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'Management Control: Exploring the effects of telecommuting incorporating a Covid-19 perspective.'

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Abstract

Covid-19 has taken the world by surprise; movement restrictions are preventing individuals from going about their daily working lives. Organizations globally are under pressure to keep operations as close to normal as possible and telecommuting is functioning as the best alternative given the conditions. Telecommuting brings with it several challenges, changes and opportunities; this paper aims to identify the long-term management control related consequences of implementing telecommuting. The Flexible Office Model predicts a set of 7 management control benefits that accompany the ideal implementation of a telecommuting arrangement. Existing literature and comparable studies on the topic of telecommuting are reviewed. It is found that the model accurately represents empirical findings and that telecommuting will certainly have a place in the future of work organization. Cost saving, productivity and efficiency improvements, improved employee health and job satisfaction, reduced need for commuting, improved accountability and responsibility allocation, recruitment process improvements and more productive meetings are identified as positive outcomes. Lack of social interaction and team management issues are cited as key concerns.

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Introduction

Management teams across the world are currently facing what may be the biggest challenge since the 2008/9 financial crisis. Covid-19 caught the world by surprise and is proving to be a respectable stress test of emergency planning and general management ability to adapt. Unpleasant situations often hold valuable lessons for the involved parties and Covid-19 is no exception. Investments in projects and changes that make businesses better off is rather common. These projects have a cost, a predictable payoff, a certain degree of risk and can easily be evaluated according to these metrics. The projects that might hold immense value but cannot be predicted with any degree of certainty are oftentimes considered too risky and consequently not pursued despite the hidden potential. Such opportunities will remain unexploited until ideal conditions arise to reveal their potential. Covid-19 and the accompanying movement restrictions may be considered as such ideal conditions.

During Covid-19 related movement restrictions, businesses and employees alike are forced to adapt to the circumstances. These circumstances require changes aimed at enabling businesses to conduct operations as close to normal as possible while employees who can, work from home. The aspect of importance is not so much the idea of working specifically from home, but rather working from a location that is not on site. Working in this manner is referred to by existing literature as telework, telecommuting, working-from-home, working-from-anywhere and flexible working; and is implemented to varying degrees across the world. In 2017, 17% of employees in the European Union were flexible workers; the extent to which Covid-19 has inflated this number is not yet known (Eurofound & the International Labour Office, 2017).

In order to clarify, this paper considers Covid-19 and its accompanying challenges related to domestic and international travel restrictions to be a central cause of widespread telecommuting adoption. Such a shift in work organization directly and indirectly influences a number of working members and organizations in society. It is the goal of this paper to identify the nature of these influences from a management control perspective as well as the potential benefits of permanently adopting temporary process adaptations. This leads to the following central research question:

"Which management control related discoveries can businesses benefit from in the long run due to Covid-19 movement restrictions?"

3 key groups are identified within the immediate sphere of organizations and are namely: employees, management teams and company shareholders. The following 3 sub-questions are formulated to determine the effect of telecommuting on these 3 groups. The questions are used in the theoretical framework to function as the foundation of theoretical arguments set forth in this paper:

1. "How are employees affected by having to work from home?"
2. "How does telecommuting affect a company's financial situation?"
3. "How are management decisions influenced by telecommuting?"

The paper derives 7 key focal areas pertaining to management control from the above sub-questions. These 7 factors are evaluated as questions and the 'Flexible Office Model' (FOM) is proposed as a theoretical answer to these questions. The FOM highlights management control benefits centered around the identified focal areas, that emerge in a scenario where telecommuting has been ideally implemented. The model composition and assumptions are substantiated with existing theory and empirical studies on the topics of Covid-19 and telecommuting. The impact of movement restrictions on these focal areas serves as an empirical test of the FOM; any benefits realized due to these restrictions validate the relevance and explanatory power of the FOM. The empirical validity of the FOM is further substantiated by a review of comparable existing theory and empirical studies.

Evidence for employees and management point towards a promising future for telecommuting, but the ongoing Covid-19 telecommuting experiment will confirm its place in work organization of the future. The paper finds that the FOM is an accurate representation of expected management control benefits from implementation of telecommuting as a work arrangement. Expected benefits include but are not limited to improved productivity, efficiency, employee health, job satisfaction, employer employee relationships, accountability and responsibility allocation and reduced transport and real estate costs. Communication, loneliness and team management are cited as key problem areas.

The scientific relevance of this paper is rooted in the fact that although telecommuting is an established concept in existing papers and theory, no existing empirical studies compare to the scale of telecommuting adoption seen during Covid-19. Additionally, the strict Covid-19 travel restrictions may reduce the omitted variable bias of any studies conducted during this time compared to previous studies. Covid-19 in essence has provided the world with the largest, and potentially most valuable study of telecommuting in history. The circumstantial depth of understanding of telecommuting contains new pieces of management control knowledge that may be carried into the future and form the basis of future studies. Furthermore, this paper acts as a launchpad for further research into the field of management control and the topic of telecommuting. It can be considered as an early example of Covid-19 research related to these topics and for this reason serves as a guideline for similar future studies.

The research conducted in this paper is a representation of the wellbeing of employees, management teams and organizations. It encompasses topics that include but are not limited to work and life quality, travel habits, mental and emotional health, ability to move or travel freely and be productive or maintain a job. It considers both the human and organizational side of the situation brought about by Covid-19 and may be used to directly assist the current and future decisions taken by relevant stakeholders within an organization. The conclusions drawn in this paper are timeless and will likely become relevant for a greater variety of industries as technology advances into the future. Additionally, it is inevitable that we will experience another catastrophe after Covid-19 passes, and it is essential to consider how Covid-19 can better prepare the world for comparable future situations. Adequate preparation for future catastrophes comparable to Covid-19 will allow stakeholders in an organization to minimize the associated negative consequences.

This thesis contains a methodology section that explains the research methods used to support the process of answering the research question and sub-questions. The theoretical framework section introduces the Flexible Office Model and the concepts on which it is based. The empirical findings section considers all relevant pre and post-Covid-19 literature on telecommuting. The results section summarizes key empirical

findings and compares them with the FOM predictions, followed by the conclusion which answers the central research question.

Methodology

The Covid-19 crisis and accompanying movement restrictions lead to an increase in telecommuting utilization. 3 key groups affected by telecommuting implementation are identified, namely employees, management teams and company shareholders; these groups fall within the scope of management control decisions. 3 guiding questions are formulated in order to determine how these groups are affected by telecommuting; existing published academic papers related to these questions are reviewed. The findings of these papers are summarized, and the scope of the paper is narrowed to 7 identified management control focal areas; questions are formulated to determine the effect of telecommuting on these areas. The answers to these questions are predicted by the Flexible Office Model and reveal management control benefits of telecommuting implementation; they are therefore directly related to answering the central research question.

