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Navigating Distributed IT Projects:

Managing Organizational and Cultural Complexities

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ABSTRACT (MAX. 200 WORDS):
Distributed IT projects are increasingly common as organizations leverage global talent and digital collaboration tools. However, these projects are associated with elevated risk due to geographical dispersion, cultural differences, and organizational complexity. This study investigates how such factors influence the emergence and management of risk in distributed IT projects. Drawing on Institutional Theory and Hofstede's 6-D model of national culture, the study is based on nine semi-structured interviews with professionals experienced in global IT project settings. Through thematic analysis, six key themes were identified: geographical and cultural barriers, relationship-building, communication clarity, risk awareness, leadership alignment, and opportunities in global setups. The findings indicate that while technology facilitates interaction, it cannot substitute for trust-building, cultural awareness, and structured leadership. Effective risk management in distributed projects is shown to require adaptive approaches that are sensitive to institutional and cultural context. This study contributes to the literature by integrating perspectives on IT project risk and virtual collaboration, offering practical insights into the social and organizational challenges of globally distributed IT work.

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1 Introduction

This chapter introduces the study's focus on the risks and complexities associated with distributed IT projects. It highlights the challenges that arise from organizational and cultural differences, difficulties in communication and coordination, and the need to build trust and align stakeholders in virtual project environments. The chapter also outlines the importance of understanding these dimensions, reviews key insights from previous research, and sets the stage for investigating how such risks emerge and can be managed in practice.

1.1 Background

IT projects are crucial for realizing organizational and societal benefits, yet they often face significant challenges and high failure rates (Schmidt, 2023). Drawing on three decades of research, Schmidt synthesizes the findings and concludes that IT projects frequently underperform in terms of cost, timeline, and delivered value. These findings are echoed in recent industry data; according to Palumbo et al. (2024), large-scale technology initiatives are routinely delayed and exceed budgets, often falling short of expectations.

Virtual teams, described by Abakpa and Dvouletý (2024) as geographically and organizationally dispersed individuals who collaborate through digital tools such as video conferencing and messaging platforms, have become a prominent feature of the modern workplace. The study emphasises that adopting virtual collaboration is no longer optional but a necessary response to globalization, technological advancement, and the evolving demands of the digital economy. However, this shift has introduced new complexities. While digital technologies facilitate interaction, they do not inherently guarantee effective collaboration. As Abakpa and Dvouletý (2024) note, many organizations continue to face difficulties adjusting leadership approaches, communication practices, and organizational structures to meet the demands of virtual environments.

Morrison-Smith and Ruiz (2020) identify that a lack of informal communication channels in virtual teams contributes to trust deficits, reduced shared understanding, and difficulties in decision-making. Similarly, Alkoud et al. (2023) group virtual team challenges into three dimensions; technological, social, and diversity-related, each of which can lead to friction and reduced performance. Furthermore, Youssef et al. (2022) found that virtual teams often face issues related to leadership, team cohesion, and stakeholder engagement, even when supported by advanced communication platforms.

Risks in IT projects have also been studied extensively. Nikolaenko and Sidorov (2023) categorizes 105 risk factors that reveal that the majority originate internally, particularly from project managers and team members. These include unclear goals, misaligned expectations, and ineffective planning. Trzeciak (2021) highlights that even in agile IT environments,

human and organizational factors such as customer involvement and team structure remain central to project outcomes.

Taken together, the literature highlights that both IT projects and distributed teams are individually associated with complexity and risk. Each domain has been examined in detail, yet they are most often studied separately.

1.2 Problem identification

More than 90% of Fortune Global 500[1] companies now use external resources to deliver IT services (L'Erario et al., 2020). Despite the growing prevalence of distributed IT projects, there is still limited understanding of how risk develops and appears when the two risk-prone areas, IT project work and virtual collaboration, are combined (Morrison-Smith & Ruiz, 2020). While past research has investigated project risk factors (Nikolaenko & Sidorov, 2023), the specific risks associated with agile IT projects (Trzeciak, 2021) and virtual team dynamics (Morrison-Smith & Ruiz, 2020), few studies have examined how risks evolve in the context of distributed IT projects. This lack of integrated insight is concerning, particularly as organizations increasingly rely on such configurations to deliver critical initiatives. As Abakpa and Dvouletý (2024) point out, many organizations adopt virtual team structures without fully adapting their project management practices. Furthermore, the assumption that digital tools can resolve challenges related to communication, trust, and alignment has proven overly optimistic (Youssef et al., 2022), as issues related to virtual team dynamics and collaboration persist despite technological advancements (Morrison-Smith & Ruiz, 2020). This gap becomes particularly visible in real-world cases where virtual collaboration and IT project delivery intersect.

A notable example of the challenges involved in international IT projects with virtual collaboration is the 2018 system migration at UK-based TSB Bank. The project was led remotely between TSB in the UK and Banco Sabadell's IT subsidiary in Spain (TSB Bank plc, 2019). Due to insufficient testing, where only one of two data centres was validated prior to launch, combined with weak oversight and miscommunication across borders, the rollout failed (Makortoff, 2019). Nearly two million customers lost access to their accounts, and in some cases, personal banking data was exposed to other users (Monaghan, 2018). As a result, British regulators fined TSB £48.7 million for serious governance and risk management failures (Wilson and Aguado, 2022), and the bank's former CIO was personally fined £81,000 (Data Centre Dynamics, 2022). This case highlights how geographical and organisational distance can amplify coordination issues and technical misunderstandings in distributed IT projects.

This study focuses on the risks that arise in distributed IT projects, where team members are geographically dispersed and communicate virtually. It examines how communication, trust, and coordination are affected by organizational and cultural complexity, and what the implications are for stakeholder collaboration and project management.

[1] The Fortune Global 500 is an annual ranking of the world's largest companies by revenue, published by Fortune magazine. (Fortune, 2024)

1.3 Research Purpose and Research question

This study investigates the risks that can emerge in distributed IT projects where team members are geographically dispersed and communication takes place virtually. Specifically, the study focuses on how organizational and cultural complexities contribute to risk, particularly in relation to communication, coordination, and stakeholder collaboration. By understanding these dynamics, the research aims to develop insights into how such risks can be effectively managed.

RQ1: What risks emerge in distributed IT projects, and how can they be effectively managed?

RQ2: How do organizations respond to the complexity and risk associated with distributed IT projects?

1.4 Delimitations

This study does not examine technical systems, tools, or platforms in detail. While digital tools are clearly used in all distributed IT projects, and form a central part of the virtual environment, they are not the focus of analysis. Instead, the study investigates how organizational and cultural factors shape the emergence and management of risk in these settings.

The scope is limited to IT projects that operate in virtual, distributed environments, where team members are geographically dispersed and rely on digital communication. Consequently, the findings may not be directly transferable to non-virtual or co-located project settings.

The respondents are global IT project managers whose insights reflect both the practical complexities of real-world projects and the subjective nature of their experiences, shaped by personal and organizational contexts. The qualitative design may introduce variability and limit generalizability, yet it enables in-depth understanding of context-dependent risk dynamics.

Both outsourced and insourced projects are included in the study, as these configurations often coexist in distributed settings. However, no distinction is made between them, since the analysis focuses on the risks related to distribution and virtual collaboration, rather than the sourcing model itself.

2 Literature review

In this chapter, we present a review of literature concerning risks in distributed IT projects. The review covers definitions and characteristics of distributed project environments and focuses on how organizational structures, cultural diversity, and communication challenges contribute to risk. Particular attention is given to issues of trust, coordination, and stakeholder alignment, factors consistently highlighted in the literature as critical in virtual collaboration settings. Furthermore, the chapter introduces Institutional Theory and Hofstede's 6-D model of national culture as frameworks for understanding how organizational norms, structures, culture and institutional pressures shape risk-related behaviors in distributed IT projects.

2.1 Definition of Distributed Projects

Distributed projects can be defined as projects in which geographically dispersed teams work in parallel across multiple sites, with tasks allocated based on location, and coordinated to achieve a shared overall objective. This configuration differs from centralized projects through spatial, temporal, and organizational separation, requiring more advanced coordination and communication mechanisms (Evaristo & van Fenema, 1999). Virtual communication technologies such as video conferencing, messaging platforms, and collaborative tools are essential in distributed projects, serving as the primary means of coordination and information exchange in the absence of physical proximity (L'Erario et al., 2020). In this study, we define distributed projects as projects carried out by teams in different locations, who use digital communication tools to coordinate their work and achieve shared objectives.

