"A Study on Tracking and Monitoring Employee Behaviour through Virtual Means: Implications for Employee Engagement and Productivity"

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Abstract

Virtual means of work is playing a vital role across all industries. Working through virtual means is new to majority of employees due to covid-19 pandemic, telework is implement for all the employees in the sector. Virtual means connect knowledge workers together over time and distance to combine effort and achieve common goals. Virtual means allow companies to procure the best talent without geographical restrictions. This paper attempts to find out the challenges of tracking and monitoring employee performance through virtual means and impact of Covid-19 on employee engagement and productivity. The present research was based on primary and secondary data. Primary data has been collected with the help of structured questionnaire (online survey through Google forms) responded by 80 IT sector employees. Secondary data has been collected through research papers from internet and major database like EBSCO and Google. The data collected has been analyzed and represented using Statistical Package for the Social Science (SPSS). It was found during the research that organizations give top priority to employees' wellbeing in covid-19 crisis. Organizations conduct online sessions to virtual teams and keep them motivated and engaged. Most of the employee's state that the biggest struggle of working remotely is poor work schedule, distraction at home and lack of human interaction. Few employees are unaware of performance measuring tools. Employees also stated that work recognition is fair in virtual team in case of remote work. Employees are recognized and rewarded for their work. Better communication and feedback for their work encourages the employees to develop their skills and solve work-related problems.

Keywords*: Virtual means, Telework, Employee engagement, Productivity.*

Introduction

Virtual means are work arrangements where team members are geographically dispersed, have limited face-to-face contact, and work interdependently through the use of electronic communication media to achieve common goals. Virtual means connect knowledge workers together over time and distance to combine effort and achieve common goals. Virtual means are made possible by a proliferation of fiber optic technology that has significantly increased the scope of off-site communication. Virtual means allow companies to procure the best talent without geographical restrictions. Performance assessment can be lay down formally in terms of things to be done, targets to be achieved, or behaviors that are to be promoted. Telework does not lend itself to in person observation, supervisors should also focus on results-based assessment. A sudden switch to work from home can cause employees' anxiety about employer expectations. Keeping in mind the growing significance of virtual means the study indicates

that the main drawback of virtual means is lack of physical interaction, lack of trust, and lack of social interaction. Telework struggles are poor work schedule, distraction at home, lack of human interaction, etc. which makes employees feel that they couldn't concentrate on work so they find themselves difficult in working remotely. Organization give top priority to employees' wellbeing in covid-19 crisis managers and leaders conduct online meditation, fitness, psychological counselling and ranging doctor on call sessions and help them in household work in order to keep them motivated and engaged. A supportive team typically displays concern for employee needs, provides positive feedback and encouragement to their concerns to develop new skills. Employees engage naturally when leaders are inspiring. Leaders are responsible for communicating, employees' efforts play a major role in overall business success. When employees work is considered important and meaningful, it leads to their interest and engagement.

Literature Review

Baruch (2001) in their research article opined that telecommuting as it is referred to teleworking, first gained popularity in the late 20th century with the advent of home computers and sophisticated telecommunications technologies. Specific research on the patterns and practices of telecommuting first appeared in the 1970's when Jack Nilles coined the terms "telecommuting" and "teleworking" and directed the first telework demonstration project with partial funding from the National Science Foundation (NSF). The 1980's brought the initiation of pilot telework programs in the United States and by the 1990's many states, local governments, and private sector corporations had implemented telework programs. In 1996 the federal government introduced a national telecommuting initiative with the goal of increasing both the number of federal teleworkers as well as the number of teleworkers in other sectors. Telecommuting is defined as teleworking, home-working, work-at-a-distance, off-site work or remote work are all the terms used to for telecommuting.

Virtual means can do things collectively, some advantages of virtual means include: the ability to assemble teams that maximize functional expertise by including professionals who are geographically dispersed, enabling continuous 24/7 productivity by using different time zones to their advantage, lowering costs by reducing travel, relocation and overhead, and sharing knowledge across geographic boundaries and organizational units and sites. In spite of the advantages of virtual means, there are some disadvantages include communication and collaboration difficulties, low levels of media richness compared to co-located teams, potentially lower team engagement by team members, difficulties in creating trust and shared responsibility among team members, isolation, high levels of social distance between members, and challenges in monitoring and managing employees using virtual means.

