Whereas, the work from home model offers the appeal of somewhat customizing your work environment where employees can make arrangements according to their own personal needs and preferences. Examples of this might involve working in more silence, playing background music, adjusting the sitting arrangements etc. The opportunity to customize their own work environment more, influences in employees feeling more comfort and having more control, therefore having a positive impact on employee morale and job satisfaction.

One particular demographic group have been noted as being highly appreciative of the flexibility, working parents and caregivers. As a result of this offered flexibility, they got the opportunity to balance out more effectively their professional responsibilities and personal or family obligations with more ease. The ability to manage their home life while maintain professional productivity has been highly valued, characterized as more stress relieving which therefore results in increase in the level of job satisfaction among that demographic. This has been particularly the case for employees in industries where work from home models and this level of flexibility, traditionally have been previously unavailable.

Moreover, an important element that has a significant impact is the stress reduction and time saving from spending time going to work and coming back from work on a daily basis. This can be quite significant time in some cases, followed by additional stress and frustration some employees potentially face from traffic. The work from home model practiced throughout the pandemic has eliminated this to a large extent. As a result, many employees have more time that would have otherwise been used in daily commuting, they can use more

productively. Subsequently, this also results in a stress relief resulting from reduction in that same daily commuting. Hence, on one side the time saved offers employees the opportunity to use it either to enhance their professional productivity, or offer more time for personal activities such as exercise, extra-curricular activities etc. Additionally, the stress relief is beneficial to the overall mental health of employees and therefore both of these elements impact on enhancement of employee morale and increased job satisfaction.

Furthermore, when working in an office environment there tends to be a certain level of unspoken pressure for conformity towards office norms. This may include, but not limited to following practices of strict office schedule, dress code or generally engaging in office politics. A work from home model relieves the pressure by reducing or eliminating the need to entertain these external factors and allowing employees to focus purely on their actual work tasks. This creates a more relaxed work environment, provides more comfort and enhances employee morale.

Moreover, according to the study, work from home has had a significant contribution in lowering the stress and burnout among many employees. The ability to work in a more comfortable environment, take breaks when necessary and avoid certain office distractions have all significantly contributed to improvements in employee mental health. The idea is that when employees feel more stress relieved and less overwhelmed, they can approach their work responsibilities with more energy and enthusiasm.

In addition, employees working from home have greater flexibility to incorporate more healthy routines in their everyday lifestyle. This may include preparing more healthy meals, taking exercise breaks and create a more ergonomic workplace that causes less physical strain. The time saved from avoiding everyday commuting can also be used for mental health activities which further contributes to the overall well-being of employees.

Work from home also addresses the issue of what is referred to as office related fatigue. This refers to the fatigue created as a consequence of long office meetings, office noise and inadequate workstations which can contribute to lower productivity. According to the study, employees that have higher control of their working conditions report that they are feeling more energized and feel more capable to maintain productivity throughout the day.

Another important aspect that the research provides an insight in is the impact on loyalty and engagement of employees, through allowing employees to work from home, employers demonstrate a higher level of trust that teams can manage themselves and be effective in their work tasks without the need for constant supervision. As a result of this trust the so-called psychological contract between an employee and employer is being strengthened, stimulating higher level of loyalty. As the research suggests, employees who feel more trusted are better motivated to perform better and demonstrate a higher level of commitment to the organization they are part of. Moreover, with employees being granted more autonomy, their sense of responsibility for their tasks also increases. Working from home encourages a more result driven approach as supposed to the number of hours an employee spends at their office desk. The higher sense of accountability for their own success

motivates employees to demonstrate more efficiency and effectiveness in the remote work environment.

An important aspect that managers need to work on are initiatives for employee engagement within a work from home model. Examples may include, virtual hangouts, employee wellness programs or competitive activities that contribute to keeping the team connected and motivated. One of the most significant challenges and concerns of work from home model is employee isolation. Therefore, virtual check-ins and group discussions provide a space for employees where they can feel seen and heard, hence reducing the risk of isolation. Likewise, maintenance of open lines of communication replicates the informal interactions that normally happen within office setting, encouraging virtual conversations, providing opportunities for virtual team building activities and encouraging casual conversations. In addition, in order to address the need for personal and professional development, organizations need to provide opportunities for remote workers to continue being invested in their personal and professional growth. This can be achieved through various upskilling programs, online learning opportunities and other online career development resources.

The deeper investigation of putting into practice the work from home model on a broader scale the paper suggests, reveals transformations of global work practices and corporate cultures. The stimulus has had many organizations rethinking their future operations and placed them in the face of dilemma regarding their future operations including more digital remote work.

3.2 Literature review

As a result of the contemporary challenges imposed by the COVID-19 pandemic and the wider application of digital remote work, the research literature available on different aspects of digital remote work seems to be getting richer. In recent years there has been variety of research papers and other literature that has investigated the impact and implications of digital remote work on various business, social, personal, legal and technical dimensions.

In regards to the concepts of remote work and job satisfaction and how these concepts are addressed in the literature it is important to review historically. In reference to job satisfaction as a concept, earlier works such as Locke (1976) describe job satisfaction as “a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". Whereas, historically speaking the work arrangement that we refer to as remote work, digital remote work, telecommuting etc. has been originally defined by Jack Niles according to Kurland and Bailey, as they explain was a reference to working from a remote location away from a standard office or work site Kurland & Bailey (1999).

In regards to terminology (Schall, 2019) points to an article written by (Parris, 2017). In the article Parris (2017) argues that even though this type of work arrangement has been around for decades, companies and organizations nowadays prefer to use the terms working

remotely, work from home or remote work instead of teleworking or telecommuting for the purpose of sounding more modern. Organizations are using more modern words and phrases to replace old ones for what is in theory as Parris puts it, not so new work concept.

Teleworking and telecommuting are terms that appear across the literature and are often used interchangeably. Nevertheless, Garret and Danziger (2007) explain telework as a broader concept consisted of four dimensions which are: time distribution, information technology, work location and diversity of employment. Whereas telecommuting, Ellison (2004) argues as a term is more specific and is in reference to completion of work at a remote location with the purpose of decrease in commuting time.

Schall (2019) conducted research that has provided an excellent framework for analyzing the relationship between remote work and job satisfaction as part of the available literature. Her work is pre-pandemic research investigating the relationship between remote work and job satisfaction using data from 185 employees. In her research she defines remote work as "performing regular work at a site other than the main office, supported by technological connections". She offers a slightly more narrow and straightforward definition of the term remote work compared to some authors which provide more detailed and comprehensive definitions of the term. In comparison, in their earlier work Allen et al. (2015) provide a more detailed explanation of the term. In their research, working remotely refers to when someone works either part, or all, of their regular work time in their primary place of residence. In doing so they reduce their time spent commuting and are potentially able to access more flexible working hours. Nevertheless, in both works, as well as other related works across the literature the core concept and the underlying idea behind remote work are consistent.

The research conducted by Schall (2019) is largely based on an investigation across three dimensions of job satisfaction: perceived autonomy, work-family conflict and telecommuting intensity. All three dimensions seem to be logical indicators of a job satisfaction level. However, they face certain limitations. Specifically, the level of perceived autonomy of remote work before the pandemic has been measured in circumstances where many monitoring software updates and processes have not taken place. Due to the massive increase in number of remote workers and hybrid workers over the pandemic period online monitoring software, processes and practices have advanced, therefore this raises the question of influence on the perceived autonomy of the employee. Moreover, work/family conflict is a bit narrow dimension and would be more appropriately analyzed as a work/life balance. This would refer to a wider social and leisure dimension of an employee`s life in balance to the work responsibilities. One argument for a wider approach derives primarily from the effects of the pandemic on the social and leisure aspects of an employee's life, manifested through isolation and reduction of social activities. Additional argument for broadening the dimension derives from the fact that the overall social effects of the pandemic have been in favor of family engagements, however non-favorable for the overall social engagements of employees. Moreover, plenty of remote workers are young people that often

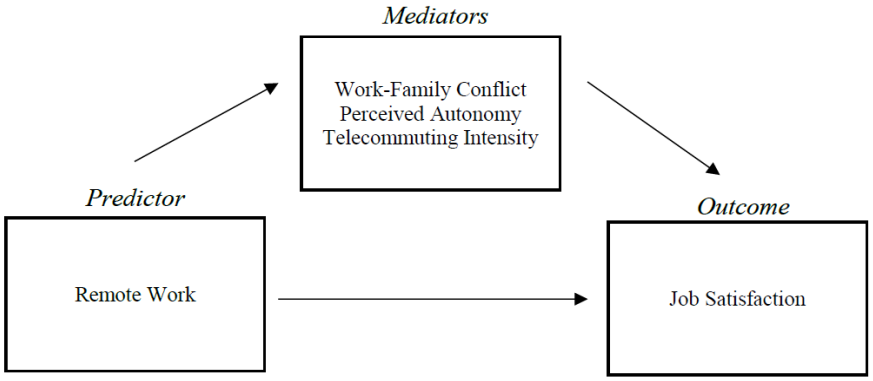
have not started a family of their own, hence the overall work/life balance would provide a more accurate image of the impact of remote work on job satisfaction. Furthermore, around half of the participants which have been subject to the study have pointed out that they are not married. This piece of data further supports the need for a broader look of the work/life balance of an employee, as opposed to a narrower work/family conflict.

One of the most notable issues that is often a subject of skepticism and a topic of debates and discussions is the productivity and performance of remote workers. More specifically, how does digital remote work reflect on employee performance and whether the level of productivity will change or remain the same. Schall (2019) comments on the attention the debate regarding the performance and productivity of remote workers has received. More specifically she has pointed out the disagreements that have received wide attention referring to the research conducted by (Fonner & Roloff, 2010) expressing the contrast in positions on the one hand that digital remote work enables employees to be more productive due to reduced office distractions and on the other hand the claim that home environment is not a proper working environment due to home distractions. These two contradicting positions have been illustrated through the statement of former CEO of Yahoo, Marissa Mayer which upon eliminating the digital remote work policy for all employees in 2013 stated "to become the absolute best place to work, communication and collaboration will be important, so we need to be working side-by-side" (The Guardian, 2013). Contrary to this position in regards to what constitutes the better work environment Schall (2019) points out a report on the State America Workplace by (Gallup, 2017) which argues that people who work remotely, though referring to certain amount of time working outside the office, tend to be more enthusiastic, engaged and committed to their job. Regardless of the contrast in the different positions on this topic, Schall (2019) argues that it is paramount for companies to understand the consequences of digital remote work in order to stay competitive and profitable in a rapidly advancing technological era. Understanding the consequences of digital remote work is vital for a company to understand the future of the workplace.

Schall (2019) points out some flaws that appear in the literature, stating that a lot of the research is based on problematic assumptions regarding digital remote work on an individual level and on an organizational level. Some of these assumptions she notes include: employees work remotely permanently, employees work remotely full-time and this has a positive impact on organizations through cost savings. According to (Gajendran & Harrison, 2007), researchers have found inconsistent results with employee job satisfaction, job performance and work-family conflict in their analysis of the impact of remote work. Therefore, Schall states that researches and managers cannot overly rely on available literature on how digital remote work influences remote workers and organizations.

Schall (2019) has introduced a model focusing on three mediators addressing the relationship between remote work and job satisfaction. Figure 3 illustrates her theoretical framework

Figure 3: Theoretical framework of the relationship between remote work and job satisfaction with mediators



Source: Schall (2019).

Schall relies on the mediators in the relationship between remote work and job satisfaction: perceived autonomy, work-family conflict and telecommuting intensity Schall (2019).

Starting from perception of autonomy, (Hackman & Oldham, 1976) defined autonomy as "the extent to which employees have control and discretion for how to conduct their tasks". Though since perceived autonomy is more emphasized in this case, Yoonhyuk (2011) provides a definition (Yoonhyuk, 2011), which states as follows: "the degree to which an individual perceives his or her actions as a result of his or her own free will, without external interference in a certain situation" which describes this moderator outlined by Schall (2019) more precisely. Ryan and Deci (2000) provide their theory of self-determination (Ryan & Deci, 2000), a general theory based on human motivation, personality and job characteristics. Hackman and Oldham (1976) provide a model demonstrating autonomy as an important job characteristic that leads to job satisfaction.

The second mediator that has been addressed in the work of Schall (2019) is the effect of work/family conflict. The effect of work/family conflict has been defined by (Greenhaus & Beutell, 1985) as a conflict resulting from simultaneous "pressures from work and family roles that are mutually incompatible". The authors argue that the appearance of this conflict results from interference of one role in meeting the expectations of the other role. There is open debate surrounding this topic and according to (Raghuram & Wiesenfeld, 2004), the empirical evidence available from previous research on whether remote work is beneficial in regards to family roles is inconclusive. Moreover (Chambel at al., 2017) studied additionally the impact of remote work on work/life balance in their work. The research they conducted found that part-time remote workers had better work/life balance and higher job satisfaction than full-time remote workers. On a similar note, (de Vos, Meijers, & van Ham, 2018) found that remote work can increase willingness to accept a longer commute, potentially improving job satisfaction by allowing employees to choose where they live.

Achieving a healthy work/life balance is essential for job satisfaction. The research of Gajendran & Harrison (2007) indicates that remote workers who are able to effectively manage their work/life boundaries experience higher levels of job satisfaction. Organizations should encourage remote workers to set clear boundaries between work and personal life to promote job satisfaction.

The third mediator investigated by Schall (2019) is telecommuting intensity. Telecommuting intensity in her work, refers to the frequency or the amount of time an employee spends working remotely and how does that reflect on their job satisfaction. Gajendran & Harrison, (2007), as well as (Golden & Veiga, 2005) have pointed out that many researchers believe that the frequency of remote work measured in hours and days has an effect on an employee`s level of job satisfaction. Gajendran and Harrison (2007) have defined telecommuting intensity as "the extent or amount of scheduled time that employees spend doing tasks away from a central work location". This concept of telecommuting intensity has been around for some time, however usually addressed under different terminology. Schall provides some examples that appear throughout the literature Schall (2019) which include telecommuting intensity being referred to as virtual status (Wiesenfeld et al., 1999), virtuality (Scott & Timmerman, 1999) and as extent of telecommuting Golden & Veiga (2005) etc. In regards to telecommuting intensity as defined in their work, Gajendran and Harrison (2007), have classified employees into two groups according to level of intensity: low level telecommuters who spent majority of their work week (2.5 days or more) working from a central location and high level telecommuters who spent majority of their work week (2.5 days or more) working outside from the central working location.

