



SOEN6841 : TOPIC ANALYSIS AND SYNTHESIS REPORT

# DISTRIBUTED TEAMS ARE FOUNDED ON EXPLICIT COMMUNICATION CHANNELS

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# Abstract

This case study, authored by Juan Pablo Buriticá, emphasizes the critical importance of explicit communication channels in managing distributed teams. As teams grow and spread across various locations, maintaining productivity and efficient management becomes a challenge. The study highlights the necessity of deliberate selection of communication types and channels, particularly in the context of the increasing popularity of remote work. The primary advantage of such explicit communication strategies is enhanced productivity, as it reduces time wasted in seeking information and minimizes unnecessary interruptions.

The study suggests the use of asynchronous communication channels, like collaborative documents, forums, and emails, for non-urgent information exchange. These channels are effective for situations where real-time interaction is not crucial, thus aiding in avoiding disruptions and facilitating better focus. Conversely, when real-time idea exchange is essential, synchronous channels like group chats, in-person meetings, or video calls are recommended.

Additionally, the study discusses the dual role of multichannel chats that can function both synchronously and asynchronously but warns against the expectation of constant availability. The case study also addresses the pitfalls of reliance on in-person communication in growing teams, advocating for a culture that prioritizes written communications and explicit communication protocols. This approach not only aligns with the dynamics of remote work but also prepares teams for scalable growth, as exemplified by the use of comprehensive onboarding materials like RFCs and checklists.

In summary, this case study underlines the significance of explicit communication in distributed teams and presents strategies to optimize productivity, align team members, and prepare for organizational growth.

# 1 Introduction

## 1.1 Problem Statement

The primary focus of this investigation is to understand how explicit communication channels influence the productivity and growth of distributed teams. This study will explore the dynamics of both synchronous and asynchronous communication in remote work settings. The research questions guiding this investigation are:

- How do explicit communication channels impact the efficiency and effectiveness of distributed teams?
- What balance between synchronous and asynchronous communication methods optimizes team performance in a geographically dispersed environment?
- In what ways does technology facilitate or hinder effective communication within distributed teams?

## 1.2 Motivation

This investigation is motivated by the rapid growth of remote work environments and the increasing prevalence of geographically dispersed teams in various industries, including technology, finance, and consulting. Effective communication is the backbone of collaborative efforts in these settings, and understanding its dynamics is crucial for organizational success. The rise of digital communication tools and platforms further underscores the need for this study, as they offer new ways to bridge the communication gaps in distributed teams.

## 1.3 Objectives

The objectives of this investigation are:

1. To provide a comprehensive analysis of the impact of explicit communication channels on the productivity of distributed teams.
2. To offer insights into the best practices for balancing synchronous and asynchronous communication in remote work settings.
3. To guide organizations in choosing the most effective communication tools and strategies for their distributed teams, thereby enhancing overall team performance and adaptability.
4. To benefit team leaders, managers, and organizational decision-makers in the realm of remote work, aiding them in fostering more efficient and cohesive distributed teams.

## **2 Background Material**

### **2.1 Communication in Distributed Teams**

Effective communication is a critical factor in distributed teams. The study by Lockwood highlights the challenges of communication breakdown in virtual teams, emphasizing the importance of understanding and managing these breakdowns for team efficiency [6]. Similarly, the work presented in the International Journal of Project Management explores communication issues in global virtual teams, underscoring the complexity of maintaining effective communication in distributed environments [1].

### **2.2 Synchronous vs. Asynchronous Communication**

The balance between synchronous and asynchronous communication is pivotal in distributed teams. The study on asynchronous collaboration in global software development projects illustrates the importance of bridging cognitive distances in such settings [3]. Furthermore, the comparative study in the communication for distributed and collocated development teams provides insights into the unique communication dynamics of these two types of teams [4].

### **2.3 Role of Technology in Communication**

Technology plays a vital role in facilitating communication in distributed teams. The study in the Proceedings of the Human Factors and Ergonomics Society Annual Meeting discusses the impact of communication delay and medium on team performance in distributed teams [2]. Additionally, the research in Decision Support Systems investigates the effects of communication channels and authority on group decision processes, highlighting the influence of technology on team dynamics [5].

### **2.4 Onboarding and Team Integration**

The process of onboarding software developers and integrating teams in distributed projects is crucial for team performance. A study in Software: Practice and Experience delves into the onboarding processes in globally distributed legacy projects, highlighting the challenges and solutions in integrating new team members [7].