Fullagar and Mills (2008) found a significant relationship between intrinsic motivation and flow experiences. Flow is the holistic sensation that employees feel when they are totally engaged within their work. The relationship between intrinsic motivation and flow supports considering engagement as the psychological need of autonomy.

Bolman and Deal (2014) suggested there is an opportunity for employees' autonomy when SDT is leveraged, and furthermore, employees can influence those around them. This influence transcends to the benefits of intrinsic rewards. Meaningful work will allow for an increase in employees' participation; however, it does not guarantee that the employee will be engaged. The need for autonomy, intrinsic rewards, and influence are required to achieve employee engagement

Cooper-Thomas, Paterson, Stadler, and Saks (2014) establishing that high levels of expectations and frequent performance reviews can increase employee participation and cooperation. The scarcity of resources has lead organizations to think more about reducing costs and increasing productivity and efficiency. Reduced variation in processes can reduce cost over time as it relates to process improvement

Eldor & Harpaz, (2015) Employee engagement is related to the psychological experiences of people who shape their work process and behavior. Employee engagement is multidimensional; engaged employees are emotionally, physically, and cognitively engaged in their daily work.

The U.S. Department of Labor (2015) identified employee engagement as a challenge, with a negative percentage of 35% or higher for organizations. Therefore, organizational leaders are rapidly finding ways to engage employees for long-term employment. Engaged employees are noted to having lower turnover rates and higher retention.

Employee performance assessment in telework

Performance should be assessed against the expectations that are set forth in telework and related work plans. Technology offers many alternatives including online video conferencing, chatting on software like Skype, and working together on virtual means. Tools like Trello, Todoist, Basecamp, Task log, etc. are used to assign work to telework employees. Because telework does not lend itself to in person observation, supervisors should also focus on results-based assessment. A sudden switch to work from home can cause employees' anxiety about employer expectations. Performance assessment can be lay down formally in terms of things to be done, targets to be achieved, or behaviors that are to be promoted. This ensures employees to get a clear picture of what they should accomplish with their limited abilities at home. Successful managers establish a daily call with their telework employees. Tools like Desk time, iDone this, Google streak, etc. are employee's performance measuring tools used for telework employees. If employees work more independently from each other their work is highly collaborative. The important feature is that the calls are regular and predictable and that there is a forum in which employees know that they can consult with supervisors and their concerns and questions will be heard.

Challenges of virtual means

Virtual means face particular challenges involving trust which is a key element to build successful interactions and to overcome selfish interests, effective communication that is even more critical for success in the virtual setting, deadlines, and team cohesiveness, new challenges rise with them. Cascio declared that there are five main disadvantages to a virtual means: lack of physical interaction, loss of face-to-face synergies, lack of trust, greater concern with predictability and reliability, and lack of social interaction. Virtual means are challenged because they are virtual; they exist through computer mediated communication technology rather than face-to-face interactions. Sometimes they report to different supervisors and they function as empowered professionals who are expected to use their initiative and resources to contribute to accomplishment of the team goal. Fewer opportunities for informal work and non-work-related conversations may form challenges to virtual means. Furthermore, virtual member is expected to become interdependent, successfully negotiate cultural differences and accomplish their tasks through computer-mediated technology. The process to motivate team members may differ depending on their orientation.

Employees Struggle in Telework scenario

Staying motivated: -Staying motivated when you're working by yourself for days and weeks on end can be especially challenging. Not having a structure in your schedule is one culprit. Another is the lack of inherent pressure to get things done, which often seems much more present when working in an office with colleagues. The level of satisfaction you feel when hitting targets as a team can seem diminished when everyone is physically dispersed.

Reliable Wi-Fi: -Internet connection is something most remote workers struggle with when working from coffee shops or other public places. However, it is also something that remote workers face at home. Fast internet is required when downloading large files and especially when you're on a conference call with many people. According to an article on Medium.com, effective video calls require download and upload speeds of 8 Mbps and 1.5 Mbps, respectively.

Distractions: -Working from home means you don't have to worry about distractions from colleagues coming to your desk to ask a question. However, if you don't live alone, you might face distractions from family members or roommates who want to talk to you while you're working. You may also find yourself distracted by small things, such as chores that need to be done or movement in your building or outside your window.

