An exploratory analysis of remote working preferences among tech

workers and managers in Ireland

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Abstract

Title: An exploratory analysis of remote working preferences among tech workers and managers in Ireland

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This research investigated what is the preferred working-from-home model that both technical workers and their managers want post the COVID-19 pandemic. The COVID-19 pandemic led to a digital transformation in remote work and technical workers were best placed to adapt to this new world. This paper used a mixed methods approach using a questionnaire to gather data from technical workers while using structured interviews to gather data from technical managers. 154 valid questionnaire responses were gathered while 5 managerial interviews were held.

This research found that 61.7% of technical workers on the island of Ireland do not want to return to the office in any form. Just 0.6% of technical workers want to return to the office full time. Of workers who want a hybrid model, the vast majority want to be able to select the days they come into the office and not have them mandated by their manager.

A total of five technical managers were interviewed for this research and it was found that 0% of them want a fully remote work environment post COVID-19. All managers want hybrid working but want the ability to select at least one day that all team members come into the office. This represents a significant gap as most technical workers want fully remote and those who want hybrid want the flexibility to choose the days that they attend the office.

In light of these findings this paper suggests that managers work more closely with their teams to identify a model that works for their team. Investment in remote and

hybrid technology may allow for a work experience that suits both remote and in-office work.

We are in the early stages of the return to the office post the COVID-19 pandemic and workers' attitudes to remote working could change. Research from China suggests that workers who initially wanted to work fully remotely, eventually wanted to return to the office due to feelings of isolation and loneliness. This paper suggests further research will be needed in this area over the coming years to see if both manager and employee attitudes to work from home will change in the coming years.

Submission of Thesis and Dissertation

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Introduction

Working from home is not a new idea, traditionally the place of work was often the home (Venkatesh & Vitalari, 1992) and craft work was often carried out within the home prior to the industrial revolution (Olson, 1989). However, exploitation of young family members often happened in these work environments and working from home was prevented in modern times in western countries such as America (Olson and Primps, 1984). With the advent of telecommunications working from home again became a possibility. Information technology such as the networking has enabled individuals to work from home and connect to their office (Venkatesh and Vitalari, 1992). As far back as the 1970s it was thought 50% of all office work could be done at home (Olson and Primps, 1984). Today however, working from home means employees do their job from home by using digital platforms (Hu, Xu, Yao, and Zheng, 2021.) Working from home can mean anything from working from home some of the time, known as hybrid working, or working from home full time, known as remote working. Prior to the COVID-19 pandemic in 2020, the vast majority of work was done in the office with little remote work carried out (Hu, et al. 2021)

In early 2020, COVID-19 began spreading in China (Wang, Zhang, Guan, Ding, Meng, Hu, Liu, Zeng, and Wang, 2021) (Parker, 2020). The World Health Organisation (WHO) then declared the outbreak of COVID-19 as a pandemic on the 11th of March 2020 (Kelly, 2020). Prior to the pandemic it was viewed that the office was crucial for productivity (Boland, De Smet, Palter, and Sanghvi, 2020). However, during the COVID-19 pandemic many companies moved quickly to safeguard their workers and implemented a Work from Home strategy. (Boland, Et al 2020) (Awada, Et al 2021) (Parker, 2020)

Working from home during the COVID-19 pandemic was on such a large scale that in May 2020 it was estimated that 35.2% of all Americans were working remotely (Bick, Blandin, and Mertens, 2020). Research that took place during the working-from-home period during the COVID-19 pandemic, has shown that productivity did not drop while people worked remotely (Erdsiek, 2021). Many workers now prefer to work from home (Kong, Zhang, Xiao, Das, Zhang 2022) and many workers have moved to a new role on the condition of remote working (Singh, and Chitranshi, 2022). This shift to remote working has created a new work-from-home culture that did not exist before the COVID-19 pandemic (Singh and Chitranshi, 2022) and Jain, Currie, and Aston, (2022) are calling this change a paradigm shift, with levels of working from home expected to be 75% higher than pre-COVID-19 pandemic levels.

Tech workers were at an advantage when compared to normal workers when it came to working from home, as most of them were used to working on computers and with remote collaboration tools (Butler, and Yeh, 2022), and according to Mohlin (2021) the vast majority of tech workers did work remotely during the COVID-19 pandemic.

Organisations are now offering hybrid models of work, a model that is a combination of co-located workspaces and home working (Mohlin, 2021). The shift to home working during the COVID-19 pandemic has caused a digital transformation and there is increased resistance from employees to return to the office (Kong, Zhang, Xiao, Das, Zhang, 2022). In Ireland, 30% of workers have indicated that they expect to work from home fully post the COVID-19 pandemic (McCarthy, O'Connor, Ó Síocháin, and Frost, 2022). Major tech companies such has Twitter are allowing their workers to work from home post the pandemic, however other companies are mandating that employees return (Russo, Hanel, Altnickel, Van Berkel, 2021). Although workers have indicated that they want to continue to work from home there is managerial resistance to letting this happen (Baker, Avery, and Crawford, 2007.) Managers have viewed working from home to be a perk that is given to the top performers and not something to be given to everyone (Dey, Frazis, Loewenstein, and Sun, 2020). Managers also have concerns as to how they will monitor performance of remote workers (Dey et al., 2020) with remote supervision seen as more time intensive when compared to in-office supervision (Olson, 1989). Furthermore, managers find remote working more difficult than their employees (Kirchner, Ipsen, and Hansen, 2021).

This research will aim to discover:

- What level of remote working do tech workers in Ireland want post the COVID-19 pandemic?
- 2. What level of remote working do managers want post the COVID-19 pandemic?
- Identify if a gap exists between what technical managers and technical workers want.

To research this the author will use both Quantitative and Qualitative methods as both have become increasingly popular in recent years, this approach is known as a mixed method approach Bryman (2006). The rationale for taking a mixed method approach is supported by the work of Almalki (2016) who states that although a mixed approach is more time consuming it offers a greater breadth of detail when just using one approach in isolation. This research will use a questionnaire to gather data from technical workers based on the island of Ireland. The questionnaire will be guided by research that was implemented by the National University of Ireland Galway's survey

on remote working in Ireland 2022 (McCarthy, et al. 2022) which targeted workers in Ireland as a whole. However, this paper will target only technical workers who work on island of Ireland. It is envisioned that since technical workers were better suited to working from home, a greater number of technical workers in Ireland will want to continue to work from home post the COVID-19 pandemic when compared to the general population.

To gather data from technical managers, structured interviews will be used. The questions to make up these interviews will be based on the Good Hire research that took place in April 2022 which surveyed 3,500 managers about their working from home preferences (Korolevich, 2022). Managers will also be asked the same question that technical workers were asked so the difference can be analysed. Given that managers have traditionally been resistant to remote working (Baker, Avery, and Crawford, 2007) it is envisioned that they will hold a differing attitude to workers in relation to remote working post the COVID-19 pandemic.

Finally, the difference between the WFH policy that technical workers want and what WFH policy managers want will be surfaced and identified by this research.

Literature Review

This section of the research examines the literature and views the relevant research under the following themes: the history of working from home, working from home during the COVID-19 pandemic, remote working post the COVID-19 pandemic, remote working for tech workers and remote working for managers.

History of working from home

Working from home is a term which refers to any employment-related work which is performed at home (Venkatesh and Vitalari, 1992). This is not a new concept and, before the industrial revolution, working from home was considered the norm with many craftspeople operating businesses from their homes (Olson, M.H., 1989).

Olson and Primps (1984) agree that working from home is indeed nothing new and they go on to state that this trend was put to an end in America in order to stop exploitation in industries like sewing and knitting where children were being kept home to help with production (Olson and Primps, 1984).

In the 1980s as home computers became popular there was a renewed surge of interest in working from home (Olson and Primps, 1984). Distributed working practices have existed for decades however the emergence of communication technologies allowed organisations to distribute their work processes (Venkatesh & Vitalari, 1992). As far back as the 1970s it was thought that around 50% of all office work could be done from home (Olson and Primps, 1984). Teleworking is mentioned in the literature since the 1970s (Jain, Currie, and Aston, 2022) and in the 1980s working from home was referred to as telecommuting, since telecommunications allowed the employee to virtually commute to the office (Olson, 1989.)

Telecommunications technology has now meant that being a physical distance away from the office is not an issue for communicating with colleagues (Olson and Primps, 1984) and Information Technology (IT) provides a range of technologies that enable individuals to work from home and also connect to their organisation (Venkatesh and Vitalari, 1992). Remote telecommunications provide access to data sources that exist in the office as well as other computers (Venkatesh and Vitalari, 1992).

In the 1980s, working two days a month from home was becoming more common (Olson and Primps, 1984). In 1999 the percentage of European workers who worked from home was under 10% (Baker, Avery, and Crawford, 2007) and the amount of people who worked from home was traditionally was very small (Hu, Xu, Yao, and Zheng, 2021). The lack of support for working from home was caused by the unwanted costs to firms to allow employees to work from home and a resistance to change due to the habits generated by working in the traditional working environment (Hu, et al., 2021). However, over the past few decades, the amount of people who are working from home in the USA has been steadily increasing (Kong, Zhang, Xiao, Das, Zhang 2022).

Work from home today means that employees can do their job from home by using digital platforms (Hu et al., 2021). These workers can be workers who substitute the office or business place of work for their home while being employed by an organisation which pays them for their work (Venkatesh & Vitalari, 1992). Working from home was seen as a way to allow for a better work life balance (Baker, Avery, and Crawford, 2007). and has been viewed as a way to increase performance and reduce absenteeism (Baker, Avery, and Crawford, 2007).

