

## The Challenges and Importance of Virtual Teams During the COVID-19 Pandemic

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### Abstract

*The covid-19 has changed how things are run in nearly all facets and aspects of life. As much as it is a health crisis, it is also a socio-economic issue. Indeed, the effects of the pandemic on the economy are set to be palpable into the future even after the world is healed from the pandemic. Thus, business organizations have to learn, adapt or intensify their use of virtual teams since virtual teams are essential in business existence and success during the pandemic. This article conducts an extensive and relevant review of literature that expounds on the subject. After the various pieces of literature are reviewed, a summary of the findings of the challenges and importance of virtual teams during the pandemic is made. The paper also presents the research methodologies used by the various authors in obtaining the results and a discussion on the matter of validity, limits of the study, credibility, and generalization of the data content.*

**Key words:** virtual teams, pandemic challenges, communication technology, digital era

**J.E.L. classification:** J62, J81, M29

### 1. Introduction

The wake of the unprecedented Covid-19 pandemic occasioned an overhaul in how things were run in offices and workplaces. When the pandemic hit the world and took a devastating toll on lives and livelihoods, governments and international institutions had to invent ways that would curb the spread of the virus. The efforts spent on the task led to various policies and health guidelines. The World Health Organization recommended people to keep a social distance of at least one meter from others even if they don't appear sick. Offices and workplaces were required to ensure that staff and employees were not close to each other. Owing to the challenge of limited space in many workplaces and the opportunities and possibilities birthed by the fast-paced technological world, many companies resulted in virtual teams. However, this does not mean that virtual teams did not exist before the pandemic. A salient example of virtual teams that existed long before the pandemic is the Whirlpool Corporation. For building their latest product, a new division was formed in the 1990's. The project was about making a refrigerator free of chlorofluorocarbon, and the experts responsible for its development were drawn from different continents like Europe, South America and North America to form virtual teams. Thus, besides being a consequence of covid-19, virtual teams have been leveraged for various benefits and reasons. Some of the reasons are globalization, industrialization, stiff competition in the marketplace, and decentralization.

Virtual teams are the gathering of individuals spread across various time regions, different languages, dialects, race or nationalities which are joined by a common shared objective. They are united by the digital telecommunication technologies to achieve the organizational assignments. Derivable from the expanding rivalry in the business community, work globalization, the breakthrough in data, decentralization and correspondence innovations, organizations request

adaptability and readiness in their conveyance of items and administrations. Virtual teams assume a critical part to fulfill these needs. As organizations keep on battling for ability and talent which is quick turning into a scant asset, virtual teams structure permits organizations to use the accessible ability across boundaries. An ever increasing number of organizations are embracing virtual teams to deal with lessen their working expenses, to promote disseminating information and knowledge between their representatives to advance a progressive hierarchical learning and increase their employee's schedule, allowing them to being open all day, every day by having virtual teams in several time regions.

As per the social analysts, human connections draw their solidarity from the actual vicinity of the people. Because of the way that virtual teams have restricted or, no eye to eye collaborations, it tosses a heap of difficulties. For the achievement and success of virtual teams it is important to beat the social contrasts, correspondence boundaries, power battles and struggle to fabricate trust, cooperation and responsibility among the people. However it sounds troublesome yet can positively be accomplished through successful authority. With the right methodologies, cycles and devices set up, associations can benefit incredibly from this trendy pattern of virtual teams

Undeniably, the pandemic's wake has shed light and exposed the challenges and importance of virtual teams. This paper aims to underscore the challenges and importance of virtual teams during the pandemic.

## **2. Literature review**

Since this paper aims to get to the nitty-gritty of the benefits and challenges of virtual teams during the pandemic, we review the relevant literature on the topic. The extensive and intensive literature review is essential for a clear and accurate understanding of the topic.

According to Victor Garro-Abarca et al., virtual teams and remote working have been facilitated and occasioned by technology advances and crises. The digital era is described by trend setting innovations that have made the worldwide software development improvement area to be a precursor in discovering available resources through which remote working will assist with exploiting the data, correspondence advances, and communication technologies to winding organizations to higher echelons (Garro-Abarca et al., 2021). The first crisis to be associated with the development and prevalence of virtual teams was the oil crisis. The crisis birthed a concept known as teleworking (Venn, 2016). Teleworking was characterized as utilizing remote computers equipment to access office equipment (Watad and DiSanzo, 2000). At the onset of the 1990s, the companies and business organizations that had the advantage of virtuality, cultural diversity, leadership, communication, the territorial allocation of employees, cohesion, the interdependence of tasks, and empowerment could form virtual teams. This was the time in history where there was an unprecedented advent of communications and the proliferation of the internet. According to the journal, the wake of the covid-19, which is also a crisis, found the virtual teams in place. The pandemic only highlighted and remarked their importance in a more broader and comprehensive way (Klonek et al., 2021).