Feeling isolated: -Staving off the feeling of isolation in remote work is something many of us have had to cope with. This may be less of an issue for those who have family members or flat mates living with them who are also working remotely. But in-person human connection is a very real physical and emotional necessity for most of us, and it can be jarring to suddenly lose many of those connections and small personal interactions that are taken for granted in an office environment.

Collaboration and Communication: -If you have not telecommuted or worked remotely before, you may find that communicating with colleagues will be a much greater challenge. Collaborating on projects becomes more difficult when people can't simply sit near each other and discuss tasks they're currently working on. Having to schedule a call or type something to ask a coworker the same question that you would have just turned around and asked at the office can be a major effort and time sink, and it often results in the question never being asked in the first place.

Unplugging After work: -If you're working from home for the first time, you'll soon start to realize it might be difficult to log off. You may find yourself constantly checking your work email outside of working hours. One reason behind this is the lack of separation between work and home (both geographical and temporal). Working in an office provides a physical distance, and the commute home gives you the temporal distance that allows your mind to transition from work to rest.

Employee engagement in case of working through virtual means

Employee engagement in general is the level of commitment and involvement an employee has towards their organization and its values. When an employee is engaged, he is aware of his responsibility in the business goals and motivates his colleagues alongside, for the success of the organizational goals. The positive attitude of the employee with his work place and its value system is otherwise called as the positive emotional connection of an employee towards his/her work. Engaged employees go beyond the call of duty to perform their role in excellence. Another popular description that appears about engagement is "the right people in the right roles with the right managers drive employee engagement". According to Gallup there are three types of people: engaged employees, not engaged employees, and actively disengaged employees. Engaged employees are builders who consistently strive to give

excellence within their roles. Not engaged employees focus on the tasks spelled out to them rather than the goals of the organization. They do what they are told to do. Actively disengaged employees are dangerous individuals who not only do not perform well but also demotivate the performer in the organization. The consequences of engagement were job satisfaction, organizational commitment, intention to quit and organizational citizenship behavior. Work environment was found to be one of the significant factors that determine the engagement level of an employee. Deci and Ryan stipulate that management which fosters a supportive working environment typically displays concern for employees' needs and feelings, provides positive feedback and encourages them to voice their concerns, to develop new skills and to solve work-related problems. Team and co-worker relationship are another aspect that emphasizes explicitly the interpersonal harmony aspect of employee engagement. Leadership is another main criterion identified as a fundamental factor to inform employee engagement. Employees engage naturally when leaders are inspiring. Leaders are responsible for communicating that the employees' efforts play a major role in overall business success. When employees work is considered important and meaningful, it leads obviously to their interest and engagement.

Working through virtual means can improve firm performance, telework with its overall effect depending importantly on two main channels: A direct channel affects firm performance through changing the efficiency, motivation and knowledge creation of the workforce; an indirect channel is for telework to facilitate cost reductions that free up resources for productivity enhancing innovation and reorganization. Telework can improve firm performance by raising worker satisfaction and thus worker efficiency. Telework can also improve firm performance through facilitating cost reductions. Telework can directly lower capital costs by reducing office space and equipment required by the company. Firms offering telework may also attract workers at lower wages than would otherwise be the case in particular if combined with other measures that improve work-life-balance such as flexible hours to the extent workers are willing to give up a higher salary in return for these amenities. Worker efficiency may also decrease with telework: telework reduces the number of in-person interactions, which impairs communication, knowledge flows and managerial oversight. Telework requires a change from assessing performance in terms of inputs, i.e. time worked, to outputs, which implies giving up some control over workers and, in principle, provides workers with more opportunities to "slack". Overall, for firm-level productivity to increase with telework it is therefore crucial that worker satisfaction increases enough to offset the potentially negative effects on communication, knowledge flows and managerial oversight. The relative strength of these channels in turn is likely to depend on the intensity of telework: the negative effect due to the lack of personal interactions likely becomes stronger with telework intensity, as opportunities for in-person communication diminish, while worker satisfaction improves with low levels of telework but may suffer from 'excessive' teleworking.