It has been found that there is a negative correlation between telecommuting and performance (Galanti, Guidetti, Mazzei, Zappalà, Toscano, 2021) however, some employers are now using surveillance software to monitor their employees (Dey et al., 2020).

People like to work from home as it gives them more flexibility, more autonomy, reduces commute times and allows them greater lifestyle choices such as living a large distance from the office (Olson, 1989.) However, the research also highlights that employees can feel isolated when working from home (Baker, Avery, and Crawford, 2007), which emphasises that although there are advantages to working from home, there are also problems (Baker, Avery, and Crawford, 2007.) The main advantages and disadvantages of working from home have been highlighted in the table below.

Advantage	Disadvantages		
Employees state that they feel they get	Employees can feel a sense of		
more done at home and are interrupted	loneliness and isolation (Kirchner, Ipsen,		
less (Olson and Primps, 1984)	and Hansen, 2021) (Kong, Zhang, Xiao,		
	Das, Zhang 2022) (Kaushik, 2020)		
	(Baker, Avery, and Crawford, 2007.).		
Employees feel they have more	Not every home has a suitable office		
flexibility, empowerment and increased	space, and many people don't possess		
productivity when working from home	the skills or equipment to work from		
(Kirchner, Ipsen, and Hansen, 2021).	home (Kaushik, 2020).		

Employees feel they have more	It may be difficult to maintain
autonomy, when working from home	accountability when working from home
(Rodeghero, Zimmermann, Houck, and	(Kaushik 2020)
Ford, 2021)	
Working from home has many	Working from home may cause a lack of
environmental benefits which include	socialisation, potential to overwork and
fewer commuter trips, shorter travel	conflict with personal life activities (Jain,
distances resulting in less carbon	Currie, and Aston, 2022).
emissions (Jain, Currie, and Aston,	
2022)	
Advantages of working from home	
include time savings, household	
interactions, better work life balance and	
less stress (Jain, Currie, and Aston,	
2022).	
There is less commuting time, improved	
work life balance and savings on capital	
costs (Hu, et al. 2021.)	
Working from home allows employees to	
maintain a better work life balance	
Kaushik, M., 2020.	

Table 1 The Advantages and Disadvantages of working from home

Working from home during the Covid-19 pandemic

In early 2020, COVID-19 began spreading in China (Wang, Zhang, Guan, Ding, Meng, Hu, Liu, Zeng, and Wang, 2021) (Parker, 2020). The World Health Organisation (WHO) then declared the outbreak of COVID-19 as a pandemic on the 11th of March 2020 (Kelly, 2020). Prior to the COVID-19 pandemic it was viewed that the office was crucial for productivity (Boland, De Smet, Palter, and Sanghvi, 2020), however during the pandemic many companies moved quickly to safeguard their workers and implemented a work from home strategy. (Boland, Et al 2020) (Awada, Lucas, Becerik-Gerber, and Roll, 2021) (Parker, 2020) (Shaw, Et al 2020.) The COVID-19 pandemic impacted the healthcare, economic and social aspects of people's lives (Kong, Zhang, Xiao, Das, Zhang 2022). Countries looked to control the disease using nonpharmaceutical measures such as stay-at-home orders (Kong, et al 2022) which led to a large reduction in people commuting to work (Bick, Blandin, and Mertens, 2020). As a result of these measures, during the pandemic many people began to work remotely (Dey et al, 2020) (Alipour, Falck, and Schüller, 2020) (Jain, Currie, and Aston, 2022) (Hu, et al. 2021) (Kaushik, 2020) and while remote working existed before the COVID-19 pandemic, there was a sharp increase in the amount of people who began working from home (Dey, et al 2020).

Millions of workers around the European Union and the world suddenly began to work from home, with 50% of European workers estimated to be working from home (Galanti, Guidetti, Mazzei, Zappalà, Toscano 2021). While it is estimated that more than half of America's workforce worked from home in April 2020 (Kong, et al. 2022) and in May 2020 35.2 percent of all Americans worked from home (Bick, Blandin, and Mertens, 2020).

This move to work from home was crucial to continue economic activity (Singh, and Chitranshi, 2022). The pandemic presented a unique opportunity to test working from home on a large scale as barriers that prevented it before were not present as governments mandated that people must work from home (Hu, et al, 2021.) This quick shift to remote work on a global scale challenged employers to rethink and redesign how they implement remote work (Kaushik, M., 2020). Many companies allowed working from home before the COVID-19 pandemic (Singh, and Chitranshi, 2022) but it is estimated that this amounted to only 12% of Europeans (Galanti, et al. 2021). Before the COVID-19 pandemic, people questioned if productivity, profitability, and work life balance would be feasible in a WFH model (Kong, et al. 2022).

Remote work before the pandemic was most popular in countries such as Sweden and the Netherlands (Alipour, J.V., Falck, O. and Schüller, S., 2020.) and while remote working was the norm to some extent the full-time remote working was a new experience for most managers and teams during the COVID-19 pandemic (Kirchner, Ipsen, and Hansen, 2021). Issues existed when working from home during the pandemic as many employees did not have adequate workspaces to allow them to have a positive working from home experience (Galanti, et al. 2021). In fact, in America the average worker invested \$561 during the pandemic in their WFH equipment (Barrero, Bloom, and Davis 2021).

The COVID-19 pandemic helped accelerate the use of online digital platforms that facilitated remote working (Kaushik, 2020). Working from home during the pandemic generated vastly different opinions on its effectiveness (Barrero, Bloom, and Davis 2021). Netflix CEO Reed Hasting has a negative view of working from home stating

that he did not see any positives and complained about the lack of ability to get people together by saying "not being able to get people together in person is a pure negative" while Rite Aid CEO Heyward Donegan stated "We have adapted to WFH unbelievably well" (Barrero, Bloom, and Davis 2021).

Remote working post covid

It has been established that to help prevent the spread of the COVID-19 virus, workers were ordered to work from home (Erdsiek, 2021), however, people continued to work from home even after stay-at-home orders had been relaxed (Dey Et Al, 2020). Research shows that 89% of professionals would like to work at least one day a month from home post the COVID-19 pandemic (Russo, Hanel, Altnickel, Van Berkel. 2021). Furthermore, research has shown that the move to working from home during the COVID-19 pandemic did not lead to a decrease in productivity (Erdsiek, 2021).

The majority of firms in the knowledgebase industry are optimistic about the opportunities that working from home will offer in the future, with 60% of firms noticing no change in productivity during the COVID-19 pandemic while 15% actually reported an increase in productivity (Erdsiek, 2021). Since many workers were forced to work from home, they learnt about its advantages and disadvantages and now know what to expect when it comes to remote working (Erdsiek, D., 2021) and now any workers now prefer to WFH (Kong, et al 2022).

It is expected that much of the shift to remote work that happened during the over the last two years will stick post the COVID-19 pandemic (Barrero, Bloom, and Davis 2021) and it is envisioned that a large number of individuals will continue to WFH (Kaushik, 2020).

A new trend has seen employees joining organisations on the condition of working from home (Singh, and Chitranshi, 2022). Post the COVID-19 pandemic the ability for firms to allow employees to work from home is an important tool to prevent against business failure (Alipour, Falck, and Schüller, 2020). A new work from home culture now exists after the pandemic (Singh, and Chitranshi, 2022) and it is expected that that the level of people who work from home will be 75% higher than pre pandemic levels (Jain, Currie, and Aston, 2022). Kaushik, M., (2020) goes as far as to say there has now been a paradigm shift in the workplace, with working from home now the social norm. Many employees state that they feel more productive at home as there are less distractions there when compared to the office (Olson, 1989.) People may also work longer hours when at home (Olson, 1989.)

Highly educated and high-income individuals are most likely to continue to work from home post the COVID-19 pandemic (Bick, Blandin, and Mertens, 2020) and as remote working becomes standard it will impact on recruitment efforts (Hu, et al. 2021.) Since 2020, firms are increasing offers of remote roles, and the demand for these roles has increased (Hu, et al. 2021.). Companies going forward will now look at remote working as a long-term strategy (Kaushik, M., 2020). In America it is estimated that 20 percent of workdays will be fulfilled from home compared to 5 percent before the pandemic (Barrero, Bloom, and Davis, 2021).

The pandemic has altered attitudes and people now support working from home (Barrero, Bloom, and Davis, 2021). There are five main reasons why working from home will continue post the COVID-19 pandemic: better than expected experiences for organisations while working from home during the pandemic; investment in working from home capabilities during the pandemic; greatly dismissed stigma about working

from home; lingering concerns about sickness and crowds; and technological advancements in working from home technology (Barrero, Bloom, and Davis, 2021).

Post the COVID-19 pandemic, all workers across different ages and circumstances are showing a desire to work from home in some form (Barrero, Bloom, and Davis, 2021). in fact, research shows workers would even be willing to take a pay cut of 7% to have a working from home option (Barrero, Bloom, and Davis, 2021).

Remote working tech workers

Prior to the COVID-19 pandemic most technical developers worked in offices (Rodeghero, Zimmermann, Houck, and Ford, 2021), however, as with a lot of industries, many made the move to work from home. Big tech companies led the way in safeguarding their staff with work from home policies with Twitter mandating working from home for its staff on March 3rd, 2020, Microsoft on the 4th of March 2020 and Facebook on the 6th of March 2020. Post the COVID-19 pandemic companies such as Gitlab and Stack Overflow will now be offering their employees fully remote working options (Rodeghero et al. 2021).