The flexible Office Model represents the theoretical contribution of this paper and predicts 7 management control benefits to implementing telecommuting. The arguments and assumptions of the model are substantiated using academic papers chosen on the basis of their link with the particular argument, focal area and telecommuting. The empirical section consists of several reviews of existing empirical studies, research reports and academic papers that have similar research questions to that of this paper and are indirectly linked to the Flexible Office Model. It is important to consider that the literature used in this paper was not quality evaluated based on citation numbers or journal reputation as in most cases it was the only available literature. Any non-academic literature was chosen with the condition that it be a study conducted by an independent research organization or from a private sector company.

The empirical findings are sorted and summarized based on relation with each of the 7 focal areas of the model. The model is evaluated by comparing its predictions and arguments with the empirical evidence; they are accepted only if supported by the

evidence. If the evidence both supports and rejects the argument, it is accepted but the rejecting findings are highlighted as challenges.

Theoretical Framework

Literature Review

The 3 sub-questions mentioned in the introduction are substantiated using existing literature; the papers reviewed in this section are chosen based on their relevance to one or more of the following sub-questions:

1. **How are employees affected by having to work from home?**
2. **How does telecommuting affect a company's output?**
3. **How are management decisions influenced by telecommuting?**

Bernardino, Ben-Akiva & Salomon (1993) investigated the process of telecommuting adoption and its impact on employees. It was found that telecommuting positively influences the transport system of a given region as it helps to reduce an employee's total travel time. A decrease in the number of trips made by employees and reduced peak-time road traffic was also observed; employees positively perceived the absence of a commute. Additionally, the work-life balance of employees was both positively and negatively affected by telecommuting; employees were able to better plan their work to accommodate family and personal needs but also worked longer hours. Noonan & Glass (2012) also found that telecommuting leads to longer working hours. Cooper & Kurland (2002) investigated how telecommuting affects employee development in public and private organizations. It was found that when compared to public sector employees, private sector employees are at greater risk of slowed development due to professional isolation; these risks can be reduced by implementation of a telecommuting training plan.

Goodrich (1990) investigated the challenges, benefits and growth factors of telecommuting. It was found that employees benefitted from reduced expenditure on transport, improved productivity, scheduling flexibility, greater work control, fewer interruptions and an overall improvement in work and home life enjoyment.

Management was found to use telecommuting to link, gather and analyze data from various sources that enables improvements in forecasting and production models. Additionally, organizational improvements were found to include improved communication and productivity, access to a larger labour market, reduced office space needs, faster information flow, tighter cost control and improvements in staff computer literacy. Raiborn & Butler (2009) considered the costs and benefits of telecommuting for employees and employers. It was found that employees enjoyed savings on transport and work clothing, a better work-life balance and higher job satisfaction rates; social isolation, distractions, technical difficulties and working longer hours were found to be the drawbacks. Employers benefitted from improved productivity, lower costs, greater workforce stability and improved employee recruitment while the drawbacks included a loss of control, data security concerns and equipment-related purchase, maintenance and update costs.

A study conducted by Bloom, Liang, Roberts & Ying (2014) investigated the effects of working from home on productivity, profitability and work-life balance. A 13% increase in output was observed; this increase consisted of a 4% increase due to higher output per minute and a 9% increase due to a higher number of minutes worked per shift. Additionally, it was also found that telecommuting lead to lower rates of absenteeism, improved productivity and fewer work time breaks among employees. Employees who worked from home were also found to be in significantly better psychological condition and reported improved overall job satisfaction with 50% lower job attrition rates. Additionally, management was able to gather data on employee behaviour and performance which allowed them to generate reports about problems and accordingly find effective solutions; rewarding exceptional performance also became easier.

Garrison & Deakin (1988) investigated the influence of technology on the organizational structure, consumption and employee performance. It was found that technological developments will further lead to improved communications and control, while relaxing time and location constraints; this may lead to altered demands from transport networks in the future. Aguilera (2008) investigated the need for business travel and found that telecommuting acts as both a compliment and substitute; only the most complex tasks and examples of teamwork truly require face-to-face interactions. Keeping all other variables constant, technological improvements are

expected to reduce the need for business travel; in the real world, technology additionally enables businesses to expand their scope of operations which in turn creates a need for business travel.

Ilozor, Ilozor & Carr (2001) investigated how choice of management communication strategy influences employee job satisfaction. It was found that clear communication of deadlines and expectations, allocation of responsibilities, continued training and regular review of work, performance and salaries among telecommuters leads to higher job satisfaction rates. Frolick, Wilkes & Urwiler (1993) also found that telecommuting leads to a more result-focused management style that requires clearly set and communicated objectives to be successful.

Summary

The following includes all key points extracted from the above findings pertaining to telecommuting when compared to normal on-site working.

Employees

Employees enjoy not having to commute and spend less on transport and work. Work-life balance is generally improved, but the opposite may be true in cases where work time dominates home time. Employees unknowingly or by feeling inclined to do so end up working more hours. Scheduling freedom allows employees to better plan work around family and other personal matters; better work control and improved productivity are also associated with time-planning autonomy. Employees experience less distractions and an overall improvement in work and home life enjoyment - they are more satisfied in their jobs, absent less frequently and are in better psychological condition.

Compared to public sector employees, private sector employees are at greater risk of slowed development due to professional isolation; these risks can be reduced by implementation of a telecommuting training plan. Social isolation, distractions, technical difficulties and working longer hours were found to be the drawbacks. Increases in output were determined to be due to increased output per minute and more minutes worked per shift - fewer work time breaks among employees.

Companies realized lower transport costs, benefitted from reduced office space needs, maintained tighter cost control and improved staff computer literacy.

Management

Management was found to use telecommuting to link, gather and analyze data from various sources that enables improvements in forecasting and production models. In some cases, telecommuting leads to faster information flows and improved communication. Telecommuting improves workforce stability, provides access to a larger labour market and leads to lower attrition rates. Loss of control, data security concerns and equipment-related purchase, maintenance and update costs were identified as challenges. Companies incur lower transport costs and benefit from reduced office space needs.

Additionally, managers can gather data on employee behaviour and performance which allows them to identify problems and improve responsibility and accountability in the organization. Telecommuting leads to a more result-focused management style that requires clearly set and communicated objectives to be successful. It was found that clear communication of deadlines and expectations, allocation of responsibilities, continued training and regular review of work, performance and salaries among telecommuters leads to higher job satisfaction rates.