Priority given to virtual means during covid-19 pandemic

Leading corporates say employees' safety and wellness- physical, psychological and emotional is their priority even as the apocalyptic spread of the Covid-19 pandemic has disrupted life and businesses alike in India and elsewhere. Top corporate employers including TCS, Flipkart, Deloitte, Microsoft, Wipro, Accenture all of them said saving human capital and wellbeing of employees is the most crucial task before their managers and HR leaders. And they have come up with novel ideas ranging from doctor on call, psychological counselling and online meditation and fitness sessions to virtual team lunches and dedicated 'work for home' hours to help in household work to keep their employees motivated and engaged. People are biggest assets to company, and that becomes more important in such times where managers conduct regular online team meetings. Microsoft is emphasizing the need to balance family and household priorities with work, and has provided resources for employees with disabilities. Flipkart

says employee wellbeing is its prime focus area now, and is organizing informal social connect session such as pasta live and chai break. Big companies are putting employee well-being ahead of productivity issues, and have come up with various initiatives such as virtual connect sessions including chai and lunch breaks, insurance plans for Covid-19, doctors on call and mental counselling helplines, and online fitness sessions.

Objectives of the research

To study the various aspects of employee performance assessment in case of remote work through virtual means.

To understand Challenges of tracking and monitoring employee performance through virtual means.

Impact of Covid-19 on employee engagement and productivity in case of work through virtual means.

Limitations of the study

In every project work there is some kind of limitations which affect the accuracy of work. Same in this project work some of the limitations are faced which are as following:

The study is focused only on one industry i.e. IT industry.

The study was undertaken without visiting the workplace due to COVID-19 lockdown.

Research Methodology

Type of research: Descriptive and Exploratory.

Exploratory research is the preliminary research to clarify the exact nature of the problem to be solved. Exploratory research is helpful when the area of study is relatively new and not much research has been done in that domain. In the present study the Covid situation has thrown up new challenges like the one studied in this project. The issue of tracking and monitoring employee's behavior through virtual means is emerging as a crucial one for organizations an attempt was made in the project to study the same.

Descriptive research is a research method that describes the characteristics of the population. The study is basically descriptive in nature as it strives to describe the present industrial scenario regarding virtual means of working and the practice of tracking and monitoring employee behavior in case of remote work. The descriptive research in this study has been carried out through online survey method using structure questionnaire tool.

Source of data collection:

Primary Data: Data was collected with the help of structured questionnaire (online surveys through Google forms) and was circulated to various IT employees through social media platforms like WhatsApp, Facebook and email and asked the respondents to take up the survey.

Secondary Data: The secondary data has been gathered from different (websites, database, articles) in the internet. And literature review is done through research papers collected from major database like Google, EBSCO.

Sampling Technique: Non-Probabilistic Judgmental Sampling.

Judgmental sampling is a non-probability sampling technique where the researcher selects units to be sampled based on their knowledge and professional judgment. It is the sampling technique in obtaining information from a very specific group of people.

Sample Frame: The study was taken for IT employees who are working through virtual means.

Data Collection: The data has been collected with the help of structure questionnaire by using Google forms and circulated among various IT employees by using social media platforms.

Data Analysis: The data has been analyzed with the help of Statistical Package for the Social Sciences (SPSS).

Findings and Discussion

Employees are working in different geographical places and coordinating their work, for 1-5 months through the help of virtual means (electronic information and communication technologies) which indicates there is reduction in cost and travel expenses, avoiding office politics, flexible work schedule. 70% of respondents are male and 30% of respondents are female employees with more than a year up to ten years of experiences. IT industry has got strong talent pool of ambitious employees.

The main drawback of virtual means is lack of physical interaction, loss of face-to-face synergies, lack of trust, greater concern with predictability and reliability, and lack of social interaction. Most of the employee's state that the biggest struggle of working remotely is poor work schedule it means there is no proper planned working hours for employees and another struggle is distraction at home and lack of human interaction. Distraction at home means the employees are mentally distress by the family environment and they couldn't concentrate on work properly. Lack of human interaction means that the employees are not able to communicate with their colleagues they feel lonely and they couldn't concentrate on work so they find themselves difficult in working remotely.