During the COVID-19 pandemic the majority of knowledge workers worked from home (Mohlin, 2021). A knowledge worker can be defined as a professional whose knowledge of an area of expertise allows them to work on complex problems (Mohlin, 2021). Software engineering is one such complex, technical, knowledgebased task work (Ford, Storey, Zimmermann, Bird, Jaffe, Maddila, Butler, Houck, Nagappan. 2021). Tech workers had an advantage over non tech workers when it came to adapting to working from home as most of their work was already done on computers and collaboration often already happened online (Butler, and Yeh, 2022).

Surveys among these knowledge workers highlight that they want a mix of working from home and working in the office, a model known as hybrid working (Mohlin, 2021). Within information and knowledge-intensive sectors the majority of people can work from home and the shift to work from home is expected to persist going forward (Erdsiek, 2021).

The COVID-19 pandemic promoted a digital transformation of the workforce and there is increased resistance particularly from younger employees to return the office (Kong, et al 2022). Working from home will increase post the pandemic as workers and employees become more comfortable with the arrangement (Dey Et Al, 2020). As previously stated, employees feel they have fewer disruptions when working from home (Olson, 1989) and many people report being more productive at home, with a big contributing factor to this being people not having to commute (Barrero, Bloom, and Davis, 2021). Evidence from GitHub, a website that allows developers to check in and manage code, supports this analysis and concludes that the amount of activity on its site remained similar or slightly increased in the first year of the pandemic when compared to the previous year (Smite, Tkalich, Moe, Papatheocharous, Klotins, and Buvik, 2022).

A study of workers in China who allowed their employees to continue to work fully remote post lockdowns found that 50% of employees came back to the office due to loneliness (Mohlin, 2021). Mohlin, (2021) describes this loneliness that workers feel as professional isolation (PI) and states that it can be harmful to employees' health. Some tech workers relish working from home however others struggle with the loneliness and struggle with connecting to their team (Butler, and Yeh, 2022). It is also possible that there could be burnout since employees are overworking due to increased activity at night and in the morning (Smite, et al. 2022.)

Many major tech companies are showing a positive attitude to working from home and large tech companies such as Twitter, Microsoft and Airbnb have informed their workers that they can work from home indefinitely post the pandemic (Russo, Hanel, Altnickel, Van Berkel 2021). This move from the tech industry is backed by research as studies have shown that software companies have nothing to fear when it comes to working from home and that working from home is not a challenge for technical workers (Smite, et al. 2022).

Remote working managers

Tech companies had some of the greatest profits during the COVID-19 pandemic (Russell, and Frachtenberg. 2021) leading many firms to expect a persistent shift towards remote working (Erdsiek, 2021). Traditionally there has been managerial resistance to remote working (Baker, Avery, and Crawford. 2007.) Employers and managers may be hesitant to allow their staff to work from home due to the cost of investing in technology to facilitate it (Dey et al, 2020). Furthermore, some companies view remote working as a job perk which should only to be given to high performers (Dey et al, 2020). Employers may also have concerns in allowing workers to work from home as they are not able to monitor performance (Dey Et Al, 2020) and remote worker supervision can be more time intensive than on-site supervision (Olson, 1989).

Research shows that employees who feel that they are trusted by their managers tend to be more open to working from home (Baker, Avery, and Crawford, 2007). Allowing employees to work from home has been proven to increase job satisfaction and also reduce operating expenses such as office rent (Russo, Hanel, Altnickel, Van Berkel,

2021) And while there is a plethora of tools that allow for remote collaboration within the tech industry, many managers still believe there are advantages to having tech workers working in an office environment such as seamless coordination, faster learning and better project management (Ford, Storey, Zimmermann, Bird, Jaffe, Maddila, Butler, Houck, Nagappan, 2021).

Although there has been significant research into how work from home impacts on employees, little research has been carried out to investigate how it impacts managers (Kirchner, Ipsen, and Hansen, 2021). A study from Denmark has found that managers find remote working more difficult than their employees (Kirchner, Ipsen, and Hansen, 2021). This research found that leadership styles that traditionally rely on body language cannot be used when working from home setting some managers at a disadvantage (Kirchner, Ipsen, and Hansen, 2021).

Managers often look to exert more stringent performance control procedures on employees who work from home (Olson and Primps, 1984). This may be because they are sceptical about working from home due to concerns around employee focus, productivity, culture, and team cohesiveness (Russo, Hanel, Altnickel, Van Berkel, 2021).

In general, managers work more hours while working from home when compared to their teams, which can be attributed to the additional overhead that managers have to manage their teams remotely (Kirchner, Ipsen, and Hansen, 2021). The ability to trust and empower people is a key skill for managers to have for remote working (Kirchner, Ipsen, and Hansen, 2021).

Research Question, Aims and Objectives.

This paper is concerned with the desires of tech workers in Ireland in relation to their preferred work from home model post the COVID-19 pandemic, the desires that managers have for remote working post the COVID-19 pandemic for their teams and to identify any differences that exist between these preferences. As seen in the literature, tech workers during the COVID-19 pandemic adapted better to working from home than non-technical workers as they were already used to working solitarily on computers. Many tech workers now want to continue to work from home. Managers however, had more difficulty working from home when compared to their employees and have concerns about working from home. The objectives of the research can be seen in further detail below.

 Investigate what work from home model technical workers in Ireland want post the COVID-19 pandemic.

As seen in the literature review, technical workers have adapted to work from home better than non tech workers. However, research from China has indicated that due to loneliness workers did return to the office even when they had the option to continue to work from home full time. This paper's aim is to discover what level of working from home do tech workers in Ireland want going forward post the COVID-19 pandemic. Investigate what work from home model managers in Ireland want post the COVID-19 pandemic.

In the above literature it was seen that large tech companies such as Stack Overflow will allow their workers to work from home indefinitely going forward. However, managers have concerns around productivity and control of their teams. Managers also tend to work more hours than their teams in a working from home model. The aim of this paper is to identify what level of working from home do managers want for their teams post the COVID-19 pandemic

3. Identify if a gap exists between what managers and technical workers want.

As seen in the literature, there is a misalignment between what managers and staff want. However, these papers are either from outside Ireland or do not focus on tech workers and managers specifically. This paper will identify the gap between the ideal work from home policy for technical managers and workers should one exist.

To address these aims and objectives this dissertation research questions are: What level of remote working do tech workers in Ireland want post the COVID-19 pandemic? What level of remote working do managers want post the COVID-19 pandemic? And what is the gap between these two if one exists?

Methodology

Introduction

This methodology section will outline the research philosophy and the research paradigm of this paper. It will also discuss the research instruments which will be used for this study: questionnaire and interviews. It will also detail the sampling methodology for this research along with limitations and the ethical considerations that the author considered. Finally, it will detail the methodology that will be followed for the analysis of data in this research.

Philosophy

Bryman (2006) states that research that includes both qualitative and quantitative methods has become increasingly popular in recent years. He goes on to state further that there are now three distinct approaches to research that now exist: quantitative, qualitative, and mixed methods.

The philosophy of this work is guided by the work of Almalki (2016). Almalki (2016) states that although it is more time consuming to implement mixed methods research, the results of the research offer a greater depth and breadth of information when compared to using just one approach in isolation. He further states mixed methods can be used on any type of research. Daly, Wood, Brooks, Miller, and Roper (1995), agree and state that different methods of research can complement one another.

Outline of research philosophy

Construct	Description		
Epistemology (knowing)	Epistemology is concerned as to what is		
	the nature of knowledge, it is concerned		
	with the nature and validity of inquiry		
	(Holden, and Lynch, 2004). For this		
	research the knowledge to be studied is:		
	- The opinions of tech based workers		
	in Ireland in relation to the preferred		
	work from home model post COVID-		
	19		
	- The opinions of mangers of these		
	tech workers in relation to their		
	preferred work from home model		
	post COVID-19		
Ontology (Being)	Ontology is concerned with the		
	assumptions that are made in the nature		
	of reality (Holden, and Lynch, 2004). This		
	research is aimed at understanding the		
	reality that exists in the minds of both		
	technical workers and of the managers in		
	relation to working from home post the		
	COVID-19 pandemic. To uncover the		
	reality of what WFH policy will look like		

	post COVID-19, it is important to		
	consider the nature of this reality both		
	from the preference of technical workers		
	and of managers.		
Axiology (Acting)	Axiology considers the beliefs and		
	values that are held by the researcher in		
	relation to the research (Deane, 2018).		
	The researcher of this study is a		
	manager of technical resources in an		
	organisation and believes that a WFH		
	solution exists for both managers and		
	workers and that research must be done		
	to uncover any potential gap so it can be		
	addressed.		

Table 2 Outline of research philosophy

Research Paradigm

Positivism states that only knowledge that can be measured and observed is valid (Fuller, 2001), while interpretivism states that there are differences between people and that reality can be subjective (Rogers, 2020). The author believes that this research requires a positivism approach to identify the preferred work from home policy of workers and managers. The rationale for this choice is that, in general, a positivism approach will allow the researcher to reach more technical workers quickly by using an online questionnaire thus increasing the sample size. The research will be able to represent that data clearly post completion of the questionnaire. It will allow the researcher to identify patterns and trends that may exist within the data. The

researcher will use a positivism approach in relation to technical managers by using structured interviews to gather responses. The technical managers will be asked what their ideal work from home policy for their team is post the COVID-19 pandemic. This will allow for objective comparison when compared to the results from the survey.