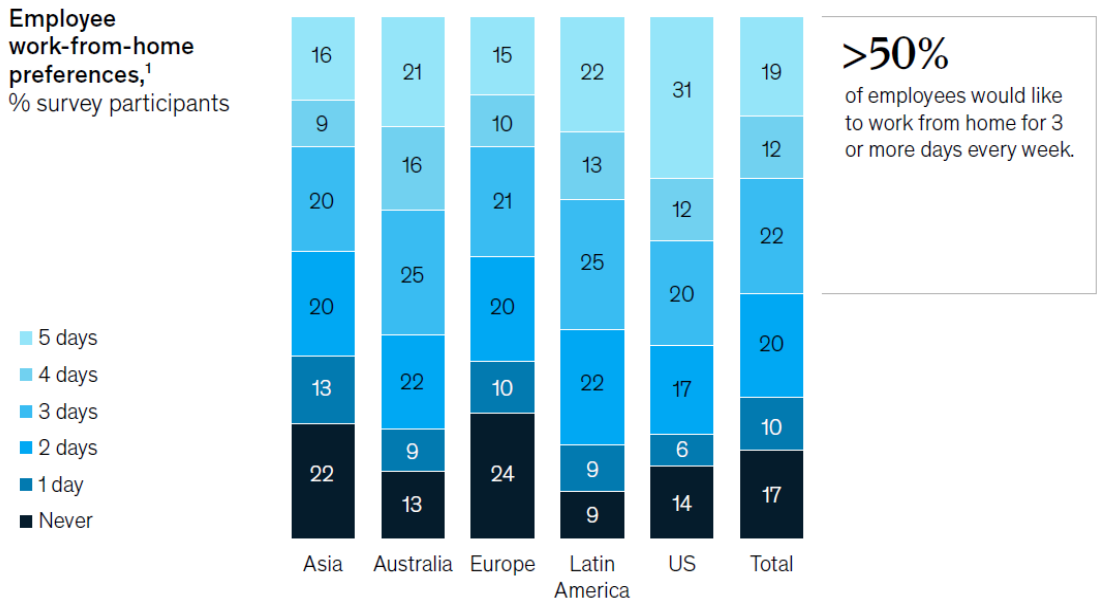
Moreover, in regards to the relationship between telecommuting intensity and job satisfaction, in their research, (Virick at al, 2010) have found a correlation to performance outcome and worker type. They discovered that when performance outcome orientation was high, job satisfaction remained the same regardless of the level of intensity of telecommuting. Interestingly enough, when the performance outcome was low, contrary to the predictions of the researchers, job satisfaction was highest during moderate levels of telecommuting, not low levels, as was the initial prediction. Their work also resulted in another finding relating to the worker type. Virick at al. (2010) classifies employees based on the level of work drive and the level of job enjoyment. They have classified as workaholics the individuals with high work drive and low work enjoyment. Using this classification as a moderator for the relationship between intensity of telecommuting and job satisfaction they have found that workaholics experienced lower job satisfaction during moderate levels of telecommuting, contrary to the other employees which experienced higher levels of job satisfaction during moderate telecommuting. Although, the research conducted by Virick at al. (2010) did not directly examine the effects of telecommuting intensity as a moderator between remote work and job satisfaction.

In continuation, Schall (2019) hypothesized that as remote work would increase, job satisfaction would increase also, however only to a certain point. Further increase in remote

work beyond that point would be counterproductive and result in a decrease in job satisfaction. The research of Schall (2019) has shown somewhat inconsistent to some of the previous research conducted by (Golden 2006) which found a curvilinear relationship or as the research of (Cooper & Kurland, 2002) and (Pinsonneault & Boisvert, 2000) indicated, a negative relationship between remote work and job satisfaction. The results of Schall (2019) showed a positive linear relationship between remote work and job satisfaction. Though it is worthy to point out that a possible reason for some of the differences might be the samples used. In particular, the research of Schall (2019) had a sample consisted of mostly low intensity remote workers. Some of the previous literature, as Schall (2019) points out, that demonstrated a curvilinear relationship had samples with high intensity remote workers.

In regards to limitations, the work of Schall (2019) relies on self-reported measure, which open vulnerability to bias, resulting in exaggerating or minimizing feelings and emotional states, imposing risk of compromising validity. Additionally, certain demographic questions were bypassed by participants, resulting in missing data. Another limitation is derived from not collecting data on industries and job sectors, thus limiting the insights on the impact of remote work on specific fields. Finally, the location of the participants was not considered, which imposes certain limitations in regards to environmental factors that could be relevant influence on remote work practices. The findings of Schall (2019) are quite consistent with the results of (McKinsey & Company, 2021).

Figure 4: Work from home preferences



Source: McKinsey & Company (2021).

The results from the survey in Figure 4 show a clear preference towards remote or a hybrid model. Over 50% of the total participants prefer to work at least 3 days or more remotely.

Going into more depth in the reports from McKinsey & Company (2021) in regards to remote work, there is a group of people that stands out. Although not surprisingly the report

mentions that parents, more specifically parents with small children are most likely to prefer more remote work. About 92% of parents with young children participating in the survey have expressed their preference towards some model of remote work. Only 8 percent of the parents with young children in the survey were willing to go back to fully on-site job after the pandemic. According to the survey results by household type conducted by McKinsey & Company (2021) it would seem that the preference for on-site job does increase as children grow older or if they do not have children who are minors. In fact, the survey results show that employees without children under 18 are almost three times more likely to prefer on site work than parents with small children. However, the overall result suggests that employees in general show preference toward some form of remote work.

In addition, (Dunatchik et al., 2021) explored the challenges of parents with small children. Their work points out a significant challenge that is often overlooked, related to this group and digital remote work, but has become evident during the pandemic In their research, they argue that aside from the rapid shift towards remote work during the pandemic that organizations and employees have been facing, there is also the challenge of child care outside the household that parents with small children are facing. As Dunatchik et al. (2021) have put it more clearly, even though many have welcomed the opportunity to work from home, few have envisioned doing so with school being closed and proper opportunities for child care for their children.

Elaborating in more detail, they conducted research which examines the impact of remote work, analyzing the experiences of 478 partnered parents and 151 single parents in relation to domestic division of labor throughout the pandemic, Dunatchik et al. (2021). The emphasis of their work in on gender inequality in regards to domestic responsibilities in the United States. According to their study, even though remote work offered some flexibility, it additionally burdened the mothers in the household, as they were more likely to assume increase in responsibilities related to childcare and house care. Moreover, due to the fact that school and childcare facilities were closed as a result of pandemic measures, mothers were also more likely to take the responsibilities regarding homeschooling. Reportedly, this has been the case even in dual remote working households, with the mothers taking up the increase in responsibilities, resulting in disproportionate burden on their side. The study suggests that as a result of the pressure, many of the mothers started reducing their working hours, or taking into consideration full withdrawal of the workforce. Even though the division of labor is quite gendered and not equally distributed, nevertheless the study suggests that in dual parent households there was an increase in the household and caregiving responsibilities of the fathers compared to before the pandemic.

In regards to single parents the work of Dunatchik et al. (2021) suggests the challenges go even deeper. Contrary to dual parenting household where parents can share caregiving responsibilities, single parents bare the full weight of domestic responsibilities and child care single handedly. The study demonstrates how these challenges and their impact on single parents have manifested themselves during the pandemic. As a single parent, by definition,

one lacks an immediate support in regards to responsibilities related to childcare and domestic labor. Therefore, due to the conditions imposed by the pandemic, with schools and caregiving facilities being closed single parents bore sole responsibility for overseeing their child`s remote learning and daily care, while having a very limited relief, or in some case none at all. As a result, balancing their remote work with childcare and domestic responsibilities, became nearly an impossible task for many, leading to increased levels of stress and burnout. The study points out that the pandemic imposed a disruption on different social support systems such as contacts with extended family members, friends, various community services which in normal conditions single parents can rely on for help. This increased isolation made it much more challenging to juggle remote work and family responsibilities. However, the study suggests remote work also opened up opportunities to single parents, as for ones that were able to work remotely, in theory remote work enabled them a level of flexibility that allowed them to manage child care while continuing employment. On the other hand, the lack of access to childcare help often resulted in single parents having to prioritize caregiving over their professional responsibilities. According to the study this has disproportionately impacted single mothers as they were more common to undertake caregiving roles in comparison to their male counterparts. Furthermore, the work of Dunatchik et al. (2021) goes deeper into the disbalance between single mothers and single fathers in regards to remote work and single parenthood. The study suggests that single mothers, were less likely to have the opportunity to work remotely. Moreover, due to overwhelming responsibility of managing remote learning, single mothers reported higher levels of stress resulting in many single mothers either working reduced hours or leaving the workforce entirely. Even though less common, according to the study, single fathers also faced increased burden related to caregiving demands, although the study suggests that they benefited from societal perceptions to a certain degree which resulted in their sacrifices gaining more visibility within the professional setting. In addition to increased stress and anxiety as a strain experienced on emotional level, there is also the implication of economic strains, as many single parents also experienced financial insecurity resulting from job loss or reduced working hours, The pandemic highlighted many gaps on a systemic level in regards to support for single parent households. These involve insufficient childcare support, as many single parents were left without viable alternatives. There is also the need for workplace flexibility, as single parents need remote work options accommodated to caregiving demands, an example of this would be decreased workloads and adjusted working hours. Finally, the need for social safety nets for example subsidized childcare and access to financial aid with the purpose of alleviating the burden on single parent households.

As a comparison between single parent households and dual parent households in regards to remote work, the work of Dunatchik et al. (2021) points out multiple differences. On one hand single parents faced challenges of balancing workloads with child care demands without a partner to fill in any gaps. In addition, many single parents particularly single mothers, reduced their working hours or left the work force due to caregiving demands. The ones that did retain their jobs fully, very often reported enhanced levels of stress and burnout

resulting from meeting simultaneously work and caregiving demands. In contrast, households comprised of two parents, when both of them worked remotely, fathers often increased their contribution in domestic tasks and responsibilities, though not to the same level as mothers. Also, dual income households have been less vulnerable to financial insecurities, as the study suggests fathers were more likely to maintain their professional workload, with mothers often making adjustments in professional commitments in favor of meeting the necessary domestic and caregiving demands. Not surprisingly, the study points out that single parent households, faced significantly higher challenges than dual parent households due to the lack of shared responsibility and lack of support systems as well as more intense financial and emotional strain. On the front of dual parent households, even though the mothers often experienced increased burdens, the availability of a partner provided a level of support and security, not available to single parents. These disparities highlight the need to improved tailoring of policies in regards to caregiving and financial assistance for single parent households.

Certain works in the available literature show more complexity in the relationship between remote work and job satisfaction, reflecting more heterogenous outcomes. A worthy mention is the work of (Gibbs, Mengel, & Siemroth, 2021), which suggests that even though remote work can enhance job satisfaction in some cases, the challenges it brings forward can have a negative impact in other cases. The study investigates the impact of remote work on the well-being of employees during the pandemic. The key findings of the authors support the argument that remote work has both positive and negative effects on job satisfaction and the overall wellbeing of employees. It recognized the positive impact caused by common remote work elements such as increased autonomy, flexibility and ability to better balance professional responsibilities and personal time. All of these factors contributed to many employees reporting increased level of satisfaction due to more control of their work environments and reduced daily commute time. However, the study emphasizes the challenges involving isolation, the mental burden of staying connected all the time with concerningly blurred boundaries between work and home life. These challenges caused many employees to feel overwhelmed by expectations to be always available which resulted in increased stress level and decreased level of job satisfaction. Hence, the study describes the relationship of remote work and job satisfaction as not being a uniform one. Instead, the effects vary, depending on certain individual circumstances, job type, family situation and access to resources. Thus, some individuals thrived, whereas other, specifically the ones with deterioration in boundaries between work and personal life struggled in remote setting. The complexity of this relationship between remote work and job satisfaction is characterized by a dual effect. With positive outcomes often correlated with negative outcomes. To illustrate, autonomy can be enjoyed by employees, but it can also lead to social isolation and flexibly leads to better work/life balance for some, but can led to increased working hours for others. The work of Gibbs et al. (2021) can be understood as describing the relationship between remote work and job satisfaction as inconclusive and complex, as the results reflect

significant variations which overall can be attributed to both personal factors and factors which are related to job specifics.

On a similar note, Martin et al. (2022) underline the complexity of remote work environments, revealing mixed results when it comes to the relationship between remote work and job satisfaction. Their data is collected through a survey, from 438 employees and analyzes the changes in the variables before and during lockdown. The aim of the research is to investigate the impact of digitally transformed home offices during the pandemic lockdowns on job satisfaction, stress and productivity. Namely, how the usage of digital tools, both collaborative and communication influenced remote worker`s job satisfaction, stress levels and levels of productivity. Martin et al. (2022) try to identify patterns related to usage of tools and how they impact on well-being and efficiency. The added value of this research is in its longitudinal design. Through comparing pre-lockdown and during lockdown data the study is able to capture how evolving circumstances followed by more intensified usage of digital tools have influenced the outcomes of remote workers. According to the findings remote workers who increased their usage of digital tools for groupware, video conferencing, and messaging platform reported higher levels of productivity. However, this resulted in information overload causing increased stress and had a negative reflection on job satisfaction. In regards to adapting to using of the digital tools, the study suggests that employees who were already using the digital tools on a daily basis prior to the lockdowns were able to adapt more easily. According to the study, they experienced quite fewer negative impacts in comparison to employees who were less frequent users prior to the lockdowns. Nevertheless, even the ones that adapted with more ease and showed improvement in productivity, they still experienced rise in stress levels, indicating an emotional toll of sustained remote work.

