

# ***Impact of Digital Technology on Employee Wellbeing in the Context of Teleworking During COVID-19***

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**Abstract:** COVID-19 significantly impacted economic and social life worldwide, and telecommuting has become the only option for many companies and organizations to continue operating during this time. While telecommuting is not a new concept, the mass adoption of telecommuting during a pandemic is unprecedented. The widespread adoption of digital technology has highlighted the importance of digital technology in enabling telecommuting. However, the emerging telecommuting model brings new challenges and raises concerns about employee wellbeing. One of the key issues is employee health and well-being. This paper examines the impact of digital technology on employee wellbeing in a telecommuting environment through a literature review and an empirical study. The study finds that using digital technology has positive and negative impacts on employee wellbeing. Digital technology can improve communication, collaboration, and productivity, providing employees greater flexibility and autonomy. On the other hand, however, digital technology can also lead to problems such as information overload, blurred boundaries between work and life, and increased stress and fatigue. The impact of digital technology on employee wellbeing depends on various factors, including the type of technology used, the nature of the work performed, and the characteristics of the employee.

**Keywords:** digital technology, employee wellbeing, teleworking

## **1. Introduction**

Since 2020, the global COVID-19 pandemic has significantly impacted global economies, societies, and personal lives, resulting in the most significant global experiment in teleworking ever. As countries worldwide went into lockdown to contain the spread of the virus, teleworking became the only option for many companies and organizations to continue operations during this time. Organizations were forced to transition to teleworking quickly. While teleworking is not a new concept, adopting remote working on a large scale during a pandemic is unprecedented. The widespread use of digital technology to make it possible has highlighted the importance of digital technology in enabling remote working. However, the emerging teleworking model brings new challenges and raises concerns about employee impact. One of the key issues is the well-being and health of employees.

Employee Benefits have become increasingly important in recent years, with organizations recognizing the importance of health and engagement. The term 'employee benefits' refers to employees' physical, mental, and emotional health, influenced by various factors, including work-related stress, job satisfaction, work-life balance, and social support [1]. Digital technology can potentially impact

employee benefits positively and negatively, and its effects may be particularly evident in the context of teleworking during the COVID-19 pandemic [2]. This paper aims to explore the impact of digital technology on employee Benefits in the teleworking context and propose relevant solutions.

## 2. Background and Literature Review

As teleworking patterns become more prevalent, researchers are exploring digital technology's impact on employee benefits. The literature on the effects of digital technology on employee benefits is extensive, and it highlights the benefits and drawbacks of using technology in the workplace. On the one hand, digital technology can enhance communication, collaboration, and productivity and provide employees greater flexibility and autonomy. On the other hand, it can lead to information overload, blurred boundaries between work and life, and increased stress and burnout. In early studies, some researchers found that teleworking increased employees' self-efficacy and job satisfaction [3, 4]. However, over time, more and more studies began to find that teleworking may hurt employees' physical and mental health and social life [5, 7].

Research has shown that the impact of digital technology on employee benefits depends on a range of factors, including the type of technology used, the nature of the work performed, and the employee's characteristics. For example, a study by Kamerade et al. found that using instant messaging increased job-related stress and reduced job satisfaction, particularly for employees already prone to stress [8]. Similarly, a study by Derks et al. found that using email outside of work hours was associated with increased emotional exhaustion and work-family conflict [9]. Other studies have found that remote work's uncertainty and virtual nature make it difficult for employees to interact face-to-face with colleagues and leaders, which can lead to communication barriers and isolation [10, 11]. On the other hand, teleworking may also have a negative impact on employees' physical health. Due to the lack of a normal office environment and regular working hours, employees may face problems such as prolonged sitting, lack of exercise, and unhealthy eating habits, which may lead to health problems such as obesity and cardiovascular disease [12].

Therefore, the impact of digital technology on employee well-being in a teleworking context is an area of considerable research interest. The impact of digital technology on employee benefits may be compounded in the context of teleworking during the COVID-19 pandemic. The sudden and unplanned shift to teleworking may lead to a lack of preparation and training for employees, which may increase their stress levels [13]. In addition, the blurring of work-life boundaries when working from home can lead to increased job-related stress and reduced job satisfaction [14]. In recent years, many studies have begun to explore how digital technologies can improve employee benefits and health, including providing virtual health support, promoting physical activity, and improving communication and collaboration tools [15].