Research Instrument

This research will focus on gathering primary data using two research instruments. Primary data can be defined as data which is unique and data that the researcher has collected themselves (Ajayi, 2017).

Questionnaire

The research instrument for technical workers was provided to the participants of this study in an online Google form. The online form included four short items. The items that were included on the questionnaire were guided by the work for McCarthy et al (2022) whose research in May of 2022 surveyed all workers in Ireland to gather data on the current working from home practices of workers in Ireland. The questions used a series of different answer types to facilitate participation. The items that were included on the Google form were:

Item	Possible responses	Comments
Do you work in the	- Yes	Subjects who selected no were
Tech industry in	- No	discounted from the study.
Ireland?		
Please select your	- 1 day a week from	Category-based answers with
preferred working	home, 4 in the office	different categories of remote
model.	- 2 days a week from	working available to select.
	home, 3 in the office	There was also an open data

	-	3 days a week from	section to allow for feedback if
		home, 2 in the office	the participants preferred
	-	4 days a week from	answer was not available
		home, 1 in the office	
	-	Fully remote	
	-	Fully in the office	
	-	Other	
If part in the office,	-	Flexible, you choose	Category-based answers with
please select how you		the day/days to be in	different categories of day
would like the office		the office	selection available to select.
days to be selected	-	Mandated, your	There was also an open data
		employer chooses the	section to allow for feedback if
		days you should be	the participants preferred
		the office	answer was not available
	-	Mixed, you choose	
		some days while your	
		employer picks other	
		days	
	-	I do not wish to work	
		in the office at all	
	-	Other:	
In general where do	-	At home	Category-based answers with
you feel more	-	In the office	different categories of where
productive	-	Other:	the participant felt more

productive to select. There was
also an open data section to
allow for feedback if the
participants preferred answer
was not available

Table 3 Questionnaire items

The administration of the questionnaire was done online via a Google form with clear instructions on the form. The instructions to the participants read like so:

I am inviting you to take part in research on hybrid working for information technology workers, by completing this brief survey. This survey is part of the requirement for the completion of my Master of Business Administration at National College of Ireland. You are eligible to participate if you are 18 years or over, and currently working in a tech company on the island of Ireland.

The focus of this research is to examine the preference for hybrid working among tech workers in Ireland and the preference for hybrid working among tech managers in Ireland.

The information you provide will be treated with strict confidentiality. The survey does not require any personal identifiable information nor any information which can be traced to you and so your participation is anonymous. All data is stored in a password protected electronic format. The results of this study will be used for scholarly purposes

Participation in this research is voluntary. You can discontinue the study simply by closing your internet browser window. However, you will be unable to withdraw after

completing the study, as the data analysis process may have begun and as all responses are anonymous, we will not be able to identify your data.

The survey will take approximately 3 minutes to complete.

Should you have any concerns you can contact me at x20154577@student.ncirl.ie

Thanks,

Darren O'Neill

Interviews

Interviewing is an approach that is used to gather data or information from individuals, which normally takes place in face-to-face settings (Rashidi, Begum, Mokhtar, and Pereira, 2014.) It is a data collection method that allows the researcher to gather information from the study's participants (Rashidi et al, 2014). For qualitative research there are normally three types of interviews, these are: structured, which focuses on a structured questionnaire; semi-structured, which uses open ended questions; and unstructured, which has no predetermined questions (Britten, 1995).

Structured interviews consist of the interviewer asking set questions in a standard manner to the interviewee. Since the researcher wanted to align the responses of managers back to the information gathered in the survey, a structured system of interview was deemed to be best. The advantage of using a structured interview will allow the researcher to provide uniformity in the answers that are received (Rashidi, et al. 2014). Using structured interviews followed by a survey to a wider group can allow the researcher to compare findings (Daly, Wood, Brooks, Miller, and Roper, 1995).

Structured interviews each with 9 questions were carried out with a total of 5 experienced IT managers. The interviews lasted between 5 and 10 minutes. The questions to make up these interviews will be based on the Good Hire research that took place in April 2022 which surveyed 3,500 managers about their working from home preferences (Korolevich, 2022) and also included the same questions on the questionnaire to allow for comparison between technical workers and employees.

Question	Ро	ssible responses	Comments
Please select your	-	· 1 day a week	Category-based answers with
preferred		from home 4 in the	different categories of remote
working model for		office	working available to select.
your team.	-	· 2 days a week	There was also an open data
		from home 3 in the	section to allow for feedback if
		office	the participants preferred
	-	· 3 days a week	answer was not available. This
		from home 2 in the	question will allow for direct
		office	comparison against what
	-	· 4 days a week	technical workers responded in
		from home 1 in the	the survey.
		office	
	-	Fully remote	
	-	· Fully in the	
		office	
	-	· Other please	
		state:	
If part in the office,	-	Flexible, you let your	Category-based answers with
please select how you		team choose the	different categories of remote
would like the office		day/days to be in the	working available to select.
days to be selected		office	There was also an open data
for your team:	-	Mandated, you	section to allow for feedback if
		choose the days you	the participant's preferred

		should all be in the	answer was not available. This
		office	question will allow for direct
	-	Mixed, you choose	comparison against what
		some days while your	technical workers responded in
		team picks other days	the survey.
	-	Other please state:	
In general, where do	-	At home	Category-based answers with
you feel more	-	In the office	different categories of where
productive:	-	Other	the participant felt more
			productive to select There
			was also an open data section
			to allow for feedback if the
			participant's preferred answer
			was not available. This
			question will allow for direct
			comparison against what
			technical workers responded in
			the survey.
Did you allow WFH	-	Yes	Category-based answers with
before COVID?	-	No	different categories of answer
	-	Other	available to select. There was
			also an open data section to
			allow for feedback if the

		participant's preferred answer
		was not available
Do you prefer in	- WFH	Category-based answers with
person working or	- In Person	different categories of
WFH?	Other	preference available to select.
		There was also an open data
		section to allow for feedback if
		the participant's preferred
		answer was not available
What is your current	- Fully Remote	Category-based answers with
remote working policy?	- Hybrid	different categories of answer
	- Other	available to select. There was
		also an open data section to
		allow for feedback if the
		participant's preferred answer
		was not available
On a scale of 1 to 10,	Scale of 1- 10	Scale based question
rate the productivity of	- 1, 2, 3, 4, 5, 6, 7, 8, 9,	
your team when	10	
working from		
home (10 being most		
productive)		
On a scale of 1 to 10,	Scale of 1- 10	Scale based question
rate the productivity of	1, 2, 3, 4, 5, 6, 7, 8, 9, 10	

your team when	
working from the	
office (10 being most	
productive)	



Limitations

The author is aware if several limitations in this methodology and will raise them now.

These limitations are:

- Potential for bias in the questions asked by the researcher.
- Potential for bias in the managers that the researcher selected for the interviews.
- Since structured interviews and online questionnaires were used, it was not possible to delve deeper into responses from participants.
- Sample sizing, particularly of the manager group, may be considered too small.
- This research was carried out as part of a part time MBA programme and as such, the author is not an experienced researcher.
- The author also works full time, and the research was carried out in a part time manner i.e., in the evening and on weekends.
- Managers may be uncomfortable to give their true opinions in a recorded interview and may give an answer based on their official employer policy.

The author acknowledges the above limitations and has taken efforts to mitigate them, such as, ensuring the anonymity of all participants within this study

Ethical considerations

The author recognises that questionnaires and interviews about work type situations may cause discomfort amongst the participants of the study. The ethical considerations for this research were guided by Sipes, Mullan, and Roberts (2020) whose paper "*Ethical considerations when using online research methods to study sensitive topics*" state that topics that may be deemed sensitive require extra thought around consent, anonymity, confidentiality, and data security. The author ensured that these were protected in the following way.

Consent – Both the questionnaires and the interviews can only be completed by consenting. Within the questionnaire the participant could close the browser at any time to withdraw their consent. The details around consent were highlighted within the introduction to the survey and participants were reminded that the research was voluntary

"Participation in this research is voluntary. You can discontinue the study simply by closing your internet browser window. However, you will be unable to withdraw after completing the study, as the data analysis process may have begun and as all responses are anonymous, we will not be able to identify your data."

For the interviews all participants were reminded before the interviews that the participation was voluntary and that they could withdraw consent at any time. They were instructed that they could withdraw at any time during the interview and their interview up to that point would be discarded. They were also instructed that they could withdraw participation up to July 31 post their interview if they changed their mind and their interview would be discarded for this research.

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Anonymity – For the questionnaires, all responses were completely anonymous. No identifiable information was requested from the participants. It is not possible for the researcher to find information related to the participants who partook in the questionnaires. Participants were reminded of this in the relevant section of the questionnaire.

"The information you provide will be treated with strict confidentiality. The survey does not require any personal identifiable information nor any information which can be traced to you and so your participation is anonymous."

The interviews were conducted over Microsoft Teams. Given the nature of the faceto-face interview it was possible for the researcher to identify the individual. In order to ensure the anonymity of the participant they were assured that although a transcript and recording of the interview would be produced, they would not be included in the research in any identifiable manner.

Confidentiality

As mentioned above, participation in the questionnaire was anonymous and there is no way for the researcher to know who partook in it. The participant can choose to keep their participation private and does not have to tell anyone that they partook in the research. For interviews, the researcher confirmed that he would keep the participants' participation private to ensure that they could answer freely and to help minimise any concerns that they may have around their answers.