Based on Victor Garro-Abarca, the virtual team's performance is affected by some factors. Communication, trust, geographical distribution, cultural diversity, leadership, and the methods used to develop work with virtual teams. Communication is essential because starting directions are not enough. Thus, communication in virtual teams needs a higher improvement in quality and in frequency. When people are distant away, they need to keep seeking instructions and consulting to ensure that they are doing the right thing. On the other hand, leadership influences the confidence among virtual collaborators (Abarca et al., 2020). Workers need clarification and good leadership so that they be aligned to the organization's goals. Trust plays an important role in virtual teams. Workers will execute their mandate well even while miles away, yet there is zero or minimum supervision.

Another piece of literature was penned down by Victor Garro, Pedro Palos-Sanchez, and Enrique Rus-Arias. The authors found out that globalization, digital culture, and an increase in the amount of technology that is available for online communications. Further, the need for virtual teams has been accelerated by the wake of pandemics, wars, and epidemics. The wake of the covid-19 pandemic, which is a health challenge, has made schools, businesses, hospitals, and all people, in general, learn how to avoid contracting the virus among the workers, students, and teachers. They have resulted in

remote working and virtual teams. According to the research, the professionals who have been using virtual teams even before the covid-19 outbreak are software developers, research and development professionals, engineering teams, developers of new products, and consultants. According to the research, the factors that affect the performance of virtual teams are interdependence of tasks, amount of virtuality as a moderating factor, characteristics of team tasks, empowerment, cohesion, leadership, team distributions, communication in virtual teams, and trust in the virtual teams. The research has stated that when companies use virtual teams well then, they are poised to benefit from increased scope; virtual teams are important tools for globalization, increased response time, efficiency, which creates value for the organization, dynamic adaptation of organizations to new situations, and environments. Other benefits that organizations have from having virtual teams are hiring staff with the necessary experience and skills regardless of their geographical locations. This helps increasing the full-scale performance of organizations. Other advantages of virtual teams are that they enable businesses to respond faster to market changes, improve creativity, and work with information trade.

According to Siebdrat et al., virtual teams, if managed well, can outperform collocated teams. The researchers investigated over 80 software development teams that have varying dispersion. These groups had members in different countries, cities, and continents (Siebdrat and Ernst, 2009). The researchers found out the virtual teams gained prominence when more and more companies started organizing their tasks over distance, when the teams started comprising members from different geographical locations, and when the teams comprised people with diverse cultural background.

According to the authors, virtual teams are here to stay. The virtual teams have both their bright and dark side. The study found out that there is trouble collaborating in virtual teams because of the distance. Thus, collaboration is easier in a collocated environment. Other challenges are that reduced trust, difficulties in coordination and communication and intensified incapacity to build up a common objective. Other potential challenges that arise from virtual teams are that the physical distance between the members in an organization decreases the closeness and affinity between the members, and this is a precursor for violence and conflicts. Another challenge is brought out by workers who are in different time zones. There are some places where people are at night time while in other places the people are at daytime. If the people were to work together, it would mean that they should work simultaneously. Thus, some workers will have to reorganize their schedules to accommodate the others. This is the part where confusion and frustration occurs.

On the bright side of dispersed teams, virtual teams are essential in accomplishing complex tasks. Complex tasks are like research and development. Big are known for consolidating their skills and proficiency in different locations that are geographically apart. The depth of expertise within the competency centers is strong. Another benefit of a dispersed team is that there is increased heterogeneity. There is a higher level of structural and demographic diversity than do the collocated teams. Structural diversity exposes the members to heterogeneous sources of feedback, work experience, and networking opportunities. The diversity in nationality among the members of the virtual teams has been found to enhance the problem-solving capacity as it brings more advantage to carry on a project.

Because virtual teams are here to stay, the studies recommend that the managers of corporations and business organizations learn how to maximize and optimize the benefits of virtual teams while reducing the disadvantages of the virtual teams. The team members must be committed to the organizational goals, actively support the team spirit and identify with the teams. The various ways through which managers can ensure that the benefits of dispersed teams are increased while the challenges are quelled are through emphasizing teamwork skills, promoting self-leadership across the group, providing eye-to-eye meetings, cultivating a worldwide culture, and not ignoring the meaning of small distances.

