

Working from Home: Who Stands to Profit from Telecommuting?

Felipe Ramos

^a Departamento de Matemática, UEL em Londrina, Paraná, Brasil, felipe.mancini@uel.br.

Abstract. Does having employees who work from home impact a company's profit? This paper discusses telework, addresses how adopting this work model affects profits both directly and indirectly, considering topics such as productivity, utility costs, leases, absenteeism and presenteeism. It reports how a company can interact more efficiently with Working from Home (WfH) and on the benefits it reaps outside of the bottom line considering previous studies on the topic. It then concludes that WfH does have a significant impact on profit, and that when executed expertly, this impact can be overwhelmingly positive.

Keywords. WfH, telecommuting, profit, remote work.

1. Introduction

The term "telework" was first employed by former NASA engineer Jack Nilles in 1975 [1], however, Nilles had no way of predicting the scales that telecommuting or Working from Home (WfH) would reach during the COVID-19 Global Pandemic.

The year-long pandemic has left it's mark on almost every sphere in human nature, and the work-sphere would be no different, as about 20% of the global population was forced into telecommuting during April, May and June of 2020 [2].

This paper will highlight the impact that the transition from corporations to home offices has had on profit margins of companies which have or haven't adopted it in recent years, as well as how to optimize this work model. It will also explore other consequences of embracing teleworking, as well as listing good practices companies can have in such workplaces.

2. Methodology

The methodology applied in the making of this paper was as follows. Firstly a hypothesis was made, "working from home has an effect on a company's profit". With this hypothesis in mind, a wide bibliography of articles, books and news reports on the topic was created, using broad search engines and experimenting with different key words. This bibliography was then curated by relevance, quality and objectiveness.

The different effects that telecommuting exerced in the working sphere was detailed in each of these literary sources. The ones considered most important were selected and gathered in this paper, as well as attempts to connect them using other published works. With all of them arranged and displayed, a conclusion was brought forth about the hypothesis "working from home has an effect on a company's profit".

3. Direct Profits

Profit, as calculated in spreadsheets accross the globe, can be defined as Gains – Cost. When discussing employement, cost can be described as pay*time, and gains as the ammount of product sold. The buzzword "productivity" is therefore the product divided by the time each employee takes to make it.

Substituting both statements, we get that profit = time*(productivity - pay), meaning that if a worker's productivity is increased, while maintining the same hours of work and pay, his employers will experience an increase in profit. This is defined by Karl Marx as "Relative Surplus Value" [3]. Hence is it paramount to analyse teleworking's effect on productivity.

3.1 Reductions in Productivity

A study in 2020 by Michael Gibbs [4] found that worker productivity during remote work seamed to decrease by 6 to 12 percent, but that the overall production stayed the same due to workers having more hours to put in. This devience was justified by the excessive and redunt on-line meetings pulling focus from the activities and the huge increase in emails [5] as well as friction while ajusting to the new system.

Another explanation could be the mental state of the workers. The 2020 pandemic featured an increase in depressive and anxiety symptoms, even among those who were not infected [6], and any negative impact in a worker's mental health can affect his productivity and thus hinder profit margins [7].

All these agravating factors can be easily avoided by clearer work assignments, planned and organised comunication as well as programs that encourage and/or promote the well being of the employee.

3.2 Increases in Productivity

Other research [8] seems to indicate that the relationship between the amount of telecommuting and the productivity of a company is ∩-shaped, and not linear. This means that employers should recognize how many workers, and most importantly which workers, can telecommute favourably, in order to chase that bell-curve peak.

Long distance commuters should always be the companies first consideration. In 2019, americans spent on average more than 10 days a year commuting [9]. People with long journeys to and from work report lower subjective well being, despite having taken on extra rent and/or extra pay to prefer a job located further away. This is known as the Commuting Paradox [10].

Collaborators employed in skilled work also belong at the top of the list. Jobs that can be entirely performed at home usually have higher pay [11] and are occupied by those with college education and/or managerial occupation [12]. Furthermore workers skilled in the tools applied in telecomuting will also experience less friction during the transition.