Employee engagement plays a vital role in remote work. When employee is engaged, he\she is aware of their responsibility in the organization and motivate their colleagues for the success of organization goals. Work environment, Team and co-worker relationship, and Leadership are some of the factors determining employee engagement, if there is trust, interpersonal relationships, supportive team promotes employee engagement.

Organization give top priority to employees' wellbeing in covid-19 crisis managers and leaders conduct online meditation, fitness, psychological counselling and ranging doctor on call sessions to virtual teams and help them in household work in order to keep them motivated and engaged. Technology can really help in communication. Team members can talk to one another with virtual tools like Microsoft teams, Skype etc these are online meeting, desktop sharing, and video conferencing software package that enables the user to meet with other computer users, clients or colleagues via the Internet in real time. If the employees are not encouraged, supported, trusted, and inspired by leaders then there is lack of employee engagement.

Employee performance measuring tools such as Desk Time, iDone This, 15Five, Google Streak, Todoist, WorkiQ are some tools which measures the performance of individual employees who are working in different geographical places. Many organizations have not adopted these tools and majority of employees are unaware of these tools.

Employees are moderately happy with working remotely which indicates that employees are enjoying the remote work facility provided by organization due to covid-19 pandemic. Employees feel themselves more productive as they involved in their work and are happy with virtual means of communication and they are comfortable in sharing their concerns as there is a frequent communication from there leader in organization which encourages employee's engagement and interest in their work.

Most of employees agree that the IT set up provided by the organization to work remotely is effective enough employees also agree that the quitter work environment enhances the work efficiency and productivity. Peaceful work environment enhances employee to work in a systematic manner in a given time. Systematic allocation of work provided by organization for remote workers it enhances employee engagement in work and in also increases productivity.

From the study it is found that there is no proper systematic tracking of work progress maintained by organization because majority of the organization has not implemented the technological tools to measure employee performance who are currently work in remote places employees are unaware of these tools which is already been adopted by other organization.

Employee work recognition is fair in virtual team in case of remote work. Employees are recognized and rewarded for their work. Recognition is a meaningful way to demonstrate that the organization care about their work and wellbeing, even when they aren't in the office, working at their desks. Better communication and feedback for their work encourages the employees to develop their skills and solve work-related problems. When the leaders encourage employees, they engage themselves more in work and helps to achieve organization more productivity.

Organization productivity has affected moderately by coronavirus. IT companies are heavily dependent on manpower and are not able to operate due to restriction in movement of people arising from lockdown and quarantine issues. Consequently, they are not able to complete or deliver the existing projects in time and are also declining new projects.

Practical implications and future possibilities of research

Having a feedback on remote employees the biggest struggle is poor work schedule organization should properly plan the work to be assigned to employees in order to achieve him\her involvement towards the organization activities. Employees will be engaged if he\she is aware of his responsibility towards the organization goals.

From the study it is analysed that virtual teams main challenge is trust it's a key element to build successful interactions and to overcome selfish interests, effective communication that is even more critical for success in the virtual team setting. Therefore, I suggest that virtual team members should be more truthful in performing the given tasks in order to have effective team with less issues.

With respect to finding for 8th question, organizations may try to implement employee performance measuring tools like (DeskTime, iDone This, Google Streak, Todoist) they are automatic tracking and monitoring tools for individuals to measure the tasks performed during work through virtual desks. Many organizations have not adopted these tools to measure remote employees work performance and the employees are unaware of these tools which are already in use by few organizations. It may take time to implement these tools but they give an effect results in employees performance.

Ailing with current study finding that majority of respondents are happy working remotely. Previous study has stated that work environment was found to be one of the significant factors that determine the engagement level of employee. A supportive working environment typically displays concern for employee needs, provides positive feedback and encouragement to their concerns to develop new skills.

The main purpose of tracking and monitoring employees are they exist through computer mediated communication technology rather than face-to-face interactions. Therefore, virtual team members need to be encouraged, recognized, communicated frequently for effective employee engagement and productivity.

Tasks should be shared with the whole team, allowing individual members to claim a task or submit work, as well as keeping them informed of what the rest of the team are up to. They can share data in order to help the company work more efficiently overall. They can also check in with one another to make sure that everything is going as it should be. This also allows managers to be sure that work is being done on time and up to standard.