2.2 Characteristics of Distributed IT Projects

Distributed IT projects, referred to as Global Software Development (GSD) by Saalem et al., (2019), are characterized by their virtual and cross-border nature, where development teams are spread across countries and time zones (Saleem et al., 2019). Jain and Suman (2018) further emphasize that such teams typically work across different cultures, languages, and geographical contexts, which complicates collaboration, communication, and trust-building. These projects are inherently complex, especially in terms of coordination, communication, and control (Saleem et al., 2019). Unlike co-located projects, GSD teams must navigate temporal, socio-cultural, geographical, and organizational distances, which significantly impact project outcomes (Saleem et al., 2019). Jain and Suman (2018) report that nearly 40% of global software development projects fail, attributing this to issues such as increased coordination costs, cultural misunderstandings, and limited face-to-face communication. These findings are echoed in educational contexts by Schmiedmayer et al. (2022), who

observed that even simulated GSD scenarios in academic settings reveal persistent difficulties in establishing trust, synchronizing across time zones, and achieving effective collaboration.

However, scholars differ in how they assess the ability of organizations to address these challenges. Razzak and Šmite (2015) argue that distributed agile teams tend to rely heavily on codification strategies to manage knowledge, often at the expense of tacit, face-to-face knowledge exchange that is more prevalent in co-located teams. This position contrasts with the findings of Zyberaj et al. (2023), who present a case in the automotive industry where the use of platform-based testing environments helped to reduce integration issues and foster early feedback loops between globally dispersed teams. Thus, while Razzak and Šmite highlight the social limitations of distributed collaboration, Zyberaj et al. (2023) emphasize how technical solutions can compensate for some of these barriers, suggesting that context, tooling, and industry readiness play crucial roles in shaping the success of GSD initiatives.

Taken together, these sources show a consensus around the challenges of GSD, particularly related to communication and coordination across distances. Yet, they also reveal contrasting perspectives on how best to overcome these obstacles, whether through improved project management and team dynamics, as suggested by Saleem et al. (2019) and Jain and Suman (2018), or through the integration of supportive technologies and platforms, as illustrated by Zyberaj et al. (2023).

2.3 Risk Factors in Global IT Projects

A recurring theme across the literature is the persistent high failure rate of IT projects, despite decades of research on risk management. In a comprehensive study of 5,392 IT projects, Flyvbjerg et al. (2022) show that cost overruns are not normally distributed but follow a power-law distribution, meaning that a significant portion of projects fall into a “fat tail” of extreme outcomes. This challenges conventional risk assumptions and reveals that large-scale overruns are not anomalies, but structural features of project environments. Similarly, Arcidiacono (2017) reports that 25% of IT projects fail outright and 50% require substantial rework, often due to weak planning and insufficient risk mitigation.

The reasons behind this widespread failure are complex and varied. Arcidiacono (2017) emphasizes organizational and managerial shortcomings such as scope creep, communication breakdowns, and failure to align with stakeholders. Arora et al. (2024) build on this by highlighting how distributed teams often face elevated project risk due to reduced real-time coordination, unclear accountability, and lack of shared contextual knowledge. The study reveals that even when technical systems are well-defined, the social and structural dynamics of global collaboration introduce hidden risk factors that are frequently overlooked in traditional planning models.

Adding another layer, Schmalz (2024) argues that the persistent challenge in managing IT project risk stems not only from execution issues but also from how we conceptualize risk itself. Schmalz (2024) further points out that the field suffers from fragmented taxonomies and inconsistent terminology, which obstruct efforts to build a shared understanding of risk drivers. As a result, even organizations that invest in risk management tools may still fail to identify, prioritize, and act on the most critical threats. Together, these sources show that the

issue is not simply the presence of risk, but our collective inability to define, anticipate, and adapt to its most disruptive forms.

2.4 Risk Management in Distributed IT Projects

2.4.1 Risk Management in Distributed and Agile Contexts

Effective risk management is essential for the success of distributed IT projects, yet its application remains uneven. According to Pilliang and Munawar (2022), many software development teams lack a proactive and integrated approach to risk, especially when it comes to aligning risk management with the software development lifecycle. Although agile methods are widely adopted for their adaptability, they often fail to incorporate structured risk management practices, which creates blind spots in planning and execution (Pilliang & Munawar, 2022).

Shrivastava and Rathod (2017) emphasize that Distributed Agile Development (DAD) merges two contrasting models: agile methods, which rely on close and continuous collaboration, and distributed software development, which is defined by spatial, temporal, and cultural distance. This combination introduces risks that are not present in traditional co-located projects. Through empirical investigation, they identified five core risk categories that have particularly high impact on DAD projects: Software Development Life Cycle, Project Management, Group Awareness, External Stakeholder Collaboration, and Technology Setup (Shrivastava & Rathod, 2017). Among these, Group Awareness and External Stakeholder Collaboration were perceived to carry the greatest risk, particularly due to coordination delays, lack of visibility, and misaligned expectations between distributed teams (Shrivastava and Rathod, 2017). Their proposed framework, validated through partial implementation in three industry settings, demonstrated measurable reductions in perceived risk severity and improved communication flows within distributed teams.

Khan (2025) reinforces the importance of having a structured and continuous approach to risk management across the entire project lifecycle. The study found that organizations that integrate risk management from the initiation phase through to project closure report significantly higher success rates than those without formalized processes. In particular, 30% higher success rates were observed among projects with proactive frameworks, and teams that engaged stakeholders early on were better able to identify and mitigate hidden risks (Khan, 2025). Furthermore, the study highlights that insufficient monitoring and late-stage reactivity often contribute to project delays and reduced stakeholder satisfaction.

2.4.2 Emerging and Adaptive Practices

In response to the limitations of traditional risk management, such as inflexible planning, delayed risk detection, and poor alignment with distributed work structures, recent research highlights a shift toward more dynamic and adaptive practices (Cagiltay et al., 2015). Cagiltay et al. (2015) advocate for embedding risk awareness into regular team activities, such as stand-ups and sprint reviews, which allows for proactive identification and communication of risks and better alignment with evolving project conditions.

Technological advancements further enable this transformation. Dantas et al. (2022) emphasize the role of cloud-based tools, real-time dashboards, and collaborative platforms in enhancing transparency and consistency in risk monitoring. Their findings support Cagiltay et al.'s (2015) emphasis on operational integration by showing how digital tools can institutionalize such practices. However, this evolution is not without challenges. Despite the availability of sophisticated technologies, Schmalz (2024) highlights a persistent lack of shared understanding regarding risk categorization and communication. Inconsistent definitions and ambiguous taxonomies continue to hinder effective knowledge transfer, especially across organizational boundaries.

Taken together, these perspectives illustrate that while the integration of digital tools and adaptive frameworks has significantly advanced risk management in virtual IT projects, a cohesive and flexible approach is still needed (Dantas et al., 2022). The field is gradually moving from rigid, top-down models toward collaborative, context-aware strategies that better reflect the fluidity and complexity of globally distributed environments (Cagiltay et al., 2015). This shift is particularly important in practical, distributed project settings, where synchronized communication and infrastructure must support continuous adaptation and learning (Schmiedmayer et al., 2022).

2.5 Organizational Challenges

Dantas et al. (2022) argue that ineffective knowledge transfer between development teams often leads to redundant work, which is particularly problematic in virtual settings where collaboration depends on reliable information flow. Furthermore, Nikolaenko and Sidorov (2023) identify these same concerns among a broader list of 105 IT project risks, specifically highlighting insufficient IT support and knowledge gaps as common contributors to failure. Their findings emphasize that risks associated with infrastructure and knowledge handling are deeply interconnected in distributed IT environments, and require early, structured mitigation efforts.

Organizational risk factors also play a significant role in global IT projects. According to Nikolaenko and Sidorov (2023), poor communication, unclear responsibility structures, and insufficient project leadership are frequently cited in failed IT projects. These internal organizational issues become even more pronounced in globally distributed teams, where physical and cultural separation can amplify misunderstandings and hinder decision-making. Neumann et al. (2024) add a complementary perspective, focusing on how organizational culture interacts with agile practices. Their empirical findings suggest that relying on broad cultural models, such as Hofstede's dimensions, without adjusting for team-specific behaviors can cause mismatches in planning, leadership, and collaboration styles. This misalignment can result in friction and miscommunication, which may be wrongly attributed to technology or process failure.

Together, the studies by Dantas et al. (2022), Nikolaenko and Sidorov (2023), and Neumann et al. (2024) highlight that technological and organizational risk factors often interact in complex ways. Although the studies focus on different areas, such as infrastructure, organization, or culture, they all point to the need to consider the specific context of

distributed IT projects to avoid escalating issues. Addressing these challenges requires not only technical competence but also cultural awareness and structured leadership.

2.5 Cultural and Communication Barriers

Lynden (2024) identifies culture and communication as two of the most persistent themes in global virtual team research, closely linked to trust, collaboration, and coordination challenges. This is supported by Welsch et al. (2024), who argue that cultural differences, such as power distance, communication directness, and uncertainty avoidance, significantly shape team interaction, especially in agile software development contexts. Misunderstandings stemming from these differences can manifest in hesitancy to speak up, conflicting interpretations of silence, or misalignment in decision-making approaches. The lack of face-to-face communication, as noted by both Welsch et al. (2024) and Lynden (2024), exacerbates these tensions by removing important social cues that help clarify intent and build mutual understanding.

