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Research Paper

Digital collaboration tools, remote management, and cultural friction in multinational teams

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Abstract: The increasing reliance on digital tools and platforms has reshaped how multinational corporations (MNCs) manage remote and hybrid teams. Whereas the technologies promote connectivity, they also reveal hidden cultural differences in communication, decision-making, and managerial expectations. This study examines how cultures impact the effectiveness of digital collaboration and the appearance of friction within multicultural teams. Based on Hofstede's cultural dimensions, the research explores how cultural orientations toward hierarchy, directness of communication, and uncertainty avoidance affect team dynamics, the establishment of trust, and project outcomes in work environments driven by digital technology. The study adopts a qualitative exploratory approach based on semi-structured interviews with employees working in culturally diverse multinational teams. The study provides insight into how digital communication practices interact with cultural expectations and how culturally responsive management practices may help reduce friction and improve cross-cultural collaboration.

Keywords: digital collaboration, cross-cultural management, multinational corporations, remote work, communication norms.

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1. Introduction

Digitalisation has transformed how multinational corporations (MNCs) manage remote and hybrid teams. Digital platforms such as Microsoft Teams and Zoom enable global collaboration but can also highlight cultural differences that affect communication, trust, and leadership (Maznevski & Chudoba, 2000). Reduced nonverbal cues and asynchronous interaction make digital collaboration vulnerable to misinterpretation, especially where cultures differ in hierarchy, directness, and uncertainty avoidance (Lifintsev & Wellbrock, 2019). These differences can lead to cultural friction - subtle tensions that may weaken team cohesion and performance.

Although virtual teams and cross-cultural management have both been widely studied, these research streams have largely developed independently. Research on global virtual teams has primarily examined coordination processes, communication technologies, and team effectiveness (Maznevski & Chudoba, 2000), while studies of cross-cultural management have focused on cultural values, leadership, and intercultural communication (Tenzer et al., 2014). More recently, research has emphasised the growing importance of digital collaboration and remote work practices in multinational organisations (Raghuram et al., 2019; Lane et al., 2024). However, comparatively little empirical attention has been given to how cultural differences are experienced in everyday digitally mediated collaboration, particularly in relation to trust-building, communication practices, and the emergence of cultural friction in multinational teams. This study addresses that gap by exploring employees' and managers' experiences of digital collaboration across culturally diverse work environments.

The research contributes to theory by examining how selected cultural dimensions are expressed in digitally mediated, rather than co-located, workplace interactions. It also contributes to practice by identifying managerial actions that may alleviate cultural friction in remote multinational teams, including more inclusive meeting facilitation, clearer communication practices, balanced planning structures, and trust-building activities.

This study investigates how cultural differences influence collaboration, communication, and trust in digital work environments within multinational corporations. It examines how cultural orientations affect communication and collaboration, identifies sources of cultural friction in digital teamwork, and offers management strategies to improve intercultural effectiveness.

2. Literature review

2.1 Digital collaboration in multinational contexts

Digital tools have reshaped coordination and communication across borders (Richter et al., 2018). They enable efficiency but alter social cues, hierarchy, and trust formation (Gibson & Gibbs, 2006). As digital collaboration becomes central to global business, understanding how culture mediates these processes is essential (Raghuram et al., 2019).

Recent research suggests that digital collaboration extends beyond the adoption of communication technologies and increasingly depends on organisations' ability to integrate digital tools with collaborative work practices. Rather than replacing traditional teamwork, digital platforms reshape how employees coordinate tasks, exchange knowledge, and establish interpersonal relationships across geographical and cultural boundaries. Successful digital collaboration therefore depends not only on technological infrastructure but also on communication norms, organisational culture, and employees' ability to adapt to digitally mediated interaction (Lane et al., 2024).

Recent research further suggests that virtuality should not be understood solely through structural characteristics, such as geographical dispersion or reliance on communication technology. Team members' subjective experiences of distance and information deficits are also important for understanding how virtual collaboration is experienced in practice (Handke et al., 2025).

2.2 Remote and hybrid management

In multinational corporations, this transformation has created new opportunities for flexibility while simultaneously increasing the complexity of communication, coordination, and leadership. Research suggests that remote and hybrid work have fundamentally reshaped organisational practices, requiring companies to redesign workplaces, strengthen digital strategies, and rethink leadership approaches to support collaboration in geographically dispersed teams (de Lucas Ancillo et al., 2021).

Remote leadership demands cultural awareness and communication transparency (Purvanova & Bono, 2009). Digital leadership, the capacity to motivate, assist, and lead remote workers, is highly reliant on communication transparency and leaders' perceived availability (Contreras et al., 2020). When managerial expectations conflict with employees' cultural expectations, remote working can increase perceptions of inequality or distance. For example, workers from high power distance cultures tend to prefer a controlling leadership style and specific guidance, whereas workers from low power distance cultures prefer a flexible leadership style and communication (Sperancin, 2010). These patterns directly influence communication channels, as well as worker engagement and participation.

Hybrid work arrangements require leaders to manage communication across both co-located and remote employees, making consistency, transparency, and cultural sensitivity increasingly important for maintaining collaboration and trust.

