

# Traditional and Virtual Teams during the COVID-19 Pandemic

Subjects: Social Issues

Contributor: Elena-Mădălina Vătămănescu, Madalina Stratone, Laurențiu-Mihai Treapăt, Mihaela Rusu

The social distance imposed by the COVID-19 pandemic alongside the development of technology has positively affected people's personal lives and the every-day working manner and environment. Currently, people can communicate and work together remotely, from different locations, cities, or even countries, very similar to the way they would work while sharing the same office. The world displays a brand-new face people have never seen before, while the business world encounters challenges never experienced until now (i.e., the imperative to reimagine work conditions in order to create a productive climate for all parties involved via a mixture of face-to-face and virtual interaction). As the result of the global virtualization trend, new types of organizations have emerged, being composed of work groups aiming to promote innovation and that have the purpose to increase the capacity of work, and the phenomenon has had an unexpected rhythm since the outbreak of the pandemic. The digitalization of the work processes has enabled remote work and the building of virtual teams in various fields of activity and for all types of companies and entities. Thus, the virtual society started to expand the global electronic space and information became more and more available through technology. Getting in contact with coworkers and leadership and sharing work and results remotely is no longer a challenge, but business as usual. The term "virtuality" has a large range of meanings in the specialized literature. The global dimension of virtualization is permanently compared to the features of the local and regional traditional teams, when it comes to the dimensional and relational aspects, involving geographical dispersion and electronic communication and interconnection. New typologies of organizational structures and the new forms of organizations emerged (i.e., organizational structures availing more flexibility in terms of schedule, location, co-presence), most of them being a virtual response to a present, more complex business environment, impacted by turmoil and uncertainty, thus creating new ways and means for both people and organizations worldwide to benefit from fresh opportunities (i.e., a better work-life balance, intercultural and transnational teamwork and coordination, etc.).

Keywords: traditional teams ; virtual teams ; COVID-19 pandemic ; team culture ; leadership ; communication

---

## 1. The Perceptions of Team Culture Strength in Traditional versus Virtual Teams

Unlike social groups where the members can influence each other's work during their normal interaction, teams are defined as more specialized groups, having a strong ownership and commitment that builds the collective identity in its whole <sup>[1][2][3]</sup>. Other theorists describe how the behavior of the teams is different from the behavior of a group, defining the teams as groups of people with a certain structure, working to achieve targeted common goals in a coordinated interaction <sup>[4]</sup>. The cooperation among the members of both traditional and virtual teams is characterized by the dependency everyone is experiencing in relation with their colleagues on the assumed methodology to accomplish the assigned work and achieve the targets <sup>[5][6]</sup>. In this vein, some communicational and interactional patterns and processes come forward as robust indicators of team culture, leadership perception, diversity management, and objectives achievement.

Pauleen and Yoong <sup>[7]</sup> focused on various papers analyzing the aspects of building relationships in the context of using information and communication technologies (ICT), and underlined that a conclusive challenge is to work at linking the individual culture of each team member into the team culture. Thomson <sup>[8]</sup> described the culture of a team as being a "reflection of the organization's culture"; thus, it is very important to develop the culture of a team, regardless of whether it is similar to the organizational culture or different from it, as a common culture unites the members of the team, conglomerates the working cell, develops a feeling of belonging, and enhances morale by increasing acceptance, tolerance, and understanding towards and among all the members. The main asset resulting from all these efforts is accepting the diversity in its entirety, an aspect of the highest importance for the team and for the targeted results.

The members of a work team, especially of virtual ones, must constantly redefine their positions, re-arrange the roles, and adjust their relationships and ways of collaborating with each other in order to negotiate a common ground and agree upon the tasks' boundaries, responsibilities, and personal duties <sup>[9]</sup>. Fostering a team culture is very important for team viability, and in the absence of a common history, difficulties may occur in assigning tasks and responsibilities, planning team development, and locating expertise, difficulties that can be overcome with trust, commitment, and good interpersonal and working relations among the members <sup>[5][10][11]</sup>. Rules become common values, trust is more solid, the relationships among members become stronger, and they start to rely on each other and accept challenges, steadily reifying team cohesion <sup>[12]</sup>.