### **2.5 Conflict Management in Distributed Teams**

Managing conflict is essential in distributed teams. The article from the International Journal of Conflict Management explores conflict and shared identity in geographically distributed teams, offering perspectives on how shared identity can mitigate conflicts in such settings [10].

## **3 Methods & Methodology**

### **3.1 Approach to the Problem**

To investigate the impact of explicit communication channels on the productivity and growth of distributed teams, we adopted a mixed-methods approach. This involved a comprehensive literature review, case study analyses, and qualitative interviews with industry professionals. The literature review focused on exploring existing research related to communication in distributed teams [1], [6], [8]. We examined case studies to understand the practical applications of communication strategies in various industries. Additionally, interviews were conducted with managers and team members from distributed teams to gain first-hand insights into the challenges and best practices of remote communication.

### **3.2 Techniques Used in Analysis of Results**

The analysis of results was conducted through both qualitative and quantitative lenses. Qualitative data from interviews were analyzed using thematic analysis to identify common patterns and themes regarding communication challenges and strategies in distributed teams. Quantitative data, primarily from the literature review, were synthesized to understand trends and correlations between communication methods, team productivity, and conflict management [10], [7]. We also employed comparative analysis techniques to evaluate the differences in communication dynamics between distributed and collocated teams [4], [5]. This mixed-methods approach allowed for a holistic understanding of the role of explicit communication in distributed team settings.

### **3.3 Data Collection and Sampling**

Data collection was performed using a stratified sampling technique to ensure diverse representation from various industries and geographical locations. This included collecting data from published reports, academic journals, and case studies relevant to distributed teams and communication methods [1], [8]. The sampling approach aimed to cover a wide range of team sizes, project types, and organizational structures to provide a comprehensive overview of communication practices in distributed teams. Furthermore, surveys were distributed among professionals working in distributed settings to gather quantitative data on communication preferences, challenges, and the impact on team dynamics [3], [9].

## 4 Results Obtained

### 4.1 Conditions

The conditions under which the study was conducted played a critical role in shaping the outcomes. These conditions included:

- The diversity of industries represented in the data, ranging from technology to consulting, provided a broad perspective on communication practices in distributed teams.
- The varying sizes of the teams and their geographic spread introduced different dynamics and communication challenges, enriching the study’s findings [8].
- The reliance on digital communication tools and platforms, especially in teams where face-to-face interactions were limited or non-existent [3].

### 4.2 Constraints

Several constraints impacted the study and its findings:

- Access to real-time data was limited, which could have provided deeper insights into the immediate effects of communication strategies on team performance [9].
- The self-reported nature of data from surveys and interviews might introduce biases, as participants’ perceptions may not always reflect actual practices [7].
- Technological disparities among different teams, which may affect the generalizability of the results to all types of distributed teams [4].

### 4.3 Quality of Results

The quality of the results obtained from this study varied:

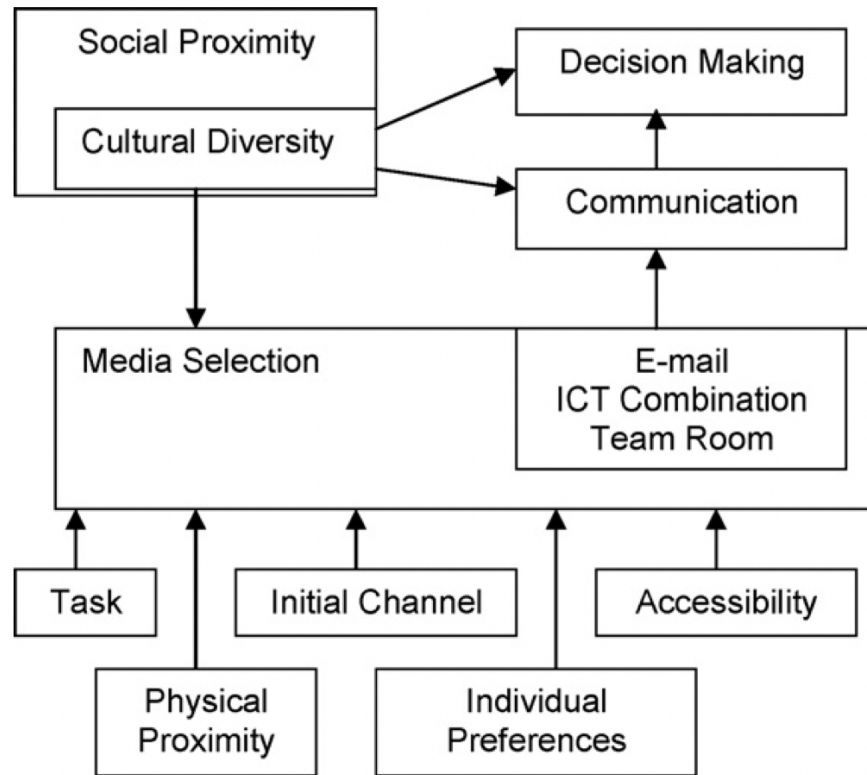
- The data from the literature review and case studies were of high quality, providing robust and comprehensive insights into the communication dynamics of distributed teams [1], [6].
- Interview and survey data, while insightful, were considered of moderate quality due to the subjective nature of self-reporting [10].
- Overall, the results were deemed adequate for drawing informed conclusions about the impact of explicit communication channels in distributed teams.