The younger generation has also shown an appreciation of remote office work [13]. They have stated that the increased autonomy and freedom as well as decreased personal costs and fatigue are the main advantages of teleworking, and that they fear mostly only the isolation from their group. As companies reorganize their workforce to receive this new batch of workers, they can compete with others in the industry and make their positions look more appealing by offering these advantages, without necessarily increasing pay. While on the other side of the spectrum, workers with babies or children, specially single-parents, feel a bigger difficulty in producing when at home compared to at the office [8].

4. Indirect Profits

Another form of increasing profits is reducing secondary costs that appear during the work hours, or avoiding obstacles that can hinder the workforce's progress.

4.1 Utility Costs

The Australian goverment has already altered it's tax law [14] to allow at home workers to deduct new costs they have taken on in this work model. Things like eletricity, gas, chairs and desks, that used to be the employers' responsibility -, now rest on the employee and is significant enough to have impacted tax legislation.

Figure 1 below details how in 2020, despite the increase in combustive fuel prices, eletric expenses of companies in the US were at an all time low. While in 2021, with the return of most workforce to the office, it faced an all time high.

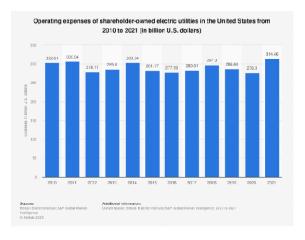


Figure 1- Eletric utilities expenses by companies in the US in Billion U.S dollars.

Eletricity isn't the only utility cost companies have being struggling to optimize. Leasing or owning office building has undergone massive changes in this new telecommuting era. Between 2020 and 2022, office values have declined 39% [15], and aren't seen as attractive investments anymore. Obviously the supply hasn't changed significantly. but the demand clearly has. This means the lack of dependence on these structures allows companies to not only save on paid office space but also get more profitable deals on the offices they do choose to lease or purchase, with all of these discounts ranking up their bottom line. The same research also showed that high quality office buildings suffered less from the drop than low quality ones, pushing the thought that those in worse working conditions got to work from home while those in high end office spaces still maintain and value those positions, which begins to stabilize a very fragile financial sector.

A newer solution has also surfaced in the form of satellite offices, workspaces that could be closer to the individual's or the taskforce's home and, most notably, rented by the hour or day. Evolving from the popular co-working or flexible working spaces of 2015, these spaces will provide all the benefits of a commercial office while simultaneously cutting away the excess costs from leasing and maintaing a work space that isn't required full-time. Satelitte offices also aid in other fields, like the significant reduction in fuel consumption and carbon emission, as well as increasing infection control in the work

place by reducing the ammount of workers in direct and constant contact with one another [16].

4.2 Flexibility

Day to day complications are very hard to predict, and even harder to prepare for. A missing key, a traffic jam or a wardrobe malfunction can send an entire day's work into dissarray.

With the home as the workplace, the ammount of random factors colliding with the workplace decreases significantly, and a more stable and controllable workspace will always add to the stability and quality of the work. This is further explored in the next topic of Presenteeismm and Abseenteism.

One must also address the "autonomy paradox", which refers to workers that have more autonomy and flexibility ending up with longer and more intense working hours [17].

This simple idea, to entrust the organization and process of production to the actual worker envolved in it, has haunted managers for years, yet it's clear that when applied to serious collaborators, it's effect is not only an increase in production at a lower energy cost to the managers, but also the multiplication of these autonomous capabilities.

5. Absenteism vs Preseenteism in the Virtual Workspace

Being important modern "buzzwords" in the industry, presenteeism and abseenteism are seldom ignored when discussing a companies revenue. Both pertain to the interruption of a fully productive and regular attendance in the workspace. This chapter will introduce both terms further and discuss teleworking's relations with them.

5.1 Absenteeism

In 1975, David J. Smith defined being "absent" in the workplace as simply not being at work when expected to be so, and "absentee" as one who is absent. To refer to the state of being the absentee, the noun "absenteeism" was born [18].