The team leader who is coordinating the people involved must be skilled, trained, and experienced in facilitating communication and cultivating a feeling of belonging. They have to promote and develop values like cooperation, support, mutual understanding, and even empathy and tolerance when the pressure inside the team reaches high peaks, before deadlines, or in difficult moments <sup>[13][14]</sup>. All these have to build a certain degree of confidence and trust among the members of the respective team, as Nemiro et al. <sup>[15]</sup> showed, as the best way to develop "a common team identity is to increase team members' confidence in each other and the team as a whole", to enhance the feeling of "common membership" <sup>[16]</sup> (p. 93). Team leaders should also attach the proper attention to sensitive topics such as anti-discrimination and wages; working in virtual teams, with members from different countries, requires awareness of the legislation, understanding concepts (such as equal treatment, direct and indirect discrimination, equal pay for work of the same value, remuneration of each member), and the ability to handle the cultural barriers by increasing awareness on the anti-discrimination policy in labor law legislation and on cultural diversity and its benefits <sup>[17][18][19]</sup>.

Regardless of whether speak about traditional teams or virtual teams, each member has to fully understand the roles, tasks, and targets that are assigned to them for the team to be effective and run in good conditions. This could be a difficult task to achieve sometimes as, particularly for the case of the virtual times, face-to-face meetings would be recommended at least at the beginning of a project but given the space and time limitations, doubled by the budget restrictions, this is not always possible. As Fisher and Fisher <sup>[20]</sup> pointed out, "creating a team culture that is supportive and productive is especially helpful in teams with only minimal face contact", a statement that highlights the real importance of face-to-face kick-off meetings. However, even if working with virtual teams requires more management and coordination efforts given the reasons previously explained, a good and efficient start can overcome such disadvantages and difficulties <sup>[13][21][22]</sup>.

## **2. Positive Leadership Perceptions in Traditional versus Virtual Teams**

The individual profile, background, education, skills, and experience of the team members can be decisive when starting a virtual team. For efficiently managing such situations, choosing a qualified team leader is a must, because only a person having previous experience in working with people can handle existing differences and eventually is able to turn them into advantages and opportunities when creating an identity and a common culture of the team involved in a project they manage <sup>[14][22]</sup>. Moreover, understanding the cultural background of each person inside a team will "enable any leader to more effectively address communication and behavioral differences that arise in virtual teams" <sup>[23]</sup> (p. 277), generating trust and confidence among the members. In line with Jordan and Adams <sup>[24]</sup> (p. 2), any kind of diversity, be it disciplinary, educational, cultural, or even if it refers to geographical areas or to the individuals' ethnicity, age, or gender, it "serves to maximize the number of different viewpoints, approaches and frames of mind".

Kayworth and Leidner <sup>[25]</sup> stated that effective leadership basically translates the perception the members of the team have regarding the effectiveness of communication, in how satisfied they are about the way the communication is performed inside the team, and in the team leader's ability to define and assign proper roles and responsibilities. Fisher and Fisher <sup>[20]</sup> clearly listed distinct roles a team leader should assume when coordinating a team: to be a living example, a role model for his subordinates, to be a coach, ready to help the other members to improve their working skills, abilities, and the necessary competencies according to the requirements of the activities they are performing, to be a good business analyzer, able to turn the chances and challenges into opportunities, to be a barrier buster, by running interference for the team, to be a facilitator and offer all the necessary tools, resources, and information to the team members in order for them to successfully provide the required deliverables of the project, and to be a results catalyst, helping his team members in their work for achieving the expected results and for continuously improving their work performance. Further, Duarte and Snyder <sup>[26]</sup> pointed to four competences which are critical for coordinating virtual teams in an effective and efficient manner and, here, the authors mentioned communication, establishing the expectations and resources allocation, and modeling the required behaviors inside the team.

Compared with the dynamics apposite for the traditional teams, in virtual teams, changes happen more frequently while negatively impacting the processes running inside the team <sup>[27]</sup>. Working in a virtual team involves more dynamic and flexible forms of organizing the activities such as alliances, outsourcings, offshoring, and temporary project-based work. The many changes that might normally appear in a virtual team attract a lot of vulnerabilities which call for a thorough leadership approach <sup>[10][13][14]</sup>. A team leader should acknowledge such inconveniences to mitigate them in due time, focusing on building “relationships among team members”, and also on implementing and developing “team processes” <sup>[28]</sup> (p. 3). Additionally, team leaders have to prove their abilities to manage interaction and communicational issues, to support individuals, and to keep the team together by being open to discussions and to problems solving and by providing a clear picture of the common objectives and goals <sup>[14][29][30]</sup>.