Transport & Technology

The stress on a given region's transport system is eased by reducing the number of weekly trips, peak time road traffic and total travel time of employees. Technological developments will further lead to improved communications and control, while relaxing time and location constraints, but has an ambiguous effect on business travel. Only the most complex tasks and examples of teamwork truly require face-to-face interactions.

Several appropriate themes can be identified from the aforementioned findings of these papers; the following heading highlights those that are most closely linked to the topic of management control.

Key Identified Focal Points and Questions

1. Company Costs
2. Employee Performance
3. Employee Wellbeing
4. Communication
5. Travelling
6. Responsibility & Accountability
7. Recruitment

In order to evaluate each of the identified focal points, they are converted into explorable questions.

1. How does telecommuting affect company costs?
2. How is productivity and efficiency affected by working from home?
3. How is employee happiness, health and job satisfaction affected by telecommuting?
4. Does telecommuting lead to improved communication?
5. How is business travel related to telecommuting?
6. How has responsibility allocation and accountability been affected by telecommuting?
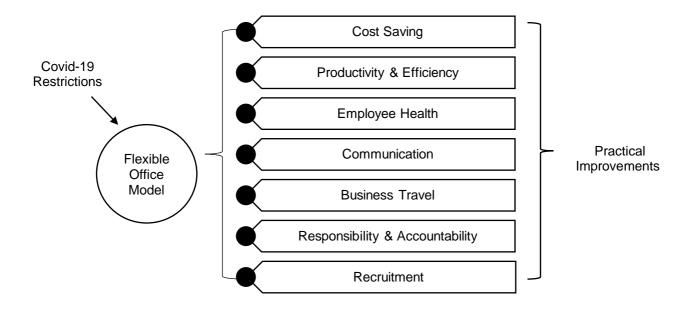7. How does telecommuting influence recruitment practices?

These questions form the foundation of the Flexible Office Model which will be used as a framework to answer the central research question.

The Flexible Office Model

The flexible office model encompasses working from home and the accompanying management control consequences. It is a representation of 7 predicted management control benefits that originate under ideal conditions and perfect telecommuting implementation in an organization. Each prediction of the model is supported by a

series of arguments pertaining to that particular focal area. This section of the paper will substantiate individual predictions and associated arguments and state any assumptions within the flexible office model.

Figure 1: A diagram of the logical thought process followed in this paper concerning management control elements and the flexible office model

As mentioned before in this paper, Covid-19 is not part of the flexible office model, but rather presents what may be the perfect environment for testing its relevance given a global shift in telecommuting acceptance under movement restrictions. Each individual element of the flexible office model is substantiated below and presented as a management control benefit.

1.Cost Saving

The concept of cost-saving is a rather obvious management control concern. According to the places and activities (PACT) model, the amount of office space a company requires is dependent on the number of employees and the types of activities they engage in (De Bruyne & Beijer, 2015). The FOM reduces the number of employees who simultaneously require office space at any particular time, leading to a lower required office capacity and spending cuts on rent (McQuarrie, 1994). Office capacity in the case of the FOM is no longer a determinant of the maximum number of employees a company can employ. The FOM relies on the concept of

telecommunications as a substitute to travelling. A reduced need to travel leads to cost cutting on transport allowances and increased productivity time (Garrison & Deakin, 1988).

2. Productivity and Efficiency Improvements

The FOM considers comfort, satisfaction, time management, and motivation as crucial contributing factors to overall productivity and efficiency. Workspaces play an essential role in employee work engagement and performance (Bakker & Leiter, 2010). Traditional work environments lead to higher rates of fatigue. Employees will be more comfortable working from their familiar environments leading to fewer distractions and efficiency improvements (Wessels, 2017). The greater autonomy provided by the FOM will encourage a sense of responsibility within employees, leading to increased intrinsic motivation (Peters, Tijdens & Wetzels, 2004). This may directly have an effect on exerted effort levels and improve work satisfaction rates (Bakker et al., 2014). The FOM allows employees more flexibility to plan and balance daily routines and activities. This planning includes time to be productive, for which more hours are available due to a lack of commuting (Garrison & Deakin, 1988). The FOM allows employees to set personal time-based checkpoint goals for themselves due to planning autonomy. These goals act as motivation throughout the process of completing a task leading to improved productivity (Crandall & Gao, 2005). Employees also take shorter breaks during their chosen productivity times leading to improved efficiency (Bloom, Liang, Roberts & Ying, 2015). More emphasis is placed on institution-set deadlines due to greater dependency on telecommuting technology as employees are now in control of their own work timelines (Ilozor, Ilozor & Carr, 2001). A result driven approach facilitated by the FOM may further lead to increased intrinsic motivation and effort levels (Frolick, Wilkes & Urwiler, 1993).

3. Health Improvements

The aforementioned autonomy and scheduling freedom that comes with the FOM will allow employees to achieve a daily schedule that encompasses a better balance of activities and responsibilities that do not involve work specifically. These activities may include maintaining physical health, sports, tending to family matters and improving work or non-work-related skills. A more balanced lifestyle accompanied by a lower

stress working environment will lead to improved employee health (Gibson, Blackwell, Dominicis & Demerath, 2002). The model additionally assumes that relationships between employees and employers will improve as employers will have no option but to trust employees to adequately handle the newfound freedom and responsibility that comes with scheduling freedom. Improved health combined with greater freedom to manage working hours leads to lower rates of absenteeism, both in cases where employees are actually sick and those where dishonesty occurs. As a direct result the company incurs fewer absenteeism and health related costs (Potter, 2003). Greater autonomy, improved health, lower stress and improved intrinsic motivation will lead to higher employee job-satisfaction rates (Frolick, Wilkes & Urwiler, 1993).

4. Communication

The FOM leads to an increased dependence on technological aids to achieve effective communication as the direct interpersonal contact of an office setting no longer exists in this scenario. As electronic communications become the primary method of information transfer in the FOM, the speed and frequency of information flow increases (Duxbury & Neufeld, 1999; Baker, Avery & Crawford, 2006). The aforementioned enhanced emphasis on deadlines combined with the absolute control that comes with electronic information sharing platforms improves management ability to monitor and gather data on projects and deadlines (Dahlstrom, 2013). This data can subsequently be analyzed to hold individuals accountable for good or bad performances with deadlines and productivity as indicators. Deadlines set with exact parameters can also allow managers to more clearly assign responsibility to employees in their respective roles (Peters, Tijdens & Wetzels, 2004). The FOM assumes that meetings are scheduled and held with a start and in some cases end time using video conferencing/calling technology. This increased emphasis on time as a factor results in improved punctuality and a greater need for structure in meetings to maximize their productivity and avoid time wastage (Tung & Turban, 1996; Bloom, Liang, Roberts & Ying, 2015). Conducting meetings in this remote manner also leads to higher participation rates as employees have FOM scheduling flexibility and do not have to travel to and between meetings (Garrison & Deakin, 1988). Meetings could consequently be held more frequently allowing for faster information transmission and decision making (Duxbury & Neufeld, 1999).