Data Security

The questionnaires were hosted on Google forms. In order to access the results data, the researcher must enter a username and password. To further protect the data, the researcher also enabled Multi Factor Authentication on his Google account. The Multi

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Factor Authentication mechanism triggers an additional button that the researcher must press on his mobile phone to log into his Google account after he enters his username and password. It is impossible for someone to gain access to the data without the username, password and the author's mobile phone.

All interviews took place over Microsoft Teams. Microsoft Teams was chosen as it encrypts calls end to end. The recordings are also stored on MS teams and the permissions ensure that only the researcher has access to them. Microsoft Teams also encrypts these recordings in storage ensuring that if they were to be comprised the attacker would need the key to decrypt them.

Data Analysis

Questionnaires

The questionnaires were conducted via Google forms. Google forms generated an excel file that could easily be downloaded. The author removed any invalid responses (those responses which stated that the respondent did not work in the tech industry in Ireland). The author had no influence over the answers that were provided to the questionnaire.

Spence and Lewandowsky (1991) state that to show percentage or proportional data both pie charts and bar charts can be used. They state that the bar charts are considered a better way as the human can more easily see the difference. However, Gillan, Wickens, Hollands, and Carswell, (1998) state that the choice of graph to display depends on the readers knowledge, experience, and expectations. Based on this, the author will display the results in both pie, bar and table form for the reader allowing the reader to digest the data in a manner that they prefer.

In order to generate the bar and pie charts the data was added into SPSS and the data displayed in both bar and pie charts to allow the reader to view the data in a manner that they prefer. The data was also displayed in a simple table format.

Interviews

Structured interviews were implemented as they allowed for close analysis to the responses in the questionnaires. Responses from the interviews were analysed in two ways. Questions that had set responses the responses were collated into an Excel file and added to SPSS and displayed in both bar, pie and table form, this is to allow the reader to view data in a manner that best suits their needs. The data was also displayed in a simple table format.

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For questions that allowed the interviewee to answer in their own words the researcher used coding. Coding can be described as the process of labelling and organising qualitative data to identify different themes and the relationship between these themes. (Medelyan, n.d.). Inductive coding will be used on the data and the researchers will manually examine the data. The researcher has elected this method as, although it takes longer than deductive coding, it is considered more thorough and gives a more complete view of the data (Medelyan, n.d.).

Analysis and Findings

Introduction

This section will analyse and examine the data that was gathered from both the questionnaire and the interviews. Quantitative data will be displayed in both table, pie, and bar chart form while qualitative data will be coded for themes. This section will first display and analyse the findings from the questionnaire and then from the interview.

Questionnaire.

Question 1: Do you work in the tech industry in Ireland?

A total of 163 responses were gathered from the questionnaire. Of these responses 9 respondents stated that they did not work within the technical industry in Ireland and their responses were discounted. This left 154 valid responses to the survey.

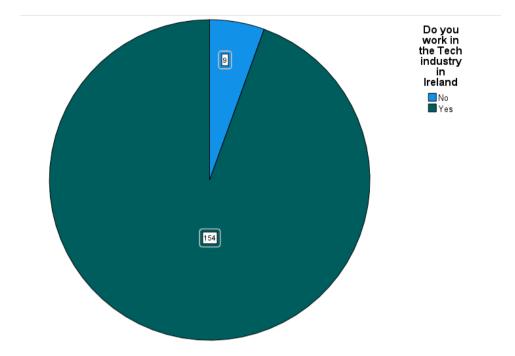


Figure 1 Pie chart of all gathered responses showing 154 valid responses

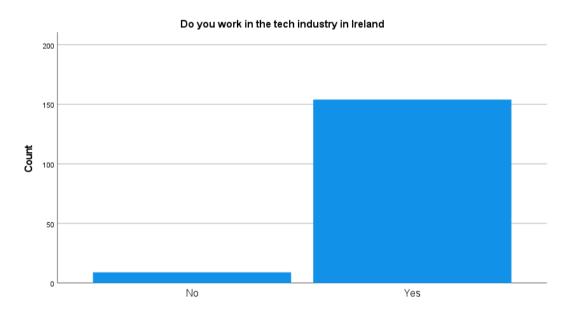


Figure 2 Bar chart of all gathered responses showing 154 valid responses

Question 2: Please select your preferred working model.

61.7% of technical workers selected that their preferred working model was fully remote. 1 respondent, 0.6% of total responses, selected their preferred working model as full time in the office. 37.7% of respondents selected a hybrid model i.e., some days in the office and some days working from home in different configurations.

Response	Number who selected it	Percentage
Fully remote	95 respondents	61.7%
4 days a week from home	23 respondents	14.9%
1 in the office		
3 days a week from home	7 respondents	4.5%
2 days in the office		
2 days a week from home	7 respondents	4.5%
3 in the office		
1 day a week from home 4	9 respondents	5.8%
in the office		
Fully in the office	1 respondent	0.6%
Other	12 respondents	8%
Unanswered	0	0

Table 5 Tabular breakdown of Question 2

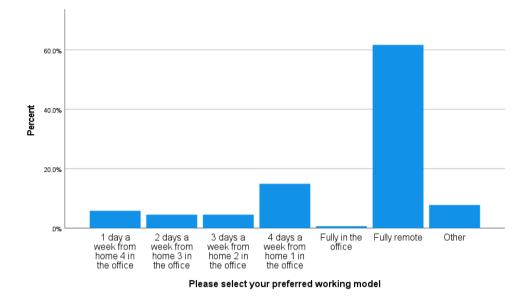


Figure 3 Bar chart showing the spread of responses from question two

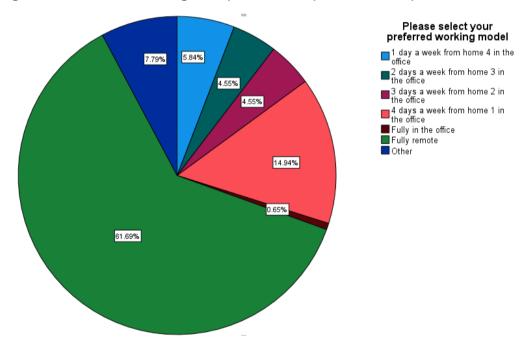


Figure 4 Pie chart showing the spread of responses from question two

Themes: Flexibility, Occasionally, Once a month

As seen in the literature, the main advantage that is seen from working from home for professionals is flexibility (Galanti, et al 2021). The theme of flexibility arose in the free text answer to this question. One respondent wrote "Fully flexible, no expectation to be in the office at all unless you want to be". The theme of occasional can be seen as well with respondents wanting to be in the office occasionally or on a special occasion. One respondent stated, "Visiting office for special occasions, team gatherings, happy hours, etc. ~1/month" while another stated" "Mostly remote with occasional office visits e.g., 1 day a month in the office"

Question 3: If part in the office, please select how you would like the office days to be selected.

40.26% of respondents want the ability to select the days they are in the office. 35.06% indicated they did not wish to be in the office at all. 7.15% of respondents would like their employer to be able to part select or select all days that they would have to attend the office. While 15.58% did not respond to the question.

Response	Number who selected it	Percentage
Flexible, you choose the	62	40.26%
day/days to be		
in the office		
Mandated, your employer	6	3.90%
chooses the days you		
should be in the office		

Mixed, you choose some	5	3.25%
days while		
your employer picks other		
days		
I do not wish to work in the	54	35.06%
office at all		
Other	3	1.95%
Did not respond	24	15.58%

Table 6 Tabular breakdown of Question 3

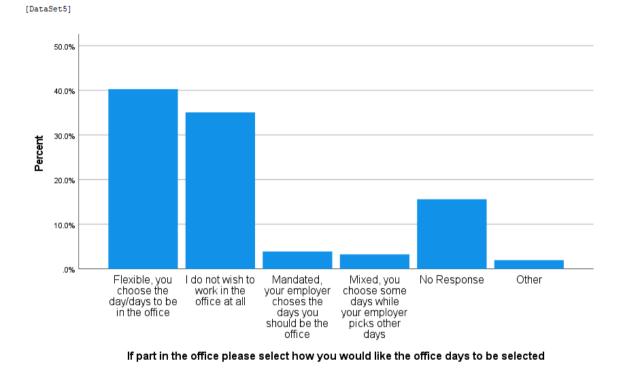
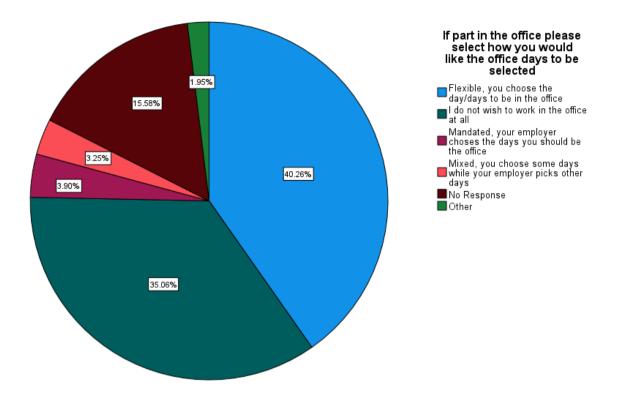


Figure 5 Bar chart showing the spread of responses from question three





Themes: once in a while, up to the employee.

A small number of text responses were gathered to this question. The themes identified were once in a while, where one respondent mentioned "I like to be fully remote but it's nice to come in for team events etc and to catch up with everyone once in a while." While another highlighted that it is up to the employee to come into the office or not "The office is open 3 days a week, but it's up to the employee whether they attend or not"

Question 4: In general where do feel more productive.