2.3 Cultural friction and communication

Cultural friction may emerge when different cultural value sets and communication styles interact at a workplace, creating a potential for misunderstanding or tension among workers (Stahl et al., 2010). Cultural friction may be amplified in digital work environments, particularly when communication channels provide limited non-verbal cues. Recent research likewise argues that digital communication is not culturally neutral. Differences in silence, response timing, tone, and implicit communication may be interpreted differently across cultures, increasing the likelihood of misunderstanding in multinational virtual teams. These challenges demonstrate that digital communication technologies may amplify rather than eliminate existing cultural differences (Hayati & Sinha, 2024). Differences in communication styles can undermine teamwork even when team members share a common technological platform (Tenzer et al., 2014).

Furthermore, cultural friction may emerge through subtle aspects of digital communication, including tone, response timing, and conventions of politeness. Hall's (1976) and Hofstede's (1980) differentiation of high-context and low-context cultures remains relevant: employees from high-context cultures (e.g., Japan, China) rely more on implicit meaning, while those from low-context cultures (e.g., the US, Germany) prefer direct and explicit messages (Sperancin, 2010). In digital communication, such differences can lead to frustration, reduced trust, and lower collaboration efficiency.

2.4 Hofstede's dimensions and team dynamics

Hofstede's (1980) cultural dimensions (power distance, individualism-collectivism, uncertainty avoidance, masculinity-femininity, long-term orientation, and indulgence-restraint) remain foundational in understanding how culture shapes workplace behaviour. In digital teams, three dimensions are particularly influential: power distance, directness of communication (related to individualism), and uncertainty avoidance. High power-distance cultures may hesitate to speak openly online, while low power-distance ones favour open debate. Similarly, uncertainty-avoiding cultures may prefer structured digital processes and clear communication norms, whereas uncertainty-tolerant ones may embrace flexibility and informality (Sperancin, 2010). Applying Hofstede's model helps to interpret how these cultural orientations affect collaboration outcomes, leadership expectations, and the negotiation of meaning in virtual settings.

Despite its continued influence, Hofstede's framework has been criticized for treating national cultures as relatively stable and homogeneous. Contemporary scholars argue that cultural identities are dynamic and shaped by organisational context, professional experience, and individual interaction rather than solely by nationality. Employees working in multinational organisations may therefore demonstrate hybrid cultural behaviours that evolve through continuous intercultural collaboration. Nevertheless, Hofstede's dimensions remain a valuable heuristic for identifying broad cultural tendencies when interpreted alongside contextual factors (McSweeney, 2002).

2.5 Trust and leadership

Trust is one of the most critical factors for effective collaboration in remote environments. According to Jarvenpaa and Leidner (1999), "swift trust" can emerge quickly in virtual teams but is fragile if communication becomes inconsistent or unclear. Cultural orientations may also influence how trust is built and maintained, with relationship-based and performance-based forms of trust varying across individuals and contexts. Effective digital leaders adapt to these expectations, maintaining engagement through empathy and clarity (Malhotra et al., 2007).

Trust formation in digitally mediated collaboration is also closely related to the concept of social presence. Communication channels that provide richer interpersonal cues, such as video conferencing, facilitate stronger perceptions of connectedness and interpersonal trust than text-based communication because they enable greater social presence between interaction partners (Lowenthal, 2010). This suggests that managers should carefully match communication media to both task requirements and relationship-building objectives.

2.6. Summary

Although previous studies have advanced understanding of virtual teamwork, remote leadership, digital collaboration, and cross-cultural management, comparatively little empirical research has examined how these perspectives intersect in the everyday digital communication practices of multinational teams. Existing research has often considered digital work and cultural interaction separately, leaving the role of digital media in shaping culturally influenced communication practices insufficiently explored. Digital tools are not culturally neutral; they can shape communication patterns and amplify existing cultural norms (Maznevski & Chudoba, 2000). In particular, the study conceptualises cultural friction as the interaction between culturally influenced communication expectations and digitally mediated work practices, an aspect that has received comparatively limited empirical attention. This study addresses that gap through an exploratory qualitative analysis of employees' and managers' experiences in multinational teams. Its empirical contribution lies in linking selected cultural dimensions to specific digital collaboration practices and exploring how these intersections generate both friction and adaptive management responses in remote work settings. It shall help to develop a cultural adaptation strategy for mitigating digital collaboration friction occurring in global companies.

3. Theoretical framework

Hofstede's (2011) model conceptualises national culture through six dimensions: power distance, individualism–collectivism, uncertainty avoidance, masculinity–femininity, long-term orientation, and indulgence–restraint. Importantly, Hofstede (2011) emphasises that cultural dimensions operate at the societal level and should not be interpreted as fixed characteristics of individuals. This study focuses specifically on power distance, individualism–collectivism, and uncertainty avoidance because previous research has identified these dimensions as particularly relevant to communication, leadership, teamwork, and decision-making in multinational virtual collaboration (Maznevski & Chudoba, 2000; Tenzer et al., 2014; Cagiltay et al., 2015). These dimensions provide a framework for examining culturally influenced expectations regarding hierarchy, autonomy, teamwork, communication, and approaches to uncertainty. Rather than erasing such expectations, digital platforms provide new contexts in which they may be expressed, negotiated, or amplified.

Intercultural communication theory provides a complementary perspective on how individuals from different cultural backgrounds create and interpret meaning. Hall's (1976) distinction between high-context and low-context communication is particularly relevant to digitally mediated cross-cultural interaction. In high context communication, there is a prevalence of nonverbal communication, whereas, in low context communication, communication is explicit. Since digital communication is less dependent on nonverbal cues, these variations result in conflicts.