While these social dynamics unfold on the team level, Anglani et al. (2023) emphasize that project leaders also play a crucial role in either mitigating or reinforcing such barriers. Their framework advocates for cultural intelligence as an essential skill for global project managers, noting that cultural intelligence fosters adaptive communication and empathetic leadership, both of which are necessary to navigate culturally complex virtual environments. This is particularly important in the absence of in-person cues, a concern also raised by Lynden (2024), who notes that virtual teams often lack informal communication channels that are vital for building trust and interpersonal clarity. The compounded effect of cultural distance and digital separation can easily cause misaligned expectations and escalating tension if not actively managed.

Technological systems used in distributed teams can further amplify or dampen these cultural and communicative frictions. As shown by Nitschke et al. (2019), enterprise collaboration systems (ECS) often fail when their implementation does not account for cultural variation in how workflows are structured or authority is exercised. Their multi-organizational study demonstrates that applying uniform digital routines without adapting them to local communication norms leads to resistance and process breakdowns. Similarly, Welsch et al. (2024) observed that tools designed for flat, participatory communication may clash with norms in high power-distance cultures, where individuals are less likely to volunteer input without explicit invitation.

Taken together, these studies show that cultural and communication barriers in global IT projects are neither incidental nor superficial. They arise from deep-seated differences in values, expectations, and interactional norms, but can be mitigated. Rather than relying solely on national cultural models, teams and organizations must promote continuous dialogue, localized adaptation, and cultural intelligence at both individual and system levels. As Lynden (2024) and Anglani et al. (2023) argue, trust, clarity, and cohesion in global teams depend not only on what tools or methods are used, but on how sensitively they are applied across cultural boundaries.

2.6 Trust, Alignment, and Stakeholder Collaboration

Successful collaboration in distributed IT projects is highly dependent on establishing trust and ensuring alignment among stakeholders across geographical, cultural, and organizational boundaries. Cheng et al. (2021) argue that trust plays a central role in the efficiency of multinational virtual teams (MNVTs), as it supports smoother cooperation and reduces cognitive overload. The longitudinal study shows that both openness-based and reliability-based trust significantly impact group efficiency over time, especially in virtual settings where informal social interactions are limited.

However, achieving stakeholder alignment remains a major challenge. Arcidiacono (2017) points out that conflicting goals, poor communication, and unclear responsibilities between business stakeholders and IT teams often contribute to IT project failure. These mismatches can lead to unmet expectations, rework, and delayed decision-making. Hacker et al. (2019) complement this view by highlighting that trust in virtual teams does not form organically; rather, it must be cultivated deliberately through leadership, shared understanding, and consistent communication practices.

Trust deficits can be especially pronounced in virtual teams due to reduced face-to-face interaction and fewer opportunities for spontaneous dialogue. Cheng et al. (2021) emphasize that trust in MNVTs is often built not through social bonding, but through timely and transparent communication, where individuals and teams, reliability and openness become key trust indicators. Morrison-Smith and Ruiz (2020) further note that the lack of informal communication channels, such as spontaneous hallway chats or unstructured brainstorming, limits opportunities for interpersonal bonding and trust reinforcement.

To bridge alignment gaps, Cagiltay et al. (2015) recommend implementing user-centered practices such as role clarity, structured feedback loops, and shared knowledge platforms. These measures can help synchronize expectations between distributed stakeholders and promote collaborative problem-solving. Cheng et al. (2021) also suggest that communication openness, where team members share progress and challenges regularly, is a critical lever to enhance group awareness and mutual accountability in virtual teams.

In summary, effective stakeholder collaboration in distributed IT projects hinges on two intertwined components: trust and alignment. Trust fosters psychological safety and reduces friction in communication, while alignment ensures that all actors work toward shared goals. Without both elements, project risks escalate significantly. As the literature shows, successful collaboration requires intentional strategies, including open communication, well-defined roles, and continuous reinforcement of mutual commitments.

2.7 Theory

2.7.1 Institutional Theory

Institutional Theory provides a valuable lens through which to examine how organizations operate within broader social, cultural, and regulatory environments. Rather than viewing

organizations purely as rational entities driven by efficiency, Institutional Theory emphasizes the influence of norms, values, and taken-for-granted beliefs in shaping organizational behavior and practices (Björck, 2004). This theoretical perspective is particularly useful in information systems (IS) research, where technological implementations and risk management strategies are often deeply embedded in social and institutional contexts.

At its core, Institutional Theory focuses on how institutions defined as social structures composed of regulative, normative, and cultural-cognitive elements guide and constrain behavior across various organizational levels (Björck, 2004). Björck (2004) further explains that these institutions manifest through formal rules (e.g., standards, laws), informal norms (e.g., shared expectations), and cultural understandings (e.g., “how things are done”). These elements shape not only what organizations do but also how they justify their actions to stakeholders, often aiming to attain legitimacy and conformity within their organizational fields.

In the context of distributed IT projects, Institutional Theory helps explain why organizations adopt similar risk management frameworks despite differences in internal structures or needs. Björck, (2004) argues that organizations tend to become more alike over time due to external pressures, imitation of others, and shared professional standards. For instance, coercive pressures may arise from legal requirements or client demands; mimetic pressures may stem from benchmarking against industry leaders; and normative pressures may emerge through professional networks and shared education. These dynamics often result in the widespread adoption of risk practices that may not necessarily be optimal, but are considered legitimate and expected within the field.

Furthermore, Institutional Theory provides a way to understand the persistent challenges in aligning global project teams with risk policies. As Björck (2004) highlights, the enactment and internalization of institutional norms can vary across cultural and organizational settings, shaping how individuals behave in relation to formal policies. Building on this perspective, such variation can be particularly pronounced in virtual project environments, where team members from different institutional backgrounds may interpret risk policies differently or default to habitual behaviors shaped by their local work cultures rather than by organizational strategy.

The theory also offers insight into why formalized risk policies, tools, or standards often remain underutilized or symbolic commonly referred to as "paper tigers" (Björck, 2004). These formal structures may exist primarily to signal compliance with institutional expectations rather than to drive actual behavioral change. This distinction between formal adoption and practical implementation is especially relevant in multinational settings, where the institutional environments and stakeholder expectations vary significantly across geographical and cultural boundaries.

By adopting an institutional lens, this study can examine not only what risk management practices are used in distributed IT projects, but also why they are used, how they are perceived by different stakeholders, and how institutional pressures influence their adoption and effectiveness. Institutional Theory thus serves as a powerful framework for interpreting and discussing the findings of this research, particularly in relation to stakeholder alignment, communication challenges, and the cultural embeddedness of risk-related behaviors.

In summary, Institutional Theory allows us to explore how distributed IT project environments are shaped by formal and informal institutions, and how these structures affect risk perception, policy adoption, and stakeholder collaboration. By integrating this theory into our analysis, we gain deeper insights into the organizational and social mechanisms that drive or inhibit effective risk management distributed IT projects.

2.7.3 The 6-D model of national culture

Hofstede's 6-dimensional model of national culture provides a comprehensive framework for understanding how cultural differences influence organizational behavior and decision-making in global environments. Developed from Hofstede's groundbreaking research at IBM in the 1960s and 1970s, and later expanded with the contributions of Gert Jan Hofstede and Michael Minkov, the model identifies six key dimensions that explain how national cultures differ and how these differences shape interactions in multinational settings (Hofstede et al., 2010).

Table 1. The 6-D model of national culture

Power Distance (PDI)	Power Distance refers to the degree to which less powerful members of a society accept and expect unequal power distribution. In high power distance cultures, hierarchical structures and authority are more rigidly maintained, whereas low power distance cultures emphasize equality and decentralized decision-making (Hofstede et al., 2010).
Individualism vs. Collectivism (IDV)	This dimension measures the extent to which individuals are integrated into groups. In individualist cultures, personal goals and achievements are prioritized, whereas collectivist cultures emphasize group loyalty and harmony (Hofstede et al., 2010).
Masculinity vs. Femininity (MAS)	Masculinity reflects a preference for achievement, competition, and material rewards, whereas femininity reflects a preference for cooperation, modesty, and quality of life (Hofstede et al., 2010). Masculine cultures tend to value assertiveness and competitiveness, which can create tension in teams with more feminine cultural values that prioritize consensus and collaboration.
Uncertainty Avoidance (UAI)	Uncertainty avoidance refers to the extent to which a society feels uncomfortable with ambiguity and uncertainty. High uncertainty avoidance cultures tend to establish strict rules, procedures, and planning to reduce uncertainty, whereas low uncertainty avoidance cultures are more comfortable with flexibility and adaptability (Hofstede et al., 2010).