The following figure displays the number of employed americans who did not attend work between 2013 and 2023.

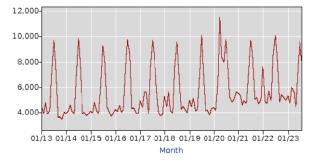


Figure 2 - Employed collaborators not at work

This displays a huge obstacle for managers who must reallocate and oversee the tasks not being currently handled by the absent employee, resulting in loss of productivity and many times even extra costs in overtime when other workers must fill in for the absentee.

A regular ammount of absence is to be expected, since obstacle may surge at random and things like sick days and paid leave are core topics on most contracts. It turns to absenteeism when this expected treshold is surpassed, specially without legitimate reasons or at a chronic rate.

5.2 Presenteeism

When David J. Smith defined absenteeism, he took it upon himself to also define it's antonym, which he called presenteeism, the state of not being absent in the work place [18]. Since then, however, the word has succumbed to new and more usefull meanings. The Oxford Dictionary defines presenteeism as "the practice of spending more time at your work than you need to according to your contract". While this does encompass the idea, most papers and business magazines refer to the term as "coming to work despite obstacles. resulting in reduced productivity".

While the obstacle that absenteeism poses is more clearly seen and understood, the damaging effects of presenteeism must also be tackled. On a surface level, presenteism might even be interpreted as beneficial, since a worker presented with an obstacle could have leaned for absenteeism, and not showed up to work, instead of just "buckling down" and clocked in anyways.

Empiric evidence shows that the previous statement is far from the truth. Not only can this be problematic to the individual, presenteeism can also result in further costs to companies that openly permit or even advocate for it [19]. These newer studies denounce how workers who are unwell commit errors more frequently as well as perform way under their usual rates.

Presenteeism has been shown to occur more often in spaces that incite job insecurity or employ the financially challenged, where collaborators are too scared of losing their income to miss work, despite being rightfully entitled to. On the other hand, reasons for constant presenteeism extends outside the workplace as well, since the decision to skip work or not is influenced by organizational and cultural conditions [19].

5.3 Teleworking and Absent/Present-ism

As hinted at in topic 4.2, teleworking can help avoid or resolve most day-to-day issues that would push an employee to opt for being absent. Being able to work from or closer to home (avoiding any trouble getting to the workspace), to construct their responsabilities to the company around their workday (like doctor visits or renovations) and by allowing them to opt to produce where they find best, teleworking can effectively erase several reasons that workers could have for opting into

absenteeism and not working for the whole day.

Working from home has an impact on presenteeism as well. Workers who opt into "sickness presenteeism", going into work while under some illness, will do so from the confort of their homes without endangering any colleague. Furthermore, the decrease in direct supervision will lend more autonomy to them and facilitate taking breaks or cutting down the hours when dealing with outside stress or when under the weather. However, this does not come without risk, as supervisors may push for presenteeism, in their belief that the reasons for not working then are "invalid excuses", not realising they are harming both their subordinate and their company by straining one's recovering while reducing the overall productivity of the other [17].

6. Positive WfH Practices

For better or for worse, working from home is here to stay, as the ability to work from home is no longer a perk but, in many worker's eyes, a well earned right [20]. Furthermore, the consequences of a company adopting telecommuting can be felt both in and outside the work environment. Therefore, it is important to understand the positive impacts as well as the benefitial methods in which companies can interact in this new work model.

6.1 Enviromental Impact

Some of the positive effects of telecommuting on the environment have been listed throughout this paper and include: decrease in gas consumption, lowering green house gas emissions, massive reduction of office generated waste (paper documents, plastic cups, packed lunches) and even less impact on the town's infrastructure.

A company that employs these tactics should be proud of their reduced foot print on nature and can boast in participating in these "greener" work models.

6.2 Job Satisfaction

The most commonly reported consequence of teleworking is job satisfaction. The discretion and flexibility gained from operating away from the office is paramount in it's success and should be defended and rewarded.