Martin et al. (2022) categorize five distinct profiles of teleworkers according to their usage of collaborative and communication digital tools:

First profile accounts for 31% of teleworkers, comprised of consistent and balanced users, as they used the same number of digital tools prior and during the lockdown, using the four tools covered by the study on a daily basis. They did not experiment with new tools or increase their frequency of usage during the lockdown and before. This is the largest group, characterized by consistent use of tools, purposefully and effectively.

Second profile consists of 18% of the teleworkers. Characterized by members who responded proactively to remote work challenges, as they have a significant rise in usage of digital tools compared to their pre-lockdown habits. This profile of teleworkers seems to have adopted rapidly to remote work demands. Even though they likely had a moderate use of digital tools as a baseline before they increased their intensity of use to facilitate remote collaboration.

Third profile encompasses 25% of teleworkers. This group is consisted of members that either did not use or had a very limited use of digital tools that favor online collaboration and communication. Of the four tools covered by the study they averaged the same both

prior and during the lockdown. Their usage was less frequent on a weekly basis and they did not discover new tools during the lockdown, or increase their intensity of usage.

Fourth profile, as the second one also groups 18% of teleworkers. This group consists of members that both prior and during the lockdown used many digital tools. Although they did not experiment or discover new digital tools during the lockdown, they intensified their usage. During the lockdown majority of the group used the digital tools on a daily basis.

Fifth profile groups 8% of teleworkers. The usage of digital tools within this group both prior and during the lockdown, results suggest is above the median value. Similar to the case of the first and the fourth profile. The results for this group suggest they have one tool that they used on a daily basis whereas the remaining three covered by the study were used on a weekly basis.

The overall results of the study suggest mixed outcomes among digital workers that adapted and increased their intensity of digital tool usage during the lockdowns. The study suggests a trade-off between productivity and job satisfaction. Specifically, increased productivity often came at the expense of job satisfaction. Remote workers were facing challenges such as extended working hours, blurred boundaries between work and personal life and stress from constant connectivity demands. The study results, suggest a form of indirect correlation between job satisfaction and productivity mediated by stress. Higher stress levels, resulting from digital tool overuse resulted in reduced job satisfaction, which subsequently resulted in negative impact on productivity. In fact, the study specifically highlights that excessive use of the digital tools resulted in negative impact on productivity among certain employees. This phenomenon is attributed to information overload, causing digital workers to feel overwhelmed, impairing their ability to focus and maintain performance due to the sheer volume of incoming information and tasks. Another worthy mention is a positive relationship with job satisfaction among remote workers between the ages of 40 and 49. This could be factored into career stability, experience and effective ability to balance work and personal life within this age group. Thus, this group might find the flexibility of remote work quite beneficial, hence increasing their job satisfaction level. On the other hand, remote workers between the age of 30 to 39 and remote workers over the age of 50 did not show any significant correlation regarding the impact on job satisfaction. The former might be under competing pressure for career advancement or responsibilities due to young family demands, which might be offsetting the benefits generally related to remote work. While the latter might be more prone to challenges from adapting to technology, remote work or simply higher inclination towards traditional workplace setup. These findings align with theories that suggest parabolic relationship, according to which the impact of remote work on job satisfaction moves in a parabolic shape, increasing to a certain peak, such as middle-aged workers and then declining for older age groups. Thus, reflecting the shifting priorities, adaptability to technology and workplace setting preferences over a career span. As an implication this could be useful to employers to target this group of middle-aged workers when trying to introduce new remote work arrangements to enhance job satisfaction, as they

are most likely to benefit and enjoy these arrangements. Also, provide adequate support to the other older and younger groups, tailored to their needs to bridge the satisfaction gap.

Another aspect of the research that Martin et al. (2022) focus on, shows a difference in job satisfaction related to gender. Namely, the research suggests that women reported lower levels of job satisfaction compared to their male counterparts. This could be attributed to additional responsibilities related to caregiving and overall household responsibilities which usually fall disproportionately on women. Subsequently the study suggests that women reported higher levels of stress than their male counterparts, likely caused by the challenge of balancing job responsibilities with domestic demands. The findings suggest that the negative effects of remote work had an amplified impact, due to the disproportionate responsibility of domestic demands, which very likely affects job satisfaction. In regards to productivity, the study suggests women reported comparable levels of productivity to their male counterparts. This indicates resilience, as women reported higher stress levels, however also highlights the potential for burnout. The findings are consistent with the work of Dunatchik et al. (2021).

Martin et al. (2022) acknowledge several limitations to their research. Namely, the study has a geographic and contextual specificity focusing on employees in Luxemburg, thus imposing a limit in applicability in other regions or countries, as some cultural or economic factors unique to Luxemburg might have affected digital workers experiences compared to other regions or countries with different cultural and economic setting. The research is also conducted within the context of the COVID-19 pandemic lockdowns and therefore might involve some limitations in applicability within different context. Moreover, the sample size, although significant may not fully reflect the diverse experiences of remote workers across various demographics, industries and organizational structures. In regards to temporal constraints, the study primarily analyzes the shift before and during the time the first lockdown took place. As beyond the initial period adjustment, remote work evolved, the study might not capture fully any subsequent changes in organizational structures, attitudes and behaviors. There is also a limitation due to self-reported data. Using self-reported data for evaluating emotional states such as job satisfaction and stress, as well as evaluate productivity introduces vulnerability to potential bias. This means that participants might underestimate or overestimate their experience in order to fit a socially desirable standard or not recollecting accurately about certain specific elements. Another limitation of the study is the focus on the usage of digital tools, while not taking into account other variables that might influence job satisfaction, which may involve but not limited to: organizational support, management style and practices or differences among individuals in their personal coping mechanisms. And finally, even though the work is a longitudinal study, there is an ambiguity in the study regarding causality, as it does not establish a clear causal relationship between usage of digital tools and changes in job satisfaction, stress and productivity. Thus, the correlations observed might be caused under the influence of unexamined external factors.

Martin et al. (2022) conclude that the relationship between remote work and job satisfaction is complex and dependent on context. As such it requires tailored organizational strategies to harness its benefits and address its challenges.

Makridis and Schloetzer (2022) investigated various work from home arrangements and their effects on job satisfaction and retention Makridis & Schloetzer (2022). Their research uses survey data collected from 70 000 employees between 2020 and 2021. It is important to note that, unlike the work of Martin et al. (2022), it is not a longitudinal study, following the same individuals overtime to observe changes in outcomes. The authors explicitly point out that they focus on cross-sectional differences rather than temporal changes. Their study uses pooled cross-sectional data analyzing aggregated patterns across groups, rather than analyzing changes over time for specific individuals. Therefore, the study can be categorized as a cross-sectional analysis with a temporal component. The aim of the study is to evaluate the impact of work from home arrangements on the outcomes. The study is controlling for factors such as employee compensation, workplace environment and demographic characteristics. The evaluation involves work from home arrangements where employees work fully from home, mostly or sometimes. Initially the study suggests employees working from home reported higher levels of job satisfaction in comparison to employees who never work from home. However, diving into more details, employees whose work arrangements involved workings either mostly work from home or sometimes, had higher increase in job satisfaction than employees who always work from home. Although, Makridis and Schloetzer (2022) demonstrate that workplace environment factors were found to be far more influential in determining job satisfaction. As employees who reported high levels of appreciation at work scored 0.52 higher in satisfaction. Therefore, suggesting a much larger effect than any of the work from home arrangements. In fact, the study found that after controlling for workplace environment factors, the correlation between always work from home and job satisfaction practically disappeared. With less frequent work from home models, particularly sometimes work from home arrangements, retaining a small positive correlation with job satisfaction even after controlling for workplace environmental factors. However, the positive correlation with job satisfaction started to weaken over time, demonstrating much weaker link between work from home and job satisfaction by the middle of 2021. This could indicate that the initial novelty of work from home, wore off over time, or workplaces introduced hybrid models for a more normalized experience. Furthermore, in regards to employee retention the study suggests a fairly similar situation as with job satisfaction. Initially, results suggesting employees with work from home arrangements being less likely to report an intention to leave within six months in comparison to those who never work from home. Similarly to the results with job satisfaction, employees with mostly and sometimes work from home arrangements being less likely than the ones who always work from home. However, after controlling for factors such as workplace environment and employee compensation, employees who always work from home, were more likely to report an intent to leave than employees who never work from home. As for employees who mostly and sometimes work from home, after taking into

account controlling factors, these arrangements had no strong influence on retention. A contextual insight of the study worthy of mentioning is the impact of managers, as employees with negative perceptions of their managers were more likely to prefer work from home arrangements. In contrast, employees with favorable perceptions of their managers reported no significant preference to always work from home. This suggests that remote work may serve as a coping mechanism to some employees for avoiding unfavorable interactions. In addition, employees performing jobs requiring low coordination reported a higher increase in job satisfaction when always working from home compared to employees with high coordination roles. In regards to retention with always work from home being linked to a higher intention to leave in the overall sample, this did not translate as significantly stronger for low coordination roles.

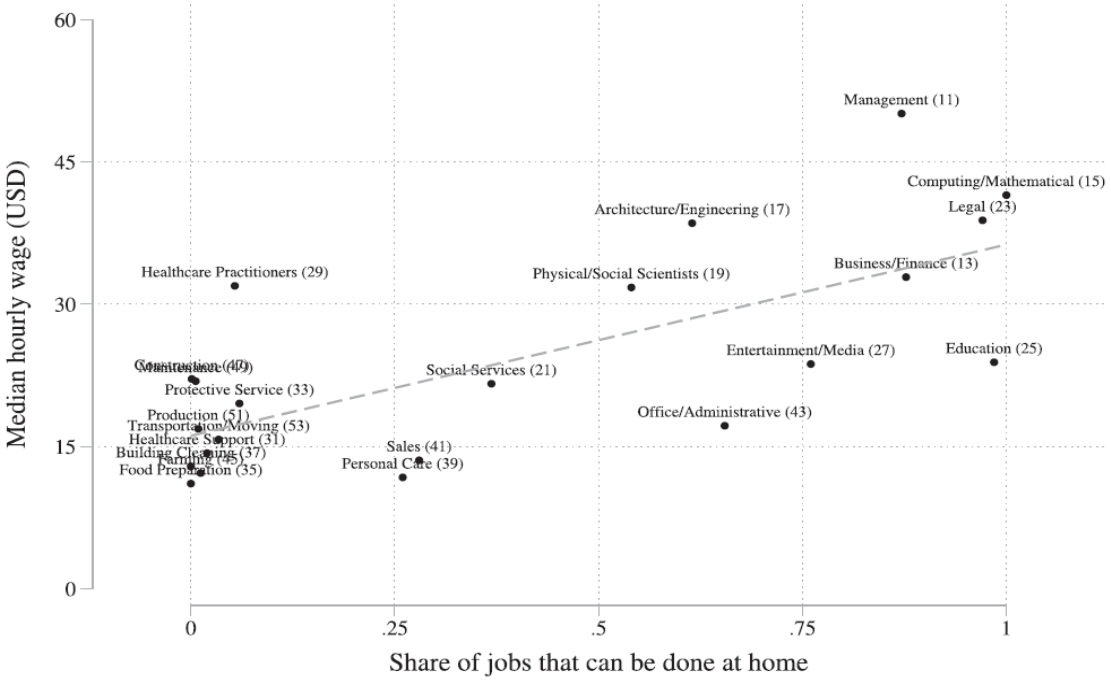
Overall, Makridis and Schloetzer (2022) illustrate a complex and conditional impact of work from home to job satisfaction and retention. With workplace environmental factors and job roles playing a more pivotal role. Presenting the work from home arrangement is not a one size fits all solution. These insights are significant for helping organizations navigate hybrid and full remote work models and understanding the importance of addressing workplace environment factors alongside remote work arrangements.

One factor mentioned in the literature that may partially explain the inconsistencies in the available research is the type of remote work arrangement. For instance, Felstead and Henseke (2017) found that those employees who worked from home occasionally reported higher levels of job satisfaction than those who worked from home more frequently (Felstead & Henseke, 2017). In addition, Golden found that relationship quality between a remote worker and their supervisor was a critical factor in determining job satisfaction Golden (2006).