In traditional teams, where the interaction happens face-to-face, leadership is a key aspect that influences the individuals' attitudes and behaviors and at the “team level impacts not only team processes and outcomes but also individual effectiveness” <sup>[31]</sup> (p. 3). On the other hand, as Hoch and Kozlowski <sup>[32]</sup> underlined, at the entire team's level, in case of the virtual teams, leaders are involved in more than just creating, developing, and designing the processes within: they are also in charge with managing and monitoring the performance of their teams. For creating an effective and efficient virtual team, “both leaders and members of virtual teams, even if experienced with face-to-face teams, need enhanced competencies to be effective” <sup>[33]</sup> (p. 17). Moreover, the team leaders coordinating virtual teams have to perform all the necessary tasks to “create, reinforce, and maintain trust between the members of their teams as well as between themselves and their team members” <sup>[28]</sup> (p. 3), as the basic value of a team must be the trust, in the absence of which nothing would be achievable. The leaders of the virtual teams have a different activity compared with the ones of the traditional teams. They have to play both roles, i.e., of team leader and of team member, and for this reason they must have specific competencies and abilities required by the remote way of working, namely technological proficiency, intercultural skills, remote leaderships skills, etc. <sup>[11][21]</sup>.

### **3. Team Diversity Approaches in Traditional versus Virtual Teams**

Nowadays, a main feature of many work teams is diversity, as the members may come from different regions and speak different languages. Additionally, the cultural diversity, the customs, and the values that depict a virtual team in its entirety are to be seen as pillars and, at the same time, approached somehow as integrative factors in a heterogeneous group of people, as Oliveira and Scherbaum <sup>[34]</sup> also explained. Consequently, these aspects have to be managed accordingly, so as to increase the potential and the performance of the teams, be they traditional or virtual. This is a very important aspect to be considered as, in a high diversity environment, communicational barriers and all sort of conflicts may occur, even though a common language is used for communicating at work.

To really create a team that functions as one body and achieves the best results in terms of efficiency and effectiveness, the team leader must create an identity for the team as well as a common culture and the feeling of belonging. In this regard, identity is one of the main pillars and plays “a crucial role in communication because knowledge of those with whom one works and communicates is necessary for understanding and interpreting interaction styles”, according to Beyerlein <sup>[21]</sup> (p. 48).

Nowadays, people's perceptions towards different cultures have changed and evolved, currently showing a better understanding and openness to diversity. Virtual teams imply working with people from all over the world, which belong to different environments and have personal values deriving from their cultures and traditions, and also different ways of working and approaches <sup>[10]</sup>. In this context, attention to detail is essential and consequently, the team leader has to find efficient ways and means to accommodate the members of the team with each other and inside the virtual team, as a whole. This is a very important issue as only in this way can further conflicts, misunderstandings, or stereotypes can be avoided later on <sup>[23]</sup>. The language used is very important for a good and comprehensive communication and understanding; slang words and street language should be avoided in all cases, and common words are preferable to be used for understanding the assigned tasks fully and correctly <sup>[35]</sup>.

Misunderstandings in terms of values, approaches, and communication errors may occur, negatively affecting the results and the performance of the respective team <sup>[14][29][36]</sup>. It is thus advisable to encourage values alignment and reconciliation to grant the comfort and the pride for its members and the feeling that they belong here, and that they can find trust and mutual support. As Levi <sup>[23]</sup> showed, if handled improperly, diversity can ruin the cohesion and communication at all levels inside the team, as the members may develop connections with one another based on the similarities they share and prefer to interact only with similar peers to a certain extent. In this respect, face-to-face meetings taking place within traditional teams proved to be major prerequisites for strengthening the bounds that keep the team together <sup>[37]</sup>.