5. Reduced Need for Business Travel

Movement restrictions during Covid-19 are on the extreme side with very little domestic and absolutely no international business travelling occurring. The FOM assumes a more relaxed stance on the topic of business travel compared to Covid-19 restrictions. Business travelling is a necessary component of direct interpersonal contact whether on a national or international level and is evaluated based on the role that it plays in employees' ability to be productive (Garrison & Deakin, 1988). Expected future improvements in remote communication capabilities would automatically reduce the need for business travelling and improve productivity capability when not travelling – only the most complex matters or tasks would require face-to-face interactions (Aguilera, 2008). The FOM assumes that its associated communication adaptations will spill over into employee roles that traditionally require frequent travelling. Reducing domestic and especially international travel costs will result in another form of cost saving in the long run (Garrison & Deakin, 1988).

6. Responsibility & Accountability Improvements

As mentioned above, the FOM predicts an increased focus on deadlines and the monitoring of deadlines through an online remote communications platform (Ilozor, Ilozor & Carr, 2001). This allows management to gather and interpret more data on employee work reliability and quality as well as more accurately hold individuals accountable for good or bad work done (Peters, Tijdens & Wetzels, 2004; Bloom, Liang, Roberts & Ying, 2015). The pressure from a more deadline oriented working environment combined with less on-hand assistance while working on tasks and projects means that employees feel a greater sense of responsibility for their work and actions. Such improvements in responsibility allocation and accountability provide a reasonable incentive against employee dishonesty and shirking (Bolten, 2001; Peters, Tijdens & Wetzels, 2004). An evidence-based approach would also make it easier to take accurate and fair disciplinary action for insufficient work. Fewer accountability and credit mistakes may lead to improved trust and a better relationship between employee and employer (Ammeter, Douglas, Ferris & Goka, 2004).

7. Recruitment Process & Quality Improvements

The aforementioned improved remote communication capabilities accompanying the FOM allows for a larger labour market to be explored as employees who telecommute

are subject to fewer if any location constraints. Recruiters can therefore prioritize worker skills over residential location and aspiring employees can apply for jobs beyond their realistic commuting distance (Bloom, Liang, Roberts & Ying, 2015) – the FOM assumes that this leads to a more efficient allocation of labour.

Empirical Findings

This section of the paper aims to present and evaluate existing relevant empirical studies, academic papers and research reports that will be used to assess the explanatory power of the Flexible Office Model. It is divided into 2 key segments – each segment represents literature from a different time period, namely before and after the emergence of Covid-19. Each segment follows the structure of a series of literature reviews. The summarized findings of these literature reviews are grouped under the headings of the 7 key focal areas of the Flexible Office Model in the following 'Results' section.

Telecommuting & Management Control – Evidence Prior to Covid-19

Peters, Poutsma, Van Der Heijden, Bakker & De Bruijn (2014) found that employees who spent at least one day working from home had a higher chance of improving their intrinsic motivation and work enjoyment. The paper attributes this relationship to the increase in time for reflection and recovery associated with telecommuting. The paper adds that building trusting relationships with employees plays a causal role in the success of telecommuting rather than being the result of it. Choudhury, Foroughi & Larson (2019) investigated the productivity consequences of shifting from a work-from-home (WFH) program to a work-from-anywhere (WFA) program. It was found that allowing employees total freedom to decide on every aspect of their working environment lead to a 4.4% increase in firm output compared to a setting where employees were restricted to only working from home when telecommuting.

Clarke & Holdsworth (2017) of the University of Manchester found that that organizations are reluctant to implement telecommuting due to associated negative perceptions such as reduced productivity. Results however indicated that flexible working resulted in increased team and individual employee effectiveness, more

selfless behaviour and increased focus. Employees were able to improve their own efficiency by optimally adapting their working environments to their needs and also had fewer distractions at home. Individual efficiencies achieved by flexible office workers eventually spilled over into team efforts and managers perceived flexible workers as being more productive and organized. Flexible working was also found to increase reciprocity, commitment and motivation among employees leading to more willingness to work overtime and change work hours. The stresses associated with work-life conflict, commuting and interruptions were found to be lower with flexible working; work intensification on the contrary lead to increased stress levels. Managers feared that teams including flexible workers would present management difficulties; uncertainty also loomed around the impact on staff resource availability. The positive influences of flexible working were also found to be accompanied by a tendency to undervalue such employees leading to management mistakes that forego the associated lucrative opportunities. Flexible working policy inconsistencies were also found to potentially lead to the disruption of working relationships and perceptions of unfair treatment.

A report by Eurofound and the International Labour Office (2017) found that work culture, technological development and existing economic structures determined the level of telecommuting implementation in a country. In the EU 17% of employees were found to telecommute with other regions varying between 2% and 40%. Benefits of telecommuting were found to include a reduction in time spent commuting and greater flexibility to organize working time, implying greater working time autonomy. Employees were found to achieve higher levels of productivity and a better work-life balance. Companies benefitted most from the efficiency and productivity gains rooted in improved employee intrinsic motivation; which is the result of the aforementioned improved work-life balance. A reduction in office space requirements and the associated costs were also found to benefit companies. Additionally, telecommuting lead to work intensification, longer working hours and a blurred line between home and work time. The balance of advantages and disadvantages were found to be more favourable among employees who telecommute less frequently. The role played by telecommuting – whether it is a substitute or supplement to office work, is foundational in understanding the nature of its consequences in a given scenario.

A report by the Centre for Economics and Business Research (2019) found that telecommuting or flexible working enabled a large percentage of the US population to better manage their working time leading to higher productivity. These individuals were also more willing to work and could work longer hours. It is also found that telecommuting could enable economically inactive and unemployed individuals to participate in the economy adding as much as $2.36 trillion per year to the US economic output. Additionally, flexible working reduces commuting costs for both employees and businesses and increases employee leisure time which leads to a better work-life balance. Given the choice to telecommute, 86% of individuals would take advantage of this option and 65% of part-time workers would work more hours. 69% of the aforementioned economically inactive or unemployed would start working given the option of telecommuting.