Another factor that may provide further explanation is the type of job itself. Dingel and Neiman (2020) demonstrate that only 37% of jobs in the United States can be done entirely from home, with the rest of the remaining jobs requiring some degree of in-person interaction (Dingel & Neiman, 2020). Not surprisingly, this suggests that digital remote work may not be suitable way of conducting work for all types of jobs. According to the study, certain job characteristics may contribute in making digital remote work model less appealing to an employee. The work of Dingel & Neiman (2020) uses data from 1000 occupations classified through the Occupational Information Network, so it is based on USA data. Their paper investigates the proportion of the jobs that can be conducted entirely remotely in the context of the COVID – 19 pandemics, while evaluating variations across occupations, industries and cities. Their research classifies the feasibility of working from home for all occupations and then continue to merge that data with occupations employment count. They found that within the 37% of jobs that can be performed from home there are significant variations across different cities and industries. Moreover, the study suggests these jobs account for 46% of all wages in the USA and are usually higher paying occupations in comparison to those that cannot be performed from home. This seems to be in alignment with the claims of

Dunatchik et al. (2021) that remote work is largely accessible, as they point it out to white-collar workers, whereas many of the blue-collar workers during the pandemic had to continue with on-site jobs. Figure 5 illustrates this point with presenting the median hourly wage in USA and the share of jobs that can be done from home,

Figure 5: Share of WFH jobs



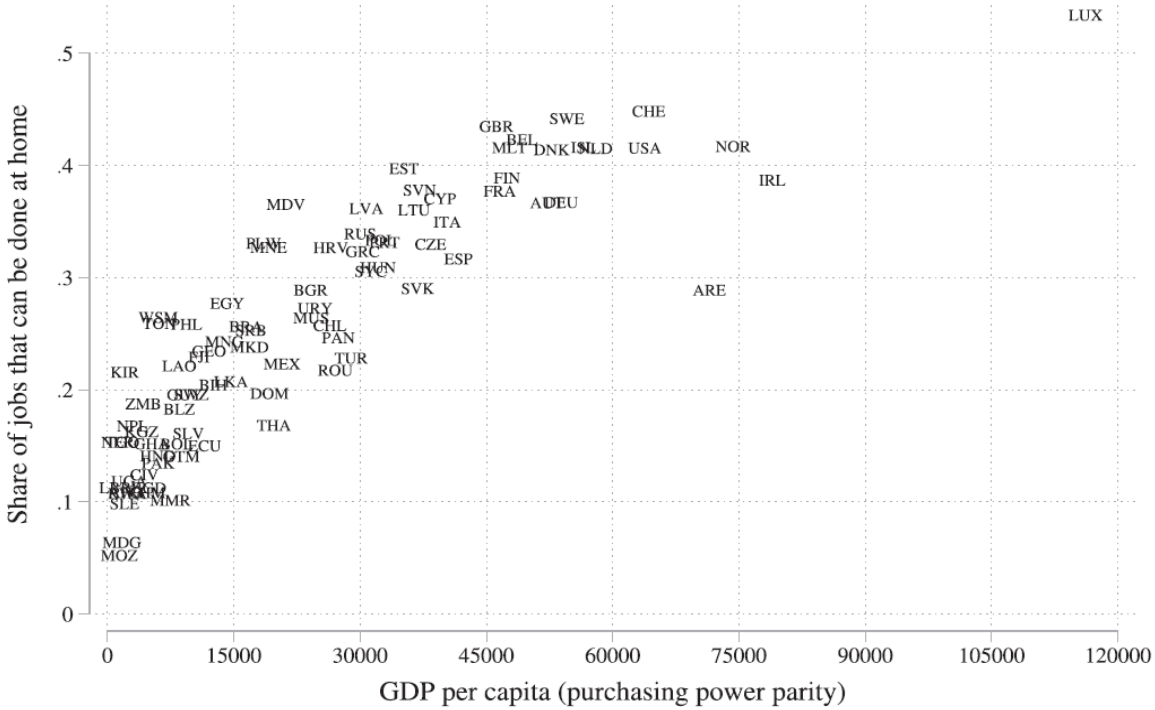
Source: Dingel & Neiman (2020).

The data is based on the assumption that all occupations listed involve the same amount of working hours. The figure illustrates a clear positive relationship between the measure of job proportion with work from home feasibility and the medial hourly wage on an occupational level.

Furthermore, some of the key insights from the research of Dingel & Neiman (2020) demonstrate a significant variation across industries in regards to remote work feasibility with high proportion of remote feasible occupations falling within industries such as computer science and mathematics with 100% of occupations, legal with 97% of occupations, and educational services with 83%. In contrast, industries such as food preparation, construction, and farming, the study suggests have zero remote work feasibility. Due to the fact that these industries are inherently heavily dependent on physical and hands-on requirements. According to the paper these variations are a reflection of a broader structural division between industries which are more knowledge-intensive and industries more dependent on manual labor. The study also finds variations across geographical areas with over 45% of jobs being remote work feasible within certain metropolitan areas such as San Francisco, San Jose, and Washington, D.C. This is accredited to be a reflection of the dominance of these three cities in sectors like technology, government and professional

services. In contrast, cities with economies more reliant on services, manufacturing or tourism and hospitality, for example Las Vegas are reported to have less than 30% of jobs having remote work feasibility. According to these findings, it seems evident that the resilience of cities to any disturbances that may result in necessity for remote work are heavily influenced by local economic structures. Other disparities detected in the paper are those of worker characteristics. The study suggested that workers who occupy jobs classified as remote work feasible are ones with higher education level, better job stability and have more access to benefits provided by employers. In contrast, workers occupying jobs which are classified as not feasible for remote work often have lower education levels, have lower income wages, live as tenants and the study points out they are more likely to be members of a minority group and have much lower access to employer provided benefits, such as health insurance. The analysis of the research conducted by Dingel & Neiman (2020) extents the investigation across 85 other countries. The application of their approach adjusted for Australian data is described in more detail by (Australian Government Productivity Commission , 2021). The cross-national comparison is made using occupational employment data from the International Labour Organization (ILO) and a mapping of USA based occupational classifications to the international standard classification of occupations (ISCO). Figure 6 shown below serves as a visual representation of the share of jobs that can be performed at home and how it correlates to the GDP per capita, adjusted for purchasing power parity (PPP) of various countries across which the model has been applied.

Figure 6: GDP per capita (PPP) vs. Share of WFH jobs



Source: Dingel & Neiman (2020).

The findings suggest that within lower income economies there are lower number of jobs which are remote work feasible resulting from differences in the occupational composition.

The analysis reveals significant patterns and implications for economies of varying income levels. More specifically, there is a higher proportion of remote work feasible jobs in advanced economies and a lower proportion in developing economies. The cross-national study reveals a positive correlation of remote work and GDP per capita adjusted for purchasing power parity (PPP). Higher income countries, such as Norway, Sweden and United Kingdon show results of remote work feasibility for over 40% of jobs. On the other hand, countries like Turkey and Mexico are taken as an example of lower income countries whose results show remote work feasibility for less than 25% of jobs. This is mainly due to higher income countries having larger knowledge-based sectors which are more adaptable to remote work. Therefore, this demonstrates consistency in the positive correlation between the feasibility of remote work and level of economic development, illustrated in Figure 5.

Dingel and Neiman (2020) demonstrate quite insightful findings, however their work is limited by certain constraints. One aspect that must be taken into consideration when assessing remote work feasibility across various countries is different digital infrastructure capacities across countries. Countries which generally fall under the low-income countries umbrella usually have more limitations in regards to digital infrastructure. Beyond occupation related characteristics, this factor further limits the feasibility for remote work Dingel & Neiman (2020). That means that these countries are facing challenges with lower broadband internet access, as well as tools and training resources which have remote compatibility. Moreover, an argument can be made that the feasibility of remote work might be overstated in certain lower-income countries, as a result of inadequate digital infrastructure, even in the case of occupations which normally would be considered feasible for remote work. Additional limitation presents the assumption of uniformity, as the study operates under the assumption that occupations which would be classified as feasible for remote work in the USA retain the same characteristics across different countries. Although, this assumption can be considered as valid on a broad scale, there might be differences in context in terms of how certain jobs are performed.

Dingel and Neiman (2020) highlight the need for investment in digital infrastructure and upskilling of the workforce in order to increase the feasibility and enhance the capacity of developing economies for adapting to remote work. The insights resulting from the study can be of use to policy makers in identifying sectors which are most vulnerable to disruption and work on designing and implementing economic safety nets.

In essence, Dingel and Neiman (2020) underline the disbalance of remote work opportunities in a global context. Highlighting as the root causes of the disbalance, the industrial compositions, digital infrastructure and the level of economic development of countries. Thus, developed economies are in a better position to leverage remote work for better economic resilience while developing economies are facing challenges caused by systemic barriers, which result in making them more vulnerable to economic downturns, when barriers to mobility are in place, as the ones imposed by the pandemic Dingel & Neiman, (2020).

An important challenge that is crucial for almost any work model, but even more so to a digital remote work model is the challenge of effective communication and collaboration. Effective communication and collaboration are essential for digital remote workers. As digital remote work is often not bound by geographical constraints, interactions are much more heavily reliant on information systems to facilitate the communication and collaboration. (Wang et al., 2020) found that remote workers who had access to reliable communication tools and also received adequate support from their supervisors reported higher levels of job satisfaction. This suggests that organizations should put a strong emphasis on providing digital remote workers with the necessary technological and support systems to foster more effective communication and collaboration. Wang et al. (2020) refer to the outcomes related to the impact of remote work on job satisfaction as being heavily dependent on specific work design factors and individual experiences. For instance, job autonomy as one of the key characteristics of remote work resulted in positive correlation with job satisfaction. Specifically, employees having more control of their work schedule and work methods, reported higher levels of job satisfaction. Another aspect serving as a predictor of the impact on the outcomes is the social support levels from supervisors and peers within the organization. Particularly in circumstances as the pandemic, social support from peers and supervisors reduces the level of isolation feelings and stress, while enhancing the overall remote work experience of employees. On the other hand, there are the challenges and their impact on job satisfaction. Challenges include work-home interference and poor communication both of which the study suggest are associated with lower levels of job satisfaction. The impact of these challenges underlined the need for better management of boundaries in remote work setup and also emphasized the importance of clear communication. An additional challenge poses the workload management, even though workload is typically associated with stress and distortion of work/life balance, the study indicates it`s impact can be moderated on an individual level by better self-discipline and on an organizational level by providing adequate support systems.

The study recognizes several limitations of the research which can serve as a context in interpreting its finding. For starters, the data collected is context specific as the research is conducted during the pandemic, hence under significantly altered professional and social conditions. Therefore, the findings may not fully generalize in the context of normal remote work conditions. Another limitation poses the sample as the data is collected from Chinese employees, therefore it may be culture specific or not fully applicable in environments with different workplace norms. The study is also reliant on self-reported measures in regards to challenges and outcomes, an example of this being job satisfaction. As such it is vulnerable to the possibility of response bias. Large part of the data is also collected at a single specific point in time, which poses a limitation in establishing causal relationship between remote work characteristics, challenges and outcomes. Finally, as the research focus is on work design elements, other factors of influence such as technological infrastructure and broader economic conditions might be neglected.

In summary, Wang et al. (2020) explore the impact remote work has on employee experiences, mainly related to well-being, performance and job satisfaction. The study is conducted using a mixed method approach relying on both interviews and surveys collected from more than 500 remote workers. The emphasis of the study is on the key challenges related to remote work and the importance of work design elements, having pivotal role in addressing these challenges. In overall review the study suggests the impact remote work has on job satisfaction can be optimized through implementing a proper work design. The backbone of the work design should be autonomy, effective communication and availability of support systems. The limitation of the research suggests a need for further research across more diverse contexts, collecting data of the same subjects over an extended period, known as longitudinal design in order to observe changes, developments, identify patterns and causal relationships over time. This is particularly useful for investigating the evolving impact of remote work on employee experiences.

3.3 Workplace engagement

Moving on to another important aspect in the experience of a remote worker which is closely related to the relationship of an employee with their job and organization. This refers to the concept of employee engagement, a significant part of the experience of an employee which due to the nature and characteristics of remote work may be altered or damaged. Thus, affecting job satisfaction. A worthy contribution in the available literature addressing the workplace engagement experience of remote workers is the work of (Lee 2018) Employee engagement is a critical and increasingly relevant topic in organizational behavior and the research conducted by Lee (2018) contributes to understanding the dynamics of it among remote workers. Lee (2018) established a taxonomy of responses to critical incidents affecting workplace engagement. The taxonomy the study develops, categorizes the responses of remote workers to positive and negative experiences. Lee (2018) uses a qualitative case study approach on the basis of Maslow`s motivation theory and Kahn`s engagement theory. The research is primarily grounded on the workplace engagement definition of (Kahn, 1990) describing it as “employee engagement is the harnessing of organizational members` selves, to their work roles, engaged workers employ and express themselves physically, cognitively, and emotionally during work(role) performances”. The study further incorporates broader definitions, thus viewing engagement as being a combination of involvement, passion and commitment to one`s work as well as the organization and its goals. However, the foundational definition has a key role in the exploration of Lee (2018) on how remote workers experience workplace engagement. By focusing on remote workers, a demographic often overlooked in traditional workplace engagement research, particularly prior to the pandemic, his work fills in a significant gap in the literature. The study investigates how various factors involving organizational culture, leadership, technology and communication are impacting the workplace engagement of remote workers. Moreover, the study uses critical incident technique (CIT) aiming to

identify responses to critical incidents that shape workplace engagement experiences. The underlying purpose behind this approach is as the author states “to create a taxonomy of responses to the incidents that are critical for maintaining, strengthening or eroding the workplace engagement”. The research identifies key incidents that either promote or pose difficulties to workplace engagement among participants. The data collection process is conducted through semi-structured interviews with 14 remote workers based in the USA from various industries.

Lee (2008) argues that the insights of the study suggest that the taxonomy that strengthens and maintains the workplace engagement of remote workers is directly related to the primary theme referred in the research, or the theme of organizational culture and connectedness. In contrast, the taxonomy that erodes workplace engagement is directly related to the secondary themes, or the themes of organizational fit and disconnectedness.

In more detail, the study identifies several critical factors that play a key role in shaping the workplace engagement of remote workers. Starting with organizational culture, the study suggests that a pivotal factor for workplace engagement is an organizational culture characterized by trust, collaboration and recognition. Due to the nature of remote work which doesn`t rely on physical proximity, the role of a positive organizational culture is even more critical when it comes to making employees feel engaged. The study indicates that remote workers value more inclusive practices which contribute to making them feel part of the organizational community. There is also the factor of leadership and communication related to transparency, support and frequent check-ins which are associated with effective leadership. Receiving acknowledgment for their accomplishments by the organizational leadership also plays a role in enhancing workplace engagement among remote workers. Regarding feelings of isolation and uncertainty a factor that helps mitigate these feelings is purposeful and regular communication. In regards to technology as one of the factors referred in the study, having access to reliable and user-friendly technology platforms plays a very important role in workplace engagement. This involves seamless tolls for communication, collaboration and task management which help remote workers feel connected and facilitate their productivity. In contrast, technological failures and inadequate support translate into causing increased frustrations and lead to workplace disengagement. The impact on work/life balance is also noted as having a significant role, as remote workers highlight the importance of maintaining clear boundaries between work and personal life. Subsequently, flexibility in work schedule is noted as having a positive impact likely due to the fact that it allows remote workers to manage their responsibilities more effectively.

As mentioned earlier, Lee (2018) relies on critical incident technique and responses. In using this technique, the study identifies specific moments that contribute to shaping the workplace engagement and as such are categorized as either positive or negative. The positive incidents covered in the study often involved recognition, growth opportunities and collaboration which stimulated higher levels of workplace engagement for remote workers. Instances where remote workers received praise or acknowledgment for their work from superiors or

peers, the study suggests had a significant impact in enhancing the emotional commitment of employees to their work. Moreover, successful work collaborations, in particular ones facilitated through effective communication and shared goals, reinforced the sense of purpose and belonging. According to the study, remote workers responded to these incidents with increased motivation. more proactive involvement in tasks and higher willingness to go beyond their standard responsibilities. Opportunities for developing skills, as well as professional advancement made remote workers feel valued, more invested in their roles and generally empowered.