With respect to the study employees engage naturally when virtual team leaders are inspiring. Leaders are responsible for communicating that the employee's efforts play a major role in overall organization success. When employees work is considered important and meaningful, it leads obviously to their interest and engagement.

The study has future implications for organization virtual team managers should systematically allocate the work and systematically tracking the work progress which enhances level of commitment and involvement of employees towards their organization and its values. Team and co-worker relationship emphasize supportive and trusting interpersonal relationships, as well as supportive team, promotes employee engagement.

Conclusion

This study indicates a clear understanding of challenges of tracking and monitoring employee is difficult through virtual means because they exist through computer mediated communication technology rather than face-to-face interactions. Virtual means challenges are lack of physical interaction, Loss of face-to-face synergies, lack of trust, greater concern with predictability and reliability, and lack of social interaction. In order to have effective team these issues must be least implicitly addressed. The work environment was found to be one of the significant factors that determine the engagement level of employee. A supportive working environment typically displays concern for employee needs, provides positive feedback and encouragement to their concerns to develop new skills. Virtual team members need encouragement, recognition, feedback for effective employee engagement and productivity. Virtual means require new ways of working across boundaries through systems, processes, technology, and people, which requires effective leadership. Leaders are responsible for communicating that the employee's efforts play a major role in overall organization success. When employees work is considered important and meaningful, it leads obviously to their interest and engagement. Overall, I concluded that systematic allocation of work, tracking and monitoring employee performance through virtual tools enhances the growth of virtual means.

References

American Business Collaboration. (2002). "A sneak preview of the workplace of the future: The challenges and benefits of managing a virtual workplace web conference". July 17, 2002.

Bolman, L. G., & Deal, T. E. (2014). How great leaders think: "The art of reframing". San Francisco, CA: Jossey-Bass.

Crossan, G and Burton, PF (1993) Teleworking stereotypes: A case study. Journal of Information Science Principles & Practice, 19(5), 349-362.

Cooper-Thomas, H. D., Paterson, N. L., Stadler, M. J., & Saks, A. M. (2014). "The relative importance of proactive behaviors and outcomes for predicting newcomer learning, well-being, and work engagement". Journal of Vocational Behavior, 84, 318–331. doi:10.1016/j.jvb.2014.02.007

Di Mauro, F. and C. Syverson (2020), "The COVID crisis and productivity growth, VoxEU.org, https://voxeu.org/article/covid-crisis-and-productivity-growth" (accessed on 17 June 2020).

Eldor, L., & Harpaz, I. (2015). "A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors". Journal of Organizational Behavior, 37, 213–235. doi:10.1002/job.2037

Fullagar, C. J., & Mills, M. J. (2008). Motivation and flow: "Towards an understanding of the dynamics of the relation in architecture students". The Journal of Psychology, 142, 533–556. doi:10.3200/jrlp.142.5.533-556

Islam, S. and Shazali, S.T. (2011), "Determinants of manufacturing productivity: pilot study on labor-intensive industries", International Journal of Productivity and Performance Management, Vol. 60 No. 6, pp. 567-582.

J.H. Dulebohn, J.E. Hoch / Human Resource Management Review (2017) "Virtual teams in organizations" by James H. Dulebohna, Julia E. Hoch.

Nader Ale Ebrahim, Shamsuddin Ahmed and Zahari Taha (2009) "Virtual Teams" Aust. J. Basic and Appl. Sci., 3(3): 2653-2669.

Monteiro, N., O. Straume and M. Valente (2019), "Does remote work improve or impair firm labour productivity? Longitudinal evidence from Portugal", NIPE Working Paper, No. 14/2019, NIPE - Universidad do Minho.

U.S. Department of Labor. (2015). "Employee engagement strategy final report". Retrieved from http://www.dol.gov/odep/pdf/20150201EESFinalReport.pdf

Websites Referred

https://economictimes.indiatimes.com/news/company/corporate-trends/in-times-of-covid-19-crisis-top-companies-give-priority-to-employees-wellbeing/articleshow/74964709.cms

https://en.wikipedia.org/wiki/Virtual_team

https://www.thecouchmanager.com/the-ultimate-list-of-virtual-team-technology-tools/

www.Wikipedia.com

https://pspdfkit.com/blog/2020/overcome-common-struggles-of-remote-work/