Deloitte conducted another relevant study on the topic of this research. The study posits that virtual era is here to stay. The organizations ought to accordingly support their existence and prosper with the reality. The researches admit that numerous businesses confronted difficulties of working with virtual teams in the initial phase of the covid-19 pandemic. This is why Deloitte came up with the piece of literature to suggest ways to overcome the challenges meted on them by the pandemic. The eight principles that can lead a team from physical to virtual-high performing team are ensuring

the well-being of the team, empowering and promoting self-leadership, strategically over-communicating, visibility and checking in frequently, leveraging on technology for collaboration, tracking capacity and progress, establishing a new rhythm and re-igniting team purpose and clarifying team roles (Deloitte).

Jennifer Feitosa and Eduardo Salas conducted a research where they identified the challenges of virtual teams during the covid-19 pandemic. The research identifies four main challenges affecting business organizations in the midst of the pandemic. The challenges are reduced trust among the team members, process loss in virtual teams, lack of inclusion emanating from huge levels of discrepancies in the member's local context, and the last challenge is in assessing the teamwork, often cognizant of the fact that many workers have been cut salaries, and thus they may not be performing optimally (Feitosa and Salas, 2020). If businesses can act towards addressing the challenges facing virtual teams, the authors state that the challenges can be turned into opportunities.

### **3. Research methodology**

This study is a report of the results obtained after a thorough review on literature related to virtual teams, the benefits and challenges of the virtual teams and the prevalence and prominence virtual teams during the covid-19 pandemic. This study has the purpose to gain extra knowledge on virtual teams and their relevance during and post the Covid-19 pandemic through the explorative review method. The sources used in the research were obtained from credible search engines such as Google Scholar and ScienceDirect among other credible and scholarly journals and websites like Web of Science, Deloitte, Emerald. The peer reviewed sources were written in English. The key terms used in the search are virtual teams, covid-19, determinants of virtual teams of performance and the benefits and challenges of virtual teams. The studies used were published between 2016 and 2021. Most of the used sources were published in 2020 and 2021 since it is during this time that covid-19 wreaked havoc in the world. Before the sources were used, they were tested for reliability and validity. All the findings and conclusions made in this research were obtained from the sources.

### **4. Findings**

From the laborious and extensive literature review, the various factors that have led to the proliferation of virtual teams are globalization, technological advancement, epidemics, war, crisis, pandemics, and the need to have global teams. Thus, the concept of virtual teams has been evolving over the years and decades. Some people call the virtual teams remote teams, dispersed teams, global teams, and computer-based teams, among other references. Some business organizations had not embraced the virtual teams until the covid-19 came knocking on their door.

They had to be aligned with the health guidelines and preventive measures to eradicate the vastly spreading virus. As a result, many companies have embraced virtual teams while others have increased the extent of virtual teams. Outright, the virtual teams have both benefits and challenges. From the various kinds of literature reviewed, virtual teams' challenges and importance during the pandemic can be obtained. It is worth noting that nearly all the sources agree that the benefits and challenges are premised on factors such as trust, cohesion, leadership, communication, empowerment, the geographical distance between the team members, cultural diversity, and the interdependence of tasks (Morrison-Smith and Ruiz, 2020). Business organizations have the arduous task of creating a conducive environment to ensure that the challenges of virtual teams do not overpower the advantages.

#### **4.1. Challenges**

One of the striking challenges is miscommunication or the lack of communication thereof among the team members. Undoubtedly, communication is key in business operations and in the prompt and efficient tasks execution. Although there are digital tools that help the team members to stay connected, the tools lack the personalization that comes with face-to-face interactions. Thus, emails and text messages can be misinterpreted as they lack the nonverbal cues, tone, and body language of in-person conversations. Another challenge occurs from the mode of communication that the various

team members prefer. Some members prefer to be contacted through an email, when others would rather choose messaging. Managers must overcome all the barriers to effective communications among the virtual teams.

Another obstacle is mistrusting your colleagues. The organizations have to face this major trouble and challenge while working with virtual teams. The organizations might feel like the virtual teams' output and productivity does not match the money they spend on the teams. This is a fertile ground for distrust (Jaakson et al., 2018). In other instances, a co-worker can feel like they are working more than the others, yet they are being remunerated the same. For instance, a worker can notice that their colleagues do not respond quick as they do. This makes them feel withdrawn and defensive. This is an impediment to virtual teams and the entire performance of business organizations.

In the wake of the pandemic, virtual teams are troubled by distracting environments. Many people are at home, including children, as a consequence of schools closing. When the teams are required to work from home, some of the team members may attend to their kids' needs while they should be working. The distraction usually diminishes the efficiency of workers who usually perform well (Besley and Stern, 2020). In extension, the performance of the business organization is affected.

