

# THE USE OF TECHNOLOGY TO FACILITATE COLLABORATION AND INFORMATION SHARING IN HYBRID TEAMS

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## Abstract

*An analysis is conducted on the factors that impact the adoption of technology in hybrid teams. These factors include organisational culture, team dynamics, leadership support, training, and security concerns. Case studies from the real world provide insightful information about how technology solutions are implemented in a variety of organisational settings. In a division of a modern assembling organization (N = 170), we completed a two-wave overview to research the interpersonal organization impacts of hybrid work. Our discoveries show that when direction searchers and counsels had various perspectives on how simple technology was to utilize, the previous was less disposed to stay with the last option. Counsel searchers' expanded remote work hours had a more critical effect. The examination offers observational bits of knowledge into how representatives' impression of hierarchical correspondence technology, when harmonious, influence their capacity to support guidance networks while working in hybrid conditions.*

**Keywords:** Technology, Facilitate Collaboration, Information Sharing, Hybrid Teams.

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## 1. INTRODUCTION

The advent of hybrid teams, which are formed of members who are both physically present at the workplace and members who are located remotely, has become a prevalent trend that is redefining organizational structures in the modern landscape of work. Due to the paradigm shift that has taken place, it is necessary to conduct a comprehensive analysis of the tools and techniques that are utilized to encourage cooperation and information sharing within such dynamic teams. One of the most important aspects of this investigation is the essential role that technology plays in overcoming communication hurdles, spanning geographical boundaries, and improving the overall efficiency of hybrid teams. To preserve productivity, encourage creativity, and keep a cohesive work atmosphere, it is essential to have a solid grasp of the symbiotic relationship that exists between technology and collaboration. Since an ever-increasing number of organizations are taking on adaptable work game plans, this understanding is turning out to be

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progressively significant. The motivation behind this study is to explore the horde of features that are associated with the usage of technology to improve collaboration and information sharing in hybrid teams. The review tends to both the hypothetical establishments and the down to earth implications that are related with this evolving scene. The reason for this exploration is to make a critical commitment to the proceeding with conversation concerning the streamlining of hybrid team elements in the computerized period through a top to bottom assessment.

### 1.1. Facilitating Collaboration Meaning

The art of facilitating collaboration is organizing and directing individuals or groups to work together towards common goals. Fundamentally, facilitation is establishing a setting that encourages creativity, open communication, and teamwork. Competent facilitators are essential in organizing interactions, promoting inclusive decision-making, and handling conflicts in a constructive manner. They use communication strategies that work to encourage active listening and make all team members feel important. They also use technology to facilitate information sharing and improve collaboration. Finally, by promoting a culture of empowerment, creativity, and continuous improvement, facilitators help to create dynamic, high-performing teams where individuals co

## 2. LITERATURE REVIEW

**Cheng, X. (2016)** explained trust, which facilitates information sharing, is crucial to teamwork. In this work, we examine trust-building elements in hybrid teams that collaborate digitally and in person. We also provide a team trust development tool. They conducted instrument experiments with Chinese and Dutch student teams to explain exploratory outcomes. These data were analysed quantitatively and qualitatively. Finally, we analyse the trials to describe initial trust development in groups from both individual and group viewpoints in two cultural contexts.

**T. Afflerbach (2020)** found companies increasingly use virtual teams. Recently, hybrid virtual teams have grown, especially in Shared Services Organisations. Companies must overcome the obstacle to foster such teamwork. Virtual teams struggle to cooperate. Thus, Shared Services teams demonstrate the contextual issues most virtual teams face today: geographic isolation, subgroup creation, imposed communication technology use, and transient team makeup, all of which complicate interaction. It is unknown how the cooperation problem develops and how team members deal with distance, technology, and temporality in their daily job. Management control, the usual answer to the collaboration problem, is infamously problematic in this scenario due to virtual monitoring challenges. Thus, decentralised and constructive solutions, such as identification, trust, and peer monitoring, may be key to solving collaboration issues.

**Cousins (2007)** explored four problematic edges in hybrid teams: distance closeness, social consistency social variety, levelheadedness emotionality, and control-strengthening. Teams utilized three mental cycles to reference these incomprehensible edges: (a) incorporating to make

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collaborations between restricting pressures, (b) separating to explain differentiations and equilibrium compromises over the long run, and (c) polarizing to eliminate strains by utilizing one component to decrease the impacts of another. Polarizing processes-kept up with logical inconsistencies as dualisms, while coordinating and separating processes-kept up with logical inconsistencies as reliant dualities. Our discoveries show how chiefs impact mental cycles that strangely accentuate distance and closeness, social consistency and variety, realism and emotionality, and control and strengthening, progressing vital inconsistency the executives.