Long-Term vs. Short-Term Orientation (LTO)	Long-term orientation reflects a focus on future rewards, perseverance, and adaptability, while short-term orientation emphasizes respect for tradition, fulfilling social obligations, and maintaining stability (Hofstede et al., 2010).
Indulgence vs. Restraint (IVR)	Indulgence reflects a society's tendency to allow relatively free gratification of basic human drives related to enjoying life and having fun, whereas restraint reflects a society's tendency to control gratification and regulate behavior through social norms (Hofstede et al., 2010). Differences in indulgence can affect team cohesion and motivation, particularly when balancing work-life expectations in multinational teams.

Hofstede's model provides a valuable framework for understanding and managing cultural diversity in distributed IT projects. Differences in power distance can create tension in hierarchical decision-making, while variations in individualism and collectivism can influence team cohesion and communication. High uncertainty avoidance cultures may resist agile project management approaches, while low uncertainty avoidance cultures may struggle with structured project governance. Moreover, differences in masculinity and femininity can affect leadership styles, motivation, and conflict resolution strategies.

By understanding these dimensions and their implications, project managers can tailor their communication strategies, decision-making processes, and conflict resolution methods to align with the cultural preferences of their teams. This approach facilitates smoother collaboration, reduces misunderstandings, and enhances overall project performance.

2.8 Summary of Included Literature

The reviewed literature highlights a complex and interconnected set of risks in distributed IT projects, including communication challenges, cultural differences, stakeholder misalignment, and limited risk awareness. Several studies point to the need for relational strategies such as trust-building, cultural intelligence, and leadership that is responsive to virtual team dynamics. In addition, frameworks for risk classification and process standardization are proposed as ways to manage distributed work more effectively. While technical tools and platforms are commonly discussed, the literature consistently emphasizes that technology alone is not sufficient to address the human and organizational challenges involved. Despite a growing body of work in this area, few studies provide an integrated view of how these risks are experienced and addressed in practice, particularly from the perspective of professionals involved in international IT projects.

Table 2 provides an overview of the literature reviewed in this study, summarizing each source's contribution, focus area, and methodological approach where applicable.

Table 2. Overview of Literature Review Material

Article	**Sources/Database**	**Motivation**
Anglani, F., Pennetta, S., Reaiche, C. & Boyle, S. (2023). Crossing digital frontiers with cultural intelligence – A new paradigm for project managers. *International Journal of Project Management*, 41, 102543. https://doi.org/10.1016/j.ijproman.2023.102543.	ScienceDirect	Emphasizes the role of cultural intelligence (CQ) in managing communication and leadership challenges in global IT projects.
Arcidiacono, G. (2017). Comparative research about high failure rate of IT projects and opportunities to improve. *PM World Journal*, 6(2), pp.1–10. Available at: https://pmworldlibrary.net/wp-content/uploads/2017/02/pmwj55-Feb2017-Arcidiacono-high-failure-rate-of-it-projects-featured-paper.pdf [Accessed 15 April 2025].	PM World Journal	Used to highlight high failure and rework rates in IT projects and to illustrate how weak planning and lack of stakeholder alignment contribute to project failure.
Arora, S., Nandi, S. & Pramod, D. (2024). Predictive analysis of global risk insights with a focus on World Risk Index factors. In: *Proceedings of the 2024 Sixteenth International Conference on Contemporary Computing (IC3 2024)*, Noida, India, 8–10 August 2024. ACM, pp.27–34. https://doi.org/10.1145/3675888.3676022.	ACM	Identifies hidden social and structural risks in distributed IT projects.
Björck, F. (2004). Institutional theory: A new perspective for research into IS/IT security in organisations. In: *Proceedings of the 37th Hawaii International Conference on System Sciences (HICSS)*, Big Island, Hawaii, USA, 5–8 January 2004. IEEE. https://doi.org/10.1109/HICSS.2004.1265444.	ACM	Used to explain how institutional factors influence risk management practices in organizations.
Cagiltay, K., Bichelmeyer, B. & Kaplan Akilli, G. (2015). Working with multicultural virtual teams: Critical factors for facilitation, satisfaction and success. *Smart Learning Environments*, 2(11), pp.1–16. https://doi.org/10.1186/s40561-015-0018-7.	SpringerOpen	Used to explain how cultural differences affect communication, trust, and collaboration in virtual teams, and to support strategies for managing multicultural dynamics in IT projects.
Cheng, X., Bao, Y., Yu, X. & Shen, Y. (2021). Trust and group efficiency in multinational virtual team collaboration: A longitudinal study. *Group Decision and Negotiation*, 30, pp.529–551. https://doi.org/10.1007/s10726-020-09722-x.	Springer Nature	Shows that openness- and reliability-based trust significantly influence efficiency in multinational virtual teams.
Dantas, E., Sousa Neto, A., Valadares, D., Perkusich, M., Ramos, F., Almeida, H. & Perkusich, A. (2022). Investigating technological risks and mitigation strategies in software projects. In: *Proceedings of the 37th ACM/SIGAPP Symposium on Applied Computing (SAC '22)*, Virtual Event, 25–29 April 2022. ACM, pp.1527–1535. https://doi.org/10.1145/3477314.3507062.	ACM	Used to identify common technological risks in software projects and explore concrete mitigation strategies that can be applied to global IT project settings.
Evaristo, J.R., & van Fenema, P.C. (1999). A typology of project management: emergence and evolution of new forms. *International Journal of Project Management*, vol. 17, no. 5, pp.275–281, https://doi.org/10.1016/S0263-7863(98)00041-6.	ScienceDirect	Defines distributed projects.
Flyvbjerg, B., Budzier, A., Lee, J.S., Keil, M., Lunn, D. & Bester, D.W. (2022). The empirical reality of IT project cost overruns: discovering a power-law distribution. *Journal of Management Information Systems*, 39(3), pp.607–639. https://doi.org/10.1080/07421222.2022.2096544.	LUBsearch	Demonstrates the extreme risk patterns and high failure rates in IT projects.

Hacker, J.V., Johnson, M., Saunders, C. & Thayer, A.L. (2019). Trust in virtual teams: A multidisciplinary review and integration. *Australasian Journal of Information Systems*, 23. https://doi.org/10.3127/ajis.v23i0.1757.	Australasian Journal of Information Systems (Open Access)	Shows that trust in virtual teams must be actively built through leadership, shared understanding, and structured communication.
Hofstede, G., Hofstede, G.J. & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd ed.). New York: McGraw-Hill.	Book (Google Scholar/LUBsearch)	Provides theoretical framework (6-D model) for understanding national cultural differences in global IT project teams.
Jain, R. & Suman, U. (2018). A Project Management Framework for Global Software Development. *ACM SIGSOFT Software Engineering Notes*, 43(1), pp.1–10. https://doi.org/10.1145/3178315.3178329.	ACM	Highlights key challenges in GSD, such as cultural barriers, coordination costs, and communication issues.
Khan, R. (2025). The role of risk management in project success: A comprehensive study of project management practices. *Texila International Journal of Management*, 11(1), pp.1–19. https://doi.org/10.21522/TIJMG.2015.11.01.Art015 [Accessed 23 April 2025].	Texila International Journal of Management	Demonstrates that continuous and proactive risk management across the project lifecycle increases success rates, and emphasizes the importance of stakeholder engagement and early risk identification.
L'Erario, D., Silveira, M.A., & Rocha, A.R.O. (2020). CFDSD: a communication framework for distributed software development. *Journal of the Brazilian Computer Society*, vol. 26, no. 1, pp.1–15, https://doi.org/10.1186/s13173-020-00101-7.	SpringerOpen	Used to describe communication in distributed projects and underline their expansion.
Lynden, K.D. (2024). A meta-review of global virtual team research: thematic insights and future directions. *Cross Cultural & Strategic Management*, 31(2), pp.205–242. https://doi.org/10.1108/CCSM-11-2022-0196.	Emerald Insight	Identifies culture and communication as key barriers in global virtual teams and highlights the importance of trust and informal interaction.
Morrison-Smith, S. & Ruiz, J. (2020). Challenges and barriers in virtual teams: a literature review. *SN Applied Sciences*, 2, Article 1096. https://doi.org/10.1007/s42452-020-2801-5.	Springer Nature	Identifies how lack of informal communication in virtual teams can reduce trust, shared understanding, and decision-making efficiency.
Neumann, M., Schmid, K. & Baumann, L. (2024). What You Use is What You Get: Unforced Errors in Studying Cultural Aspects in Agile Software Development. In: *Proceedings of the 28th International Conference on Evaluation and Assessment in Software Engineering (EASE 2024)*, Salerno, Italy, 18–21 June 2024. ACM, pp.405–410. https://doi.org/10.1145/3661167.3661229.	ACM	Highlights the risk of misinterpreting cultural factors when applying generalized models like Hofstede's without team-specific adaptation
Nikolaenko, V. & Sidorov, A. (2023). Analysis of 105 IT Project Risks. *Journal of Risk and Financial Management*, 16, Article 33. https://doi.org/10.3390/jrfm16010033.	MDPI	Used to identify common organizational and technical risks in IT projects, including insufficient IT support, unclear responsibilities, and knowledge transfer challenges in distributed settings.
Pilliang, M. & Munawar, M. (2022). Risk management in software development projects: A systematic literature review. *Khazanah Informatika*, 8(2), pp.1–10. Available at: http://journals.ums.ac.id/index.php/khif/article/view/12710 [Accessed 27 April 2025].	UMS Journals (Open Access)	Highlights the lack of structured and lifecycle-integrated risk management in global software development projects, particularly in agile contexts
Razzak, M.A. & Šmite, D. (2015). Knowledge management in globally distributed agile projects – lessons learned. In: *Proceedings of the 2015*	IEEE Xplore	Highlights reliance on codification over tacit knowledge in distributed agile teams.