In a paper by Saunoi-Sandgren & Lari (2013) it was found that employees and managers are aware of and agree on the importance of flexible working policies. 90% of employees preferred a work setting in which they work both from home and the office. Managers and employees both strongly agreed that workplace flexibility enhances employee effectiveness through improvements in work quality and quantity. Employees enjoyed the lack of a commute and additionally felt more trusted by their employers in a flexible working environment. Employees benefitted from the freedom to schedule their own lives leading to lower levels of work-related stress, a better work-life balance and more time to take care of their personal health and other responsibilities. Managers and employees together reported lower levels of absenteeism as they could work from home while sick or make up the lost time later on. A key disadvantage observed among employees was found to be a loss of connection with peers; shared team responsibilities were difficult to share and keep track of. Additionally, employees experienced communication difficulties with their supervisors pertaining to asking for assistance, advice and general questions.

Owl Labs (2019) conducted research to determine the state of telecommuting in the United States and found that employees feel happier, more trusted, have a better work-life balance and are more likely to accept lower salaries to benefit from the flexibility of remote work. Employees who have the option to work remotely are also more loyal to their employers compared to on-site only workers. Additionally,

telecommuting is found to lead to improved productivity, focus and less stress; employees who work remotely most value the lack of a commute. Remote work was also found to benefit employees with families, disabilities and other related responsibilities; however longer working hours lead to employees feeling overworked. Telecommuters participate in more meetings than on-site workers; team meetings consisting of both on-site and remote workers are however challenging to manage. Interruptions, being talked over and IT issues were cited as key problems during such hybrid team meetings; remote workers lose more productivity due to lost time in meetings than on-site workers.

Gitlab (2020) found that company culture plays an important role in extracting the full potential of remote work. Empowering employees and trusting them with responsibility leads to better overall engagement and contributions. Remote workers enjoy not having to commute and instead spend this time working, relaxing, exercising and tending to family matters. 52% of employees found themselves to be more productive, and 48% experienced improvements in efficiency; scheduling flexibility and being able to pursue career ambitions while having a family were additionally cited as top benefits. Additionally, the report identifies that telecommuting increases the number of possible recruitment candidates by allowing people with disabilities and chronic illnesses to be better represented and more active in the labour force. The report also finds that 86% of respondents believe telecommuting is here to stay; 84% report to be completely competent in their respective roles. Telecommuting challenges include lack of direct interpersonal contact and distractions at home, but remote or face-to-face meetings are more productive in a flexible setting as they are planned for a specific purpose.

Telecommuting & Management Control – Evidence During Covid-19

Rubin, Nikolaeva, Nello-Deakin & te Brömmelstroet (2020) found that 43% of employees working from home during Covid-19 perceive their own productivity as equal or potentially higher than before and 61% of the respondents reported lower job satisfaction. Face-to-face contact was revealed to be an important element of productivity and work enjoyment. Positivity about working from home in the future was

found to have increased by 45% during the pandemic while many respondents suggested that the ideal working situation would be a combination of working from home and commuting. Respondents with children reported distractions to be a bigger disadvantage to working from home than lack of social contact. Commuting preferences were found to strongly influence preferences about future working situations. Brynjolfsson, Horton, Ozimek, Rock, Sharma, & Yi Tu Ye (2020) found that the fraction of employees who were laid-off during the Covid-19 crisis represented roles in organizations that could not be converted to a remote work state and young people are more likely to adopt a remote work role; one third of the US labour force converted to telecommuting. The report also expresses an expectation that Covid-19 induced knowledge expansion on the topic of telecommuting may induce long lasting changes and effects in the area of work organization.

Dingel & Neiman (2020) determined during the Covid-19 pandemic that 37% of jobs in the US can be performed in a telecommuting setting; these jobs also fall in the higher portion of the salary distribution. Additionally, the study finds that lower income economies have fewer jobs compatible with the idea of working from home. Kramer & Kramer (2020) investigated how Covid-19 will change the perceptions of employees and employers about occupations and work. It was found that occupational supply and demand could be affected by a shift in the perceived value and status associated with certain occupations due to Covid-19. Additionally, the paper considers Covid-19 as an opportunity for organizations to better understand the compatibility of certain roles with a telecommuting setting and cautions that such a setting could lead to increased segmentation and inequality in the labour market.

Belzunegui-Eraso & Erro-Garcés (2020) argue that past viruses such as SARS, H1N1 and Ebola should have resulted in the development of teleworking contingency plans for similar future scenarios such as Covid-19. It is also found that no specific intentions exist among companies yet to implement mass telecommuting into the future. Concrete positive results from the Covid-19 telecommuting experiment could however lead to the use of flexible work to improve employee work-life balance, cut infrastructure costs and function as a planned alternative in future situations where mobility induced contamination plays a role. The paper additionally emphasizes the

importance of future telecommuting based contingency plans but warns that longer working hours and security concerns may hamper this process.

Lincoln, Khan & Cai (2020) investigated the general influence of the Covid-19 pandemic on the medical care industry and finds that medical physicists have numerous telecommuting friendly responsibilities. The paper finds that medical physicists have with the help of telecommuting supported research projects, evaluated educational material, prepared for clinical procedures and conducted literature reviews. It additionally argues that telework for medical physicists should be more broadly supported as they can contribute to their profession and institutions while benefitting from fewer commutes, less office distractions and improved efficiency. The paper also mentions that telecommuting can reduce the stress levels of healthcare professionals by improving their work-life balance which ultimately reduces the likelihood of workplace errors and improves patient safety.

Bartik, Cullen, Glaeser, Luca & Stanton (2020) found that telecommuting adoption rates vary much between industries and that better paid and educated employees are more likely to telecommute; losses from remote working were lower in higher educated and paid industries. 40% of companies making use of telecommuting expect it to be more commonly implemented beyond the lifetime of the Covid-19 pandemic and at least 16% of American workers will continue to work at least 2 days per week from home in the future. The paper additionally anticipates major changes in workplace norms for employees, organizations and policymakers. Such changes include decisions such as where employees live and companies choose to locate; lower office capacity requirements will also influence the real estate market.

PWC (2020) found that the majority of their employees were working completely remotely during the pandemic while 21% occasionally also worked on-site. The majority of respondents were adequately supported to work from home and had no communication difficulties. 44% of employees reported productivity increases which consequently eliminated telecommuting doubts among management. Employees additionally benefitted from less commuting, less office distractions and interruptions, improved focus, more family time and less stress due to more time for maintaining their health. Employees also experienced a better work-life balance and a flexible

schedule allowed them to work when they were most focused and efficient. Managers were found to be slightly less optimistic about remote work than employees. Employees however felt more pressured to perform and worked more hours due to a blurred line between home and work life; loneliness due to less human interaction and more distractions among those with children were additionally cited as problems. 81% of employees would like to continue with a flexible working environment beyond Covid-19, but technological adaptations, more trust from management and an organizational culture shift will be necessary to ensure future success.