The negative incidents covered in the study were primarily caused by poor communication, technological barriers and remote workers experiencing feeling of exclusion. All of this hindered workplace engagement. Examples include unclear instructions or delayed feedback and instances where employees felt left out of critical decision making processes, creating a sense of disconnection and causing frustrations. Moreover, technological issues involving unreliable tools and inadequate training contributed to stress in daily workflows and caused inefficiencies. The responses of remote workers to these negative incidents involved experiences with defensive disengagement, such as emotional withdrawal and reduced efforts. The study also suggests instances of some employees developing coping mechanisms, such as seeking support from peers or avoiding further reliance on problematic systems in effort to manage their dissatisfaction and maintain a basic degree of functionality.

Lee (2018) identifies several emerging themes in his study as being central for understanding workplace engagement among remote employees. One key theme identified by the study is connectedness which emphasizes the importance of interpersonal relationship and nurturing a sense of belonging despite physical distance. Another theme underlines that employees value autonomy and they appreciate the flexibility to manage their own schedule and daily workflows without the need for excessive oversight by supervisors, contributing to both their satisfaction and productivity. There is also the theme of support and resources referring to the importance of having access to adequate tools, emotional backing and managerial guidance, all of which are significant contributing factors to the levels of workplace engagement. The final emerging theme covered in the study is the alignment with organizational goals, which is an essential theme. This means, remote workers tend to be more engaged when the organizational mission and values resonate well with their own personal objectives. Put together, these themes, as the study suggests, highlight the unique interplay of personal, organizational and technological factors of shaping remote employee's workplace engagement.

The taxonomy highlights that when confronted with positive incidents such as recognition or successful collaboration, remote workers tend to manifest positive engagement Lee (2018). Their response is characterized by increase in their emotional, cognitive and physical investment in their work, as well as taking more initiative and having a more creative contribution to their task. These responses can be interpreted as a demonstration of their sense of belonging, motivation and alignment with organizational goals. In addition, remote

workers who feel more valued through acknowledgment of their contributions and receiving support are more likely to engage actively with their roles, nurturing a cycle of positive reinforcement and sustainable productivity.

Conversely, in the face of negative incidents, such as poor communication and technological barriers, remote workers may manifest defensive disengagement or adopt adaptive strategies. Defensive disengagement can be understood as involving emotional withdrawal, reduced effort and lack of initiative, through which employees shield themselves from further disappointments and failure. Adaptive strategies rely on peer support, finding alternative ways to complete tasks and reframing challenges in order to maintain a level of functionality. These responses present highlights of the attempts of employees to cope with obstacles while preserving a minimal level of workplace engagement. The study indicates that the taxonomy as such, underlines the dynamic nature of workplace engagement, shaped by the resilience of an individual and the organizational context of remote work.

Although Lee (2018) primarily relies on qualitative methods, he underlines in implicit manner the quantified impact of a variety of factors which influence workplace engagement through employee narrative and thematic patterns. Throughout the study, trust and recognition emerge as particularly significant contributing factors to workplace engagement. As the study suggests, these insights are in alignment with the broader literature which continuously correlates these factors to enhanced productivity and increase in job satisfaction. According to the study, participants consistently reported increase in emotional and cognitive engagement in instances where they felt valued by their organization, manifesting a clear link between individual performance and interpersonal dynamics. In addition, this effect is amplified by effective leadership the study notes, through providing clarity, consistency and support. These elements not only enhance workplace engagement, but also strengthen other factors, including team cohesion and organizational culture. Another significant insight revealed by the study suggests that well-structured communication channels along with reliable technology help in mitigating disengagement by reducing inefficiencies and frustrations which arise as a result of work settings. Although the study does not explicitly present numerical metrics, the recurring accent on these contributing factors throughout the research findings indicates their substantial and measurable influence on the overall workplace engagement of employees in a remote environment.

Lee (2018) acknowledges several limitations which pose constraints to his findings and their broader applicability. For starters, the sample size consists of only 14 participants, which although appropriate for qualitative research, poses a limit for generalizability of the results to a larger population or a more diverse one. Furthermore, it has a geographic focus on USA based remote workers, therefore excludes perspectives from international context, where cultural norms and organizational differences may have a significant influence on workplace engagement. While the reliance on qualitative methods such as critical incident technique (CIT) provides a more in-depth insight, it also lacks quantifiable metrics that can validate

and expand upon the study`s findings. Moreover, primary focus is on factors such as organizational culture, leadership, communication and technologies, which means certain critical influences, involving individual traits, challenges which are job specific, or certain economic factors might be potentially overlooked. An inherent risk in qualitative analysis is the researcher bias which may have an effect on categorization and interpretation of the data in spite of efforts being made to ensure objectivity. Finally, it is important to note that the study doesn`t examine the evolution of engagement overtime, but rather provides a snapshot. Thus, it is missing the opportunity to explore dynamic changes that might occur over time in engagement levels as a response to organizational or external factors. These limitations, highlight the need for further investigation in the future, consisting larger and more diverse samples, approaches that include mixed methods and a longitudinal design for more comprehensive understanding of workplace engagement among remote workers over time.

3.4 Hybrid work

Moving forward to what can be arguably described as a contemporary trend of remote work, the hybrid work model. The available literature on this model involves the work of (Bloom et al., 2023), describing the hybrid work model as a work arrangement in which employees split their working week between working from home, and office days. More specifically, employees perform tasks, individual focused activities which are suited for remote work on work from home days, whereas tasks that benefit from in-person collaboration on office days. According to the study, hybrid work model has become the dominant and growing trend in the post pandemic workplace. As the pandemic significantly accelerated the adoption of remote work, although initially adopted as a necessity, the study suggests hybrid work, as a form of remote work has become the most common work configuration after the pandemic. For many organizations and employees, it has become a preferred long-term arrangement. The study argues that hybrid model is appealing due to its flexibility, as it allows employees to avoid daily commuting, manage personal responsibilities and save time. Bloom et al. (2023) investigate the efficiency of hybrid model using a randomized control trial consisted of 1612 engineers, marketing and finance employees working in a large technology company called Trip.com. The trial was conducted over a period of six months during 2021 and 2022. Employees were divided into two groups based on date of birth. Employees whose date of birth was an odd number were part of the treatment group which was allowed to work from home twice a week. The other group, the control group, consisted of employees whose date of birth was an even number, worked full time from the office. The method of assignment was random and unrelated to employees personal preferences, characteristics or their roles. Employees were selected from two divisions Airfare and IT The randomized experimental setup in the study was very significant in isolating the effects of hybrid work on various performance metrics. The design was rigorous in order to ensure the results were not influenced by pre-existing differences between employees. Therefore, enabling a better assessment of the true impacts of hybrid work. The random assignment

ensured that both groups had statistically similar representation in demographics, job functions and initial performance levels. The aim was to minimize the risk of observed differences in outcomes, such as productivity, attribution rates or job satisfaction resulting from factors other than hybrid work policy. The study focused on analyzing several metrics: attrition rates – to understand the impact on retention, job satisfaction – to assess employee well-being, working patterns – to observe changes in hours worked and communication habits and productivity – measured through performance reviews, promotions and technical outputs, such as lines of code written. Due to randomization balancing other influencing factors, differences between the control group and the treatment group were attributed to the hybrid work arrangement.

Bloom et al. (2023) revealed several key factors related to hybrid work. Firstly, hybrid work reduced the attrition rates of employees by 35%, particularly among those who volunteered for this arrangement. In addition, it significantly improved job satisfaction, work/life balance, as well as the likelihood of employees recommending the company to others. Secondly, according to the study, hybrid model noticeably altered the working patterns by reducing the number of working hours worked from home. More specifically, employees worked 1.3 hours less on work from home days, which was attributed to greater flexibility at home, as it allowed them to attend to personal matters, such as medical appointments or childcare during the day. On the other hand, on office working days and on weekend, employees slightly increased their working hours to compensate for the work from home reduced hours and maintain consistency of output. In regards to engagement, the use of company VPN`s for remote access and the increase in messaging activities on non-work from home days indicates that employees continued to engage outside traditional working hours. Moreover, the study points out that employees in the treatment group logged in more hours on the company VPN`s even on days when they were expected to work from the office. This would suggest that they continued working from home during early morning, evenings or weekends. The significant increase in messaging on non-work from home days recorded, also indicates that employees maintained asynchronous communication habits which they had developed during their remote work practice. It is noted that this involved more messaging between team members and pre-existing close contacts, a reflection of preference for written and digital communication even when the parties involved are located in the office. This behavioral shift towards asynchronous work culture signals that employees prioritize communicating and completing tasks at their own pace, rather than conforming to traditional office hours. Being able to engage with work beyond the standard 9 to 5 schedule, likely allowed employees to accommodate personal commitments throughout the day, which resulted in a more efficient allocation of their work time. The persistence of these patterns indicates that hybrid work, encourages work habits which are a blend of flexibility and continued professional engagement, thus ensuring sustained productivity no matter the location. The study indicates that the increase of use of both VPN`s and messaging shows that hybrid work facilitates a more fluid approach to work, one which enables employees to remain connected and maintain productivity and at the same time having the benefit of a

greater control over their schedule. Furthermore, the study notes that employees saved substantial commuting time with the introduction of hybrid work which they were able to use for personal and work-related activities. Finally, while hybrid work had no significant impact on the performance ratings or the promotions themselves, according to the study productivity among technical employees which was measured by lines of code written, had increased by 8%. In addition to this, self-reported productivity also rose slightly. These findings demonstrate the benefits of hybrid work regarding retention, satisfaction, and efficiency without negatively affecting overall performance

When it comes to its generalizability and interpretation of its findings, the work of Bloom et al. (2023) has several limitations. The experiment was conducted in a Chinese multinational company and it is reflected in a context, both geographical and cultural where hybrid work was not common. This might potentially limit its applicability in regions where hybrid work is a more common practice. In addition, the period of six months, may not capture some long-term impacts and evolution of work dynamics. The study is also focused on specific roles in engineering, marketing and finance, therefore, it may not be applicable to other roles which require a higher physical presence or interaction with customers. Moreover, measure of productivity, such as lines of code written and self-reported productivity, although valuable, provide incomplete insights, particularly for roles which are non-technical. Despite randomization reducing selection bias, the initial phase of volunteers may have introduced motivation differences, after which subsequent inclusion of non-volunteers added variability. Another limitation of the research is that its findings are based on solely one organization which may limit their broader applicability, and potential spillover effects between the treatment and control groups may have weakened the observable differences. As a final limitation it should be noted that the study took place during the pandemic, a contextually unique period, thus, its long-term and post pandemic applications might be limited. Overall, these limitations emphasize the need for further research across different contexts, various roles and industries, extended timeframes etc.

4 EMPIRICAL ANALYSIS

This section covers the conceptual framework of the data collection process, description of the target demographic group and the overall description of the empirical analysis.

The data collection process for this research was conducted using digital questionnaires which can further be used for data analysis. The design of the questionnaire was based on the overview and insights of the available literature. The target demographic for the data collection process are knowledge workers between the ages of 22 and 45. Knowledge workers is a term often accredited to (Drucker, 1959) who defined knowledge workers as “high level individuals who utilize theoretical and analytical knowledge, often acquired through formal training to develop products or services”. Furthermore, Drucker (1959) in

his work views knowledge workers as individuals who engage in problem solving and are generally expected to find new and innovative ways to improve how things are done. Knowledge workers typically have roles which are reliant on information systems and therefore are more likely to occupy position compatible with digital remote work. Job position and description will be used as a criteria to ensure the contacted respondents fit into the knowledge worker category. The minimal age incorporates people who are old enough to be recent graduates and have some work experience. The upper age limit should keep the pool of candidates within the first half of their career and roughly corresponds with the age range of people that are more likely to be comfortable with technology. The data collection process will be carried out over a several months period in the second half of 2024. The distribution of the questionnaire will be fully online to ensure wider reach and more convenience for the respondents. All of the participants are expected to have some experience with some type of digital remote work arrangement. The aim is for respondents to come from various domains and industries, occupying a large spectrum of job roles on different levels of an organizational hierarchy. The aim is to have over 30 percent of the participants being parents and the male to female ratio to be balanced to ensure a sufficient sample in each category. Overall, the data sample is aimed to be balanced across multiple demographic categories, as much as possible due to various categories involved in order to ensure balanced representative sample.

4.1 Questionnaire design

The questions are structured relying on the available literature, such as (Schall, 2019) and her assessment of telecommuting intensity, work-life balance and perceived autonomy.

The questionnaire has been divided into segments:

Demographics: this segment is consisted of questions regarding the demographic profile of the respondent. The segment involves questions to determine the respondent's gender, age, level of education, marital status, area of residence, employment status, whether or not the respondent has children, personal income level, etc. Overall, the questions are structured in a multiple-choice format, with a few short text questions where appropriate. In regards to personal data privacy, the questionnaire is anonymous. The idea behind these questions is to obtain an insight of the specific demographic profile of the respondent which can further be cross referenced with other data for analysis to discover the potential existence of data correlations and patterns.

Remote work background and experience: as a prerequisite, the respondents must have some experience with remote work as defined by the study. This segment is constructed to gain better insight on the experience with remote work of the respondent and understand their remote work background. Overall, questions are structured in a multiple-choice format, with a short text answer where appropriate. The works of (Grant, 2021) and Schall (2019) provide

a basis for this segment. The idea behind the questions in this segment is to determine in more detail the specific work model arrangement of the respondent, the amount of time spent in remote work, did they start working remotely prior, during or after the pandemic, their proficiency with the technologies they use and their perceived benefit of remote work. This data should provide valuable insight for analysis on patterns and data correlations regarding work arrangement details, level of skill, personal preferences etc.

