

## Remote Work's Planning and Preparation: Key Takeaways for Employee Productivity

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### Abstract

*Productivity, remote work, and disruptions have become the challenge when many companies are faced with uncertainty from the COVID-19 pandemic. Such uncertainty includes lockdown and quarantine for a worker and closed-contact colleagues. Despite the advancement in digital technology, maintaining productivity when working at a remote location (including work-from-home), there is a lack of the insights into the interrelationships among the key attributes on the productivity of a workforce. These insights are expected to help improve planning and preparation for remote work, especially during the pandemic crisis when the level of readiness is suspected. Based on the extensive review, the key variables include synchronized work, scheduled work, and software/tools. On the other hand, these variables are expected to influence employee productivity. The survey is developed while the responses are analyzed by the AMOS software and the Microsoft Excel. The findings reveal that synchronized work and scheduled work appear to have a direct impact on employee productivity. However, the software/tools variable show an indirect effect on employee productivity due to its relationship with synchronized work. The result indicates that synchronized work and scheduled work are important for planning and preparation of remote work to ensure employee productivity. Thus, these two variables should be prioritized equally due to their similar impacts on employee productivity. Lastly, the software/tools variable should also be considered due to its impacts on synchronized work. Awareness of the benefits of digital technology should be constantly communicated as this information sharing is significant for effective remote work.*

**Keywords:** Productivity, remote work, technology acceptance

## INTRODUCTION

Companies are required to implement remote work in response to the COVID-19 pandemic. Adapting to remote work represents a challenge due to the difficulties relating to supervision, communication, information sharing, privacy and security of data, and others. Although the advancement of technology, the impacts from remote work on the productivity of the company's operations have often been examined (Alexandre *et al.*, 2017).

It appears that the hesitation to fully embrace remote work is one of the major contributors to the negative impacts on performance. Work stoppage and disruption are often the outcomes of remote work. This hesitation stems from the concern of privacy, miscommunication, misinformation, and perceived reactive supervision. Despite the awareness of these attributes, the need to gain more insights into their priority becomes essential for effective planning and preparation, especially when facing the crisis such as the COVID-19 pandemic (De *et al.*, 2020).

Remote work has become was started as "telecommuting" which the term was first used in the early 1970s. In early 1980s, many branch office and home workers were allowed to gain an access to organizational mainframes using personal computers and terminal emulators. Since then, the number of people working from home or remote location has grown rapidly. The ongoing pandemic has accelerated the need for remote work due to lockdown and quarantine (for a person who is tested positive for the virus and a group of people with direct contact).

The lockdown has resulted in most people having to rely heavily on digital technology for communication, interaction, and a continuation of their job responsibilities from home (Vargo *et al.*, 2021). Internet services have seen rises in usage from 40 % to 100 %, compared to pre-lockdown levels. As software capabilities become more complex, and business processes come to rely on them more, many of their employees are no longer bound by a physical workplace to work efficiently. It is expected that a remote workplace (including working from home) can be just as efficient and effective.

Ineffective use of technology for remote work can contribute to the inability to unplug from work. Work stress has increased and can negatively interfere with their health and well-being (Vargo *et al.*, 2021). Many companies have tried to maintain office protocols such as dress code and others for remote work to help maintain a work-life balance. For remote work's implementation, especially during the Covid-19 pandemic, collaboration and communication have been the roadblocks as well as the employees' willingness to use digital technology when working away from their workplace. Specifically, people normally rely on nonverbal communication use of tone of voice, posture, and body language). Remote work often results in loneliness and feeling of isolation due to a lack of communication. Ensuring the willingness to use technology for remote work needs to recognize this issue for planning and preparation. In other words, people are hesitant to adapt remote work due to uncertainty and unknown consequences.

Interestingly, taking vacations or small intermediate breaks are essential for employee's physical and mental well-being. Vacation can increase your productivity, mental ability, and efficiency. Other practices that have been applied successfully such as open-door policy is neither practical nor doable effectively for remote work. This hinders communication and can further contribute to work stoppages and disruptions. The distractions at home have further affected the productivity and quality of work, especially during the COVID-19 pandemic when family members are also required not to be out. Finally, the readiness of digital infrastructure (such as network and internet) is essential for effective remote work, especially work from home. Poor connectivity impacts quality of work as well as the

productivity of a workforce. This readiness is needed due to more frequent uses of video- and audio-conferencing tools.

## **PROBLEM STATEMENT**

Many companies have been required to implement remote work in response to the COVID-19 pandemic. Adapting to remote work represents a challenge due to the difficulties that have been previously mentioned. Despite the advancement of technology, planning and preparing for the remote work has received a lot of attention due to its past impacts on productivity and quality. More insights into the priority of these attributes becomes essential for effective planning and preparation. In other words, there is a lack of priority on the attributes to the commitment of technology adaptation for remote work, especially when a firm is faced with a sudden shift in its working environment.

## **OBJECTIVE**

This study aims to identify the important features from the viewpoints of the workers, the companies, and the perceived usefulness of technology in work's processes and operations.

## **METHOD**

There are several steps to be taken for achieving the study's objective. The first step includes an examination into the past findings and results on remote work and the challenges facing a company and its workforce. This step is important for the development of a research model which shows the interrelationships among key attributes to effective remote work. Then, a survey is created to help evaluate the suitability of the proposed research model and the study's objective. Statistical techniques are used to complete the analysis of the survey's results.