A report by Slack (2020) found that employees who had been working from home for less than a month were struggling with coordination, communication and collaboration; 86% of such 'new remote workers' switched to remote work because of Covid-19. 33% of new and 13% of experienced remote workers reported hampered productivity; 60% of experienced telecommuters experienced productivity improvements. 45% of new and 25% of experienced remote workers reported a reduced sense of belonging and a reduced connection with colleagues; 47% of experienced telecommuters reported an increased sense of belonging. 23% of new remote workers and 10% of experienced remote workers reported reduced work satisfaction while 72% of experienced telecommuters experienced improved work satisfaction. Additionally, the report emphasizes that telecommuting success lies in trusting employees, setting concrete team goals and making individual responsibilities clear. 71% of employees expect to continue working from home beyond the pandemic – the report states that the Covid-19 induced telecommuting adoptions may turn into long term policy changes.

McCarthy, Ahearne, Bohle Carbonell, Ó Síocháin & Frost (2020) found that 51% of workers are now telecommuting because of Covid-19 and 78% prefer to continue in this setting beyond the pandemic. 48% of respondents found it relatively easy to telecommute while 37% indicated the opposite. Employees were found to benefit the most from not having to deal with a commute and the associated traffic, lower transport costs, less stress, and scheduling freedom which allows them to spend more time on personal health and other responsibilities. Employees found communication and collaboration in teams and with co-workers to be more difficult; unsuitable home workspaces, overlap between work and home time, loneliness and distractions were additionally cited as challenges. Additionally, the study found 37% of respondents had

no change in productivity, 30% experienced higher productivity and 25% experienced lower productivity. 83% of employees want to continue working from home beyond the pandemic and 31% reported that there are no apparent challenges with doing so. The report advises that emphasis be placed on stricter communication guidelines and team goals and individual responsibilities be clearly outlined.

According to a report by Boland, De Smet, Palter and Sanghvi (2020) Covid-19 is forcing companies to rethink the role that offices play in creating productive, stimulating and enjoyable environments for employees. The report found that 80% of employees enjoy telecommuting, 41% reported being more productive, and 28% were equally as productive as before. Additionally, employees were found to enjoy the lack of a commute and have more flexibility to balance work and home lives. Companies also have access to larger pools of potential employees due to fewer location constraints and benefit from lower real estate costs.

Results

In this section of the paper the "Empirical Findings" section is summarized and used to assess the explanatory power of the Flexible Office Model; after a general overview the 7 central elements of the model will be individually evaluated under their own sub-headings. Each sub-heading contains an outline of the model arguments, a summary of the relevant findings and a concluding statement. This section lays the foundation on which the central research question will be answered in the conclusion.

Summary & Evaluation

The majority of flexible workers are now telecommuting due to Covid-19 and would prefer to continue in this setting beyond the pandemic. Employees would ideally work from both home and work. Perceptions of the role telecommuting plays in the future are generally positive with happier employees and promising signs for management. Evidence suggests that telecommuting less frequently allows for a better balance between the associated costs and benefits – this however depends on whether telecommuting is a substitute or a supplement to on-site work. The factors determined to be necessary for telecommuting success are as follows:

- o Stricter communication guidelines.
- o Team goals and individual responsibilities need to be clearly outlined.
- o Technological adaptations.
- o More trust from management – an organizational culture shift.

Covid-19 is forcing companies to rethink the role that offices play in creating productive, stimulating and enjoyable environments for employees. It is acting as a large-scale telecommuting experiment and any positive results and realizations have the potential to evolve into long term policy changes. Past similar situations should have been used to develop contingency plans for the future; Covid-19 is a large wake-up call to be prepared for the inevitable next coming disaster and telecommuting plays a central role in such future planning.

1. Cost Saving

Model Arguments
- o Less office space requirements will lead to lower real estate costs; office capacity is not a factor determining the number of potential employees a company can employ.
- o Telecommuting is a substitute to travelling and leads to fewer commutes and less spending on transport.

Empirical Findings: 'How does telecommuting affect company costs?'

Telecommuting leads to fewer commutes which leads to lower infrastructure costs and lower transport costs in general for both employers and employees. Additionally, less office space is needed leading to lower real estate costs. Lower levels of absenteeism are observed under telecommuting, meaning companies lose less money due to sick and unproductive days. In some cases, employees may be willing to accept lower salaries to benefit from the flexibility of remote work – this could act as an indirect cost saving mechanism. Evidence suggests that fewer losses from remote working are prevalent in higher educated and higher paid industries. Telecommuting leads to major changes in workplace norms for employees, organizations and policymakers such as where employees live, and businesses locate. Security concerns were highlighted as a challenge and potential source of capital outflow in the future.

Concluding Statement

The empirical findings are in total agreement with the predictions of the model.

2. Productivity and Efficiency Improvements

Model Arguments

- o Employees will be more comfortable working from their familiar environments leading to fewer distractions, shorter breaks and efficiency improvements.
- o Improved sense of responsibility, intrinsic motivation, work satisfaction and higher exerted effort levels due to greater autonomy and planning flexibility.
- o More productivity time due to the lack of a commute.
- o Personal control over goal setting due to scheduling autonomy leads to improved productivity and intrinsic motivation.
- o Greater emphasis on deadlines as employees have more freedom to plan their own work timelines; the increased reliance on technology also plays a role.
- o More pressure to perform leading to higher levels of exerted effort due to a more results-oriented approach.

Empirical Findings: 'How is productivity and efficiency affected by working from home?'

The effects of telecommuting on productivity and efficiency are predominantly positive, but some challenges were found. Highlighted below are the key reasons found for either an increase of decrease in productivity or efficiency.

Reasons for positive influence on productivity or efficiency:

- o Less distractions, interruptions & time spent commuting.
- o Scheduling freedom to choose the best time to be productive and improved focus.
- o A greater pressure to perform while working from home.
- o More experienced telecommuters were found to more commonly benefit from telecommuting compared to on-site work.
- o Higher educated and higher paid industries had fewer losses from remote working.
- o In some cases, team effectiveness was also improved due to more selfless behaviour and efficiency improvements from flexible working members.