In virtual collaboration, the absence of nonverbal cues and the lack of immediate feedback can make the management of 'face' even more difficult. Communication breakdown can result from delayed feedback, a lack of message elaborateness, or a misinterpretation of tone. Uncertainty reduction and stress management, as identified by Gudykunst (2004), play a central role, according to this author, for intercultural communication, adding to these challenges the 'mediated' or 'fragmented' nature of digital communication. Hall's distinction between high-context and low-context communication therefore provides an important complementary perspective to Hofstede's dimensions by explaining how cultural differences become visible through communication processes rather than value orientations alone.

Social Presence Theory helps to explain how communication media influence the extent to which interaction parties are recognised as socially and emotionally "present" in mediated environments. Originally developed by Short et al. (1976), the concept refers to the degree of salience or sense of "being there" between communicators using a particular medium. Later research extended this perspective by showing that social presence is not determined solely by the technical properties, but also by how users feel connectedness, responsiveness, and the authenticity of others in online communication (Lowenthal, 2010). In multinational remote teams, this theory is particularly relevant because digital tools differ in their capacity to transmit tone, non-verbal cues, and interpersonal warmth. As a result, variations in social presence

can affect trust development, message interpretation, participation, and collaboration quality across cultures.

3.1 Digital mediation and cultural friction

Digital collaboration platforms mediate social interactions through interfaces that filter communication cues, shape participation, and impact perceptions of authorship and membership (Leonardi, 2020). Technological filters can both facilitate and constrain intercultural communication. Examples of such platforms include text-based communication platforms that promote low-context communication, where communication is short, direct, and to the point, and platforms such as video conferencing that provide high cues. Nevertheless, there can be a lack of cultural sensitivity on the digital platform, even inadvertently. It is important to note that this dynamic requires a blending of culture and communication theories and perspectives of digital work design. Digital communication platforms therefore perform a dual role: they facilitate information exchange while also shaping social presence, trust, and power dynamics. Recognising this dual role is important for the effective management of digitally mediated multicultural teams.

3.2 Conceptual model

The study integrates these theoretical perspectives into a model that links cultural dimensions to communication behaviour, digital mediation to interaction dynamics, and interaction outcomes to trust and collaboration effectiveness. Cultural friction emerges when values and digital mediation misalign but can be mitigated through adaptive leadership and explicit communication norms. This framework guides the qualitative analysis of interviews exploring how employees and managers from diverse cultures experience digital teamwork.

The conceptual model integrates three complementary perspectives. Hofstede's dimensions explain differences in cultural value orientations, Hall's high- and low-context communication theory explains how these orientations are reflected in communication behaviour, and Social Presence Theory explains how digital media influence the interpretation of those behaviours in remote collaboration. Together, these perspectives provide a coherent framework for understanding how cultural friction emerges in digitally mediated multinational teams.

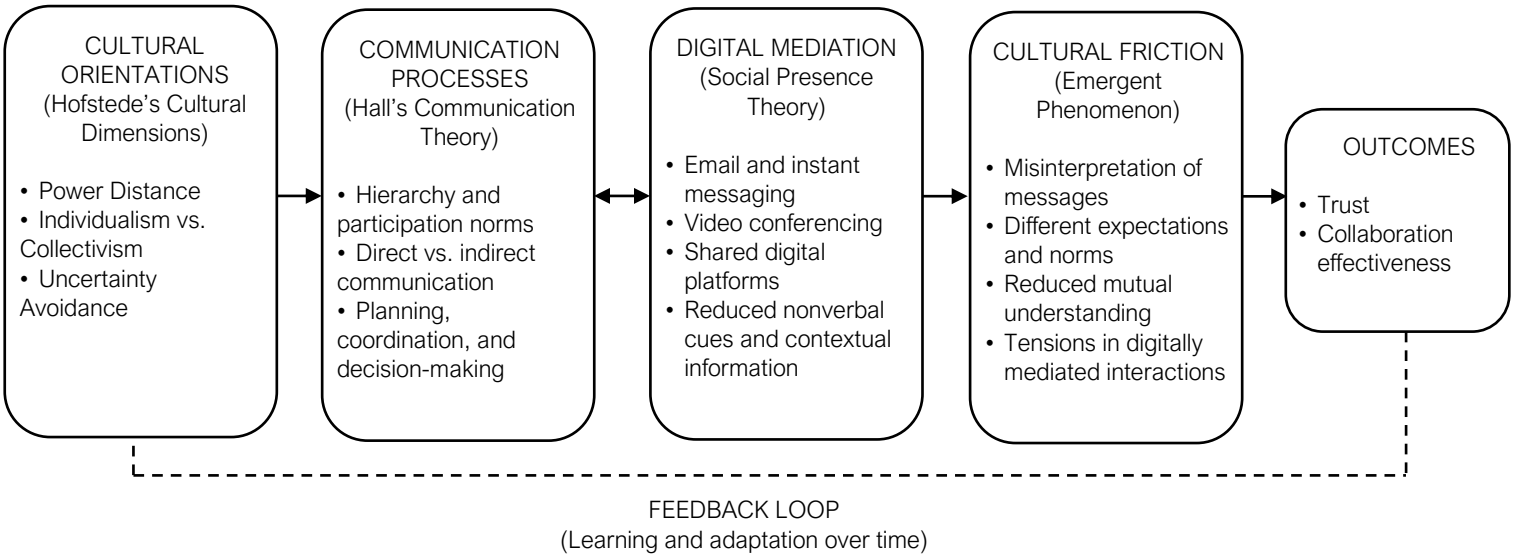


Figure 1. Conceptual model of cultural friction in digitally mediated multinational teams. Source: *Author's own*

As illustrated in Figure 1, cultural friction is conceptualised as an emergent outcome of the interaction between culturally influenced communication processes and the characteristics of digital mediation, with subsequent implications for trust and collaboration.