Also important is: the increased physical distance between subordinate and supervisor is no reason to reduce positive feedback. A good conection to the staff will always turn to more proactive and exact efforts from them, specially in WfH. Team celebrations, friendly correspondance and public praise when proper are all important tool in maintaning these connectios. These will all serve to disarm the isolation one might feel to their workforce and keep him engaged in production.

7. Conclusion

After reviewing all the relevant bibliography, the forms of direct and indirect profits as well as the practices employed in quality telecommuting and the benefits it brings, it is trivial to conclude that working from home does have an effect on a companies profit.

Not only that, but that this effect can be overwhelmingly positive for the employers, employees, environment and bottom-line. If applied inteligently, in the right ammount with the proper collaborators, it can increase productivity, reduce costs, combat absenteeism and presenteeism as well as generate a healthy environment for work to thrive.

8. References

- Nilles, Jack. "Telecommunications and organizational decentralization." IEEE Transactions on Communications 23.10 (1975): 1142-1147.
- 2. Soares, Sergei, Florence Bonnet, and Janine Berg. "Working from home during the COVID-19 pandemic: Updating global estimates using household survey data." VoxEU. org (2021).
- 3. Marx, K. (1867). "Capital: A critique of political economy". Volume 1, Part 1: The process of capitalist production. New York, NY: Cosimo.
- Michael Gibbs, "Work from home and productivity", Bonn: Institute of Labor Economics
- 5. Pastore, José. "A produtividade do trabalho Remoto." (2021).
- Vindegaard, Nina, and Michael Eriksen Benros. "COVID-19 pandemic and mental health consequences: Systematic review of the current evidence." Brain, behavior, and immunity 89 (2020): 531-542.
- 7. Bubonya, Melisa, Deborah A. Cobb-Clark, and Mark Wooden. "Mental health and productivity at work: Does what you do matter?." Labour economics 46 (2017): 150-165.
- 8. Behrens, Kristian, Sergey Kichko, and Jacques-François Thisse. "Working from home: Too much of a good thing?" (2021).
- 9. Washington Post Nov. 9,2021 Sergio Peçanha.
- 10. Stutzer, Alois, and Bruno S. Frey. "Stress that doesn't pay: The commuting paradox." Scandinavian Journal of Economics 110.2 (2008): 339-366.
- 11. Dingel, Jonathan I., and Brent Neiman. "How many jobs can be done at home?." Journal of public economics 189 (2020): 104235.

- 12. Krantz-Kentkrantz, Rachel M. "Where did workers perform their jobs in the early 21st century?." Monthly Labor Review (2019): 1-10.
- 13. Nedelcu, Elena. "The perspective of young people on the effects of telework on the quality of life at work." Romanian Review of Social Sciences 19 (2020).
- 14. CAN, WHAT YOU, CLAIM THIS, and FINANCIAL YEAR. "Working from home." (2020).
- 15. Gupta, Arpit, Vrinda Mittal, and Stijn Van Nieuwerburgh. "Work from home and the office real estate apocalypse". No. w30526. National Bureau of Economic Research, 2022.
- 16. Kim, Seungbeom, Yooneun Lee, and Byungchul Choi. "Adoption of Satellite Offices in Response to a Pandemic: Sustainability and Infection Control." Sustainability 13.14 (2021): 8008.
- 17. Steidelmüller, Corinna, Sophie-Charlotte Meyer, and Grit Müller. "Home-based telework and presenteeism across Europe." Journal of Occupational and Environmental Medicine 62.12
- 18. Smithy, David J. "Absenteeism and" presenteeism" in industry." Archives of Environmental Health: An International Journal 21.5 (1970): 670-677
- 19. Ruhle, Sascha A., et al. ""To work, or not to work, that is the question"-Recent trends and avenues for research on presenteeism."

 European Journal of Work and Organizational Psychology 29.3 (2020): 344-363.
- **20.** Smite, Darja, et al. "Work-from-home is here to stay: Call for flexibility in post-pandemic work policies." Journal of Systems and Software 195 (2023): 111552.