## 4. Communication Effectiveness in Traditional versus Virtual Teams

Good communication is a prerequisite of any successful relationship and has to be accomplished by using a certain channel and a common language, unanimously accepted by all the participants, as, in order to build an efficient communication, the transmitted message has to be decoded and understood by both the issuer and the recipient <sup>[38][39]</sup>. Pursuant to Levi <sup>[23]</sup>, in the case of the virtual teams, communication represents one of the core activities, facilitating cooperation, triggering new ideas, and stimulating creativity and the out-of-the-box thinking among the members. Working and communicating together in an efficient manner, the team will be able to adapt “to the changes in the organizational culture, because it encourages adequate participation of workers” <sup>[40]</sup> (p. 5) and to efficiently achieve the targeted goals and objectives.

In the case of the virtual teams, the technology of information and communication is a must for an efficient cooperation and coordination of the common efforts in accomplishing the targeted goals <sup>[10][13][27][41]</sup>. Team dispersion directly influences the dynamics of the communication among team members (i.e., co-workers) and imprints a different trademark to the coordination, clarification, and edification processes <sup>[42][43]</sup>. Gibbs et al. <sup>[44]</sup> (p. 4) proposed arguments in favor of computer-mediated communication, positing that “the degree of information value (e.g., communication richness) and synchronicity of communication technology” should be approached as “key elements of virtuality”. Likewise, as Purvanova <sup>[45]</sup> explained, if the team members succeed in increasing the exchange of social information, technology can be turned into an opportunity. Yet, remote communication is less personal and does not provide the opportunity for the members of the same team to get to know and to understand one another better, to create stronger bonds and relations, but it also can prevent the eventual preconceptions towards the physical features or the ways of behaving some colleagues might have <sup>[11][46]</sup>. In other words, remote communication is mostly soulless and objective while face-to-face communication might involve personal bonds like affinities and friendships in addition to work cooperation, facts that might lead to subjective approaches inside a team.

Krawczyk-Bryłka <sup>[36]</sup> (p. 2) showed that the language barriers can represent a real issue, resulting in communication breakdowns and, possibly, in a lack of self-confidence, as “language barriers intensify isolation and frustration”. Consequently, tasks must be assigned also considering this aspect for enabling fruitful cooperation among peers and diminishing the negative impact of the language barrier. Klitmøller et al. <sup>[47]</sup> posited that, when choosing communication tools, the decision makers have to keep in mind the language skills of each member. If deal with less proficient people, then textual communication is preferable, giving the possibility to re-read, re-think, and correct possible mistakes <sup>[47]</sup>. Language skills are very important when working in a virtual team, as, in the absence of good linguistic competencies, the effectiveness and the efficiency of the entire team will suffer on one hand, while on the other hand, it will negatively affect the communication and the trust that has to be permanently cultivated as, according to Child <sup>[48]</sup>, building trust can reduce the cultural differences and distance that can occur in any virtual team. Trust can enhance the motivation and facilitate a better flow of information, thereby increasing the performance and avoiding and fixing the possible conflicts that might normally occur when many people work together <sup>[48]</sup>. Communication issues might occur especially in large-sized teams as have explained before, and thus subgroups might be formed, in most of cases affecting the cohesion of the team as a whole <sup>[16]</sup>. On the background of this lack of communication that can generate misunderstandings when it comes to tasks and responsibilities, and particularly when the team does not have a well-formed identity, interpersonal conflicts are also likely to appear.

In contrast, for the traditional teams, technology represents just a tool that supports face-to-face work, for example, when delivering presentations during meetings or working on shared projects, and also in electronic communication and so on. In this way, the members of such teams could share their work and the necessary data and information and exchange views and opinions as an additional channel to the face-to-face interactions. Nevertheless, direct communication remains the backbone of an efficient and effective cooperation within the traditional teams, whereas online communication has become instrumental in the virtual teams <sup>[49][50]</sup>.

## 5. Objectives Achievement in Traditional versus Virtual Teams

Beyerlein and Harris <sup>[23]</sup> (p. 40) defined collaboration as “the collective work of two or more individuals where the work is undertaken with a sense of shared purpose and direction that is attentive, responsive and adaptive to the environment”. Collaboration is the main means of accomplishing something together, to make a change, to progress, and to benefit from extended human capital acting in a joint way to achieve a common goal, as it is well known that the teamwork makes a difference when it comes to synergy, potential, effectiveness, and efficiency.