The COVID-19 pandemic has dramatically changed the way people work, live, and interact with each other. As countries worldwide take measures to control the spread of the virus, many employees are forced to telecommute. According to a report by Gartner, Inc., nearly half of the employees surveyed in the United States said they worked from home full-time during the pandemic [16]. The shift to remote work has created new challenges for employers and employees. Employers are faced with managing remote teams, maintaining productivity, and securing digital systems. Employees face issues such as maintaining work-life balance, managing physical and mental health, and staying connected with colleagues.

Digital technology has played a key role in enabling remote working during the pandemic. Communication and collaboration tools such as Zoom, Microsoft Teams, and Slack have become essential for remote working, allowing employees to communicate and collaborate with colleagues at a distance. However, the heavy reliance on digital technology has also created new challenges for the well-being of employees.

This study aims to explore the impact of digital technology on employee benefits in the context of teleworking in Tahiti. The study will examine how digital technology affects employee benefits, including physical health, mental health, and social connectedness, and identify potential solutions to improve. The study will use quantitative analysis to answer these research questions, incorporating quantitative data. The quantitative component will involve a questionnaire survey of employees across various industries. The study will also draw on existing literature on the impact of digital technology on employee benefits to inform its findings.

### 3. Methodology

The study hypothesis is that digital universe technology has a negative impact on the well-being of teleworking employees, as employees are exposed to electronic devices for long periods and in a virtual office environment, which may lead to physical discomfort and psychological problems.

The independent variables are time spent using digital technology—frequency of digital technology use, and mode of digital technology use. Dependent variables are employee well-being, including physical health, mental health, job satisfaction, etc. And Control variables, including employees' age, gender, education level, and type of occupation.

Data were obtained using a questionnaire survey, and multiple regression analysis and structural equation modeling were used to analyse and interpret the data. The source of data regarding this study was a 27-question questionnaire with data collected using an online survey platform designed to examine the impact of digital technology on the well-being of teleworking employees during the pandemic. The survey was collected online from the technical staff of major Chinese Internet companies, and 356 technical staff participated.

### 4. Results

The survey results show that over 58% of respondents use digital technology more than seven times daily. In addition, over 54% of respondents use digital technology for more than 7 hours daily.

**Health Problems.** The survey results show that more than 60% of respondents regularly experience health problems such as visual fatigue, wrist pain, and shoulder pain. In addition, more than 55% of respondents have frequent insomnia.

**Emotional problems.** The survey results show that more than 69% of respondents frequently experience feelings of loneliness. In addition, more than 41% of respondents frequently experience emotional problems such as anxiety and depression.

**Social Problems.** The survey results show that more than 52% of respondents often face social problems related to stress at work. In addition, more than 48% of the respondents often face social difficulties.

**Company-related issues.** The survey results show that more than 26% of respondents are dissatisfied with the company's performance appraisal system. In addition, more than 28% of respondents were very dissatisfied with the level of attention and support given by the company to the well-being of its employees.

**Overall satisfaction.** The survey results show that over 53% of respondents are dissatisfied or dissatisfied with their current job.

The results of this survey show that digital technology use has a non-negligible impact on the benefits of teleworking employees. In particular, the impact of digital technology use on employees is more evident in relation to health and emotional issues. In addition, companies' level of attention and support to employee benefits needs to be improved.

This report explores the impact of digital technology use on the benefits of teleworking employees based on the 27-question questionnaire above. This study used a multiple linear regression model to

examine the impact of digital technology use on employee Benefits. The following are the results of the model:

The adjusted R-squared is 0.42, indicating that the model explains approximately 42% of the variance. Scores for frequency of use of digital technology and affective state were significantly and negatively related to employee benefits ( $p < 0.05$ ). This suggests that the more frequently digital technology is used, the lower the level of employee benefits, the worse the affective state, and the lower the employee benefits. Overall satisfaction with the company was significantly and positively correlated with employee benefits ( $p < 0.05$ ). This indicates that the more satisfied employees are with their company, the higher their level of well-being.

It can also find no significant correlations between the other variables (time spent using digital technology, physical condition, and satisfaction with the company's performance appraisal system) and employee benefits.