**PM Ralph (2022)** presumed that telecommuting, remote-first teams, scattered teams, and hybrid (part-remote/part-office) teams are visualized as the Coronavirus pandemic influences programming experts and organizations. Explore programming teams' and associations' remote and hybrid work hardships. This drawn out, member perception, constructivist grounded hypothesis concentrates on investigations what telecommuting means for programming advancement. This study created programming team coordination hypothesis. From office to home impacted programming team coordination. However, bunch attachment and correspondence improve, doubt, nurturing, and bricolage prevent participation. Unfortunate coordination prompts mistaken assumptions, help demands, low team fulfilment, and hazy obligations. The issues reduce project achievement and push specialists to progress from Scrum to Kanban. Our discoveries recommend that far off programming organizations can help execution by empowering teamwork and supporting family and childcare.

### 3. RESEARCH METHODOLOGY

#### 3.1. Participants

A global industrial manufacturing company's India HR department performed a two-wave study. 200 employees completed the surveys, with 92.5% in the first and 90.0% in the second. Response rates above 80% allowed independent networks for each wave. The ultimate sample was 170, with 25 leaving and 5 entering between surveys.

#### 3.2. Procedure

Two waves of employee interaction surveys were conducted before and after COVID-19. First wave examined employees' social relationships and communication technology use perceptions. In the second wave, employees rated convenience of use and turnover intention.

#### 3.3. Measures

The study examined advice-seeking ties by asking employees which colleagues they asked for help last week. A complete roster of colleagues with autocomplete was given to participants to avoid bias. A tie with  $j$  at time  $t$  was indicated by 1 in the network matrix, while no tie was shown by 0. Dependent variable: advice-seeking networks.

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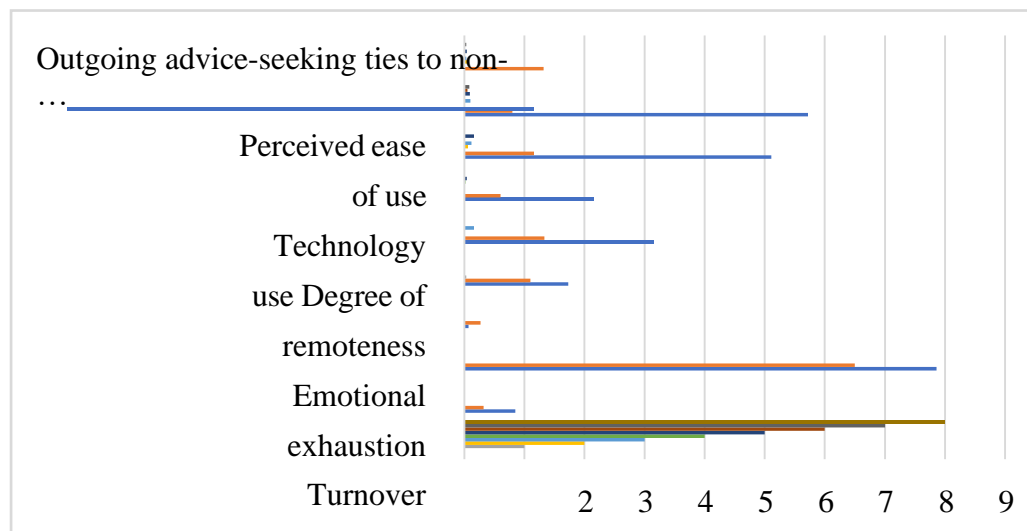
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## 4. DATA ANALYSIS

The examinations' variable means, standard deviations, and relationships are displayed in Table 1.

**Table 1:**Mean, Standard Deviation, and Variable Connections

S.No.	Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8
1.	Gender (Female)	0.85	0.32								
2.	Organizational tenure	7.86	6.50	−0.01							
3.	Organizational rank	0.07	0.27	−0.05	0.26**						
4.	Turnover intention	1.73	1.10	0.03	−0.10	−0.10					
5.	Emotional exhaustion	3.15	1.33	−0.02	−0.06	0.16	−0.07				
6.	Degree of remoteness	2.16	0.60	−0.03	−0.04	−0.04	0.02	0.04			
7.	Technology use	5.11	1.16	0.01	0.06	0.12	−0.04	0.16	−0.01		
8.	Perceived ease of use	5.72	0.80	−0.04	−0.16	0.10	−0.05	0.09	0.05	0.08	
9.	Outgoing advice-seeking ties to non-respondents	0.50	1.32	−0.06	0.07	0.03	0.20**	0.04	−0.01	0.03	−0.07