Teams represent groups of individuals who are expected to perform relevant tasks by sharing common goals, socially interacting, and by establishing task interdependencies [51]. Wageman, Gardner, and Mortensen [52] described teams as a “bounded and stable set of individuals interdependent for a common purpose” (p. 303). In this light, according to Dunham [53], the affiliation to a group of individuals who are gaining experience on how to cope, interact, and work together, regardless of the type of activity, project, or the entity they are activating within, creates the prerequisites for growing personal success and collective survival and also enhances objectives achievement and organizational sustainability [53]. In this front, Wu and Cormican [54] brought to attention the responsibilities a team leader must take in relation with the team they coordinate, namely to organize their team in accordance with the developed activity and the targeted results, to identify and articulate clear goals and objectives, to assign tasks, duties, and responsibilities to suitable members, to follow-up the plan and make all the necessary adjustments as necessary and inform the others accordingly, to assess the performance of the members part of their team and provide feedback, to manage and allocate the necessary resources for running the project in good conditions, to facilitate the exchange of data and information, to encourage the members to grant support to one another, to involve themselves in solving the issues and conflicts that might occur during day-to-day activities, and to structure and conduct effective and efficient teamwork.

There are similarities when it comes to the problems that both the traditional and virtual team happen to face. Scholars indicated that among the five common problems that people are usually experiencing when working in a team, here can mention the lack of commitment, productivity losses, poor communication, interpersonal conflict, and poor leadership [53]. Thus, here can speak about a lack of commitment when only a few members of the team are fully involved in the work, the rest not following the pace of the others and displaying a detached attitude. In such cases, the productivity decreases, particularly when this unwanted situation overlaps with a poor structure, bad planning, or a weak decision-making process or, when there are all sort of conflicts and misunderstandings about the members' responsibilities, the team's objectives and deliverables. A reasonable solution would be defining clear roles and tasks inside the team, building trust among the members, peers, or leaders, and encouraging efficient and transparent communication at all levels [55].

Hoch and Kozlowski [32] affirmed that the shared leadership is a style of leading according to which the tasks and responsibilities are shared among the members of one team, regardless of whether it is traditional or virtual, in this way exerting a mutual influence upon one another and promoting a collaborative decision-making process. Na Chen [56] explained that, through a shared leadership, the feeling of equality and equity is preserved inside the team, particularly when speaking about virtual teams, so it can prove itself to be the most favorable leadership model, though a central figure must still exist, a focal point to whom the rest of the members still have to report to: a team leader, namely “the person who is managing the boundary, feeding the team's accomplishments to the organization and to the individuals' function or line managers” [57] (p. 5). In addition to the necessary resources that are granted to the team for running in the day-to-day work in good conditions, the members must also “have the desire and willingness to coordinate their efforts to work collaboratively” [20] (p. 183).

Nevertheless, when working remotely, it is not always easy to support, control, stimulate, or motivate the team, aspects that might turn into real challenges for the project. According to Jones et al. [46], there are several practices the team leaders can make use of, such as good and frequent communication through which colleagues can be informed and updated about the new priorities, challenges, and the eventual changes in the organization they are working for, fairness and openness towards their subordinates while avoiding hurting their feelings and egos, transmitting clear, direct messages and giving feedback using a friendly way of speaking and, not least, availability and accessibility, namely the team leaders to always be there for their people, whenever they are needed [46].

---

## References

1. Giske, R.; Rodahl, S.; Haugen, T.; Hoigaard, R. Shared Mental Models, Role Ambiguity, Team Identification and Social Loafing in Elite Sports Groups: A Mediation Analysis. *Sport Exer. Psychol. Rev.* 2017, 13, 2–12.
2. Wesner, B.; Smith, A.; Austin, T. Ready for Action: Developing Classroom Teams to Prepare Students for the Business World. *Admin. Iss. J. Connect. Educ. Pract. Res.* 2018, 8, 119–137.
3. Khoshnoodi, A. The Virtual Teams. 2018. Available online: <https://www.researchgate.net/publication/326986168> (accessed on 15 January 2022).
4. Forsyth, D. *Group Dynamics*, 3rd ed.; Belmont: California, CA, USA, 1999.
5. Florea, L.; Stoica, M. Exploration of Team Mental Model Characteristics to Identify Opportunities and Hindrances in Global Virtual Teamwork. *Manag. Rev.* 2019, 30, 93–119.