- o Working environments can be adapted to optimally suite working needs leading to improved efficiency.
- o Ability to organize and plan around family and other needs – better work-life balance.
- o Improved commitment and motivation – improved reciprocity towards employers.
- o Greater willingness among employees to change and take on more working hours.
- o Lower levels of absenteeism

Reasons for negative influences on productivity or efficiency:
- o Unsuitable home workspaces - more distractions due to young children.
- o Communication and collaboration issues in teams and with co-workers.
- o Less experienced telecommuters struggled with coordination, communication and collaboration.
- o Management difficulties in teams - sharing and tracking team responsibilities.
- o Undervaluing of flexible workers.
- o Loss of connection with peers, difficulties asking for advice between employees and supervisors.
- o Have to participate in more meetings – more time lost.

Generally, individuals are observed to be completely competent in their roles in cases where no explicit improvements in productivity or output are apparent. A flexible work arrangement where employees have total freedom to decide from where they work leads to higher output levels compared to an arrangement that specifically requires of employees to work from home.

Concluding Statement

There is little evidence in support of an increase in deadline orientation compared to an on-site work setting. Productivity and efficiency improvements are observed to be as predicted by the model, but communication challenges hamper progress in these areas. A lack of commuting and scheduling freedom are cited as key drivers of productivity and efficiency improvements; the model predictions are considered to be accurate.

3. Health Improvements

Model Arguments
- Improved balance of non-work activities and responsibilities due to improved autonomy and scheduling flexibility.
- These activities may include maintaining physical health, sports, tending to family matters and improving work or non-work-related skills.
- More trusting relationships between employers and employees due to the additional responsibility that accompanies scheduling freedom.
- Improved employee health due to a more balanced lifestyle and a less stressful working environment.
- Lower rates of absenteeism due to improved health and greater freedom to manage working hours; the company consequently incurs fewer absenteeism and health related costs.
- Higher job-satisfaction rates due to greater autonomy, improved health, lower stress and improved intrinsic motivation and a greater sense of trust among employees.

Empirical Findings: 'How is employee happiness, health and job satisfaction affected by telecommuting?'

The majority of individuals would choose a telecommuting arrangement but prefer to also work on-site occasionally.

Reasons for improved happiness, health and job satisfaction:
- Improved work-life balance.
- Enjoyment and positivity towards telecommuting among employees.
- More time for personal health and other responsibilities due to scheduling flexibility.
- More time for family matters and increased sense of belonging.
- Reduced stress levels and lower absenteeism rates.
- Arrange workspaces to optimally suite individual needs – less distractions.
- Freedom to work when most focused and efficient.
- Improved intrinsic motivation due to more time for reflection and recovery.

- o Less commuting, work-life conflict and interruption related stress.
- o More time for leisure, personal health and other responsibilities.
- o Improved commitment and reciprocity towards colleagues and employers.
- o Ability to pursue a career while having a family.
- o More experienced telecommuters experience less difficulties.
- o Empowering employees – more trusting relationships between employees and employers.

Reasons for declines in happiness, health and job satisfaction:
- o Leads to longer working hours and a higher sense of pressure to perform.
- o Blurred line between work time and home time.
- o Loneliness due to less human interaction – lower job enjoyment.
- o Distractions at home - more common among people with children.
- o Reduced sense of belonging and connection with colleagues.
- o Struggles with communication and collaboration.
- o Less experienced telecommuters experience more difficulties.
- o Perception of having to work longer hours – work intensification, higher stress levels.
- o Disruptions in working relationships and perceptions of being treated unfairly due to inconsistencies in flexible working policy.

Concluding Statement

The evidence is in agreement with the predictions of the model; loneliness, communication difficulties and work intensification appear to be problem areas but do not directly disagree with any model statements.

4. Communication Improvements

Model Arguments
- o Improved ability to gather and analyze data on employee performance due to a greater emphasis on deadlines and the absolute control that accompanies electronic information sharing.
- o Improved accountability for good or bad performances due to the aforementioned data gathering ability.

- Deadlines set with exact parameters allow managers to more clearly assign responsibility to employees in their respective roles.
- Meetings are scheduled and held with strict starting and ending times using video conferencing technology; this leads to improved punctuality and a greater need for structure in meetings to maximize their productivity and avoid time wastage.
- Improved participation rates in meetings due to scheduling flexibility and no commuting to or between meetings.
- Meetings can be held more frequently allowing for faster information transmission and decision making.

Empirical Findings: 'Does telecommuting lead to improved communication?'

Telecommuting leads to more productive remote and face-to-face meetings as they are scheduled and planned for a specific purpose. The management of teams partially consisting of flexible workers is challenging and team responsibilities are difficult to allocate, share and track. Additionally, telecommuters experience a loss of connection with peers, and a lack of direct interpersonal contact leads to communication difficulties when asking for advice from managers or supervisors. Telecommuters participate in more meetings than on-site workers but are not necessarily better informed. Team meetings consisting of both on-site and remote workers are challenging to manage; interruptions, being talked over and IT issues were cited as key problems during such hybrid team meetings. New telecommuters were observed to be struggling with coordination, communication and collaboration. In other cases, new methods of communication were cited as being potential security concerns. Face-to-face contact was additionally found to play a central role in communication in particular examples. The effect of telecommuting on communication is rather ambiguous with evidence to support both benefits and challenges; negative realizations however appear to be more common in the evidence.

Concluding Statement

General evidence pertaining to communication under telecommuting suggests an unclear effect; the negative consequences found in the evidence do not lie within the scope of predictions made by the model. Model predictions are therefore supported by the findings with the exception of punctuality in meetings.

5. Reduced Need for Business Travel

Model Arguments

o Expected future improvements in remote communication capabilities will automatically reduce the need for business travelling and improve productivity capability when not travelling – only the most complex matters or tasks would require face-to-face interactions.

o These communication adaptations will spill over into employee roles that traditionally require frequent travelling leading to a decline in domestic and international travel, and the associated costs.

Empirical Findings: 'How is business travel related to telecommuting?'

Employee perceptions of telecommuting were found to be somewhat dependent on their commuting preferences. The majority of employees enjoy not having to deal with a commute and the associated traffic. Employees spend less time commuting to and from work – only the most complex tasks require face to face contact which implies having to commute. Major changes in workplace norms for employees, organizations and policymakers are expected – where employees live, and businesses locate. The effect of telecommuting on international business travel is unclear.

Concluding Statement

The findings agree that telecommuting is bound to lead to future changes in locational and travel related decisions. Additionally, findings support that telecommuting reduces the need for commutes to only the circumstances that involve the most complex tasks. The effect on international and long-distance domestic travel however remains unclear.