IEEE 10th International Conference on Global Software Engineering (ICGSE 2015), Ciudad Real, Spain. IEEE, pp.81–89. https://doi.org/10.1109/ICGSE.2015.22.		
Schmalz, M. (2024). *C*onceptualizing Software Development Project Risk. In: *Proceedings of the Thirtieth Americas Conference on Information Systems (AMCIS 2024)*, Salt Lake City, USA, August 2024. Association for Information Systems. Available at: https://aisel.aisnet.org/amcis2024/it_pm/it_pm/5/ [Accessed 10 April 2025].	AIS	Highlights the complexity of GSD projects, especially regarding communication, coordination, and control.
Schmiedmayer, P., Chatley, R., Bernius, J.P., Krusche, S., Chaika, K., Krinkin, K. & Bruegge, B. (2022). Global software engineering in a global classroom. In: *Proceedings of the 44th International Conference on Software Engineering: Software Engineering Education and Training (ICSE-SEET 2022)*. ACM, pp.113–121. https://doi.org/10.1145/3510456.3514163.	ACM	Illustrates persistent GSD challenges in educational settings, especially trust, time zones, and collaboration.
Shrivastava, S.V. & Rathod, U. (2017). A risk management framework for distributed agile projects. *Information and Software Technology*, 85, pp.1–15. https://doi.org/10.1016/j.infsof.2016.12.005.	Science Direct	Provides an empirically validated framework identifying five key risk categories in distributed agile projects, emphasizing group awareness and stakeholder collaboration as critical areas
Welsch, D., Burk, L., Mötefindt, D. & Neumann, M. (2024). Navigating cultural diversity: Barriers and benefits in multicultural agile software development teams. In: *Proceedings of the 39th ACM/SIGAPP Symposium on Applied Computing (SAC '24)*, Avila, Spain, 8–12 April 2024. ACM, pp.818–825. https://doi.org/10.1145/3605098.3635988.	ACM	Highlights how cultural dimensions such as power distance and communication style influence team interaction and can lead to misunderstandings in agile virtual teams.
Zyberaj, D., Hirmer, P. & Aiello, M. (2023). Towards a Globally Distributed Testing Network in the Automotive Industry. In: *Proceedings of the 4th European Symposium on Software Engineering (ESSE 2023)*, Napoli, Italy, 1–3 December 2023. ACM, pp.46–51. https://doi.org/10.1145/3651640.3651646.	ACM	Shows how technical solutions can reduce integration issues in GSD.

3. Methodology

In this chapter, we present the methodological approach of our study and explain how the research was designed and conducted. We describe the qualitative research strategy and justify our choice of data collection method, which consisted of semi-structured interviews with project managers in distributed IT projects. Furthermore, we outline the procedures for respondent selection, interview conduction, and data transcription. We also detail how the data were analysed using thematic analysis. Lastly, we address the ethical considerations relevant to our study and reflect on the research credibility, and limitations of our methodological choices.

3.1 Research philosophy

This study adopts an interpretivist research philosophy, as our aim is to explore how project managers in distributed IT projects perceive and experience challenges related to risk, coordination, and collaboration. Interpretivism is particularly well suited for studies that seek to understand complex social phenomena through the eyes of those involved, and allows for the collection of rich, contextual insights rather than generalisable truths (Myers, 1997).

By focusing on the respondents' subjective interpretations of their work environments, we were able to examine how meaning is created in relation to cultural dynamics, stakeholder interactions, and communication across distributed teams. This approach also acknowledges the role of the researchers in shaping the data collection and interpretation process (Oates, 2006), something we have actively reflected on throughout the study.

Given that our data consists of qualitative interview material, the interpretivist paradigm provides an appropriate foundation for both the interview design and the subsequent thematic analysis. Rather than testing hypotheses, our goal has been to generate a deeper understanding of the contextual conditions that influence professionals' actions and decisions in global project settings.

3.2 Search strategy

To conduct our literature search, we used a range of scholarly databases in the field of IS, accessed through Lund University Library's portal. We primarily searched in databases such as ACM, AIS eLibrary, IEEE Xplore, SpringerLink, and LUBsearch, as these are commonly used within the IS field and provide access to peer-reviewed journals and conference publications. To broaden our search and capture additional relevant literature, we also used Google Scholar.

We refined our searches using a combination of keywords that aligned with our research focus. These included terms such as "IT project risk", "global virtual teams", "distributed IT projects", "multinational project management", "cultural challenges", "stakeholder alignment", and "institutional theory in IS".

Although our study is based in a Swedish academic context, the global nature of our topic required that we consider international research. As such, we only included sources published in English, and we aimed to focus on peer-reviewed academic work published in journals or conference proceedings. In some cases, we also included older sources that are considered foundational within the field, particularly when no newer publications were available on a given topic.

To determine the relevance of each source, we reviewed the titles, abstracts, and conclusions. Articles that appeared relevant were read in full. This process allowed us to build a collection of high-quality and thematically suitable sources, which together form the theoretical foundation for our study.

3.3 Research approach

This study adopts a qualitative research approach, as our aim is to understand how project managers in distributed IT projects perceive and navigate the complex risks that arise from organizational and cultural dynamics, particularly those related to communication, coordination, and stakeholder collaboration. Given the contextual and interpretive nature of these challenges, qualitative research offers the most appropriate means of inquiry. Recker (2013) emphasizes that qualitative research is suitable for exploring phenomena where human interpretation and contextual understanding are central. Myers (1997) highlights that qualitative methods are especially valuable for studying IS in complex social environments, where technology use is shaped by human behavior, organizational norms, and cultural context. Oates (2006) adds that such approaches allow researchers to explore subjective realities and the social processes that shape them.

In contrast to quantitative research, which often seeks to measure variables and test predefined hypotheses through numerical data, qualitative research enables a more flexible and open-ended exploration of social phenomena (Recker, 2013). Quantitative methods would not have allowed us to capture the depth and nuance required to understand how individuals experience risk or respond to coordination challenges in their specific project environments. Nor would an experimental or positivist design have reflected the contextual, dynamic, and socially embedded nature of the phenomena under investigation (Myers, 1997).

A qualitative approach also aligns with our aim to examine not only what challenges exist in distributed IT projects, but how they are perceived and made sense of by those involved. These are questions that cannot be meaningfully answered through surveys or statistical analysis, but require an understanding of individual perspectives and context-specific dynamics (Oates, 2006). Through interviews and rich narrative data, qualitative research enables a closer examination of how risk is experienced, interpreted, and managed in distributed settings, where collaboration is virtual and cultural differences are present.

Furthermore, as our study is grounded in an interpretivist philosophy, it was important to choose a research approach that allows for the exploration of multiple subjective realities and the co-construction of meaning between researchers and respondents. Oates (2006) underscores the value of interpretivist inquiry for uncovering diverse viewpoints and meanings. Myers (1997) similarly notes that interpretive research is ideal for investigating the

complex interplay of technology, people, and context, particularly in settings that are socially constructed and mediated by organizational and cultural factors. The link between qualitative methods and interpretivism is widely recognized in IS research, where understanding how actors make sense of their environment is considered central to both theory-building and practice.

In summary, the qualitative approach was selected not only because it fits the nature of our research topic, but because it is particularly well suited for research grounded in interpretivism. It allows us to investigate the complexity, context, and meaning that shape how risk and collaboration are experienced in distributed IT project environments, elements that are central to our research aim.

3.4 Method of data collection

3.4.1 Interview Guide Design

Semi-structured interviews were chosen as the primary method of data collection for this study. This approach was considered suitable as it supports exploring respondents' perspectives and experiences in a flexible yet focused manner. As Recker (2013) explains, qualitative interviews are particularly effective when exploring rich, human-centered insights in complex environments. Myers (1997) highlights their value in IS research, noting that such interviews strike a balance between structure and openness, allowing researchers to probe deeper into respondents' narratives without constraining them to predefined categories. According to Oates (2006), semi-structured interviews are especially effective when the goal is to co-construct meaning and understand subjective realities, as they facilitate both guided inquiry and respondent-led exploration.