Another challenge facing global teams is the interdependence between tasks. If any of the workers face unforeseen challenges or commitments, then it means that the work will be halted. For the tasks to be done, then all the members have to be scheduled for the same timetable as others. Outright, during the pandemic, there are many unforeseen occurrences. Some people contract the virus and fall ill, and that adversely affects their productivity and availability. Also, a member of a virtual team can be held up attending to their loved ones who have suffered from the effects of the pandemics. Evidently, the pandemic increased the rates of deaths and illnesses, and thus people are more likely to have ailing concerned ones more often.

#### **4.2. Benefits of Virtual teams during the pandemic**

Virtual teams have played a critical role in ensuring that businesses adapt to new situations that the covid-19 pandemic has occasioned. Undoubtedly, the pandemic changed many implications that affect businesses operations. These changes were witnessed when there was a ban on international travel and flights, lockdown so that people do not move from one place to the other, and the disruption of the global supply chains (Guan et al., 2020). Organizations that did not have virtual teams before the pandemic faced it rough, and they had to stall some of the operations that had been affected by the pandemic. However, for organizations that had virtual teams in place, their operations were not stalled. This gave such businesses a competitive advantage over their competitors who did not have virtual teams.

Virtual teams facilitate the organizations to attract global talent. This means that organizations are not limited to hiring and recruiting workers who are not skilled or experienced while there are others who are talented, skilled, and experienced far away. This helps the organizations to benefit from industrious, efficient, and hardworking workers (Collings, 2014). Thus, the overall performance increases. The pandemic has adversely affected businesses, and business organizations need to have the best human resource to rise above the shackles of the pandemic. Virtual teams will bridge the geographical boundaries and allow businesses to hire talented workers from any part of the world. This will help businesses recover from the ills of the pandemic. The efficiency brought about by the virtual teams creates value for the organizations.

Another benefit of virtual teams during the pandemic is that businesses benefit from globalization. Globalization has made it possible for businesses to outsource raw materials from cheaper places and sell their products to other markets. Therefore, businesses have been able to tap on globalization to increase their market and lower the cost of production. Virtual teams help in the communication and planning of operations in various countries and regions where business organizations sell and market their products and suppliers of raw materials. The pandemic has shown people that the world is interconnected (Futures, 2021). Otherwise, how would one explain the spread of the virus from China to nearly all corners of the world? Thus, even businesses should spread their products from one corner of the world to the others. Virtual teams are one of the tools that will help them soar to large markets and overcome the adverse effects of the pandemic.

## 5. Conclusions

The benefits and drawbacks of virtual teams can be assessed from three points of view: organizational, individual, and cultural. This article sums up alternate points of view on the benefits and drawbacks of the virtual group and fills in as prepared reference for our pursuers.

We first present the advantages that we found beneficial for having virtual teams. The greatest benefit an organization has by implementing virtual teams is the cost savings. The organization can reduce or better, eliminate huge costs on land, office spaces, utilities bills and leaders' movement. Numerous organizations relocate their operations to the low-cost zones. In this way production cost additionally diminishes with the decreased unrefined material cost, functional expenses and lower wages of the representatives in these geographic areas. Attracting global talent is another great benefit. Virtual Teams enable organizations to search for ability past their nation. This unites the specialists and experts from across the globe to cooperate on the objective. Expanded information sharing and more noteworthy advancement occurs as organization's human resources share their comprehension of worldwide and nearby business sectors just as best strategic policies. Higher productivity means higher profits. Members of virtual teams will quite often have higher spotlight on the job that needs to be done. The individuals don't need to manage the organization bureaucracy which slows down the decision-making process. This improves the efficiency which shows as higher benefits. Since the individuals are spread across different time regions, there could be diverse group engaged on a similar task all day, every day of the week, so when one part rests there will be another elsewhere who might begin work where the previous had left. This abbreviates the item improvement time just as quicker reaction time to requests in both worldwide and local markets. If we see at a bigger cultural level, virtual teams have set out more current open doors for individuals who are less versatile and reluctant to move due to either family necessity or physical form. Presently any assignment that doesn't need the actual presence of an individual and which can be upheld by correspondence innovation and communication technology tosses a chance for some. This could open up to newer opportunities for every person who wasn't able to show their talent before.