The study applies the online platforms to gather the data from the employees of different occupations in various countries, there is a total of 100 participants which meets the minimum sample size. According to survey data, most of the survey participants (39% of the responses) are engineers. Survey participants are from several countries such as Thailand, Sri Lanka, India, Taiwan, Myanmar, Australia, and the Maldives, where the greatest number of responses were from Thailand which is 54%.

## **FINDINGS**

The findings show most people view that both synchronized work and scheduled work impact on employee productivity. Synchronized Work (SynW) indicates the following circumstance- an employee feels that he or she is aware of the work performed by others which affects his or her tasks. It represents the feeling that this employee has the perception that remote work is not significantly different from an office work due to the smoothness and seamless work as well as communication. Miscommunication, perceived by distant or remote location, can be avoided.

Scheduled Work (SchW) illustrates the following circumstance. This term shows that a team member understands his or her work within a specific schedule, a deadline, and agreed expectation. SchW reflects information availability that can be accessed by all employees so that there is no work stoppage or disruption. For remote work, a work stoppage is often caused by misinformation.

The Software/Tools (ST) attribute consists of a company's digital infrastructure. This term highlights the availability of software to perform the tasks or assignments as well as other activities such as office

communication. Furthermore, a notebook, printer, and other needed instruments are considered as part of the tool.

Finally, the term Employee Productivity (EP) represents the achievement of work by a group of workers. The focus on this term is the amount of work that a group of employees achieve within the planned schedule (and targets). Since the employees work from a remote location, it is not possible to examine how much time he or she takes for task/ work completion. However, if he or she is aware of a schedule or deadline and can communicate well with others, it is presumed that he or she is efficient with the amount of time taken to complete his or her work.

The interrelationships among the three key variables with the EP can be illustrated as follows (Table 1).

Table: 1 Standardized Regression Weights of the Research Model

			Factor loading	P-value
SynW	<---	ST	0.5	0.011
EP	<---	SynW	0.522	***
EP	<---	SchW	0.521	0.046

(Note- \*\*\* mean less than 0.001)

$$\text{Equation 1: SynW} = 0.5(\text{ST})$$

The first equation shows that the ST variable has a positive relationship with the SynW component. This first equation indicates that, when planning for remote work, the level of readiness of digital infrastructure is significant. This is because the ST is believed to help reassure that the work and tasks are synchronized.

$$\text{Equation 2: EP} = 0.52(\text{SynW}) + 0.52(\text{SchW})$$

The second equation indicates that SynW and SchW appear to have a similar impact on EP. Miscommunication and misinformation contribute to the feeling of unproductiveness among the survey's participants. Delay, indecision, stoppage, and disruption are some of many examples that are viewed to be part of remote work. It is important that the executive(s) need to be aware of and try to address this perception.

The following example helps illustrate the applicability and implications of the two above equations. For instance, in a company, one of its departments experiences a positive result from the COVID-19 test and requires all employees (due to closed contact) to be quarantined. In this circumstance, the company can use this research to prioritize the needs and plan the quarantining employees to remote work. In addition, continuous interactions to help the workers accept the benefits and usefulness of digital technology while preparing its infrastructure for digital technology should be given a high priority (Park, 2009).

These interactions need to include the relevant issues that the employees are concerned such as data security and privacy due to a possible severe punishment of data loss and confidentiality (De *et al.*, 2020). More importantly, the perception that the difference between normal work in an office and

remote work at home or other locations is not significant. This perception is important to ensure seamless operations while being able to meet a deadline and other operational and customer requirements (Donate *et al.*, 2021).

## CONCLUSION

The findings help to highlight the preparation and planning for remote work. The post-COVID-19 working environment has shown that the trend of remote work will continue (Raveendhran 2020). The insights from the survey help to learn about the challenges of remote work which has affected workplace productivity. This is caused due to lack of insights into planning and preparation of remote work.

Future efforts on SynW (e.g., use of informal communication channels, social media, examining information bottleneck, schedule time for coffee break, open chat, etc.) should be the focus on planning and preparation of remote work. Note that, remote work can be implemented by careful deliberation (through comprehensive consideration) and by a sudden requirement (as witnessed during the COVID-19 pandemic for health and safety reasons). Assuring positive perception on the usefulness of technology on the continuous basis becomes necessary. Accepting the usefulness of technology is the foundation for integrating the ST attribute into remote work.

Finally, the three attributes on employee productivity for remote work are examined. These attributes are the software/tools, synchronized work, and scheduled work. Each attribute has shown the interrelationships with employee productivity as illustrated by the regression. As the COVID-19 pandemic is expected to stay with the society for many years to come, remote work is unavoidable. It is hopeful that the priority based on the surveys can benefit planning and preparation of a company.

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## APPENDIX A: PARTIAL ILLUSTRATION OF SURVEY QUESTIONS

ST attributes:

- Your company has provided you with laptop, stationary and other important items to work from a remote location.
- Your company has provided sufficient support with internet and other components for connectivity.

- Your company has provided finds reliable and secure software/tools to assist you for remote work.

SynW Attribute:

- The company has consistently updated the relevant information within its operations (e.g., suppliers and customers), latest events and polices during working from a remote location.
- The company has prepared working environment with the robust database that is viewed to be effective whether the work is conducted in an office or in a remote location.
- The company has successfully included everyone regardless of where he or she works during its communication.