Remote work and job satisfaction: this segment delves deeper into the relationship and dynamics of remote work and job satisfaction. The questions are structured in a multiple-choice format relying on related literature, such as the work of Schall (2019) and her ideas and concepts. Schall (2019) introduced the underlying ideas for the questions on perceived autonomy, remote work intensity and work/life balance. Perceived autonomy, level of remote work intensity, type of work-life balance, work flexibility and overall job satisfaction level are measured using a 5-point Likert scale, ranging from strong positive to strong negative with a neutral option provided. Using a Likert scale the respondents can give better feedback to better understand the sentiment and help grade the variables. Moreover, this segment includes questions aimed to determine the preferences of the respondents in regards to remote work, personal assessment on the work efficiency in comparison to traditional model. as well as comparative scenario to determine work model preference. The responses should provide insightful data to analyze for correlations and explore potential patterns in the relationship between remote work and job satisfaction.

Workplace engagement: this segment examines the engagement respondents experience with their organization and position while working remotely. As the literature review suggests workplace engagement is an important component and closely related to job satisfaction. Due to the nature of remote work, which does not rely much on physical contact and interaction, the workplace engagement a remote worker experiences is examined in its own segment. The questions are structured in a multiple-choice format. The work of Lee (2018) as well as Kahn (1990) offer valuable insights for constructing the questions of this segment. Although, their research has a much more extensive focus on workplace engagement extending outside the scope of the thesis. Therefore, the questions contained in this segment are constructed in respect to the scope regarding workplace engagement.

Moreover, the quantitative research process also relies on guidelines proposed in the work of (Kraska, 2010) regarding quantitative research design.

4.2 Statistical methods

Using statistical analysis tools and methods the research should result in descriptive statistical data for the overall responses in each segment.

Furthermore, to address the research question, the results showing the number of hours spent working remotely, the level of autonomy, work/life balance, level of flexibility, level of

intensity will serve as independent variables to measure a dependent variable of job satisfaction using an ordinal logistic regression described in (Ordinal Logistic Regression in SPSS, 2025). The reason behind this method is to measure the impact of the independent variables both as a system and as individual variables on the level of job satisfaction as a dependent variable.

Moreover, a Chi Square test analysis will be conducted to compare the frequencies and distribution of values among different demographic categories to determine if there is a relationship between a demographic category and a preference towards a specific model of work such as traditional, fully remote or a hybrid work model.

The experience regarding workplace engagement will be expressed with descriptive statistics through evaluating the responses of the questionnaire focused on that segment. Based on the responses on the questions designed to serve as indicators of workplace engagement the outcome should provide meaningful descriptive data on how the remote workers perceive and assess their level of workplace engagement.

5 RESULTS

This section demonstrates the results of the data analysis.

After analyzing the data sample of 135 respondents using SPSS statistical analysis software, through appropriate procedures and methods, the analysis produced the results shown in the Tables presented in Appendix 3: Descriptive statistics results. Consistent with the grouping and structure of the questions, the results are divided in four segments based on demographic parameters, remote work background and experience parameters, job satisfaction parameters and workplace engagement parameters. The descriptive statistical representation of the analysis reflects the following:

5.1 Results on demographics

The detailed results on demographics are presented in Tables 7 to 16 listed in Appendix 3. The sample is consists of 135 respondents, 55 males (40.7%) and 80 females (59.3%). . There largest age group is between 30-37. Over 30% of respondents are parents and the sample is consisted of highly educated respondents with dominantly bachelors and masters degree. A vast majority of respondents are residents of urban areas with a small portion residing in rural areas. According to marital status respondents are quite evenly split between categories. Results show that vast majority of respondents are full time employees and mostly commonly employes within the Information and Communication Technologies

sector. Majority of the respondents reported having upper medium personal income and the largest share of respondents are employes in large organizations

5.2 Results on remote work experience

The detailed results on remote work background and experience are presented in Tables 17 to 20 listed in Appendix 3.
The number of respondents with remote work experience is 135. Respondents generally reported high levels of proficiency with the technologies they use at work.

Consistent with the trend, majority of respondents stated working remotely during the pandemic, although significant number reported they started working remotely outside of the pandemic timeframe.

The number of hours spend working remotely on a weekly basis various widely among respondents and is show quite a balanced distribution among different categories.

Also, responses regarding perceived benefit of remote work are quite diverse among respondents however there is a visible trend related to perceived benefit of flexibility and freedom among vast number of respondents.

5.3 Results on remote work and job satisfaction

The detailed results on remote work and job satisfaction are presented in Tables 21 to 30 listed in Appendix 3.

The results show a trend of tendency towards positive responses in multiple categories, Most respondents respond positive levels of job satisfaction with vast majority reporting being either somewhat satisfied or highly satisfied. Similar trend is visible whin it comes to level of flexibility and level of autonomy. Overall, reported levels of autonomy are very high with vast majority of respondents reporting either having high levels of autonomy or full autonomy. On a similar note, vast majority of respondents report their level of flexibility being either somewhat flexible or very flexible. All three categories show results that are skewered towards positive responses, with very small number of respondents reporting neutral levels and no negative responses.

In regards to remote work intensity, the majority of respondents report grades of 3 and higher with lower intensity grades being less common among respondents. The level of work/life balance also shows a positive trend with majority of respondents reporting positive levels. There is also notable levels of average work/life balance reported with negative levels being reported much less common. Also, when it comes to efficiency, majority of respondents report being either more efficient or being equally efficient when working remotely,

compared to with traditional model. Significantly smaller number of respondents report being less efficient when working remotely.

When it comes to preference, the overall results show a strong preference towards remote work among the respondents compared to traditional work model. Even with the introduction of a salary increase with traditional work model, the vast majority of respondents report a preference towards remote work.

When it comes to factors influencing the levels of job satisfaction, vast majority have reported than all of the provided answers influence their job satisfaction with work/life balance and salary being most commonly listed as single factors.

5.4 Results on workplace engagement

The detailed results on workplace engagement are presented in Tables 31 to 34 listed in Appendix 3.

In regards to meaning at purpose, the results show that most responds believe that remote work provides them with levels of meaning and purpose comparable to that of traditional work model.

Almost half of the respondents feel that their company makes efforts to improve workplace engagement for remote workers, with the remaining being either uncertain or feel their company does not make enough effort to improve workplace engagement for remote workers.

Reports on valuation and recognition of remote work contributions show that a significant majority of respondents feel their contributions and efforts when working remotely are sufficiently valued and recognized by their organization. The percentage of uncertain and respondents do not feel their contributions are recognized and valued by their organization is significantly lower. This segment the only one of the workplace engagement section that shows so significant positive trend.

Regarding sense of integration with the organization when working remotely the results show that nearly half of the respondents feel well integrated and. Significant portion also report being partially integrated. The remaining small portion of respondents report either neutral levels or poor levels of integration.

Overall, the descriptive statistics results in each segment are expressed as nominal and ordinal values.

5.5 Research question 1: Is there a positive correlation between remote work and job satisfaction?

Investigation on the impact of several factors such as flexibility, autonomy, proficiency, intensity, work-life balance and the number of hours spent working remotely on job satisfaction was conducted using ordinal regression. The reasoning behind using this method as opposed to alternatives is the nature of the collected data and the structure in relation to the research questions needed to be addressed. More specifically, one of the valuable concepts introduced by ordinal regression is a threshold, particularly useful as the data analyzed is in ordered categories, often using Likert scale. In ordinal regression, the predicted outcomes are organized in an ordered scale. Thresholds provide so called cut points or intercepts on that scale that separate those categories. As such they help determine where one category ends and another begins, defining the boundaries of the outcome scale.

The results of the analysis show that the system of independent variables has statistically significant impact on the dependent variable, or at least one of the independent variables has a significant contribution as a predictor of the level of job satisfaction.

Table 1: Model Fitting Information

Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Intercept Only	257,490			
Final	209,431	48,059	20	,000

Source: Own work.

The model fitting information in Table 1 shows how well a model fits the observed data, comparing the predictive capabilities of a model without any predictors, as opposed to the model with the predictors.

The intercept only model serves as a Null model, a model without any predictors. The Final model describes the model with the predictors included. As the results show, the final model serves as a better predictor of the outcome, meaning the predictors do help in explaining the outcome. As the -2 Log Likelihood is lower for the Final model, it shows that the model better fits the observed data.

The model fitting information illustrates that the final model involving the predictors is statistically significantly better than just intercept ($\chi^2(20) = 48{,}059$, $p < 0.001$).

Analyzing individual predictors, two variables stand out as having a statistically significant impact on predicting job satisfaction. Shown in Table 2 are the Parameter Estimates.

Table 2: Parameter Estimates

Parameter Estimates

		Estimate	Std. Error	Wald	Df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Thres-hold	[Job_satisfaction = 1]	(2,882)	,729	15,613	1	,000	(4,312)	(1,453)
	[Job_satisfaction = 2]	(2,128)	,708	9,039	1	,003	(3,515)	(,741)
Location	[Hours_remotely_job=1]	(1,017)	,732	1,927	1	,165	(2,453)	,419
	[Hours_remotely_job=2]	(,933)	,752	1,541	1	,214	(2,407)	,540
	[Hours_remotely_job=3]	(1,144)	,749	2,335	1	,127	(2,611)	,323
	[Hours_remotely_job=4]	(1,241)	,691	3,229	1	,072	(2,595)	,113
	[Hours_remotely_job=5]	(,630)	,596	1,116	1	,291	(1,798)	,538
	[Hours_remotely_job=6]	0[a]	.	.	0	.	.	.
	[Level_of_proficiency=0]	(,446)	2,014	,049	1	,825	(4,393)	3,501
	[Level_of_proficiency=1]	(,848)	,773	1,203	1	,273	(2,364)	,668
	[Level_of_proficiency=2]	,605	,478	1,598	1	,206	(,333)	1,543
	[Level_of_proficiency=3]	0[a]	.	.	0	.	.	.
	[Rate_autonomy=3]	(,144)	1,009	,020	1	,886	(2,122)	1,833
	[Rate_autonomy=4]	(,754)	,409	3,397	1	,065	(1,556)	,048
	[Rate_autonomy=5]	0[a]	.	.	0	.	.	.
	[Rate_flexibility=1]	(1,788)	,476	14,136	1	,000	(2,720)	(,856)
	[Rate_flexibility=2]	(1,767)	,977	3,273	1	,070	(3,682)	,147
	[Rate_flexibility=3]	0[a]	.	.	0	.	.	.
	[Intensity_remote=1]	,511	1,122	,207	1	,649	(1,689)	2,711
	[Intensity_remote=2]	1,040	,874	1,417	1	,234	(,673)	2,753
	[Intensity_remote=3]	(,088)	,590	,022	1	,882	(1,245)	1,069
	[Intensity_remote=4]	(,193)	,549	,123	1	,726	(1,268)	,883
	[Intensity_remote=5]	0[a]	.	.	0	.	.	.
	[Work_life_balance=1]	(1,870)	1,756	1,134	1	,287	(5,311)	1,571
	[Work_life_balance=2]	(2,277)	1,042	4,775	1	,029	(4,319)	(,235)
	[Work_life_balance=3]	(1,750)	,641	7,453	1	,006	(3,005)	(,494)
	[Work_life_balance=4]	(,064)	,531	,014	1	,905	(1,105)	,978
	[Work_life_balance=5]	0[a]	.	.	0	.	.	.

Source: Own work.

The level of flexibility resulting with a value of (p = 0.000) demonstrates that higher level of flexibility results in an increased probability for higher levels of job satisfaction.

Another predictor demonstrating statistically significant results is the level of work/life balance. With a value of ($p = 0.006$) and ($p = 0.029$) for certain levels, meaning that respondents with better work/life balance have a higher probability to experience higher levels of job satisfaction.

The remaining variables do not demonstrate a statistically significant impact, although some of them such as level of autonomy with a value of ($p = 0.065$) show a trend of influence.

The Goodness of Fit model shown in Table 3 also indicates that the model fits well with the data. Even though the Pearson test to determine adequacy demonstrated statistical significance ($\chi^2(214) = 253.976$, $p = 0.032$), the Deviance test did not show statistical significance ($\chi^2(214) = 199.491$, $p = 0.753$). Overall, this suggests the model offers generally well explanation of the results. Both Pearson and Deviance test are used as a tool to check fit. The Pearson test compares the observed frequencies or what the data shows with the expected frequencies, meaning what the model predicts for each unique predictor combination. As the p – value is < 0.05, the Pearson test shows a statistically significant difference between these two frequencies. Therefore, the Pearson test results show the model does not fit the observed data perfectly. However, Deviance test that also measures how well the model explains the data, shows there is no statistically significant difference between the data and what the model predicts with a p value > 0.05. The Deviance test compares the model`s Deviance, against the number of degrees of freedom(df). The Deviance test is based on likelihood and therefore more stable and reliable for ordinal regression. Thus, it can be concluded that the model fits adequately, while noting that Pearson detected some mismatches.

Table 3: Goodness of Fit model

Goodness-of-Fit

	Chi-Square	Df	Sig.
Pearson	**253,976**	**214**	**,032**
Deviance	**199,491**	**214**	**,753**

Source: Own work.

Test of parallel lines as shown in Table 4 checks whether the effect of the predictors is consistent across all levels of the ordinal regression. The null hypothesis assumes parallel lines, meaning that the effects of the model are consistent across all levels. Whereas the General model is more flexible, assuming that the effects are not consistent across different levels, meaning the effect changes across different thresholds. Simply put, Chi square shows whether the difference between the Null hypothesis which assumes consistent distribution is statistically significant (p<,0.05) as opposed to the General model. In other words, the Chi Square measures how significant is the improvement of fit when you switch to the more flexible General model.

The test of parallel lines results in a value of (p = 0.003) which is statistically significant, therefore the assumption of parallel effects is not met. This means that the impact of some of the predictors is not consistent across all levels of job satisfaction. This is an important limitation to note, as it may influence on the accuracy of the interpretation of the coefficients.

Table 4: Test of Parallel Lines

Test of Parallel Lines[a]

Model	-2 Log Likelihood	Chi-Square	Df	Sig.
Null Hypothesis	209,431			
General	167,788[b]	41,643[c]	20	,003

Source: Own work.