4. Methodology

The study adopted a qualitative, interpretivist approach. Interpretivism was considered appropriate because the research seeks to understand how individuals interpret their experiences and construct meaning within particular social and organisational contexts (Wells & Giacco, 2025).

Data were collected through semi-structured interviews, which allow participants to describe their experiences in their own words while giving the researcher flexibility to probe emerging topics in greater depth. This format is particularly suitable for examining culturally embedded managerial and communication practices, as it enables the exploration of contextual nuances that may not emerge through structured survey instruments.

The study is designed as exploratory qualitative research aimed at identifying patterns and themes regarding cultural friction and digital collaboration rather than producing statistically generalisable findings.

4.1 Sampling and Participants

Participants were selected using purposive sampling, a common strategy in qualitative research that enables the selection of individuals with experience relevant for the research topic (Campbell et al., 2020). The sampling criteria required that participants (1) work in multinational teams, (2) regularly use digital collaboration tools such as Microsoft Teams or Zoom, and (3) have experience working with colleagues from different cultural backgrounds.

Participants were recruited through professional networks and industry contacts in Hungary. The selection of participants was guided by their direct involvement in digitally mediated collaboration with colleagues from different cultural backgrounds, rather than by an intention to achieve statistical representativeness. The energy, finance, and aviation sectors provided relevant organisational contexts because the participants' roles involved communication, coordination, and information exchange within multinational working environments. Including participants from these three sectors enabled the study to explore how similar communication challenges were experienced across different professional settings, while retaining a focused exploratory design.

Although all interviewees were based in Hungary at the time of the study, they represented diverse cultural and professional backgrounds and worked in multinational environments within the energy, finance, and aviation sectors. Table 1 provides an overview of the participants' professional and cultural backgrounds. Only characteristics relevant to the research context are reported to preserve participant confidentiality.

Table 1: Participant profile table. Source: *Author's own*

Participant	Professional role	Industry	Managerial responsibility	Cultural background	International work experience
P1	Accounts Payable Junior Analyst	Finance	No	Azerbaijani	2 years
P2	Contract Analyst	Energy	No	Hungarian	2 years
P3	Negotiator	Energy	No	United States	8 years
P4	Sales Support Analyst	Aviation	No	Hungarian	4 years

As shown in Table 1, the participants represented three industries and three cultural backgrounds and had between two and eight years of international work experience, providing varied professional perspectives on digitally mediated cross-cultural collaboration.

Given the exploratory and narrowly focused nature of the research, four in-depth interviews were conducted. In qualitative research, sample adequacy is determined not solely by the number of participants but also by the information power of the sample, which depends on factors such as the specificity of the participants, the focus of the research aim, the use of established theoretical perspectives, the quality of the interview dialogue, and the depth of analysis (Malterud et al., 2016). In the present study, participants were purposively selected because they had direct experience of digitally mediated cross-cultural collaboration in multinational organisations, providing information-rich accounts closely aligned with the research question. Thematic recurrence was examined by reviewing the four interview

accounts and comparing participants' descriptions within the main areas covered by the interview guide. Similarities and differences were identified in relation to hierarchical participation, communication misunderstandings, uncertainty management, teamwork expectations, and technology-mediated trust. Although these topics were addressed across the interviews, participants provided different examples and perspectives. The recurrence of related experiences was therefore treated as preliminary evidence of shared themes rather than as an indication of comprehensive thematic saturation. Given the small sample, the findings are therefore positioned as exploratory and context-specific, and their transferability is explicitly acknowledged as a limitation of the study.

4.2 Data Collection

Data were collected through semi-structured interviews conducted via digital platforms (e.g. Zoom, Microsoft Teams) to accommodate geographically dispersed participants. Each interview lasted approximately 30–45 minutes and was recorded with the participants' consent before being transcribed for analysis. Participation in the study was voluntary, and informed consent was obtained from all interviewees prior to the interviews. Participants were assured that their responses would remain confidential and that all quotations would be anonymised during analysis.

An interview guide was developed to ensure consistency across interviews while maintaining flexibility for follow-up questions, based on the research questions and Hofstede's cultural dimensions framework. The questions were designed to explore how cultural differences influence communication, decision-making, and trust-building within remote multinational teams. Several questions directly addressed specific cultural dimensions. For example, participants were asked how hierarchy and power distance influence communication and decision-making in digital meetings. Other questions explored differences in communication styles, such as direct versus indirect communication and the use of high-context cues across cultures. The interview guide also included questions related to uncertainty avoidance, asking participants how team members cope with ambiguity or project uncertainty in remote environments. In addition, participants were invited to reflect on individualism versus collectivism, particularly in relation to expectations for teamwork, information sharing, and collaboration. Beyond these theoretical dimensions, participants were asked to describe practical experiences, including examples of misunderstandings or conflicts linked to cultural differences and the ways these situations were resolved. Finally, questions examined how digital collaboration tools influence trust-building, communication efficiency, and overall team coordination in multicultural remote teams. Open-ended questions were used to encourage detailed responses, while sensitivity to language differences allowed participants to express their experiences comfortably.