We also did find some weaknesses of the virtual teams. The cost of technology can be one of them. The effective working of virtual teams is upheld by the proficient utilization of numerous correspondence and communication technologies like texting, emails and video-conferencing, among others. One device can't offer the total help. The expense related with these establishment and upkeep apparatuses is minimal on the higher side. Another issue that leads to a number of conflicts and contradictions between the individuals from virtual teams is the social and cultural contrasts. For example, while an European would draw up a direct report telling a terrible circumstance, this would be seen as inconsiderate by a Indian individual from the group. This would prompt struggles, conflicts, doubt and troubles in productive joint effort which is so imperative for the accomplishment of virtual team working. These difficulties are additionally encouraged by the shortfall of non-verbal signals so natural for up close and personal collaborations. So managing cooperation, distrust, conflicts and disputes is an important part for the wellbeing of the organization. Many individuals from virtual teams are antagonistically impacted by the absence of actual collaborations and social isolation may become a drawback from working in virtual teams. The majority of the correspondences in virtual climate is task-situated. In the present society where occupation is a significant social power for the majority of us on the grounds that a considerable lot of our working environment partners additionally comprise our dear companions, this gives a not-great sensation of social confinement. This thus counter-impacts usefulness just as prompts pressure.

This small, but important number of detriments can be overwhelmed by following an alternate leadership and management approach, trainings, more prominent job clearness and powerful correspondence techniques. Organizations both big or small ones, are receiving the rewards of virtual teams for quite a while. It has been an all around perceived reality that virtual team is definitely not a passing tide yet it is digging in for the long haul.

The sources that have been used for this research are scholarly and peer-reviewed. Thus, the findings of this research can be used in other research that concern the same topic. However, the researchers used some sources that did not address the pandemic in the analysis. This has limited the study but has not affected its impact. The parting shot is that businesses should leverage virtual teams to overcome the challenges visited on them by the covid-19 pandemic.

Through the extensive review of virtual teams literature, the researcher concludes that virtual teams is an arising trendy pattern with adherents across all business areas. Very much like some other recent fad, virtual teams additionally need to be scrutinized by researchers to gauge its benefits and impediments prior to being acknowledged by the experts.

## 6. References

- Abarca, V.M.G., Palos-Sanchez, P.R. and Rus-Arias, E., 2020. Working in virtual teams: a systematic literature review and a bibliometric analysis. *IEEE Access*, 8, p.168923-168940.
- Besley, T. and Stern, N., 2020. The economics of lockdown. *Fiscal Studies*, 41(3), p.493-513.
- Collings, D.G., 2014. Integrating global mobility and global talent management: Exploring the challenges and strategic opportunities. *Journal of World Business*, 49(2), p.253-261.
- Feitosa, J., & Salas, E., 2020. Today's virtual teams: Adapting lessons learned to the pandemic context. *Organizational dynamics*, 100777, Advance online publication.
- Futures, B.L.I., 2021. Being Interconnected at the Time of COVID-19 Pandemic: A Call to Regain the Sense of Community. *Journal of Futures Studies*, 25(3), pp.39-48.
- Garro-Abarca, V., Palos-Sanchez, P. and Aguayo-Camacho, M., 2021. Virtual Teams in Times of Pandemic: Factors That Influence Performance. *Frontiers in Psychology*, 12, p.232.
- Guan, D., Wang, D., Hallegatte, S., Davis, S.J., Huo, J., Li, S., Bai, Y., Lei, T., Xue, Q., Coffman, D.M. and Cheng, D., 2020. Global supply-chain effects of COVID-19 control measures. *Nature human behavior*, 4(6), p.577-587.
- Jackson, K., Reino, A. and McClenaghan, P.B., 2018. The space between—linking trust with individual and team performance in virtual teams. *Team Performance Management: an international journal*. 25(1-2), p. 30-46
- Klonek, F.E., Kanse, L., Wee, S., Runneboom, C. and Parker, S.K., 2021. Did the COVID-19 Lock-Down Make Us Better at Working in Virtual Teams?. *Small-Group Research*.
- Deloitte, 2020. Leading Virtual Teams. *Human Capital*
- Morrison-Smith, S. and Ruiz, J., 2020. Challenges and barriers in virtual teams: a literature review. *SN Applied Sciences*, 2, p.1-33.
- Siebdrat, F., Hoegl, M. and Ernst, H., 2009. How to manage virtual teams. *MIT Sloan Management Review*, 50(4), p.63.
- Venn, F., 2016. *The oil crisis*. 1<sup>st</sup> ed., Routledge.
- Watad, M.M. and DiSanzo, F.J., 2000. Case study: the synergism of telecommuting and office automation. *MIT Sloan Management Review*, 41(2), p.85.