Regardless of the limitations, the model still offers valuable insights on the factors that impact the level of job satisfaction in relation to digital remote work.

5.6 Research question 2: Is there a correlation between specific demographic group and remote work preference?

In regards to digital remote work correlation to work model preference in relation to specific demographic groups the results of the analysis demonstrate that generally there is no statistically significant correlation demonstrating digital remote work preference related to specific demographic groups. Table 5 shows the case processing summary of the analysis:

Table 5: Case Processing Summary

Case Processing Summary

		N	Marginal Percentage
Hybrid Model	Hybrid - working part time remote, part time at a job site	98	72,6%
Fully Remote Model	Fully Remote - working full time remotely	34	25,2%
Traditional Model	Traditional - working full time at a specific job site	3	2,2%
Gender	Male	55	40,7%
	Female	80	59,3%
Age	22-29	36	26,7%
	30-37	77	57,0%
	38-45	22	16,3%
Place of residenence	Rural	10	7,4%
	Urban	125	92,6%

(table continues)

Table 5: Case Processing Summary (cont.)

Employment status	Contractor	17	12,6%
	Full time employee	117	86,7%
	Part time employee	1	0,7%
Industry/Sector	Information & Communication Technologies	53	39,3%
	Finance, Banking & Business Services	17	12,6%
	Education, Research & Public Sector	16	11,9%
	Tourism, Hospitality & Retail	6	4,4%
	Marketing, Media & CRM	17	12,6%
	Healthcare, Life Sciences & Social Impact	13	9,6%
	Engineering, Manufacturing & Critical Infrastructure	13	9,6%
What is the size of your organization? (Number of employees)	Micro (<10 employees)	26	19,3%
	Small (10-49 employees)	27	20,0%
	Medium (50-249 employees)	33	24,4%
	Large (Over 250 employees)	49	36,3%
Marital status	Single	48	35,6%
	In a relationship	29	21,5%
	Married	48	35,6%
	Divorced	8	5,9%
	N/A	1	0,7%
	Widowed	1	0,7%
Do you have children?	No	93	68,9%
	Yes	42	31,1%
Personal income level	Lower medium level	3	2,2%
	Average income	37	27,4%
	Upper medium level	75	55,6%
	Upper level	20	14,8%
What is the highest level of education you have completed?	High school	8	5,9%
	Bachelor's degree	62	45,9%
	Master's degree	55	40,7%
	PhD	8	5,9%
	Post doctoral studies	1	0,7%
	Professional Qualification	1	0,7%
Valid		135	100,0%
Missing		0	
Total		135	

Source: Own work.

The Chi-Square test results ran on the independent demographics variables involving: gender, age, place of residence, level of education, employment status, industry/sector, size of organization, marital status, children and personal income level as demographic categories. Each analyzed in relation to the dependent variable of remote work preference produced the following results shown in Table 6.

Table 6: Chi Square Test Results

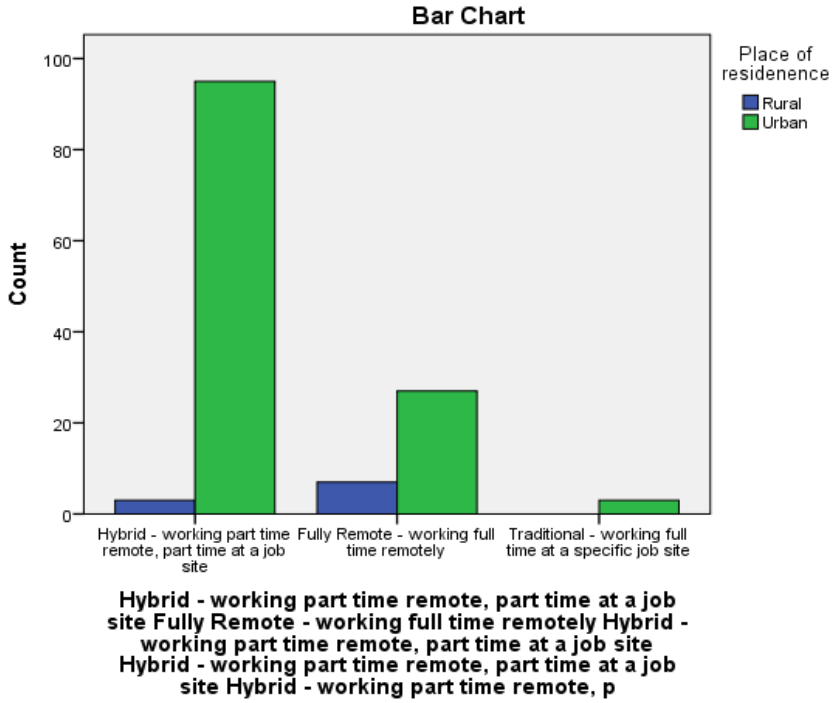
		Value	Df	Asymp. Sig. (2-sided)
Gender	Pearson Chi Square	,071[a]	2	,965
Age	Pearson Chi Square	5,159[a]	4	,271
Place of Residence	Pearson Chi Square	11,551[a]	2	,003
Level of Education	Pearson Chi Square	7,743[a]	10	,654
Employment Status	Pearson Chi Square	7,367[a]	4	,118
Industry/Sector Category	Pearson Chi Square	15,001[a]	12	,241
Size of Organization	Pearson Chi Square	7,047[a]	6	,317
Marital Status	Pearson Chi Square	13,006[a]	10	,223
Do you have children?	Pearson Chi Square	1,219[a]	2	,544
Personal Income Level	Pearson Chi Square	3,575[a]	6	,734

Source: Own work.

Analyzing each individual result from the Chi Square test it is evident that the only demographic category meeting the criteria for statistical significance of ($p < 0,05$) is the category of place of residence. Place of residence demonstrates a p – value of 0,003 therefore meeting the criteria of $p<0,05$ and making it statistically significant correlation between the demographic characteristic and digital remote work preference. Therefore, based on this result it can be concluded that there is a statistically significant difference regarding a preferred model of work between respondents who live in urban areas, as opposed to respondents who live in rural areas. The results of the Chi Square test show that respondents living in urban areas have a significantly stronger preference toward hybrid work model in comparison to respondents living in rural areas. In regards to respondents who have children, the results do not show consistency with some of the available research in the literature, such as McKinsey & Company (2021), according to which respondents with children demonstrated more significant preference than those without.

For a more detailed overview of the results and better understanding of the data, Figure 7 illustrates the results of the correlation between Place of residence and digital remote work preference per each model:

Figure 7: Preferred work model in rural and urban areas



Source: Own work.

However, it is important to understand that due to the nature of work in rural areas being mainly in different fields that are not often compatible with remote work models, the sample of respondents residing in rural areas is also significantly lower.

An interesting insight from the results that can be observed is the higher tendency of rural residents towards fully remote work model, as opposed to hybrid model. Although there is a small preference for traditional work model among urban residents, there is not expressed preference for this model among rural residents. In contrast, residents of urban areas demonstrate a more significant preference towards hybrid model, as opposed to fully remote model, although fully remote model is still more preferred than a traditional model among these respondents.

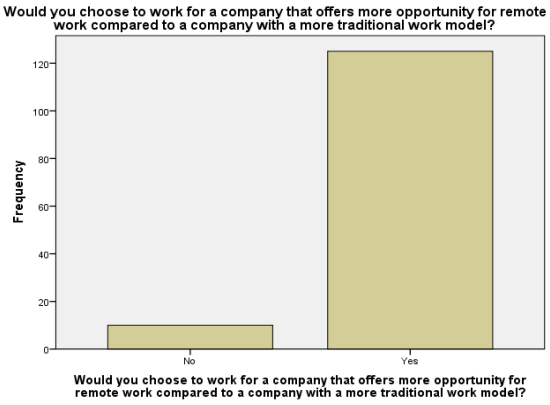
5.7 Research question 3: Do remote workers experience workplace engagement?

The results expressed in descriptive statistics are inconclusive as to whether remote workers experience workplace engagement as there is no sufficient consistency in the results across assessing different indicators of workplace engagement. However, it is worth noting that a vast majority of respondents comprising 79,3% do consider that their contributions and effort when working remotely are sufficiently valued by their company. This is an important indicator related to workplace engagement as it addresses an aspect of perception of the quality of their relationship with the organization while they work remotely. The remaining

results relating to workplace engagement can be interpreted as a tendency towards giving a positive assessment of workplace engagement, however the partial, neutral and to a lesser extent negative options have a significant number of respondents, thus the results on workplace engagement can be best described as inconclusive.

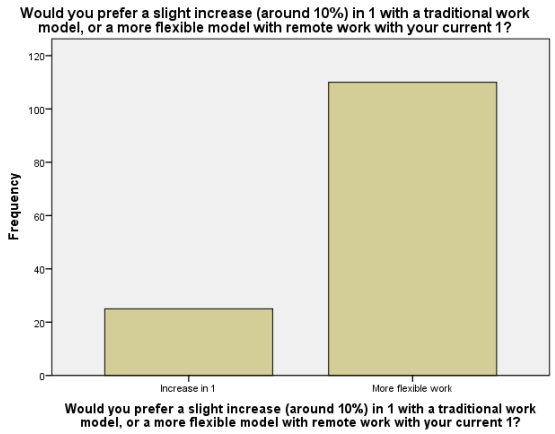
Furthermore, the results show that vast majority of respondents would choose digital remote work as opposed to traditional work and the results still show a strong preference even after introducing an incentive such as salary increase along with traditional work. Figure 8 and Figure 9 below illustrate the preferences of respondents, as well as the preference when an increase of around 10% in salary is involved with traditional model.

Figure 8: Remote vs. Traditional work model



Source: Own work.

Figure 9: Remote vs. Traditional model + salary increase (around 10%)



Source: Own work.

According to the results 92.6% of respondents would choose to work for a company that offers more opportunities for remote work, as opposed to only 7.4% for traditional work model. When a financial incentive is introduced as an addition to traditional work model, comparing traditional work model with around 10% increase in salary versus more opportunity for remote work, the results show 81.5% of respondents will still choose more

opportunity for remote work versus 18.5% for traditional work model. Even though there is a certain decrease in the percentage of respondents that would choose digital remote work model over a salary increase, the results still show a strong favorability towards digital remote work among the respondents. Putting this result into a wider perspective, it is important to know that even though around 10% does not seem like a large increase, 70.4% of respondents have upper medium or upper-level income, which in absolute numbers is likely to be significant amount of increase.

Regarding the trend for digital remote work stimulated by the pandemic the results do show that more than half of the respondents started working remotely during the pandemic which can largely be attributed to the circumstantial factors. However, it is worthy to note that a significant number of respondents started digital remote work outside of the pandemic framework. About 43.7% are attributed to either pre or post pandemic which is a significant portion pointing to the digital remote work trends being significant even outside pandemic circumstantial framework.

6 CONCLUSION AND DISCUSSION

This section contains a final conclusion of the findings followed by a final discussion.

Overall, in regards to the first research question: is there a positive correlation between remote work and job satisfaction? It can be concluded that a positive correlation between digital remote work and job satisfaction exists according to the parameters measured in the research. The system of variables demonstrates a positive correlation when tested as a system, whereas the individual variables as stand-alone variables demonstrate that level of work/life balance and level of flexibility serve as significant predictors as independent variables.

In regards to the second research question of specific demographics and their correlation to digital remote work preference it can be concluded that only place of residence as a demographic factor demonstrates a significant correlation to preference. However, the demographic parameter offers limited sample size. The remaining demographic parameters do not demonstrate a significant correlation and therefore it can be concluded that among the remaining demographic parameters there is no significant correlation between a specific demographic and digital remote work preference as a model. However, it`s important to point out that due to the results showing an overall high preference towards digital remote work, taking into account both hybrid model and fully remote, it can be concluded that there is a strong preference for this model across various demographic categories.

Moreover, it can be concluded that the results do not show a significantly higher preference towards digital remote work among respondents with children, as opposed to those without, which does not align with some of the data in the available literature such as McKinsey &

Company (2021) which suggests a significantly stronger preference towards digital remote work among this demographic category.

In regards to the third research question and whether remote workers experience workplace engagement, due to the inconsistency of the results as a result of significant number of responses pointing to positive, neutral and negative evaluation, neither of which seems carry particular significance, the outcome can be described as inconclusive.

In accordance with the results we can conclude that the amount of hours spent working remotely as a single parameter does not align with the claims expressed by Gajendran & Harrison (2007), as well as Golden & Veiga (2005) related to frequency of remote work measured in hours and days having an effect on an employee`s level of job satisfaction. Even though as part of a system of variables it seems to have an effect.

Based on the results it can be concluded that there is a significant preference towards a Hybrid model, which show consistency with the works of Virick et al. (2010), which showed that moderate levels of remote work deliver most favorable results in regards to job satisfaction

Moreover, it can be concluded that digital remote work offers a strong appeal when choosing to work for a company and shows a clear advantage over a traditional work model. Even with a financial incentive, digital remote work at a company according to the results of the research appears to be a stronger incentive than the financial incentive, as it shows a significantly better result. This is a particularly useful insight for talent attraction and talent retention, as the results demonstrate a method of incentivizing talent that can be more effective than a financial incentive. Organizations which are more budget sensitive can use this insight as a method for achieving competitive advantage at the talent market. Furthermore, as the results are based on evaluation of knowledge workers this insight may be of use also to governmental organizations, which particularly in industries like IT and engineering have more difficulties with competing for talent with the private sector which often offers more lucrative job opportunities.

6.1 Limitations

Although the study provides some valuable insights in the relationship of digital remote work and job satisfaction, there are limitations that can serve as a backbone for future further research on the topic. The concepts of job satisfaction and workplace engagement are quite abstract concepts and as such are difficult to measure. The study relies on the subjective self-assessment of the respondents measuring their personal perception and sentiment. There are also limitations to application related to cultural characteristics and norms. As the respondents are of Macedonian nationality, there might be aspects of the evaluation that are sensitive to the culture and not necessarily applicable within other cultures. The

demographics is largely consisted of remote workers living in urban areas with a very small sample of ones from rural areas.