4.3 Data Analysis

Thematic analysis was used to interpret the interview data. Transcripts were coded iteratively. First, the researcher read all transcripts to become familiar with the data and generated initial codes. A hybrid approach was employed, combining inductive coding of emergent themes with deductive coding informed by Hofstede's cultural dimensions. Hofstede's framework conceptualises national culture through dimensions including power distance, individualism–collectivism, uncertainty avoidance, masculinity–femininity, long-term orientation, and indulgence–restraint (Hofstede, 2011). These dimensions served as sensitizing concepts: for example, the analysis noted when participants described deference to authority (power distance) or preferences for detailed planning (uncertainty avoidance). At the same time, any new themes (e.g. specific challenges of virtual trust-building) were identified inductively. Using Hofstede's dimensions helps structure the analysis, since this framework "offers a model for comparing cultures" that is widely used to explain cross-cultural interaction (Hofstede, 2011). Given the small dataset, the analysis was conducted manually. Initial codes were organised around the main issues raised in the interviews, including hierarchical participation, communication styles, uncertainty management, teamwork expectations, and digital trust-building. Related codes were considered together to develop broader thematic categories, while differences between participants' accounts were retained rather than treated as

evidence of uniform cultural behaviour. The resulting five themes were used to structure the presentation of the findings.

To support the credibility of the interpretation, the five themes were reviewed against the interview accounts, with attention to both recurring patterns and differences between participants' experiences. Hofstede's dimensions informed the interpretation but were not treated as fixed categories into which every response had to fit. The analytical procedure did not involve a formal coding matrix or qualitative analysis software. Given the exploratory design and four-participant sample, the resulting themes are presented as context-specific interpretations rather than exhaustive or universally applicable categories.

5. Findings

The thematic analysis identified five recurring themes related to participants' experiences of digital collaboration in multinational teams. The themes emerged from participants' descriptions of everyday work practices, communication experiences, and management challenges in remote collaboration. The findings therefore present how interviewees experienced and interpreted cultural differences in digitally mediated work rather than assuming fixed national cultural characteristics. The five themes identified were: (1) hierarchical participation in virtual meetings, (2) communication styles and intercultural misunderstandings, (3) managing uncertainty in remote collaboration, (4) teamwork expectations and knowledge sharing, and (5) technology-mediated trust and relationship building. Each theme is presented below with illustrative quotations from the interviews.

5.1 Hierarchical participation in virtual meetings

Participants described perceived differences in how hierarchical expectations influenced participation during virtual meetings. Across several interviews, participants reported that expectations regarding authority affected who spoke first, challenged ideas, or waited to be invited into the discussion. Participant P1 explained: '*Team members from higher power distance cultures tend to withhold participation until they feel they have been vocally encouraged to share, or until they feel their input is sought; members from lower power distance cultures feel less uncomfortable disagreeing or suggesting something even to their seniors*.' Participants P1 and P3 further noted that ideas from less vocal team members could remain unheard unless managers deliberately encouraged broader participation.

5.2 Communication styles and intercultural misunderstandings

Participants frequently described communication style as one of the main sources of misunderstanding during digital collaboration. Participants P1, P3 and P4 observed that differences in directness, politeness, and implicit communication occasionally resulted in misinterpretation, particularly in written communication, where tone and intention were more difficult to interpret. Participant P2 described initially perceiving a colleague's repeated interruptions during a presentation as impolite, before later understanding that the behaviour reflected different expectations regarding conversational interaction. Participants P1 and P3 also reported that written messages could be interpreted differently when contextual or non-verbal cues were unavailable. To address such misunderstandings, participants P1 and P3 described clarifying communicative intent, using more neutral language, and, where necessary, moving from written communication to richer communication channels.

5.3 Managing uncertainty in remote collaboration

Participants described differing preferences regarding structure and flexibility in remote projects. Participant P1 referred to colleagues who preferred "detailed structure, detailed planning, and well-defined responsibilities", while others were described as more comfortable adapting plans as projects developed. Participant P3 explained that although major milestones could be agreed in advance, teams could retain sufficient flexibility to adjust their approach

when new information emerged. Regular task reviews were also described as a practical way of balancing structure with adaptability (P1).

5.4 Teamwork expectations and knowledge sharing

All four participants described different expectations regarding teamwork, personal accountability, and information sharing. Participants P1 and P3 associated these preferences with both perceived cultural differences and their previous experiences of working in multinational teams. Participant P2 emphasised group cohesion and shared knowledge, explaining that he and his colleagues "usually create and work on online shared documents for better knowledge transfer". Other accounts (P1, P3) placed greater emphasis on personal accountability while simultaneously recognising the importance of collective involvement. For example, participant P1 described trying to involve colleagues in discussions and seek consensus while maintaining clear individual responsibility. Participant P3 similarly described balancing teamwork with personal accountability and explained that experience in multinational teams had taught him to adapt to colleagues who preferred to wait for group direction.