### 4.4 Key Findings

The study yielded several important results, summarized as follows:

- Explicit communication channels significantly enhance the efficiency and effectiveness of distributed teams, reducing miscommunication and improving information accessibility [1].

- A balanced mix of synchronous and asynchronous communication methods optimizes team performance, catering to both immediate and non-urgent communication needs [5].
- Over-reliance on synchronous communication can disrupt workflows and hinder deep-focus tasks, while exclusive use of asynchronous methods may delay decision-making [2].
- The interplay between social proximity, cultural diversity, and media selection is pivotal in the decision-making and communication processes within distributed teams. Teams that account for the social and cultural makeup of their members when selecting communication media, such as email, ICT combinations, or team rooms, are better equipped to handle tasks efficiently. Factors such as the initial communication channel, accessibility, and individual preferences further influence these dynamics, as depicted in a model from the referenced study [8].



- Effective onboarding processes, supported by comprehensive documentation and explicit communication protocols, significantly ease the integration of new team members in distributed settings [7].
- Conflicts in distributed teams can be better managed through shared team identity and clear communication norms, reducing the impact of geographical and cultural barriers [10].



## **5 Conclusions and Future Works**

### **5.1 Suggested Improvements**

In future iterations of managing distributed teams, it would be beneficial to implement a centralized information repository that can be easily accessed by all team members, regardless of location. Enhancing collaborative tools with AI to prompt team members about important updates and deadlines could also improve efficiency. Changes in the integration of new communication technologies should be considered to provide seamless interaction between team members.

### **5.2 Limitations to Solution**

The suggested communication strategies might not be applicable in environments where real-time decision-making is critical, such as emergency response teams or trading floors. Additionally, teams with limited access to reliable internet services would find it challenging to implement these solutions effectively.

### **5.3 Applications in Real World**

The findings from this study can be immediately applied in global software development companies, where teams are often distributed across continents. By using explicit communication channels, such companies can improve project coordination and reduce time-to-market for their products. These practices can also benefit academic research groups that collaborate on projects from different universities, ensuring that all members stay informed and aligned with the group's goals.

### **5.4 Conclusion**

The research conducted underscores the pivotal role of explicit communication in fostering efficient distributed teams. Establishing clear and accessible communication channels has proven to enhance productivity and foster a cohesive work environment. The study highlights the advantages of selecting appropriate channels for both synchronous and asynchronous communications, catering to the nuanced needs of team dynamics. The case study conclusively demonstrates that with intentional communication strategies, distributed teams can achieve a level of efficiency and collaboration that parallels, and sometimes exceeds, that of colocated teams. Furthermore, the importance of written communication in ensuring continuous access to information and reducing reliance on physical presence has been reaffirmed. The outcomes of this study serve as a testament to the adaptability and potential of distributed teams in a rapidly evolving work landscape.

### **5.5 Future Works**

Future research could explore the impact of cultural differences in communication preferences and the development of adaptive communication frameworks that cater to diverse teams. Another area for exploration is the use of virtual reality environments for improving social presence and engagement in distributed teams.

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4. **IEEE Xplore**: For guiding me towards relevant journals and conference papers.
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