Telecommuting: The Work Anywhere, Anyplace, Anytime Organization in the 21st Century

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Abstract

Globalization, advancing digital technologies and the competitive work environment have changed the nature of the workplace in the 21st century. New work arrangements have emerged and telecommuting which a work environment of "work anywhere, anytime, anyplace" has emerged. In this paper we examine the history of telecommuting, the research studies that have been done and the mixed findings that have emerged, with vey inconclusive research regarding the positive and negative outcomes of telecommuting. Recommendations and suggestions for future research on how to integrate different theoretical perspectives are also discussed in the paper.

Keywords: Telecommuting, alternative work arrangements, work life balance, telework, global workforce, 21st century workplace

Introduction

Globalization, continuous and rapid advancement of technology, an increasingly competitive work environment, the availability of a global workforce, and the need for work-life balance have changed the nature of the workplace today. From a manufacturing/production economy, to a service economy, we have become a knowledge/information/digital economy today. With rapidly growing digital technology, there are no constraints on time or space or location for work. Therefore it is not surprising that this 21st work environment has been transformed the notion of the workplace with the "work anywhere, anyplace, anytime" culture (Varty, O'Neill, & Hambley, 2017).

Telecommuting or telework has gained increasing popularity and many organizations are offering the opportunity to telecommute in greater numbers than ever before. According to a recent report (The state of telecommuting in the US in 2017 employee workforce report) the number of people telecommuting in the U.S. increased to 115 percent in the last 10 years. The report also states that

in more than half of the top U.S. metro areas, employees' telecommuting exceeds public transportation as the commute option of choice.

Although various labels and definitions have been given to the notion of telecommuting, telecommuting can be briefly defined as an alternative work arrangement where you travel or "commute" to work via technology. In other words, it is generally used to refer to opportunities given to employees to work from home or a satellite office, a hotel, or any other place besides the traditional office setting.

The general literature on telecommuting has focused on the positive benefits of such an arrangement and it has become increasingly popular, starting with the initial growth in the US and now its increasing growth globally (Fonner, & Roloff, 2010).In many organizations this has become a critical part of the human resource strategy and is seen as a way to achieve many financial and human resource goals and objectives. Some organizations see telecommuting as displaying corporate social responsibility and good corporate citizenship such as Pitney Bowes. In 2000, Pitney Bowes was one of only five Fortune 500 Companies that was invited to be a member of the Environmental Protection Agency's Commuter Choice Leadership Initiative.

Despite the incremental growth in Telecommuting, not all of them always are successful. Not all the organizations achieve the results they expect from these work arrangements. Many companies have cut back or reverted telecommuting. For example, Hewlett Packard (HP), Yahoo and Best Buy are just a few organizations that cut back on the telecommuting and wanted workers to return to the traditional office setting at one time or another.

Brief history of telecommuting

In the 1970's Jack Nilles was the first person to use the term "telecommuting" and was a pioneering in coming up with the first telecommuting concept (Nilles, 1998). Initially the main motivation and push for telecommuting was to minimize traffic congestion, and lessen pollution in the environment and give workers some flexibility and better work- life balance. In the 1980's there were small number of pilot telecommuting programs in the United States, and by the mid-nineties telecommuting there was a considerable increase in the number of telecommuters, with many federal, state and private sector organizations supporting the practice of telecommuting.

Several research studies and reports done by many organizations have pointed out the benefits of telecommuting. For example, one major benefit, from an organizational point of view with telecommuting is that you can save on office space and rent costs. Statistics from many companies point to a big savings in real estate costs (Apgar, 1998). IBM reported saving US$75 million by selling buildings and reducing its leased office space (McCune, 1998). Ernst and Young was able to save US$ 25 million annually by reducing office space by two million square feet (Monnette, 1998).

From a macro-system point of view, the benefits of telecommuting could benefit the larger environment, there would be less traffic and congestion, less air pollution and a decrease in accident rates. In the US, at both the federal government and state levels, legislation and a mandate

from the Congress with the Clean Air Act, EPA (2007).This has increased the environmental motivation for telecommuting.