5.5 Technology-mediated trust and relationship building

Participants described different ways in which communication technology influenced multinational collaboration, highlighting both its practical benefits and its limitations for interpersonal understanding and trust-building. Participants P1, P2 and P3 described email and chat as efficient means of exchanging information but noted that the absence of non-verbal cues could create ambiguity. As participant P1 explained, 'Emails and chats work really well for sharing information…but without non-verbal communication, emails and chats can be interpreted differently'. Video conferencing was described as a "bridge" that partially compensated for the reduced non-verbal cues of text-based communication.

Participant P2 observed that 'it is quite easy to hide actual feelings through written communication, thus this can affect trust.' Participants P1, P3 and P4 described adapting their communication practices to support trust-building, including using cameras during video meetings and creating opportunities for informal conversation to partially replicate face-to-face interaction. They also reported adapting remote management practices through flexible meeting arrangements, culturally sensitive feedback, and workload allocation that accounted for differences in time zones (P1, P3, P4).

Taken together, the five themes suggest that participants experienced cultural differences through concrete digital practices involving participation, communication, coordination, knowledge sharing, and trust-building. These recurring patterns provide the empirical basis for the interpretation of digitally mediated cultural friction developed in the following Discussion section.

6. Discussion

Given the exploratory design and small purposive sample, the findings are interpreted as context-specific patterns rather than generalisable characteristics of national cultures or multinational teams more broadly. This research aimed to examine cultural value effects on communication, trust, and collaboration processes within digital multinational teams, especially through the lens of Hofstede's dimensions. The interview accounts suggest that participants perceived differences in expectations concerning hierarchy, communication, uncertainty management, and teamwork, which they associated, at least in part, with cultural background. Hofstede's dimensions provide a framework for interpreting these perceptions, but the findings do not establish that national cultural background determines individual behaviour. Organisational practices, professional experience, and the characteristics of digital communication may also influence the interactions described.

6.1 Power distance and hierarchy in virtual teams

The findings indicate that hierarchical expectations remain relevant in virtual teams, but digital communication environments shape how these expectations are expressed. Importantly, the empirical contribution lies not simply in confirming differences associated with power distance, but in suggesting how these differences become visible through digitally mediated participation practices. In virtual meetings, where turn-taking and opportunities to contribute may be less spontaneous than in face-to-face interaction, the absence of an explicit invitation to speak can reinforce existing hierarchical expectations.

Cultural friction emerged when contrasting expectations regarding appropriate participation were interpreted differently by team members. Behaviour perceived by some participants as openness, initiative, or active engagement could be interpreted by others as interruption or inappropriate disagreement with senior colleagues. Digital communication therefore did not eliminate hierarchy; rather, it altered the mechanisms through which hierarchical expectations were expressed and interpreted. Participants also described managerial practices that could mitigate these differences, particularly inviting less vocal team members to contribute and creating structured opportunities for participation. These findings suggest that the influence of power distance in virtual teams is not determined by cultural orientation alone but is shaped by the interaction between culturally influenced expectations and the communication practices embedded in the digital environment.

6.2 Communication styles

The findings suggest that digital communication does not merely reproduce existing differences in communication style but can alter how those differences are experienced and interpreted. Differences in conversational practices, such as interruptions, may also become more noticeable in virtual meetings, where turn-taking is shaped by the communication platform and interruptions may be perceived as impolite. Digital communication therefore appears to create additional conditions under which culturally influenced communication expectations can generate friction.

This finding extends the application of Hall's (1976) distinction between high- and low-context communication to digitally mediated interaction by suggesting that context is not determined solely by cultural communication preferences but is also shaped by the communication medium. In digitally mediated interaction, the availability of contextual information varies considerably between channels: written messages provide fewer interpersonal and non-verbal cues, whereas video communication can restore some contextual information through facial expression, tone of voice, and immediate feedback. The exploratory evidence therefore suggests that cultural friction may arise not simply from differences between direct and indirect communication styles, but from a mismatch between participants' expectations regarding contextual information and the contextual resources provided by the digital medium.

The contribution of these findings is thus to conceptualise communication-related cultural friction as a digitally mediated interpretive process. Digital tools can amplify communication differences when cues needed to interpret politeness, intention, or interpersonal meaning are restricted, while richer communication channels may mitigate such friction by increasing social and contextual information. This interpretation also connects Hall's communication framework with Social Presence Theory, as communication channels that provide greater social presence may support more nuanced interpretation of culturally influenced communication practices (Lowenthal, 2010).

6.3 Uncertainty avoidance and structured collaboration

The findings indicate that different approaches to uncertainty were expressed through concrete digital working practices rather than only through general preferences for structure or flexibility. Digital collaboration tools therefore appeared to function not merely as communication channels, but also as mechanisms through which team members could manage uncertainty and coordinate expectations across cultural differences.

At the same time, the interviews suggested that these practices could themselves become a source of cultural friction. While some team members valued detailed planning and

clearly defined processes, others preferred greater flexibility and the possibility of adjusting plans as new information emerged. These findings suggest that preferences associated with uncertainty avoidance may become visible through everyday digital coordination practices. Digital technologies can reduce uncertainty by increasing transparency, documentation, and predictability, but they can also make differences in preferences for structure and flexibility more visible. Participants' experiences suggest that combining clear milestones and responsibilities with opportunities for adjustment can help multinational teams accommodate these different expectations.