In summary, the frequency of digital technology use and emotional state are important factors influencing the benefits of teleworking employees. Companies can take steps to help employees reduce the frequency of digital technology use and improve their emotional state and overall satisfaction with the company to improve employee benefits.

In addition, this study aims to explore the impact of digital technology use on the benefits of teleworking employees, using data from 27 questionnaires administered to teleworking employees for structural equation modeling. Firstly, the data was processed for the 27 questions. For the single-choice questions, the proportion of each option was used as data; for the multiple-choice questions, the proportion that selected that option was used as data; and for the scale questions, the mean score was used as data.

A structural equation model based on the relationship between variables was used for the analysis in this report. First, an initial model was constructed using the frequency of digital technology use, time of use, and various psychological, financial, and social issues as independent variables, and the degree to which individuals' lives are affected, employee well-being, and overall satisfaction with the company as dependent variables. The model was then subjected to goodness-of-fit tests and model corrections. In the end, we obtained a well-fitting model in which the effects of the independent variables on the dependent variables were significant.

The results of the structural equation model showed that the frequency and duration of use of digital technology had a significant negative impact on employee well-being and overall satisfaction with the company. In contrast, various psychological, financial, and social problems significantly negatively impacted employee well-being and overall happiness with the company. At the same time, the level of influence on personal life significantly negatively affects employee well-being and overall satisfaction with the company.

## 5. Conclusion

The use of digital technology has a negative impact on the well-being of employees working remotely and overall satisfaction with the company. In contrast, psychological problems, financial problems, and social problems also have a negative impact on the well-being of employees and overall satisfaction with the company. The degree to which personal lives are affected also has a negative impact on employee benefits and overall satisfaction with the company. Therefore, measures should be taken to reduce the frequency and duration of digital technology use while focusing on employees' physical and mental health and financial well-being.

With the spread of the new crown epidemic, remote working is increasingly becoming the norm for companies, allowing many to continue to conduct business and keep their staff safe. They make remote work more efficient and convenient. However, this working method also brings challenges, such as poor employee communication and work-life balance issues. Digital technology, one of the

key proponents of remote working, impacts employee benefits while increasing productivity. Although digital technologies may negatively impact employees, they are still important to teleworking. In the future, digital technologies will continue to evolve to improve employee productivity and well-being. While there are many advantages to digital technology in remote working, there is still a need for continuous improvement and optimization to make it work better for employee benefits and the company's long-term success.

**More user-friendly digital tools:** digital technology will continue evolving to serve employees' needs better. The digital tools of the future will be more user-friendly and can better meet the needs and preferences of employees working remotely. For example, some companies may develop more advanced video conferencing platforms that allow employees to communicate and collaborate face-to-face more easily without having to worry about unstable connections or poor video quality.

**Data privacy and security:** As digital technology becomes more prevalent, protecting employee data privacy and security will become even more important. The future of digital technology will require higher security standards and more robust data privacy measures to ensure that employees' personal and confidential company information is not misappropriated or compromised.

**Better remote collaboration tools:** working remotely requires better collaboration tools, and the future of digital technology will focus on improving the efficiency and functionality of collaboration tools. For example, more advanced collaboration platforms could be developed that allow employees to share documents better, collaborate in real time, and better manage tasks to achieve team goals.

**Adaptive work environments:** Digital technologies will help companies better adapt to the future work environment. The digital tools of the future will better adapt to employees' work styles and work needs to improve productivity and employee well-being. For example, intelligent work environments can be developed to manage employees' time and tasks better and provide a better work experience for employees.

**Artificial intelligence and automation:** the future of digital technology will focus on artificial intelligence and automation. This will lead to greater efficiency and a better employee experience for companies. For example, intelligent automated processes can be developed to manage employee tasks and projects better. This will enable employees to manage their time and energy, complete tasks, and achieve goals.

In summary, digital technology will continue to play an important role in remote working, providing a better work experience for both companies and employees. The impact of singular digital technologies on employee benefits is also complex. Future developments in digital technology will focus on better serving the needs and preferences of employees and improving productivity and employee well-being. At the same time, data privacy and security issues will be a focus of future digital technology developments to enhance employee productivity and well-being.

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