There is also a lot of interest in studying this topic from both practitioners and researchers around the world. For example there have been many studies in Europe: in Britain (Mitchell, 1996; Stanworth, 1997), in Finland (Suoimi & Pekkola, 1998). There have interest in many other parts of the world, in Asia: in Singapore (Teo & Lim, 1999), China (Chen & Ling, 2004) and India (Raghuram, 2011), Bosua et al. (2013).

Davenport and Pearlson (1998) did an extensive study on telecommuting to understand how employees worked in the virtual office. They interviewed 100 firms and examined the different environments and conditions where telecommuting is done. They came up with 5 areas that we need to focus on to better understand the telecommuting process. The first was how to manage people, second was the way to manage information, the third was how to manage teams, the fourth was how to manage the whole process and finally how to manage the facilities.

Gajendran & Harrison (2007) in their meta-analysis discuss several mediators and variables that can influence and impact the telecommuting process. They tested several hypotheses and identified some key factors that could be contributing to the success of the telecommuting experience. For example, a crucial factor was the perception of autonomy and control, employees who feel a high degree of autonomy are more productive. They also concluded that in general, the findings from these studies indicated that overall telecommuting had positive outcomes, and they recommend several directions to address the negative aspects of telecommuting.

Problems with research on telecommuting

What is surprising is despite the increasing growth of telecommuting, there is still a dearth of research on telecommuting and few studies have systematically examined the processes that make telecommuting a success. In general, a review of the literature on telecommuting reveals that the methodology is generally weak across many of the studies. The samples are small and not very representative. There is no solid foundation in theory in most cases and many of the findings are inconclusive (Gajendran & Harrison, 2007). Most importantly, many of the studies and reports and data have been in many cases reported by the organizations themselves that offer telecommuting. Most of these studies have focused on the positive outcomes and benefits of telecommuting. There have been fewer studies on the negative effects and the detrimental consequences that can occur with telecommuting. Finally, the studies themselves sometimes contradict each other (Bailey & Kurland, 2002).

In this paper we attempt to identify some gaps in the knowledge base of telecommuting and discuss specific areas where research could be done, based on solid theoretical foundations. These areas are detailed below and we suggest the following recommendations for future research on telecommuting

1. Draw on research on social psychology and sociology and examine topics such as social isolation, group behavior and team management in a virtual environment. There is a plethora of research in social psychology and sociology that researchers can use to

understand the theoretical underpinnings of such behavior. For example, individuals who thrive on group identity and belongingness and draw their sense of identity of worth and meaning from the work environment would be more likely to have a higher degree of feelings of social isolation. For example, perception's of one's own ability, the construct of self-efficacy (Staples, Hulland, & Higgins, 1998) and self-identity could be related to performance in this type of distance environment.

2. Draw on research on psychology to understand the personality and temperament of those individuals who are more suitable and are a better fit for these kinds of telecommuting jobs. This could include an examination of qualities, skills and abilities both cognitive and non-cognitive needed to be successful in these telecommuting environments. For example, introverted, conscientious, self-motivated individuals may be a better fit that those who are very extraverted and need to work with others. This research could look at both the kinds of employees and the kinds of manager or leaders needed to make a good fit to work together. Research could also examine dispositional variables such emotional intelligence (Goleman, 1998) and variables such as cultural intelligence (Ang et al, 2007), especially if telecommuting is done with a global workforce.

3. Draw on research from management theory, and leadership to understand how to supervise and manage individuals who work outside of the traditional office. This could include factors on what makes up an organizational culture or environment that supports individuals' autonomy and control. Conducive factors could include a culture and leadership that promotes high level of trust, high empowerment, participative management, and other factors in the organizational culture that are crucial for these telecommuting occupations. More recently, there has been interest in the notion of "Lead anywhere workers" (Varty, O'Neill, & Hambley, 2017). In this culture of "anywhere working" we need to develop a new construct and new perspective of management and leadership on what is needed to lead "anywhere workers". Questions of how lead in an output-based versus a traditional behavior-based culture could be addressed.