6.4 Individualism–collectivism and team orientation

The interviews suggest that expectations associated with individualism–collectivism may be reflected in everyday practices of accountability, information sharing, and collaborative decision-making, rather than representing fixed characteristics of national groups. Importantly, these orientations were not mutually exclusive: some respondents combined strong expectations of personal accountability with deliberate efforts to involve colleagues and seek consensus.

Digital platforms made these different orientations particularly visible because practices such as document sharing, task ownership, and online discussion require teams to make explicit decisions about what is handled individually and what is handled collectively. Cultural friction could therefore emerge when expectations regarding autonomy and collective involvement were not aligned. The findings indicate that effective digital collaboration involves continuous negotiation between individual responsibility and collective coordination rather than a simple distinction between individualistic and collectivist behaviour.

6.5 Technology use and trust formation

The findings suggest that digital communication technologies can both support and complicate trust-building in multinational teams. Although email, chat, and shared platforms facilitate information exchange and coordination, text-based communication may create misunderstandings when tone, intention, and non-verbal cues are difficult to interpret. Participants' accounts suggest that trust-building in virtual teams requires deliberate attention to communication practices rather than reliance on digital connectivity alone. This interpretation is consistent with Jarvenpaa and Leidner's (1999) discussion of swift trust in global virtual teams, which highlights the importance of communication in establishing and maintaining trust. In the present study, participants described the value of richer communication channels, particularly video meetings and opportunities for informal interaction, in supporting interpersonal understanding. These findings suggest that the effectiveness of digital communication depends not only on the technology used but also on how team members adapt their communication practices to different interpersonal and cultural expectations.

6.6 Cultural friction in digitally mediated teams

The findings suggest that cultural friction should not be understood simply as disagreement between individuals from different national cultures. Instead, cultural friction emerged when different expectations regarding communication, hierarchy, planning, and collaboration interacted within digitally mediated work environments. Participants described these situations as misunderstandings rather than overt conflict, often resulting from differences in communication styles, expectations of leadership, or preferred approaches to uncertainty.

This interpretation is consistent with recent research showing that the effectiveness of digital communication tools in global virtual teams depends on the social context in which they are used rather than on technology use alone (Heubeck et al., 2024). Rather, communication platforms may amplify existing cultural differences by reducing non-verbal cues, limiting contextual information, and increasing reliance on written communication. Consequently, cultural friction appears to emerge through the interaction between cultural expectations and the communicative characteristics of digital media rather than through national culture alone.

This perspective extends previous research by suggesting that cultural friction is not merely an outcome of cultural diversity, but a dynamic process shaped by the interaction of

culture, communication practices, and digital technologies. Understanding this interaction provides managers with greater opportunities to anticipate misunderstandings and design communication practices that reduce unnecessary friction while maintaining the benefits of cultural diversity.

The central contribution of this study is to conceptualise cultural friction as a digitally mediated process rather than a direct consequence of national cultural differences. The interview accounts suggest that friction may arise when culturally influenced expectations regarding hierarchy, communication, uncertainty, and teamwork interact with the characteristics of digital communication environments. Reduced contextual cues, structured opportunities for participation, and technology-dependent coordination can make differences in expectations more visible or more difficult to interpret. Conversely, deliberate communication and leadership practices may help mitigate these difficulties. Although exploratory, this perspective highlights the role of digital technologies in shaping how cultural expectations are expressed, interpreted, and negotiated in multinational teams.

7. Implications

7.1 Practical Implications

The findings suggest that effective management of multinational remote teams requires more than technological competence; it also requires deliberate adaptation of communication and leadership practices to accommodate cultural differences. Based on the interview findings, several practical recommendations can be proposed.

First, managers should actively encourage inclusive participation during virtual meetings. Participants reported that employees from more hierarchical cultural backgrounds were often reluctant to express opinions unless explicitly invited to contribute. Rotating meeting facilitation, inviting quieter team members to share their views, and allocating dedicated time for questions can help reduce participation inequalities and create a more inclusive communication environment.

Second, organisations should establish explicit communication norms for digital collaboration. Interviewees highlighted that differences in communication style frequently resulted in misunderstandings, particularly in written communication. Managers can reduce ambiguity by defining expectations regarding response times, meeting etiquette, feedback practices, and the level of directness expected in emails and instant messaging.

Third, communication channels should be selected according to the purpose of the interaction. While email and chat are efficient for routine information exchange, participants consistently emphasised that video conferencing is more appropriate for complex discussions, conflict resolution, performance feedback, and trust-building because it provides richer interpersonal cues and reduces misunderstandings.

Fourth, managers should balance structure with flexibility when coordinating multinational projects. The interviews suggested that employees differed in their preferences for planning and uncertainty management. Providing clear objectives, documented responsibilities, and regular progress reviews while allowing flexibility in implementation can accommodate diverse working preferences and improve collaboration.

Finally, organisations should deliberately invest in relationship-building within remote teams. Participants emphasised that trust develops not only through task completion but also through informal interaction. Regular virtual coffee sessions, informal check-ins, team-building activities, and opportunities for social conversation before or after meetings can strengthen interpersonal relationships and foster trust across cultural boundaries.