In regards to demographics of people that have children, there are additional specifics that may have more in dept impact, such as number of children and the age of the children. Moreover, this also relates to specifics regarding the partner of the remote worker in question, as the employment status and work characteristics of the parent may also influence the dynamics of the relationship between the parents and children related responsibilities.

Preferences of remote work compared to traditional work model show a certain level of decrease when a salary increase of around 10% is offered along with traditional work model. The research is limited to these more standard levels of salary increase, however larger salary increases may demonstrate more significant drop in remote work preference and tilt the balance more towards traditional work. Another aspect regarding salary that should be taken into consideration is level of income and potential changes in lifestyle related to salary increase. More specifically, the respondents generally classify their income as medium or upper medium. This is consistent with the job types, as majority of jobs that can be performed remotely tend to be related to knowledge work and therefore are usually financially well compensated. Thus, a respondent that already has a comfortable level of income may be less sensitive to small salary increases as opposed to remote work opportunities.

Moreover, there is another cultural element that relates not to the remote worker's own culture. It is a common case for remote workers to be employed in organizations that are not necessarily based or operate in the country where they reside, or not even serve that market. This is another cultural factor which may bear some significance and can be used as a basis for investigating in future research.

6.2 Future research

As the topic is relatively broad, the potential opportunities for future research are vast. There is an opportunity to investigate the same parameters among different cultural group and investigate whether certain cultural norms may have an impact on the results. As the research relies mainly on respondents from urban areas, with a very small representative sample of rural area residents, there is an opportunity to investigate further among larger sample of rural area residents.

Moreover, this research relies on investigating digital remote work impact from the personal perspective of the digital remote worker. Therefore, there are new opportunities to further investigate the impact based on the management perspective and make a comparison. This opportunity may provide interesting insight into better understanding and better utilizing remote work to deliver a win-win result for both the organization and the employee.

The research focuses on hybrid work model as a form of remote work model. However, as the results demonstrate a significant preference of hybrid work model there are interesting opportunities arising to investigate this model on its own. Exploring this model in more detail should provide a clearer image on the proper balance between full remote work and traditional work model that seems to be compelling to vast number of respondents based on the portion of respondents expressing preference of the hybrid model.

Also, as job satisfaction and workplace engagement are very abstract concepts, opportunities arise for further research to investigate various parameters that may serve as measurements of job satisfaction and workplace engagement.

As this is not a longitudinal study, there is a future opportunity to further investigate the relationship between digital remote work and job satisfaction through a longitudinal framework and observe protentional changes and deviations that may occur over time among the respondents.

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APPENDICES

Appendix 1: Summary in Slovene language

Appendix 2: Questionnaire design

Demographics

1. Gender (Male; Female)
2. Age (text)
3. Nationality (text)
4. Is you place of residence rural or urban area? (Rural; Urban; Other)
5. What is the highest level of education you have completed? (Did not attend school; Primary school; High school; Bachelor`s degree; Master`s degree; PhD; Post doctoral studies; Other)
6. What is you employment status? (Unemployed; Part time employee; Contractor; Full time employee; Other)
7. What industry/sector do you work in? (text)
8. What is the size of the organization (Number of employees)? (Micro <10; Small 10-49; Medium 50- 249; Large >250; Other)
9. What is your marital status? (Single; In a relationship; Married; Divorced; Widowed; Other)
10. Do you have children? (Yes; No)
11. How would you classify your personal income level in respect to the standard of your country of residence? (Low level; Lower medium level; Average; Upper medium level; Upper level)

Remote work background and experience

1. How would you rate your level of proficiency with the technologies you use at your job? (Low; Low medium; Medium; Upper medium; High; Other)
2. When did you first start working remotely? (Prior to COVID 19; During COVID 19; After COVID 19; Other)
3. On average how many hours have you spent working remotely in a typical working week? (Less than 10; Between 10-20; Between 20-30; Between 30-40; 40; More than 40; Other)
4. What do you consider is the biggest benefit of remote work for you? (text)

Remote work and job satisfaction

1. How would you describe your level of job satisfaction? (Highly unsatisfied; Somewhat unsatisfied; Neutral; Somewhat satisfied; Highly satisfied; Other)
2. How would you rate your level of autonomy in performing your work tasks? (5 being the highest, 1 being the lowest)
3. How would you rate the flexibility of your job (flexibility in work schedule and flexibility as a form of autonomy in performing job activities)? (Very inflexible;

Somewhat inflexible; Neither flexible, nor inflexible; Somewhat flexible; Very flexible)

4. How would you rate the intensity remote work you have experienced (Intensity refers to frequency or the amount of time spent working remotely)? (5 being most intense, 1 being least intense)
5. How would you describe your Work/Life balance? (Terrible Work/Life balance; Bad Work/Life balance; Average Work/Life balance; Good Work/Life balance; Excellent Work/Life balance; Other)
6. What is your preferred work model? (Traditional; Hybrid; Fully Remote; Other)
7. How would you rate your work efficiency in remote work compared to traditional work model? (Less efficient; Approximately the same; More efficient)
8. Which of the following do you consider has the highest impact on your job satisfaction? (Salary; Better Work/Life balance; More autonomy; Higher engagement; All of the above; None of the above)
9. Would you choose to work for a company that offers more opportunity for remote work compared to a company with a more traditional work model (Assuming that other parameters such as salary are similar in both cases)? (Yes; No)
10. Would you prefer a slight increase (around 10%) in salary with a traditional work model, or a more flexible model with remote work with your current salary? (Increase in salary; More flexible work; Other)

Workplace engagement

1. Do you feel remote work makes you to be well aligned with your organization`s culture and strategic goals? (Yes; No; Maybe)
2. Do you feel the company makes attempts to improve the engagement of employees working remotely? (Yes; No; Maybe)
3. Do you feel your contribution and effort while working remote are sufficiently recognized and valued by your organization? (Yes; No; Other)
4. How would you rate the level of integration you experience with your company while working remotely? (Not integrated well; Partially disintegrated; Neither integrated, nor disintegrated; Partially integrated; Well integrated)
5. How would you rate the overall relationship between the organization and you as an employee? (5 being the highest, 1 being the lowest grade)

Appendix 3: Descriptive statistics results

Demographics

Table 7: Gender

Gender		
	Frequency	Percent
Male	55	40,7
Female	80	59,3
Total	135	100,0

Source: Own work.

Table 8: Age

Age		
	Frequency	Percent
22-29	36	26,7 %
30-37	77	57,0 %
38-45	22	16,3 %
Total	135	100 %

Source: Own work.

Table 9: Place of residence

Place of residenence		
	Frequency	Percent
Rural	10	7,4 %
Urban	125	92,6 %
Total	135	100 %

Source: Own work.

Table 10: Education

Education

	Frequency	Percent
High school	8	5,9 %
Bachelor's degree	62	45,9 %
Master's degree	55	40,7 %
Phd	8	5,9 %
Post doctoral studies	1	,7 %
Professional Qualification	1	,7 %
Total	135	100 %

Source: Own work.

Table 11: Marital Status

Marital Status

	Frequency	Percent
Single	48	35,6 %
In a relationship	29	21,5 %
Married	48	35,6 %
Divorced	8	5,9 %
N/A	1	,7 %
Widowed	1	,7 %
Total	135	100 %

Source: Own work.

Table 12: Children

Do you have children?

	Frequency	Percent
No	93	68,9 %
Yes	42	31,1 %
Total	135	100 %

Source: Own work.

Table 13: Employment Status

Employment Status

	Frequency	Percent
Contractor	17	12,6 %
Full time employee	117	86,7 %
Part time employee	1	,7 %
Total	135	100 %

Source: Own work.

Table 14: Industry/Sector

Industry/Sector

	Frequency	Percent
Information & Communication Technologies	53	39,3 %
Finance, Banking & Business Services	17	12,6 %
Education, Research & Public Sector	16	11,9 %
Tourism, Hospitality & Retail	6	4,4 %
Marketing, Media & CRM	17	12,6 %
Healthcare, Life Sciences & Social Impact	13	9,6 %
Engineering, Manufacturing & Critical Infrastructure	13	9,6 %
Total	135	100 %

Source: Own work.

Table 15: Personal Income

Personal Income

	Frequency	Percent
Lower medium level	3	2,2 %
Average income	37	27,4 %
Upper medium level	75	55,6 %
Upper level	20	14,8 %
Total	135	100 %

Source: Own work.

Table 16: Organization Size

Size of organization

	Frequency	Percent
Micro (Fewer than 10 employees)	26	19,3 %
Small (10-49 employees)	27	20,0 %
Medium (50-249 employees)	33	24,4 %
Large (Over 250 employees)	49	36,3 %
Total	135	100 %

Source: Own work.

Remote work background and experience

Table 17: Technology Proficiency

Rate your level of proficiency with the technologies you use at work

	Frequency	Percent
Lower medium	1	,7 %
Medium	13	9,6 %
Upper medium	40	29,6 %
High	81	60,0 %
Total	135	100 %

Source: Own work.

Table 18: Remote work start

First started working remotely

	Frequency	Percent
Prior to COVID 19 Pandemic	33	24,4 %
During COVID 19 Pandemic	76	56,3 %
After COVID 19 Pandemic	26	19,3 %
Total	135	100 %

Source: Own work.

Table 19: Average time working remotely

Average amount of hours spent working remotely in a typical working week?

	Frequency	Percent
Less than 10 hours per week	22	16,3 %
Between 10 and 20 Hours per week	17	12,6 %
Between 20-30 hours per week	16	11,9 %
Between 30-40 hours per week	20	14,8 %
40 hours per week	33	24,4 %
More than 40 hours per week	27	20,0 %
Total	135	100 %

Source: Own work.

Table 20: Biggest benefit of remote work

What do you consider is the biggest benefit of remote work for you?

	Frequency	Percent
Flexibility	28	20,7 %
Freedom	31	23,0 %
Time with family	9	6,7 %
Experiencing higher engagement at your work	2	1,5 %
All of the above	64	47,4 %
Other	1	,7 %
Total	135	100 %

Source: Own work.

Table 21: Level of job satisfaction

Rate of level of job satisfaction

	Frequency	Percent
Somewhat satisfied	56	41,5 %
Neutral	18	13,3 %
Highly satisfied	61	45,2 %
Total	135	100 %

Source: Own work.

Table 22: Level of autonomy

Rate of level of autonomy

	Frequency	Percent
Moderate autonomy	8	5,9 %
High autonomy	55	40,7 %
Full autonomy	72	53,3 %
Total	135	100 %

Source: Own work.

Table 23: Level of flexibility

Rate the flexibility

	Frequency	Percent
Somewhat Flexible	57	42,2 %
Neither flexible, nor inflexible	7	5,2 %
Very flexible	71	52,6 %
Total	135	100 %

Source: Own work.

Table 24: Remote work intensity

Rate of remote work intensity

	Frequency	Percent
Grade 1	6	4,4 %
Grade 2	10	7,4 %
Grade 3	42	31,1 %
Grade 4	46	34,1 %
Grade 5	31	23,0 %
Total	135	100 %

Source: Own work.

Table 25: Work/Life balance

Work/Life balance

	Frequency	Percent
Terrible Work/Life Balance	2	1,5 %
Bad Work/Life Balance	8	5,9 %
Average Work/Life Balance	28	20,7 %
Good Work/Life Balance	72	53,3 %
Excellent Work/Life Balance	25	18,5 %
Total	135	100 %

Source: Own work.

Table 26: Preferred work model

Preferred work model

	Frequency	Percent
Hybrid - working part time remote, part time at a job site	98	72,6 %
Fully Remote - working full time remotely	34	25,2 %
Traditional - working full time at a specific job site	3	2,2 %
Total	135	100 %

Source: Own work.

Table 27: Work efficiency comparison

Work efficiency in remote work compared to traditional work model

	Frequency	Percent
Less Efficient	6	4,4 %
Approximately the same	52	38,5 %
More Efficient	77	57,0 %
Total	135	100 %

Source: Own work.

Table 28: Highest impact on job satisfaction

Which of the following do you consider has the highest impact on your job satisfaction?

	Frequency	Percent
Salary	28	20,7 %
Having better work/life balance	31	23,0 %
Having more autonomy at work	9	6,7 %
Experiencing higher engagement in your workplace	2	1,5 %
All of the above	64	47,4 %
None of the above	1	,7 %
Total	135	100 %

Source: Own work.

Table 29: Remote vs Traditional work model choice

Would you choose to work for a company that offers more opportunity for remote work compared to a company with a more traditional work model?

	Frequency	Percent
No	10	7,4 %
Yes	125	92,6 %
Total	135	100 %

Source: Own work.

Table 30: Traditional model + salary increase vs Remote work

Would you prefer a slight salary increase (around 10%) with a traditional work model, or a more flexible model with remote work with your current salary?	Frequency	Percent
Increase in salary	25	18,5 %
More flexible work	110	81,5 %
Total	135	100 %

Source: Own work.

Workplace engagement

Table 31: Remote work meaning and purpose

How do you feel about this statement: Remote work provides me with meaning and purpose at my job as much as traditional work	Frequency	Percent
Disagree	8	5,9
Neutral	37	27,4
Agree	53	39,3
Strongly agree	37	27,4
Total	135	100,0

Source: Own work.

Table 32: Company attempts to improve engagement

Do you feel the company makes attempts to improve the engagement of employees working remotely?	Frequency	Percent
No	32	23,7 %
Maybe	36	26,7 %
Yes	67	49,6 %
Total	135	100 %

Source: Own work.

Table 33: Remote work contribution and value recognition

Do you feel your contribution and effort while working remote are sufficiently recognized and valued by your organization?

	Frequency	Percent
No	26	19,3 %
Maybe	2	1,5 %
Yes	107	79,3 %
Total	135	100 %

Source: Own work.

Table 34: Remote work integration level

How would you rate the level of integration you experience with your company while working remotely

	Frequency	Percent
Not integrated well	4	3,0 %
Partially integrated	53	39,3 %
Neither integrated nor disintegrated	14	10,4 %
Well integrated	64	47,4 %
Total	135	100 %

Source: Own work.