The interview guide was developed through an iterative process informed by insights from the literature review and the theoretical framework of the study. Key focus areas included communication challenges, team structure, stakeholder dynamics, and risk perception in distributed IT projects. These focus areas were turned into a structured but flexible interview guide with open-ended questions that encouraged respondents to share detailed stories and personal reflections.

Each section included both primary questions and potential follow-up prompts to allow for deeper exploration. For example, under *Team Setup & Interaction*, respondents were asked: *“What factors influence how your team works together when you’re not in the same location?”*, with a possible follow-up like: *“Can you describe an experience where working across locations impacted the project, positively or negatively?”*.

Although the same structure was used in all interviews, the sequence and emphasis of questions were adapted in response to each respondent’s input. This flexibility allowed for the emergence of unanticipated but relevant themes.

Interviews were designed to last approximately 20–35 minutes and were conducted in English or Swedish depending on the respondent’s preference. Each session began with a short

introduction and informal conversation to establish a relaxed and open interview environment before moving into the structured thematic areas.

Table 3 presents the final interview guide model, which was structured into the following thematic sections:

Table 3. Interview guide model

Informed Consent	Clarifying the purpose of the study, ensuring voluntary participation, and obtaining verbal consent to record.
Background	Understanding the respondent's role, experience, and context within the project(s).
Team Setup & Interaction	Exploring team structure, geographical distribution, communication flows, and collaboration practices.
Stakeholders & Roles	Investigating internal and external stakeholder involvement, alignment, and challenges in role clarity.
Risk	Discussing perceived risks, uncertainty, and mitigation strategies in the project environment.
Working Practices	Exploring routines, tools, and workflows in virtual collaboration settings.
Reflection & Experience	Encouraging broader reflections on challenges, success factors, and lessons learned.
Closing	Offering space for additional comments and ensuring respondent comfort with the interview content.

The full interview guide is available in Appendix B.

3.4.2 Selection Criteria and Sampling Strategy

3.4.2.1 Sampling Strategy

Respondents were selected using a combination of purposive and snowball sampling strategies. In purposive sampling, individuals were intentionally identified based on their relevant experience in distributed IT projects. Initial outreach was conducted through our professional networks and LinkedIn, focusing on individuals with roles in project

management. Snowball sampling was then used by asking initial respondents to suggest additional qualified contacts. This combined strategy allowed us to access a broader network of experienced professionals.

3.4.2.2 Selection Criteria

To be eligible for participation, individuals had to currently hold, or have previously held, a position as a project manager within distributed IT projects. While demographic characteristics such as age and gender were not part of the inclusion criteria, we aimed for diversity in roles and professional backgrounds to gather a wide range of perspectives.

3.4.3 Respondent Background and Interview Details

Nine professionals participated in the study, all of whom had experience managing distributed IT projects. The respondents represented a variety of roles, including consultants, business developers, and senior managers, and came from industries such as IT, cybersecurity, transport, and sales. Most respondents had over 20 years of professional experience, while one was in an early-career position. Three respondents identified as female and six as male.

Interviews were conducted online between the 9th and 17th of April 2025, using either Zoom or Microsoft Teams depending on the respondent's preference. The interviews lasted between 16 and 38 minutes. Table 4 provides a detailed overview of all respondents.

Table 4. Overview of Research Respondents

Respondents	**Role**	**Gender**	**Work Experience**	**Interview Date**	**Duration**
Respondent 1	Junior management consultant	Female	2 years	9th of April	25 minutes
Respondent 2	Senior Consultant	Male	20+ years	10th of April	38 minutes
Respondent 3	Senior role in secure software and cybersecurity	Male	20+ years	11th of April	22 minutes
Respondent 4	Head of Sales and Marketing	Male	20+ years	10th of April	35 minutes
Respondent 5	Growth-Focused Business Developer	Female	15+ years	14th of April	19 minutes
Respondent 6	Senior Role in Information Technology	Male	20+ years	15th of April	16 minutes

Respondent 7	Director of Regional Transport Hubs	Female	20+ years	17th of April	17 minutes
Respondent 8	Technology consultant	Male	20+ years	17th of April	30 minutes
Respondent 9	CEO of Western European company	Male	20+ years	17th of April	19 minutes

3.5 Method of Data analysis

Thematic analysis was chosen as the analytical method for this study, as it aligns well with the interpretive and qualitative nature of the research. According to Braun and Clarke (2006), thematic analysis provides a flexible yet systematic approach for identifying, analysing, and reporting patterns within qualitative data. This method is particularly suited for research that aims to explore how people make sense of complex, context-dependent phenomena, such as the risks, communication challenges, and stakeholder dynamics present in distributed IT projects.

A key strength of thematic analysis is its ability to balance structure with flexibility. It allows researchers to remain grounded in respondents' own words while also generating conceptual insights that speak to broader themes and meanings (Braun & Clarke, 2006).

We followed Braun and Clarke's (2006) six-step framework to guide our analysis process. First, we transcribed all interviews verbatim using the AI tool Klang. All interviews conducted in Swedish were translated into English to ensure consistency throughout the dataset. We then carefully reviewed the translations to confirm their accuracy and representativeness.

Following this, each researcher individually read through the interview transcripts and highlighted quotes and passages deemed important or relevant. These highlighted segments were then discussed collaboratively, and from this discussion, six initial themes were identified. We returned to the transcripts and coded all relevant data into the thematic categories we had agreed upon. This coding process was iterative and guided by Braun and Clarke's (2006) principles, ensuring that our themes captured both the frequency and the depth of the data.

Finally, we refined our selection by extracting the most illustrative and representative quotes to be included in the empirical findings chapter. This process allowed us to present a coherent narrative while preserving the respondents' voices and contextual insights. After finalising the thematic analysis we masked or removed any identifying details to keep the respondents anonymity.

This approach enabled us to engage deeply with the data while remaining attentive to the complexities of distributed IT work. It also supported the interpretivist ambition to explore

how respondents construct meaning around risk and collaboration within their project environments. See table 5 for an overview of themes and codes.

Table 5. Overview of Themes and Codes

Theme	**Code**
Geographical and Cultural Barriers	GB
Relationship-Building and Cohesion	RC
Communication and Information Clarity	CI
Risk Awareness and Flexibility	RF
Leadership and Strategic Alignment	LS
Opportunities in Global Setups	OG

3.6 Ethical considerations

Ethical responsibility is a fundamental component of conducting research, particularly when engaging with individuals and organisations as part of the data collection process. Throughout this study, we have adhered to established ethical principles to ensure that all respondents were treated with dignity and fairness, and that no harm, psychological, social, political, or economic, was inflicted on them or their organisations.

In line with ethical research practices outlined by Oates (2006), respondents were fully informed about the purpose of the study and their role in it. They were given the opportunity to participate voluntarily and were explicitly informed of their right to decline participation or withdraw at any point without consequences. Respondents were also assured that their contributions would be anonymized and that no identifying information would appear in the final study. Consent to record the interviews was obtained verbally before each session began.

To ensure the integrity of the data collection and reporting process, all interviews were transcribed verbatim. Interviews conducted in Swedish were translated into English, and all transcripts were carefully reviewed to confirm accuracy and completeness. Any identifying details or sensitive information were masked or removed. The finalized transcripts were then sent back to the respondents for review and approval, allowing them to confirm the accuracy of their statements and ensure that they felt comfortable with the way their input was represented.

We also recognized our obligation to act with integrity and minimize unnecessary intrusion. To this end, we avoided asking questions that were not directly relevant to the research purpose, such as demographic details that offered no added value to the analysis. All data collected during the study were handled with transparency and care, no information was manipulated, omitted, or presented out of context to support preconceived conclusions.

Moreover, the presentation of results was conducted with sensitivity to ensure that no respondent or affiliated organisation could be identified, directly or indirectly, and that the reporting did not lead to misinterpretations that could cause harm. By maintaining this ethical stance, we aimed to conduct research that respects the rights and well-being of all involved parties while upholding academic integrity and scientific quality.

3.7 Research credibility

In this study, we have paid careful attention to ensuring the reliability and validity of our research process and results, in accordance with recommendations by Oates (2006). Validity concerns whether we have studied what we intended to, while reliability refers to the consistency and transparency of the research process.

To ensure content validity, we constructed our interview guide based on insights from existing literature and our theoretical framework. This helped ensure that all key aspects of the research topic were covered and that no important areas were overlooked. Construct validity was addressed by ensuring that our questions clearly reflected the theoretical concepts we aimed to investigate, such as risk, communication, leadership, and organizational responses in global IT projects.