6. Huettner, B.; Brown, M.K.; James-Tanny, C. *Managing Virtual Teams: Getting the Most from Wikis, Blogs, and Other Collaborative Tools*; Wordware Publishing Inc.: Plano, TX, USA, 2007.
7. Godar, S.F. *Teaching and Learning with Virtual Teams*; Information Science Publishing: Hershey, PA, USA, 2000.
8. Thomson, I. *Making the Team: A Guide for Managers*, 2nd ed.; Upper Saddle River: New Jersey, NJ, USA, 2004.
9. Morley, S.C. An Analysis of Virtual Team Characteristics: A Model for. *J. Tech. Manag. Inn.* 2015, 10, 189–203.
10. Stratone, M.E.; Vătămănescu, E.-M. The Human Capital Dimension within the Organizational Equation. *Gliding Between Virtual and Traditional Teams. Manag. Dyn. Know. Econ.* 2019, 7, 447–467.
11. Carozzo-Todaro, M.E.; Pinheiro-Carozzo, N.P.; Machado, A.D. From Face-to-Face to Virtual Teams: Work Organization During the Covid-19 Pandemic. *Teor. E Prática Em Adm.* 2022, 12, 1–11.
12. Hurt, A.C.; Trombley, S.M. *The Punctuated-Tuckman: Towards a New Group Development Model*; Texas A&M University: Texas, TX, USA, 2007.
13. Batirlik, S.N.; Gencer, Y.G.; Akkucuk, U. Global Virtual Team Leadership Scale (GVTLS) Development in Multinational Companies. *Sustainability* 2022, 14, 1038.
14. Vătămănescu, E.-M.; Alexandru, V.-A.; Gorgos, E.-A. The Five Cs Model of Business Internationalization (CMBI)—A Preliminary Theoretical Insight into Today's Business Internationalization Challenges. In *Strategica. Management, Finance, and Ethics*; Brătianu, C., Zbucnea, A., Pînzaru, F., Vătămănescu, E.-M., Eds.; Tritonic: Bucharest, Romania, 2014; pp. 537–558.
15. Nemiro, J.; Beyerlein, M.M.; Bradley, L.; Beyerlein, S. *The Handbook of High-Performance Virtual Teams—A Toolkit for Collaborating Across Boundaries*; Jossey-Bass: San Francisco, CA, USA, 2008.
16. Langer, A.M. *Information Technology and Organizational Learning—Managing Behavioral Change through Technology and Education*, 2nd ed.; CRC Press: Boca Raton, FL, USA, 2011.
17. Adamišin, P.; Šindleryová, I.B.; Čajková, A. Coronavirus vs. Real Cause of the European Economic Crisis—Comparing Slovak and German National Model Example. *Online J. Mod. New Eur.* 2021, 37, 78–101.
18. Skrabka, J. The moratorium on loan repayments during the Covid-19 Pandemic in Europe: A comparative analysis of loan moratoria in selected European countries. *Jur. Trib.* 2021, 11, 291–301.
19. Peráček, T. Human Resources and Their Remuneration: Managerial and Legal Background. In *Proceedings of the 13th International Scientific Conference on Reproduction of Human Capital—Mutual Links and Connection 2020*, Relik, Prague, Czech Republic, 5–6 November 2020; pp. 454–465.
20. Fisher, K.; Fisher, M. *The Distance Manager: A Hands-on Guide to Managing Off—Site Employees and Virtual Teams*; McGraw-Hill: New York, NY, USA, 2001.
21. Beyerlein, M.; Harris, C. *Guiding the Journey to Collaborative Work Systems: A Strategic Design Workbook*, 1st ed.; Pfeiffer: San Francisco, CA, USA, 2004.
22. Stănescu, D.F.; Zbucnea, A.; Pînzaru, F. Transformational Leadership and Innovative Work Behaviour the Mediating Role of Psychological Empowerment. *Kybernetes* 2021, 50, 1041–1057.
23. Levi, D. *Group Dynamics for Teams*; SAGE Publications, Inc.: Thousand Oaks, CA, USA, 2014.
24. Jordan, S.; Adams, R. Perceptions of Success in Virtual Cross-Disciplinary Design Teams in Large Multinational Corporations. *Codesign* 2016, 12, 2–14.
25. Kayworth, T.R.; Leidner, D.E. Leadership Effectiveness in Global Virtual Teams. *J. Manag. Inf. Sys.* 2015, 18, 7–35.
26. Duarte, D.; Snyder, N.T. *Mastering Virtual Teams: Strategies, Tools, and Techniques that Succeed*, 3rd ed.; Jossey-Bass: San Francisco, CA, USA, 2001.
27. Gibson, C.; Gibbs, J.L. Unpacking the Concept of Virtuality: The Effects of Geographic Dispersion, Electronic Dependence, Dynamic Structure, and National Diversity on Team Innovation. *Adm. Sci. Quart.* 2006, 51, 451–495.
28. Hacker, J.V. Trust in Virtual Teams: A Multidisciplinary Review and Integration. *Australas. J. Inf. Sys.* 2019, 23, 2–30.
29. Vătămănescu, E.-M.; Alexandru, V.-A.; Andrei, A.G. The Relational Leader. A Preliminary Framework for Corporate Intercultural Accommodation. In *Proceedings of the Strategica. Local Versus Global*, Bucharest, Romania, 29–30 October 2015; Brătianu, C., Zbucnea, A., Pînzaru, F., Vătămănescu, E.-M., Leon, R.D., Eds.; Tritonic: Bucharest, Romania, 2015; pp. 303–312.
30. Lin, C.-H.; Shih, J.-L. Analyzing Group Dynamics of a Digital Game-based Adventure Education. *Edu. Tech. Soc.* 2018, 21, 51–63.
31. Liao, C. Leadership in Virtual Teams: A Multilevel Perspective. *Hum. Res. Manag. Rev.* 2016, 27, 648–659.