4. Organizational citizenship behaviors are very relevant and related to how successful the telecommuting experience can be for the organization and the employee. There need to be more studies that relate organizational citizenship behaviors, both and the individual and organizational level to the telecommuting process. In a more recent study, Gajendran & Delaney-Klinger (2014), have made a significant step in this direction.

5. Draw on research on economics and finance theories and understand how the cost effectiveness of telecommuting occupations. This could include a cost-benefit analysis of different variables that are involved in a telecommuting environment. They could look at many models of telecommuting and identify optimal conditions and occupations that can be telecommuted from a fiscal point of view.

6. Draw on ecologists and environmental scientists to examine how telecommuting impacts the environment. This would involve working with several departments at the federal and state levels and agencies such as the department of transportation, the department of energy and other local and governmental agencies, and would involve integrating the findings from multiple disciplines. Several vast banks of archival data would need to be accessed and used, with quasi-experimental designs such as time series designs to get some conclusive findings about the relationships across several variables. For example, Shabanpour et al. (2017) have done a series of interesting studies integrating travel time, mode of transportation and other factors such as air quality analysis and modeling how the travel behavior could work.

7. Draw on research from cross cultural studies and study the role of cultural differences. With a global workforce and jobs being outsourced to different parts to the world, there is a different kind of telecommuting going on across the globe. Researchers can examine for example, how telecommuting works in countries that are culturally different from the West such as India or China. Raguram and Fang (2014) have recently examined this from this cultural perspective such as understanding how Hofstede's cultural dimensions such as Individualism/Collectivism and Power Distance could work in this kind of telecommuting environment. For example some studies on telecommuting in China have found that performance monitoring and evaluation is given the most important consideration given the cultural norms and expectations in China (Chen & Ling, 2004). Some recent studies (Ansong & Boateng, 2017; Ansong et al. 2016) have looked at the telecommuting in Africa and have identified several factors that make it successful in this culture.

8. Although telecommuting has developed rapidly in many parts of Asia such as India, Singapore and China, it is very important to also examine the development and growth of telecommuting in the other developing countries. For example, in many countries in the Middle East have been very reluctant and slow to adopt these kinds of work arrangement. Given the rapid urbanization and growth and the steady increase in traffic congestion and most importantly, given the high number of fatalities due to traffic accidents telecommuting could be a very viable option in these countries. Traffic accidents are predicted to be the fifth leading cause of death and the third leading cause of disability worldwide. In the Middle East, and the Middle East in particular has a very high rate to traffic injuries (Abibzadeh, 2012). Yet, very few studies from practitioners and researchers have been done on the potential of telecommuting.

9. Finally, we need to have better rigor in the methodology and design of studies so that we can have reliable and valid data on the telecommuting. Most studies have used surveys and many are just descriptive or correlational. We need to do more experimental and quasi-experimental studies, with innovative designs and methodologies. For example, Bloom et al (2014) did a recent 9-month experimental study with China's largest travel agency, Ctrip, a company that has over 16,000 employees. They looked at different factors and found some interesting results and this feedback from the experiment was used by the company

to modify some of its practices. We need to do more longitudinal studies, and use both qualitative and quantitative methodologies. Studies also need to distinguish the different types of work arrangements that are categorized under the term "telecommuting". Telecommuting is not one single work arrangement. For example "hoteling" is one form of telecommuting that is sometimes call hot desking where office space is used and shared only when it is needed, saving real estate costs. So the various types of telecommuting need to be differentiated and studied each for its own unique environment.

Conclusion

To summarize, we presented in this paper different theoretical perspectives areas for future researchers and gave some specific directions and recommendations. Telecommuting is an area where there is a crucial need for research from both the practitioner and theoretical point of view. Even after nearly three decades of research on telecommuting, many of the findings is still so inconclusive and mixed. There is a great opportunity for researchers from multiple disciplines to study a variety of topics on this subject which can be grounded on sound theory. From the organization's perspective, many applied research endeavors can be taken and the findings from these studies could lead to better application and implementation of practices that work in the telecommuting environment.

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