**Figure 1:** Mean, Standard Deviation, and Variable Connections

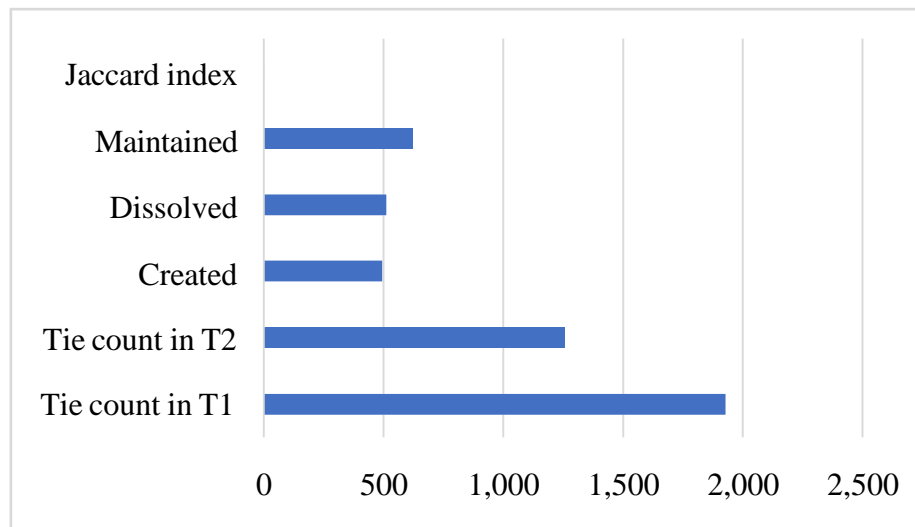
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The two-wave counsel looking for organizations' clear measurements and their disparities are shown in Table 2. The discoveries show that there were 1,926 guidance looking for ties in T1 and 1,254 in T2. Somewhere in the range of T1 and T2, 493 exhortation looking for joins were shaped, while 510 ties were cut off. When contrasted with an absolutely in-person working environment, representatives were less disposed to look for counsel from each other in the hybrid working environment, as confirmed by the general shrinkage of the guidance looking for network from T1 to T2.

**Table 2:** Counsel looking for connections shaped, maintained, and finished when the hybrid working environment change.

Tie count in T1	1,926
Tie count in T2	1,254
Created	493
Dissolved	510
Maintained	620
Jaccard index	0.36



**Figure 2:** Advice-seeking relationships formed, sustained, and ended before and after the hybrid workplace change.

## 5. CONCLUSION

Early in the project, when they must create a team, when they define expectations and make

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plans, and during the delivery phase, when they may decide whether or not to collaborate with their team members on future projects, are the main times when participants seem to build trust. Remote work was abruptly adopted as a result of the COVID-19 outbreak. Lessons from this shift have led to an expansion of remote and hybrid work beyond the traditional office work norms that have been in place for decades in several industries. Employees with a variety of work arrangements coexisting in an increasingly heterogeneous work environment is predicted to result from the trend towards greater flexibility in work locations. Our investigation of an organization that was moving from a fully in-person work model to a hybrid one yielded valuable insights on how the change affected information exchange as seen by the advice-seeking behavior of employees.

### REFERENCES

1. Afflerbach, T. (2020). *Hybrid virtual teams in shared services organizations. Progress in IS.*
2. Cheng, X., Yin, G., Azadegan, A., & Kolfschoten, G. (2016). *Trust evolvement in hybrid team collaboration: A longitudinal case study. Group Decision and Negotiation, 25, 267-288.*
3. Choi, S. Y., Lee, H., & Yoo, Y. (2010). *The impact of information technology and transactive memory systems on knowledge sharing, application, and team performance: A field study. MIS quarterly, 855-870.*
4. Cousins, K. C., Robey, D., & Ziggers, I. (2007). *Managing strategic contradictions in hybrid teams. European Journal of Information Systems, 16(4), 460-478.*
5. de Souza Santos, R. E., & Ralph, P. (2022, May). *A grounded theory of coordination in remote-first and hybrid software teams. In Proceedings of the 44th International Conference on Software Engineering (pp. 25-35).*
6. Denny, N., Mani, S., Nadella, R. S., Swaminathan, M., & Samdal, J. (2008). *Hybrid offshoring: Composite personae and evolving collaboration technologies. Information Resources Management Journal (IRMJ), 21(1), 89-104.*
7. Hu, X. E., Hinds, R., Valentine, M., & Bernstein, M. S. (2022). *"Distance Matters" Paradox: Facilitating Intra-Team Collaboration Can Harm Inter-Team Collaboration. Proceedings of the ACM on Human-Computer Interaction, 6(CSCW1), 1-36.*
8. Mirbabaie, M., Stieglitz, S., & Frick, N. R. (2021). *Hybrid intelligence in hospitals: towards a research agenda for collaboration. Electronic Markets, 31, 365-387.*
9. Neumayr, T., Jetter, H. C., Augstein, M., Friedl, J., & Luger, T. (2018). *Domino: A descriptive framework for hybrid collaboration and coupling styles in partially distributed teams. Proceedings of the ACM on Human-Computer Interaction, 2(CSCW), 1-24.*
10. Nissen, H. A., Evald, M. R., & Clarke, A. H. (2014). *Knowledge sharing in heterogeneous teams through collaboration and cooperation: Exemplified through Public-Private-Innovation partnerships. Industrial Marketing Management, 43(3), 473-482.*