Research has shown that the move to WFH during the COVID-19 pandemic did not lead to a decrease in productivity (Erdsiek, 2021). 83% of respondents to the questionnaire stated that they feel more productive working from home, while 10% of respondents stated that they feel more productive in the office.

Response	Number	Percent
At home	128	83%
In the office	16	10%
Other	10	7%

Table 7 Tabular breakdown of Question 4

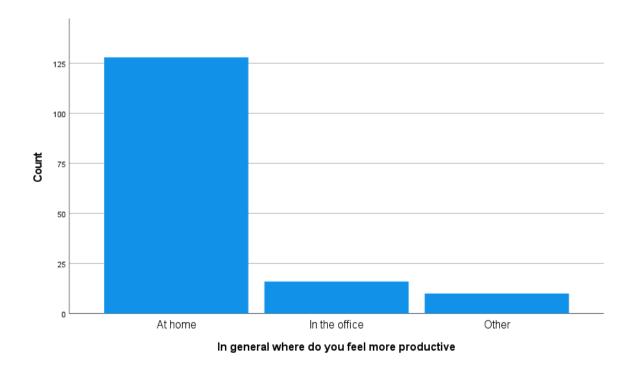


Figure 7 Bar chart showing the spread of responses from question four

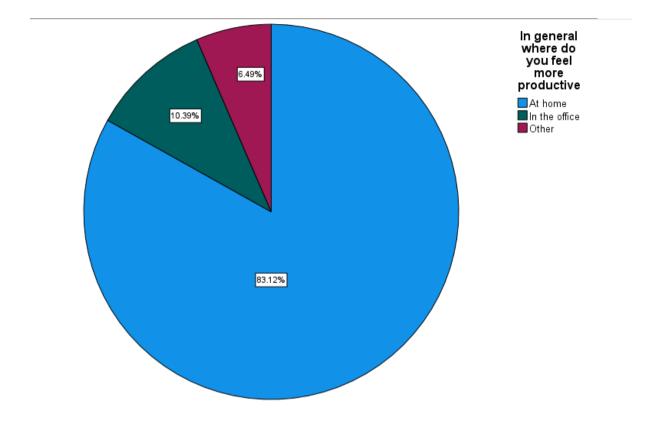


Figure 8 Pie chart showing the spread of responses from question Four

Themes: Equal, Both, depends on the task.

The main themes that were gathered from the free text were 'equal', 'both' and 'it depends'. Multiple respondents stated that they feel equally productive in both the office and at home. Multiple respondents stated it depends on the task, with one respondent stating "It depends in what I am trying to do. Planning and collaboration work better in the office, coding and thinking at home"

Interviews

A total of five interviews were held with individuals who had managerial roles in the tech industry. As outlined in the methodology structured interviews were conducted with these participants. Quantitative data will be displayed in tabular, pie and bar chart form while qualitative data will use coding to highlight themes.

Question 1: Please select the preferred working model for your team.

100% of managers interviewed want a hybrid model for their team. They want the team to be in the office two days a week and to work from home 3 days a week.

Themes: planning, teamwork, one day week

The main themes that emerged from the interviews for this question were 'in office teamwork' and 'planning'. Managers must plan and delegate work. Managers during this question highlighted that they needed their team in the office at least one day a week to plan out work with them. They felt that sessions around planning and the allocation of work had more value when they were carried out in person.

Response	Number	Percent
1 day a week from home 4 in the office		
2 days a week from home 3 in the office	5	100%
3 days a week from home 2 in the office		
4 days a week from home 1 in the office		
Fully remote		
Fully in the office		
Other		

Table 8 Tabular breakdown of Question 1 for managers

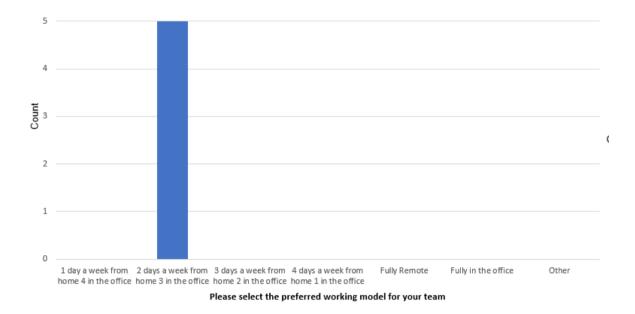


Figure 9 Bar chart showing the spread of responses from question one for managers

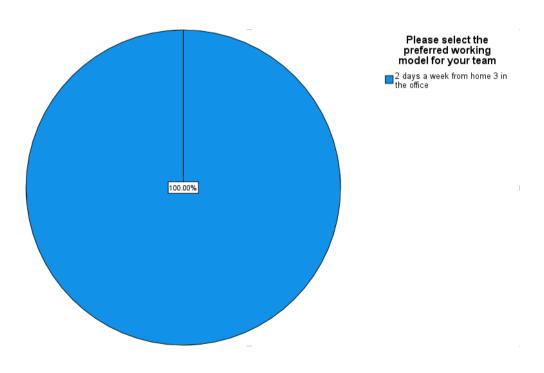


Figure 10 Pie chart showing the spread of responses from question one for managers

Question 2: If part in the office, please select how you would like the office days to be selected for your team.

All managers interviewed wanted a mixed approach to the how the days were selected for their team.

Themes: planning, team activities, one day week

All managers highlighted in this section that they wanted a mixed approach to how days were allocated to their team. The main theme that came to the fore during this question was that, for planning, managers need to know a day when their team would be in the office. All managers interviewed were happy to give their team a degree of flexibility, however they needed to select one day a week when the team would all be together to allow them to plan work and if needed, to allow team members to work on complex problems in person.

Response	Number	Percent
Flexible, you let your team		
choose the day/days to be		
in the office		
Mandated, you choose the		
days you should be in the		
office		

Mixed, you choose some	5	100
days while your team		
picks other days		





Figure 11 Bar chart showing the spread of responses from question two for managers

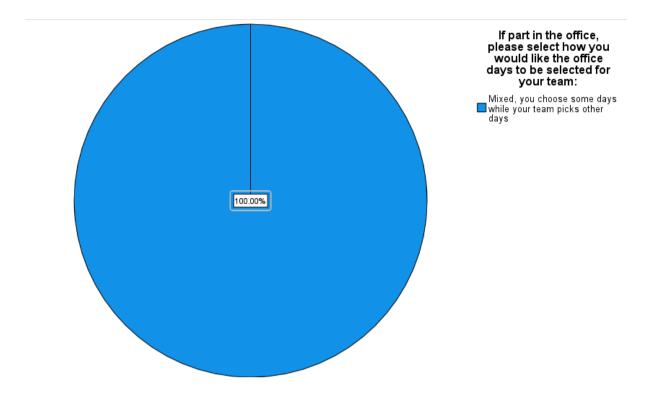


Figure 12 Pie chart showing the spread of responses from question two for managers

Question 3: In general, where do you feel more productive?

80% of managers interviewed in general feel more productive at home.

Themes: Type of work

The main theme that was generated from this question was the type of work. Managers stated that heads down work, work where they needed to work in quiet on a certain task was seen as a more productive pursuit to have at home. While collaboration was seen to be a better activity to pursue in person in the office.

Response	Number	Percent
At home	4	80%

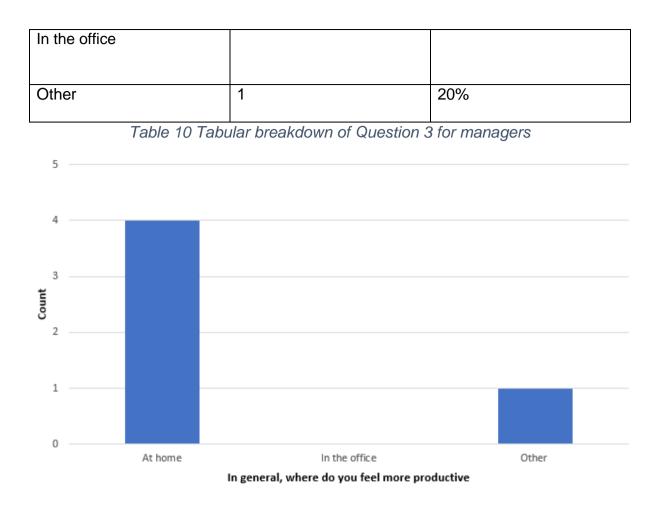


Figure 13 Bar chart showing the spread of responses from question three for managers

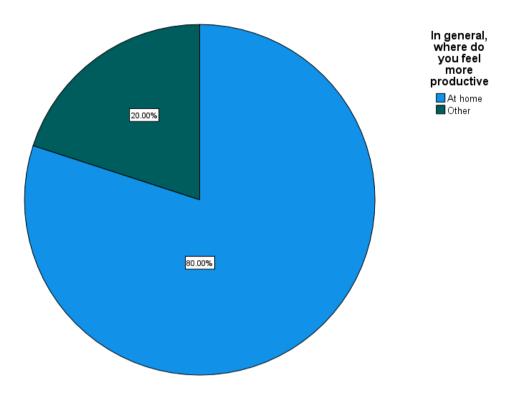


Figure 14 Pie chart showing the spread of responses from question three for managers

Question 4: Did you allow WFH before COVID?

80% of managers interviewed allowed work from home before COVID-19. Managers have viewed WFH to be a perk that is given to the top performers and not something to be given to everyone (Dey Et Al, 2020) and one manager highlighted that this was the policy in his company before the COVID-19 pandemic.

Themes: One to two days, pre-approved days

Managers that allowed their team to work from home allowed for 1 to 2 days a week on an agreed schedule with them. Employees' preferred days had to be pre-approved with their manager in advance of the days which they planned to work from home.