6. Responsibility and Accountability Improvements

Model Arguments

o   Improved ability to gather and analyze data on employee performance.

o   Increased focus on deadlines and the monitoring of deadlines - allows management to gather and interpret more data on employee work reliability and quality.

o   The aforementioned data gathering improvements allows for individuals to be more accurately held accountable for good or bad work done.

o   Employees feel a greater sense of responsibility due to less on-hand assistance, total control over their own work time and a greater emphasis on project and work deadlines.

o   Reduced employee dishonesty and shirking due to responsibility allocation and accountability improvements.

o   Improved fairness and accuracy of disciplinary actions due to a more evidence-based approach.

o   Improved relationships between employers and employees due to fewer accountability and credit mistakes and a greater sense of trust among employees.

Empirical Findings: 'How has responsibility allocation and accountability been affected by telecommuting?'

Employees have greater freedom to schedule their own time; this is accompanied by the responsibility to meet deadlines and remain productive. Evidence suggest that employees understand the weight of this responsibility, in many cases being willing to put in extra hours in order to meet the work requirements. Employers have no choice but to empower employees and build more trusting relationships to achieve telecommuting success – such empowerment leads to a greater sense of belonging, engagement and more contributions. Employees however are responding well to the additional responsibility and accountability that comes with a telecommuting arrangement with increased selfless behaviour, commitment, motivation and reciprocity towards employers being observed. Responsibility allocation and tracking in teams partially consisting of flexible workers was cited as a problem area. Managers and employees together reported lower levels of absenteeism as they could work from

home while sick or make up the lost time later on. Security concerns were cited as a central challenge as employees have to be trusted with valuable and sensitive information in more vulnerable circumstances.

Concluding Statement

The findings are in agreement with the predictions of the model; however, the effect of telecommuting on disciplinary action and accountability mistakes remain unanswered. There is also no evidence supporting the notion that telecommuting increases the importance of deadlines compared to on-site work.

7. Recruitment Process & Quality Improvements

Model Arguments

o More efficient allocation of labour on a macro scale and within a company as recruiters can prioritize worker skills over residential location – potential candidates are more likely and willing to apply for jobs beyond their reasonable commuting distance.

o The aforementioned point leads to a larger effective labour pool that an organization can recruit from.

Empirical Findings: 'How does telecommuting influence recruitment practices?'

Covid-19 will change employee and employer perceptions of occupations and work; the perceived value and status of some jobs may change, leading to altered supply and demand. These altered perceptions could however lead to increased segmentation and inequality in the labouor market. Companies additionally have access to larger pools of potential employees due to fewer location constraints. Telecommuting enables more economically inactive and unemployed individuals to participate in the labour market leading to an increased number of possible recruitment candidates. People with disabilities and chronic illnesses are also better represented allowing them access to more or new jobs; organizations consequently have more suitable candidates to choose. Flexible workers are undervalued in some cases, leading to lost opportunities and talent as they are overlooked in the recruitment process. Covid-19 is an opportunity to better understand compatibility of certain roles with a telecommuting or flexible work arrangement. Telecommuting additionally most

benefits employees with families, disabilities and other related responsibilities. Increased segmentation and inequality in the labour market due to altered perceptions is cited as a key potential challenge.

Concluding Statement

The findings are in agreement with the model predictions.

Conclusion

Covid-19 and the accompanying movement restrictions have resulted in a global scale telecommuting experiment and a widespread focus on telecommuting as potentially major element of work organization in the future. An experiment on such a scale holds valuable realizations specifically pertaining to organizations, their employees and their management teams. This paper focuses on the management control consequences of deeper and more widespread telecommuting adoption in the future; the central research question is revisited:

"Which management control related discoveries can businesses benefit from in the long run due to Covid-19 movement restrictions?"

The research question is answered using the Flexible Office Model which represents a set of 7 key management control benefits that emerge in ideal telecommuting circumstances and implementation. The evidence gathered in this paper firmly supports that the model has significant explanatory power.

In the long run, telecommuting adoption allows businesses to benefit from reduced real estate and transport costs due to reduced need for commuting and office capacity. Improved productivity and efficiency due to employees having work time scheduling freedom, more comfortable working environments, improved motivation, more time for productivity and shorter breaks, fewer distractions, improved sense of autonomy and responsibility, and higher levels of effort exertion due to a greater sense of pressure to perform.

Employees also experience improved work-life balance due to more time for non-work activities; this is achieved due to greater scheduling autonomy. A more balanced lifestyle and less stress allows for improvements in employee general health. Greater freedom to manage working hours and improved health leads to lower absenteeism rates. Job satisfaction is also improved by the aforementioned factors combined with the associated improvements in intrinsic motivation. Employers and employees also develop more trusting relationships as employees take on greater responsibility in managing their own time and work. Improvements in management ability to gather and analyze data allows for improvements in accountability and responsibility allocation. Meetings are found to take place more frequently and are more productive due to an increased focus on structure and minimum time wastage. Meeting participation rates also improve due to a lack of commuting to and between meetings, combined with better time management that comes with scheduling freedom.

Additionally, findings agree that telecommuting is bound to lead to future changes in business and employee locational, residential and travel related decisions. Telecommuting reduces the need for commutes and indirectly acts as a replacement for them, reducing their need to only circumstances that involve the most complex tasks and interactions. Telecommuting results in a more efficient allocation of labour on a macro scale and a larger effective labour pool for organizations. Recruiters can prioritize worker skills over their residential location – potential candidates are more likely and willing to apply for jobs beyond their reasonable commuting distance.

The general consensus among employees and management is that telecommuting is here to stay into the future. The results from the ongoing Covid-19 telecommuting experiment will dictate the final long-term position for telecommuting and provide organizations with additional insight into which roles are optimally suited for a telecommuting arrangement. It is certain that telecommuting will form part of contingency plans for future potentially similar situations. Extracting positive results from telecommuting is highly dependent on successful and effective implementation; this involves clearly defined team and individual goals and responsibilities, a culture shift, more trust from management and adequate technological adaptations.

This paper is limited by the quality and quantity of the research that its conclusions are based upon. The key shortcoming is the lack of an empirical study to assess the explanatory power of the model. Additionally, the Flexible Office Model only considers 7 areas of management control influenced by telecommuting, limiting the scope of the research. Given the contemporary nature of the Covid-19 crisis, it is essential to acknowledge the incomplete and ongoing nature of the research on which this paper bases its conclusions. Future researchers could examine the existing framework and assumptions of the FOM as well as look for additional relevant management control consequences excluded by the model. More specifically future research could attempt to identify the factors that influence the nature of the outcome of telecommuting implementation.

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