32. Hoch, J.E.; Kozlowski, S.W.J. Leading Virtual Teams: Hierarchical Leadership, Structural Supports, and Shared Team Leadership. *J. App. Psychol.* 2014, 99, 517–535.
33. Berry, G.R. Enhancing Effectiveness on Virtual Teams. Understanding Why Traditional Team Skills Are Insufficient. *J. Bus. Comm.* 2011, 48, 4–20.
34. Oliveira, J.; Scherbaum, C. Effects of Activating Team Diversity Dimensions on Member Perceptions of Conflict, Trust, and Respect. *New Sch. Psychol. Bull.* 2015, 13, 21–30.
35. Wong, S.C.; Selvadurai, S.; Saxena, V.; Okal, M.A.K. Demographic Diversity and Salience of Nationality on Team Effectiveness in Information and Communication Technology (ICT) Small and Medium Enterprises (SMES). *e-Bangi* 2017, 14, 229–244.
36. Krawczyk-Brylka, B. Intercultural Challenges in Virtual Teams. *J. Inter. Manag.* 2016, 8, 69–85.
37. Orhan, M.R. Invisible, therefore Isolated: Comparative Effects of Team Virtuality with Task Virtuality on Workplace Isolation and Work Outcomes. *J. Work Org. Psychol.* 2016, 32, 109–122.
38. Huguet, L.; Sanouret, N.; Lourdeaux, D. Errare Humanum Est Simulation of Communication Error Among a Virtual Team in Crisis Situation. In *Proceedings of the 15th International Conference on Cognitive Informatics & Cognitive Computing, Palo Alto, CA, USA, 22–23 August 2016*; pp. 344–350.
39. Baltezarevic, V.N.; Baltezarevic, R. The Role of Communication in Intellectual Capital Management, Education and Employment Opportunities for Entrepreneurs; Faculty of Business Economics and Entrepreneurship: Belgrade, Serbia, 2013.
40. Baltezarevic, V.N.; Baltezarevic, R. Marketing, Business Law and Transformational Governance; Faculty of Economics and Entrepreneurship: Belgrade, Serbia, 2015; pp. 2–7.
41. Townsend, A.M.; DeMarie, S.M.; Hendrickson, A.R. Virtual Teams: Technology and the Workplace of the Future. *Acad. Manag. Exe.* 1998, 12, 17–29.
42. Shee-Mun, Y.; Lip-Sam, T. Temporal Dispersion Separation and Schedule Flexibility Impact on Job Satisfaction for Malaysian Virtual Teams. In *Proceedings of the International Conference on E-Commerce ICoEC, Kuching, Malaysia, 20–22 October 2015*; pp. 1–9.
43. Jiao, A.; Egorova, K.; Hahn, J.; Lee, G. The Effects of Spatial and Temporal Dispersion on Virtual Teams' Performance. In *Proceedings of the 24th European Conference on Information Systems (ECIS 2016), Istanbul, Turkey, 12–15 June 2016*; Paper 160. Available online: [https://aisel.aisnet.org/ecis2016\\_rp/160](https://aisel.aisnet.org/ecis2016_rp/160) (accessed on 12 January 2022).