Response	Number	Percent
Yes	4	80%
No		
Other	1	20%

Table 11 Tabular breakdown of Question 4 for managers

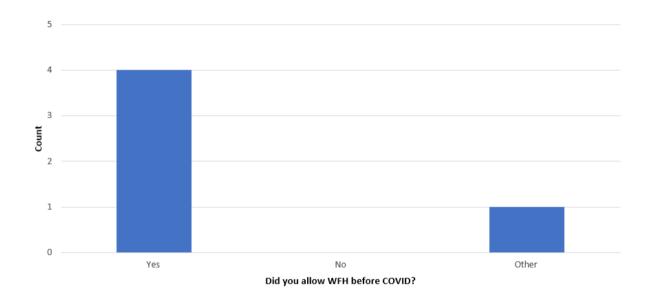


Figure 15 Bar chart showing the spread of responses from question four for managers

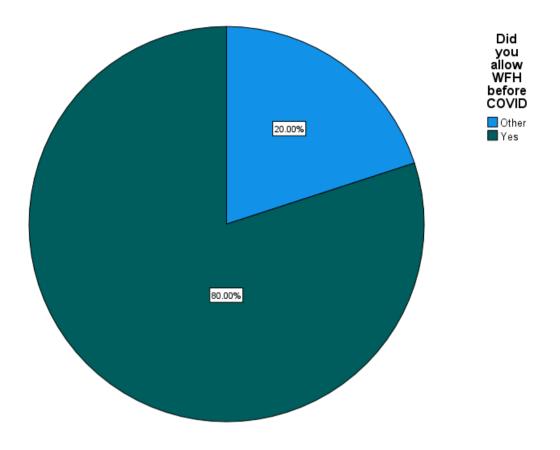


Figure 16 Pie chart showing the spread of responses from question four for managers

Question 5 Do you prefer in person working or WFH?

Response	Number	Percent
WFH	5	100%
In person		
Other		

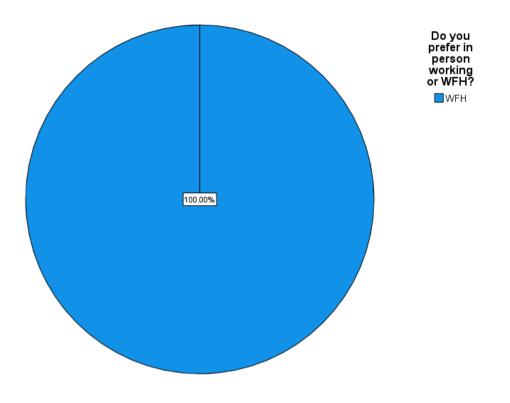
Table 12 Tabular breakdown of Question 5 for managers

Themes: Depends on the work

Although all managers for this question indicated that they prefer working from home to in person working, all managers highlighted that it does depend on the type of work and office working can be useful for certain tasks.



Figure 17 Bar chart showing the spread of responses from question five for managers





Question 6: What is your current remote working policy?

None of the managers interviewed stated that they were implementing a fully in the office model.

Themes: Flexibility

The main theme that was garnered from this question was flexibility. Most managers want to give flexibility to their staff by allowing a mixed model. One manager highlighted that at the moment the company was fully remote with the option to come into the office if the employee wanted to.

Response	Number	Percent
Fully remote	1	
Mixed	4	

Fully on site	0	

Table 13 Tabular breakdown of Question 6 for managers

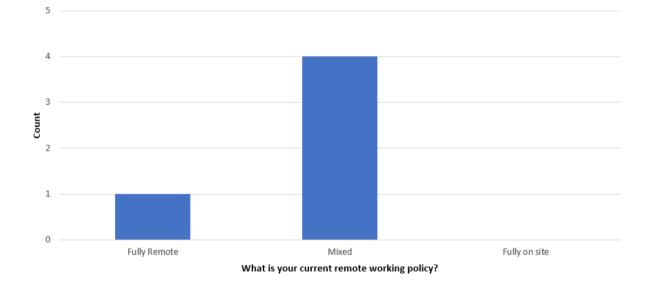


Figure 19 Bar chart showing the spread of responses from question six for managers

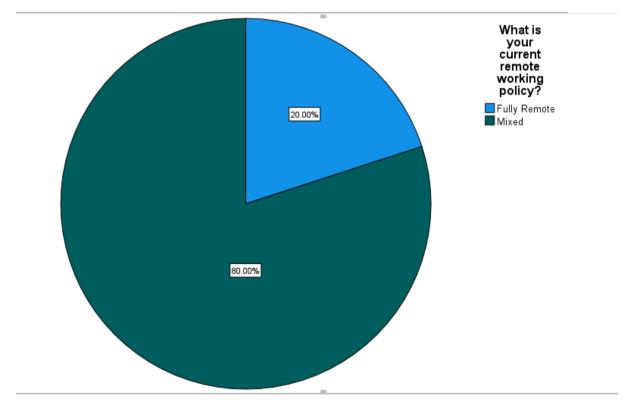


Figure 20 Pie chart showing the spread of responses from question six for managers

Question 7: Has this policy impacted on recruitment?

60% of managers have stated that their work from home policy has impacted on their recruitment while 40% said it had not.

Themes: Positive impacts, negative impacts

In a positive way it has allowed managers to hire employees outside the traditional catchment area as they only need to commute to the office once or twice a week. However, in negative terms, managers have found it difficult to hire staff when it comes to the mandated in office work, with employees turning down roles due to being mandated to be in the office.

Response	Number	Percent
Yes	3	60%
No	2	40%
Other		

Table 14 Tabular breakdown of Question 7 for managers

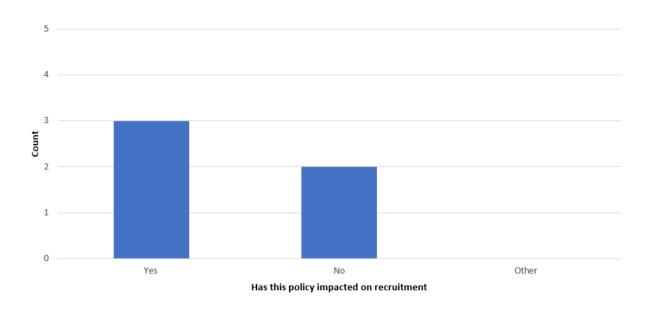


Figure 21 Bar chart showing the spread of responses from question seven for managers

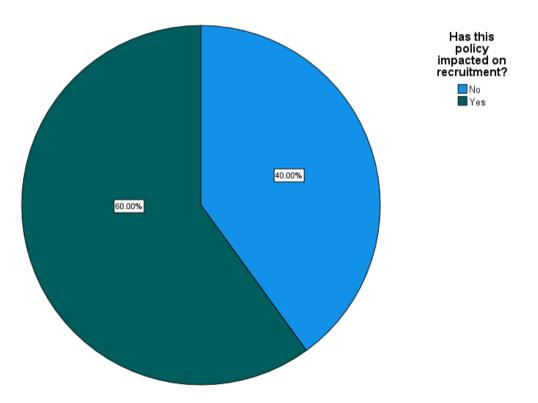


Figure 22 Pie chart showing the spread of responses from question seven for managers

Question 8: On a scale of 1 to 10, rate the productivity of your team when working from home (10 being most productive)

From the research we know 60% of firms noticed no change in productivity during the COVID-19 pandemic while 15% actually reported an increase in productivity when staff worked from home (Erdsiek, 2021). All managers interviewed in this study rated the productivity of the team when working from home at an 8 out of 10.

Themes: High Productivity

The main theme from this question is that managers in general have found productivity amongst the team to be high when working from home. All managers ranked the productivity of their team at an 8.

Response	Number	Percent
One		
Тwo		
Three		
Four		
Five		
Six		
Seven		
Eight	5	100%

Nine	
Ten	

 Table 15 Tabular breakdown of Question 8 for managers

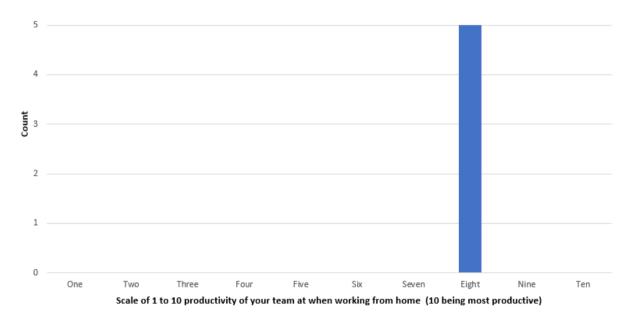


Figure 23 Bar chart showing the spread of responses from question eight for managers

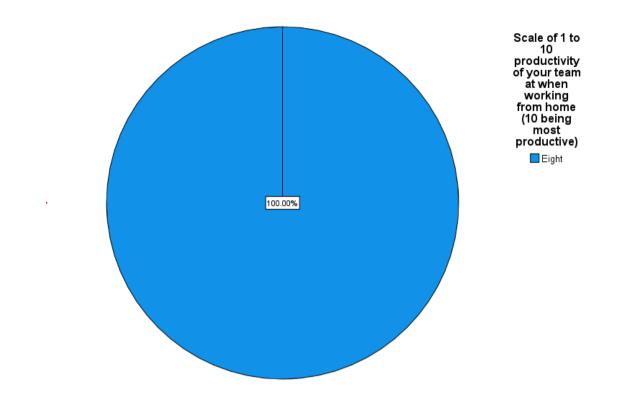


Figure 24 Pie chart showing the spread of responses from question eight for managers

Question 9: On a scale of 1 to 10, rate the productivity of your team in the office (10 being most productive)

60% of managers found the productivity of their team lower while they are working in the office while 40% found it the same as when working in the office.