We addressed credibility, that is, the accuracy and trustworthiness of the findings (Oates, 2006) by working closely with the data and carefully analysing the interviews to reflect respondents' experiences as faithfully as possible.

Transferability, which concerns the extent to which the findings can be applied to other contexts, was strengthened by providing thick descriptions of the study setting, respondent roles, and the overall research process. This enables readers to assess whether the insights are relevant to similar project environments (Oates, 2006).

Dependability was supported by following a structured and well-documented research process. We carefully described how we selected respondents, conducted interviews, and analysed the data. This makes it possible for others to understand how the study was carried out and to follow the reasoning behind our conclusions (Buchholz, 1995).

Finally, we aimed for confirmability by being reflexive throughout the research process. We continuously reflected on our own roles, assumptions, and possible biases, and how these might affect the interpretation of the data. Following Oates (2006), this helped us ensure that the findings were grounded in the respondents' statements rather than shaped by our own expectations.

By applying these principles, we have aimed to strengthen the quality and trustworthiness of our research and ensure that our findings offer credible and useful insights into the management of risk in distributed IT projects.

4. Empirical findings

The purpose of the data analysis was to explore the perspectives of interview respondents regarding the key factors influencing the effectiveness and challenges of distributed IT projects. To achieve this, data analysis based on Braun and Clarke's (2006) thematic analysis approach was conducted, resulting in the identification of six key themes. These themes represent the main findings from the research, each of which contributes to a deeper understanding of the dynamics and complexities of distributed teamwork.

4.1 Theme 1: Geographical and Cultural Barriers

Geographical and cultural barriers emerge as recurring challenges in the execution of global IT projects. One core difficulty lies in the breakdown of informal communication and interpersonal understanding when collaboration occurs across borders. As one respondent explains: *"If I've met someone in person, it's much easier to have a Teams meeting later. But only using Teams, there are so many personal dimensions that you just can't read. That's a challenge too, I think."* (R3:24). This lack of informal interaction, such as casual conversations or non-verbal cues, is echoed in another statement: *"It's the distance, absolutely. And that you don't have the daily social contact maybe. Like meeting at the coffee machine and such."* (R2:14). Together, these statements underline that remote communication technologies often fall short in replicating the nuances of in-person interactions, which can hinder trust-building and effective collaboration.

Cultural norms and hierarchies also shape how information is shared and decisions are made, sometimes leading to miscommunication or misalignment. One respondent recounts a case where: *"She had invited her boss to a second meeting and didn't get to speak even though she was the one who knew things. The boss wanted to do the talking and was almost rude to her subordinate."* (R3:16). A related observation highlights the impact of power distance in certain cultures: *"And the hierarchical. It's like this, if you work with certain cultures, as soon as a higher manager enters, those you work with become silent."* (R2:12). These hierarchical dynamics can obstruct the flow of relevant information and reduce the effectiveness of collaborative efforts.

Moreover, time zones introduce additional complications, both practically and culturally. One respondent reflects: *"Yes, time zones are a huge thing. Cultural differences are also a tricky one that you have to learn and that are hard to predict."* (R3:24), and another elaborates: *"So we have to split it up instead. And that can result in some people, who are in completely different time zones, kind of falling into the background and missing out on these opportunities."* (R1:12). This implies that scheduling across multiple time zones not only affects operational efficiency but can also create unequal participation and knowledge dissemination within teams.

Stereotyping and cultural assumptions, while sometimes rooted in experience, further illustrate the risks of misunderstanding across cultural divides. For example, one respondent remarks: *"But if you work with people from [country in South Asia], they always say yes. But*

if they say yes and nod a bit like this, then you know they're lying. Or they're not really sure about what they're saying." (R2:10). Although meant as an informal reflection, such statements may point to real challenges in interpreting intent and commitment across cultures, especially in high-context environments where communication is often indirect.

Geographical distance also affects leadership and change management. As one respondent notes: *"Leading an operation where you are physically present every day and can talk and give feedback and see what happens between meetings is something completely different from leading an operation remotely."* (R7:12). Another reflects on the value of physical presence in moments of change: *"There's a lot of change management involved, and I think that part is very hard to do completely remotely. With change management, you need to be present and see how it's received and how it's actually being used."* (R1:8). These experiences suggest that being on-site remains a critical factor when dealing with sensitive processes such as organizational change.

At the same time, some respondents highlight the value of bridging geographical and cultural gaps through in-person gatherings. For instance: *"So we flew everyone from the different countries to one and the same place. So they could physically meet and be there together for three days. [...] And I got a lot of feedback afterwards from those who were there that they thought it was super valuable."* (R1:30). Similarly: *"Because those teams have been really fun to work in. Where you've also done things together. Like going out for a jog in the morning, that's what you do."* (R5:12). These experiences support the notion that structured social and professional in-person interaction can mitigate some of the inherent challenges of geographically distributed teams.

In sum, the empirical material shows that geographical and cultural barriers in global IT projects manifest through broken communication loops, hierarchical obstacles, time zone mismatches, and misinterpretations of cultural cues. However, deliberate efforts to create social connection, foster cultural understanding, and occasionally meet in person appear to offer valuable strategies for overcoming these challenges.

4.2 Theme 2: Relationship-Building and Cohesion

The importance of relationship-building and team cohesion emerges strongly in the empirical material. One respondent underlines the significance of trust and long-term collaboration for fostering strong teams, stating, "*I think the most common factor is trust towards each other. That how teams, members actually trust each other and that comes with time. It's not something you build over time, sorry with a short time. You need to work with them, you need to have maybe some collaborative meetings, in-person meetings.*" (R6:14). This highlights how trust, as a part of relationship-building, is a gradual process that benefits from consistent interaction and physical meetings.

The role of time in forming cohesive teams is further emphasized: "*it depends a lot on time. A team needs time to work together. Remote work can absolutely work well. But these big portfolio projects, especially when made up mostly of consultants, tend to be everything but that.*" (R8:8). Frequent team member replacements and the remote nature of global IT projects are described as barriers to building strong relationships and stable collaboration.

Face-to-face interaction is seen as a key factor in enhancing cohesion, as illustrated by the statement: "*Something happens when you share a physical whiteboard, sit in the same room, week in and week out. You get to know each other. You go to lunch together. It's a totally different thing.*" (R8:8). This suggests that informal, everyday interactions outside formal meetings contribute significantly to team cohesion. One respondent described how outsourcing in global setups can reduce connection and accountability: "*As soon as the word global is in front of something, like 'global helpdesk,' then it doesn't work anymore. [...] You lose that. It's not the same anymore. People stop caring.*" (R4:11)

Additionally, the social dimension of teamwork is stressed: "*But I think it's about bringing the social part into it. Not just meeting, meeting, meeting, but actually being social and human. I think that's what's important.*" (R2:14). This highlights the need to maintain a human side to teamwork, fostering an environment where members feel secure and connected.

The creation of personal bonds is also seen as crucial, even if kept at a surface level: "*You have all the professional keys, but you also have a key in creating some kind of relationship, a social relationship. It doesn't have to be deep, but it's about feeling that you know the person.*" (R2:14). Engaging in personal conversations helps humanize team members, as described: "*You have to talk about how you are. How many children do you have? Where are you in life? What do you do? This whole thing of actually creating a person on the other side.*" (R2:14).

Leadership practices that encourage positive interactions also support cohesion. One strategy mentioned is holding informal meetings to strengthen social bonds: "*So I think it's important to have a meeting that doesn't just have to be about work, for example a "celebration meeting." Where you celebrate like, when ending the week, you just take fifteen minutes and everyone says something like "this was awesome this week," and often that leads to people giving positive feedback to their teammates.*" (R5:12). Informal activities, such as traveling and exercising together, are also cited as ways to enhance team spirit.

Despite efforts to build strong relationships, challenges in maintaining clarity and alignment persist: "*Even if it was crystal clear from my perspective what we were supposed to do, still someone goes off the rails out in the field and comes back with something we absolutely didn't agree on.*" (R8:16). This suggests that even cohesive teams require continuous communication and management to stay aligned.

Moreover, physical proximity is seen as facilitating spontaneous feedback and collaboration, which is harder to achieve remotely: "*What I think is the problem is when I, as a leader of other managers, try to get in touch. Their daily schedules are very full. Mine is very full. Finding those moments when both are green in Teams and can connect and give feedback or follow up or something. That's what's difficult.*" (R7:14). The lack of casual office interactions makes maintaining cohesion in distributed teams more challenging.

Finally, having motivated and knowledgeable team members is viewed as foundational for achieving both strong collaboration and project success: "*You need people who are super motivated and knowledgeable. And those two go together. If they're motivated, interested, and skilled, then you can solve almost anything.*" (R8:30). This suggests that individual commitment and competence also play crucial roles in fostering cohesive and effective teams.