44. Gibbs, L.J.; Kim, H.; Boyraz, M. Virtual Teams. In *The International Encyclopedia of Organizational Communication*; Scott, C.R., Barker, J.R., Kuhn, T., Keyton, J., Turner, P.K., Lewis, L.K., Eds.; John Wiley & Sons.: Hoboken, NJ, USA, 2017; pp. 1–14.
45. Purvanova, R. Virtual teams. In *The SAGE Encyclopedia of the Internet*; Warf, B., Ed.; SAGE Publications, Inc.: Thousand Oaks, CA, USA, 2018; pp. 912–914.
46. Jones, R.; Oyung, R.; Pace, L.S. Working Virtually: Challenges of Virtual Teams; IGI Global: Hershey, PA, USA, 2005.
47. Klitmøller, A.; Schneider, S.C.; Jonsen, K. Speaking of Global Virtual Teams: Language Differences, Social Categorization and Media Choice. *Pers. Rev.* 2015, 44, 270–285.
48. Child, J. Trust—The Fundamental Bond in Global Collaboration. *Org. Dyn.* 2001, 29, 274–284.
49. Stasi, C.E. Effective Communications in a Virtual Team. OUBS Alumni Careers Network Industry Insights: Created by Alumni for Alumni; The Open University: Milton Keynes, UK, 2013; pp. 1–7. Available online: [https://business-school.open.ac.uk/sites/business-school.open.ac.uk/files/files/Virtual%20Teams%20-%20Carlo\\_S%20-%20updated%20logo.pdf](https://business-school.open.ac.uk/sites/business-school.open.ac.uk/files/files/Virtual%20Teams%20-%20Carlo_S%20-%20updated%20logo.pdf) (accessed on 12 January 2022).
50. DaRos, J. Communication Efficacy Using Technology within. *USM Digit. Commons* 2016, 1–23. Available online: <https://digitalcommons.usm.maine.edu/etd/274> (accessed on 12 January 2022).
51. Özok, A.F.; Kozanoglu, O.; Özok, A.F. Takim Kompozisyonu Optimizasyonu İçin Bir Hedef Programlama Modeli. *J. Yaşar Univ.* 2009, 4, 1–25. Available online: <https://dergipark.org.tr/en/pub/jyasar/issue/19128/202986> (accessed on 9 March 2021).
52. Wageman, R.; Gardner, H.K.; Mortensen, M. The Changing Ecology of Teams: New Directions for Teams Research. *J. Org. Behav.* 2012, 33, 301–315.
53. Dunham, B.A. Working in Teams—Moving from High Potential to High Performance; Sage Publications, Inc.: California, CA, USA, 2015.
54. Wu, Q.; Cormican, K. Shared Leadership and Team Effectiveness: An Investigation of Whether and When in Engineering Design Teams. *Front. Psychol.* 2021, 11, 569198.

55. Acai, A.; Sonnadara, R.R.; O'Neill, T.A. Getting with the Times: A Narrative Review of the Literature on Group Decision Making in Virtual Environments and Implications for Promotions Committees. *Perspect. Med. Educ.* 2018, 7, 147–155.
56. Chen, N. Cooperation with Friends or New Encounters: Tie Strength and Shared Leadership Behaviors. *Soc. Beh. Pers.* 2017, 45, 573–582.
57. Serrat, O. Managing Virtual Teams. In *Knowledge Solutions*; Springer: Singapore, 2017; pp. 2–10.

---

Retrieved from <https://encyclopedia.pub/entry/history/show/52309>