Themes: Low productivity, no difference

60% of managers found their team were less productive in the office, they stated that team members would spend a large amount of time getting coffee and socially catching up with their colleagues. 40% of managers found that there was no difference in the productivity of the team if they were in the office versus if they were working from home.

Response	Number	Percent
One		
Тwo		
Three	2	40%
Four		
Five		
Six	1	20%
Seven		
Eight	2	40%
Nine		
Ten		

Table 16 Tabular breakdown of Question 9 for managers

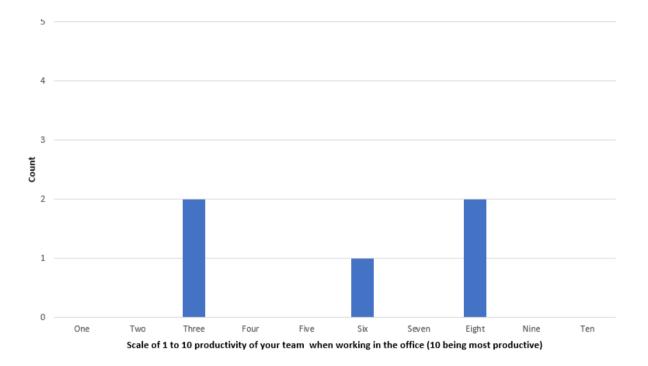


Figure 25 Bar chart showing the spread of responses from question nine for managers

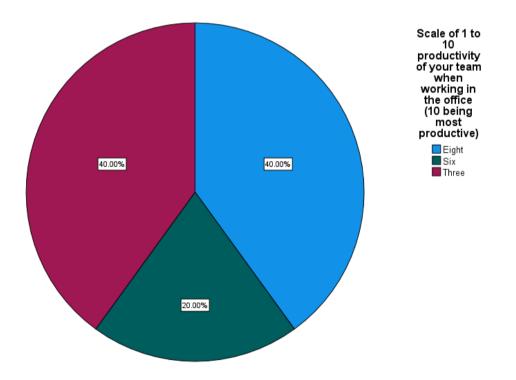


Figure 26 Pie chart showing the spread of responses from question nine for managers

Discussion

Tech workers

The Remote Working survey published in May 2022 by NUI Galway which surveyed all workers in Ireland found that 61% of workers expect to work in a hybrid model post the pandemic, 30% expect to work completely remote and 9% expect to work from the office (McCarthy, 2022). An aim of this research was to identify what level of remote working do tech workers in Ireland want post the pandemic. This paper has found that 62% of tech workers want to work fully remote post the pandemic, 37% want to work in a hybrid model, while just 0.6% want to work in the office full time post the pandemic. These statistics represent a large difference in what the general public expect in relation to home working and what tech workers want. When we view the difference compared to the general population survey 32% more of tech workers want to work fully remote when compared to the general population. 24% less want hybrid and only 1 person who took the questionnaire in this study wanted to work in the office fulltime going forward. This represents 0.6% of the sample who want to work in the office full time post the COVID-19 pandemic and thus a key finding of this research is that less than 1% of tech workers in Ireland want to return to the office full time post the COVID-19 pandemic. This represents a major change from before the COVID-19 pandemic as developers working in the office was the norm (Rodeghero, et al. 2021). Further research will be needed to figure out why tech workers in general want a more remote working setup post the COVID-19 pandemic. However, as seen in the research tech workers were more likely to adapt to working from home as they were familiar with technology and using online tools (Butler, and Yeh, 2022). This is likely a factor as to why more tech workers want to work from home than the general public.

The remote working research carried out by NUIG also asked individuals who indicated they would work hybrid as to what their hybrid model would be. They found that

- 3% will be onsite a minimum of 4 days a week
- 24% will be onsite a minimum of 3 days a week
- 36% will be onsite a minimum of 2 days a week
- 17% will be onsite a minimum of 1 day a week
- 8% will be onsite several days a month
- 12% selected "other".

When this research asked the same questions to tech workers only the following results can be seen:

- 39% want to be on site for one day per week.
- 11.89% want to be on site 3 days a week
- 11.89% also want to be on site 2 days a week
- 15.25% want to be home just one day a week

When viewed against the larger population we can see that 22% more tech workers want one day per week in the office when compared to the general population.

Managers

Another aim of this research was to discover managers preferences to remote working post the pandemic. Kirchner, Ipsen, and Hansen, (2021) stated that managers find working from home difficult as there is increased effort to monitor employees. However, all managers interviewed in this research stated that they preferred to work from home. However, none of the managers interviewed wanted to work full time remote. Ford et al. (2021) stated that although there are a plethora of tools to allow for remote communication many managers want the faster coordination that comes from being in the office. This can be seen in this research that although all managers want a hybrid model, they want their team in the office at least one day a week to allow for planning and team building. To allow for this team planning or building day all managers stated that they would prefer to pick a day for the team to come in the office. This would allow the entire team to be together and a hybrid model were workers select their own days would not allow for this planning day to take place. Russo, et al (2021) stated that managers are sceptical about working from home due to concerns around employee focus, productivity, culture, and team cohesiveness. However, this research has found that the majority of managers find that their team are more productive when working from home and the remaining managers rated their teams productiveness as the same as the office as when they are working from home. Not one Manger stated that their team were less productive when working from home when compared to the office.

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The gap between managers and workers

When the tech worker questionnaire and tech manager interviews are compared, we can identify gaps between what tech workers want and what tech managers want from remote working post the COVID-19 pandemic. In the questionnaire 61.7% of technical workers stated that they wanted to work fully remote post COVID-19. However, 100% of managers interviewed stated that they wanted a least one day a week in the office and did not want a fully remote model. Managers want employees to come to the office at least one day a week for the ability to plan and do collaborative work. However just 7.15% of tech workers want their manager to pick one or all of their days to be in the office. Both technical workers and managers agreed that in general they feel more productive at home. Both the questionnaire and the interviews identified themes around the type of work. Working from home is seen best for alone work that requires concentration while in the office work is better for collaboration.

A majority of managers interviewed stated that their remote working strategy has impacted both positively and negatively on their recruitment efforts. One manager highlighted that they can now look further afield to hire employees who will work in remote roles. Alipour et al. (2020) stated that post the COVID-19 pandemic the ability for firms to allow employees to work from home is an important tool to prevent against business failure. This research agrees with this statement as 61.7 percent of tech workers want remote roles going forward so the ability to hire remotely will be important going forward post the COVID-19 pandemic.

Further Research

Working from home can cause loneliness and isolation and the normalisation of remote working post covid needs to address these aspects (Kaushik, 2020). A study of workers in China who allowed their employees to continue to work fully remote post lockdowns found that 50% of employees came back to the office due to loneliness (Mohlin, 2021). The return to work in Ireland post the COVID-19 pandemic is still in its early stages and some tech workers relish working from home while others struggle with the loneliness and with connecting to their team (Butler, and Yeh, 2022). It is possible that over the coming months and years that the attitude of tech workers in Ireland may change to working from home and many may want to return to the office in the coming months or years as feelings of isolation grow. The author would propose a longitude study of those who plan to work from home to take place over several years to see if their attitudes to remote work changes over time and if more tech workers would plan a return to the office as time passes.

It is possible that people who work from home could face burnout as they are overworking due to increased activity at night and in the morning (Smite, et al. 2022.) The author recommends further research on burnout of individuals who work from home full time and tracking of their working hours to see if the stray from the traditional working hours that they would normally fulfil when in the office.

Conclusion

When the COVID-19 pandemic began and work from home orders were issued tech workers were in a better position than other workers to adapt quickly. They had experience with technology and technical collaboration tools to react and adapt to this new normal. However, although technical workers were better suited to work from home managers struggled and often worked longer hours than their teams to account for the difficulty in managing a team remotely. As the Ireland begins to exit the COVID-19 pandemic the return to work has begun and there are questions about the best model for working going forward. This research aimed to undercover the desires of technical worker and their managers in relation to remote working post the COVID-19 pandemic and to identify any gap that may exist between the two.

Research from NUIG that was published in May 2022 found that 30% of employees in the general workforce expect to work fully remote post the pandemic, while 61% expect hybrid and 9% expect to be fully on site. This research surveyed 154 tech workers on the island of Ireland and discovered that over 61.7 perfect of tech workers would prefer to work fully remote going forward. Only 0.6% of responses, a single response said they wished to work fully from the office. 99.3% of respondents want fully remote or some sort of hybrid model post the COVID-19 pandemic.

This research interviewed five managers to get their views on remote working post the pandemic. All managers interviewed stated that they do not want a full time return to the office and want a hybrid model. Managers want to get their teams into the office at least one day a week to facilitate team planning and team building. This tendency for a hybrid model in which the manager selects a day when the employee has to come into the office is a major gap between what tech workers and managers want. Just

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3.9% of tech workers surveyed indicated that they would like their managers to pick a day for them to come to the office while just 3.25% indicated they would be like their managers to pick some of the days they would be in the office.

The return to the office post the COVID-19 pandemic is in its early stages and research from China has indicated that workers who remained working from home post lockdowns began to feel isolation and loneliness and eventually began to return the office. This author of this paper recommends that further research takes place over the coming years to see if tech workers attitudes towards remote working change as time progresses.

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