Taken together, these recommendations suggest that culturally responsive digital leadership extends beyond awareness of cultural differences. It requires managers to intentionally design communication practices, leadership behaviours, and collaboration processes that support inclusion, trust, and effective teamwork in multinational digital environments.

7.2 Theoretical implications

This research contributes to the literature on cross-cultural management and virtual teamwork by linking established cultural frameworks to participants' experiences of remote, technology-mediated collaboration. Although Hofstede's cultural dimensions and Hall's context theory are well established, their application to contemporary digital teamwork continues to require further empirical examination. The exploratory evidence suggests that cultural friction may emerge when culturally influenced expectations interact with digitally mediated communication practices, indicating that managers may need to adapt their approaches rather than apply supposedly universal management practices across different cultural settings. Moreover, by providing empirical examples from participants working in multinational organisations, this study offers qualitative insights that complement existing research on virtual and multicultural teamwork.

Participants' accounts suggest that different expectations regarding uncertainty management may shape preferences for structure and communication practices, while individual and collective orientations may influence approaches to accountability, knowledge sharing, and collaborative decision-making. The findings further suggest that digital communication practices require careful management because reduced contextual and interpersonal cues may contribute to misunderstandings and difficulties in maintaining trust. Overall, the study contributes to cross-cultural management research by suggesting that digital environments do not simply reproduce established cultural differences; rather, they may reshape how culturally influenced expectations are expressed, interpreted, and negotiated in everyday remote collaboration. Cultural friction therefore provides a useful conceptual lens for understanding the interaction between cultural expectations and digital communication conditions.

8. Conclusions

This exploratory qualitative study contributes to cross-cultural management research by conceptualising cultural friction as a digitally mediated process. Drawing on four semi-structured interviews with employees of multinational organisations operating in Hungary, the study suggests that culturally influenced expectations regarding hierarchy, communication styles, uncertainty management, and teamwork interact with the characteristics of digital communication environments. Rather than simply reproducing cultural differences, digital technologies may amplify, reshape, or help mitigate misunderstandings by influencing the availability of contextual cues, opportunities for participation, and practices of coordination and trust-building. These findings offer a context-specific perspective on how cultural expectations are expressed and negotiated in digitally mediated multinational collaboration.

The key takeaways include the importance of inclusive leadership to align leadership structure and hierarchy, the importance of varying communication styles to suit direct or indirect communication, and the importance of flexible planning to suit different uncertainty tolerances. Trust, although fragile in a virtual environment, can be built by appropriate uses of video conferencing, customised feedback, and bonding rituals.

Furthermore, this study contributes to the literature on cross-cultural management by highlighting the importance of cultural adaptability in digitally mediated multinational teamwork. Future research may build on this topic and include a wider range of metrics for studying cross-cultural team performance.

The findings of this study should be interpreted in light of several limitations. First, the empirical findings are based on four semi-structured interviews, which reflects the exploratory qualitative design of the research. Although the interviews provided rich, context-specific insights into participants' experiences of digital collaboration, the relatively small sample limits the transferability of the findings to the wider population of multinational teams. Rather than aiming for statistical generalisation, the study seeks to provide an in-depth understanding of how cultural differences are experienced and managed in digitally mediated work environments.

Second, all participants were employed by multinational companies operating in Hungary, representing the energy, aviation, and finance sectors. While these industries were selected because they rely extensively on multinational collaboration and digital

communication, organisational culture, industry characteristics, and the Hungarian business environment may have influenced participants' experiences. Consequently, the findings should be interpreted within this specific context and may not fully represent multinational teams operating in other countries, industries, or organisational settings.

Third, the study relies on self-reported interview data. Participants described their own perceptions and experiences, which may be influenced by personal interpretation, selective recall, or social desirability bias. Although semi-structured interviews enabled the collection of rich qualitative data, future research could complement interview findings with observational methods, organisational documents, or communication records to provide methodological triangulation and strengthen the robustness of the findings.

Finally, although Hofstede's cultural dimensions provided a useful analytical framework for interpreting participants' experiences, cultural behaviour should not be understood as static or determined solely by national culture. Individual experiences, organisational culture, professional background, and previous exposure to multicultural environments also shape communication and collaboration in multinational teams. Accordingly, Hofstede's framework was used as an interpretive lens rather than a deterministic explanation of participants' behaviour.

Future research could build on this exploratory study by including a larger and more diverse sample of multinational organisations across different countries and industries. Comparative studies using mixed-method designs or longitudinal approaches could further examine how digital collaboration practices and cultural interaction evolve over time and across organisational contexts.

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Author Contributions Statement (CRediT)

Conceptualization: KA; Methodology: KA; Investigation: KA; Formal Analysis: KA; Writing – Original Draft Preparation: KA; Writing – Review & Editing: KA.

Conflicts of Interest

The author declares no conflict of interest.

Data Availability Statement (DAS)

The data supporting the findings of this study consist of qualitative interviews and are not publicly available due to participant confidentiality considerations. Further information about the research data may be obtained from the corresponding author upon reasonable request, subject to applicable confidentiality and ethical restrictions.

Declaration of Generative AI Use

During the preparation and revision of this manuscript, the author used ChatGPT (OpenAI) to assist with improving the clarity, language, structure, and presentation of the text. The author reviewed and edited the resulting content and takes full responsibility for the accuracy, integrity, and final content of the publication.

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