In summary, the findings suggest that building strong relationships and fostering team cohesion in global IT projects requires deliberate efforts over time, attention to social interactions, stable team compositions, and proactive leadership practices. Remote work conditions and high team turnover present specific challenges that must be managed to maintain effective collaboration.

4.3 Theme 3: Communication and Information Clarity

Clarity and consistency in communication emerge as critical success factors in global IT projects. Several respondents emphasize the importance of written follow-up and ensuring a shared understanding. As one respondent states, "*I would say, communication. And in communication, it could be in writing communication, it could be like Teams communication, what we are doing right now, or it could be also some reference documentation. And then I prefer to have a follow up what we have said and everyone basically be on the same page when it comes to responsibilities. Who is supposed to do what and by when?*" (R6:20). This highlights the need for multiple forms of communication to ensure alignment and clarify responsibilities.

However, challenges arise when there are different levels of understanding, particularly related to language barriers. One respondent explains, "*I think usually sometimes people have different understanding level of how the communication is being done towards them. So let's say if someone is not comfortable enough in English language, they might say yes we understood but reality might be different.*" (R6:22). To mitigate misunderstandings, this respondent advocates for both verbal and written communication to verify comprehension.

The complexity of communication is further emphasized when teams are distributed across physical and digital spaces. A respondent notes, "*it works really poorly if some people are present physically and some are digital. And if you do have some in the same room, we've done it so that everyone opens their laptop and all have their screens on, so that it becomes a bit more clear how people are present.*" (R9:12). This practice seeks to create a more equal environment for participation, despite hybrid work settings.

Preparation before project initiation is also highlighted as key to promoting clarity. One respondent describes a rigorous process: "*We spend quite a bit of time before starting up a project defining what the impact goals of the project are. We create a project directive that quite clearly stipulates what should be achieved.*" (R7:20). The emphasis on detailed project directives and public procurement processes indicates an effort to reduce ambiguity and enhance communication between stakeholders.

Even with detailed preparations, creating a complete overview in complex projects remains challenging. A project manager shares, "*And I've noticed that's really difficult. So then it's mostly about getting all of them to talk to each other, as the project manager in that kind of situation. Because it's impossible, or, well, maybe not impossible, but for me it feels very difficult, to go in and fully understand and create the complete picture.*" (R1:20). This underscores the ongoing need for facilitation and communication even after formal structures are in place.

This complexity is echoed by another respondent, who stated: "*The more people you have, the worse it gets. People misunderstand, they don't want to understand, or they can't.*" (R4:23). The respondent further pointed out that communication can be hindered even between departments located in the same country: "*Even if you're sitting in [city in Sweden] and [city in Sweden], it's still really hard to communicate because they're driven by different goals*." (R4:25). These statements illustrate how both scale and internal fragmentation can obscure clarity, even when formal communication structures are in place.

Regular meetings without rigid agendas are proposed as a strategy to maintain open communication channels: "*Then I also really believe in having some kind of standing, scheduled meetings at regular intervals. Just to talk. It doesn't have to be anything very specific on the agenda.*" (R1:30). Such meetings provide space for informal updates and surfacing issues that might not emerge through formal reporting.

Distance and cultural differences add additional layers of complexity to communication. As one respondent puts it, "*You make sure to bring along the people you need. You have clarity in what you're going to do. But then you add the dimension of distance. Try to maybe be even more repetitive. Speaking English, but alignment. That you constantly ensure everyone knows what they're supposed to do.*" (R2:10). The emphasis on repetition and sensitivity to cultural factors reflects an awareness that clarity must be actively maintained over time and distance.

Clear documentation is emphasized as an important tool for managing risks and maintaining transparency. One respondent articulates: "*Clear documentation. For me, that's really it. And including that in the way you work.*" (R2:26). This approach not only supports internal project management but also enables stakeholders to take timely action when needed.

Decision-making across geographically dispersed teams poses particular challenges. As one interviewee explains, "*The best thing is to talk to a team member who is close to their boss. That's what I feel. And if someone is maybe out in Australia but the decision-maker is in Shanghai, it can be harder to reach decisions.*" (R3:12). Physical separation between decision-makers and team members can delay communication and hinder responsiveness.

Being well-prepared and structured is seen as a countermeasure to these challenges: "*But being clear and well-prepared is a good thing.*" (R3:14). A dedicated point of contact is also recommended to streamline communication: "*Well, it's pretty good to have a dedicated speaking partner on the other side.*" (R3:30). Having a single representative facilitates communication across regions, ensuring that information flows more efficiently and misunderstandings are minimized.

In summary, the analysis shows that clear, multi-modal communication practices, thorough preparatory work, and active maintenance of understanding are central to navigating the complexities of global IT projects. Language skills, cultural awareness, and physical distance all impact how effectively information is conveyed and understood, necessitating deliberate strategies for ensuring information clarity throughout the project lifecycle.

4.4 Theme 4: Risk Awareness and Flexibility

Risk awareness and flexibility emerge as crucial factors in the management of global IT projects, as reflected in the collected statements. A structured approach to risk management is highlighted through the statement "*In all major IT projects, there is a risk reporting process. And it is continuously updated. [...] Then there are certain risks that you can never mitigate, but you still have to be aware of them. And there it's also important to have a contingency budget for the unforeseen. That it exists. And that it's appropriately sized for the projects.*" (R9:24). This suggests that formalized structures and contingency planning are viewed as essential for maintaining control in the face of uncertainties.

However, despite established processes, managing risk in practice proves complex, particularly in geographically distributed environments. The statement "*Geographically distributed usually means people from different countries. [...] So, spread out. The risk is communication. How is communication handled? Because it has to be more written down and more asynchronous, instead of being fast and direct. The benefit of sitting in the same room, close together, is that you can just say, "Let's do it like this instead of that," and look around and everyone nods, and then you go. But when you have different ways of working, different people have different working styles.*" (R8:20) illustrates how distance and diverse work styles can hinder the quick and informal communication that benefits co-located teams.

Cultural and linguistic factors further add layers of complexity, as described in "*And then I think it's important to establish how you're going to work together. But I believe the greater risks are linked to cultural aspects. And what people mean when they express themselves in a non-native language. There's a risk of misunderstandings that way. And if you add the digital layer on top of that, then it becomes even more difficult.*" (R9:22). Misunderstandings arising from language barriers and reliance on digital communication channels highlight the need for proactive and adaptable communication strategies.

The technical infrastructure across global sites can also pose significant, often unforeseen risks. This is illustrated by the experience shared in "*Like, something as basic as the internet, how well it works. That can vary in different countries. And that, for example, has been a real obstacle for development in one of the factories, because they don't have working internet. And that's such a basic thing, really. But just something like that can differ and make things quite difficult.*" (R1:34). Such technical disparities require flexibility and localized problem-solving approaches that might not have been anticipated during the planning phase.

The need for clear structures to deal with unexpected developments is underscored in "*And then you set very clear boundaries, you always have risk reserves, and as soon as you see that the project cannot stay within budget or something happens, it has to be escalated, and then there are very clear paths for how, what decisions may be made, and so on, at different levels.*" (R7:28). Here, the importance of escalation paths and predefined decision-making processes is emphasized as a way to maintain flexibility while preserving control when deviations occur.

Furthermore, the challenges of underestimating IT components in wider projects are noted: "*[...] when IT becomes part of another project, not everyone understands how long it takes. And that you really need to allocate time for developers and others. There's a lot of preparatory work that isn't always accounted for. So that's probably a challenge for me right*

now, and I've heard it's common." (R1:32). This reflects a broader issue of insufficient appreciation for the complexities inherent in IT development, which can compromise project timelines and quality if flexibility and proper planning are not incorporated.

Finally, geographical dispersion and the false sense of security it can create is reflected in "*You don't want to stand there two days before and then some team sitting somewhere else has said for three weeks, "Yes, absolutely, everything is fine." And then two days before: "Well, no, actually we can't." And there the geographical aspect can be a problem.* " (R2:22). This highlights the risks associated with delayed or inaccurate reporting from distributed teams and the need for continuous, proactive oversight to remain adaptable to emerging realities.

In summary, the empirical material highlights that risk awareness in global IT projects involves not only formal structures like risk reporting and contingency budgets but also a flexible and responsive approach to cultural, communicative, technical, and organizational uncertainties. Flexibility must be built into both planning and day-to-day management to navigate the inherent unpredictability of global IT projects effectively.

4.5 Theme 5: Leadership and Strategic Alignment

Leadership and strategic alignment emerge as critical factors when managing global IT projects, particularly in navigating the complexities of distributed teams and ensuring project coherence. The importance of structure and communication tools is reflected in the statement "*And working in different time zones or even just in different places in the same time zone, like one person in [city in Sweden] and one in [city in Sweden], how do you ensure that I've seen the update? There are tons of tools, but everyone has to use the tools the right way.*" (R8:20). This highlights that while digital tools are available, their effectiveness depends heavily on consistent and correct usage across team members.

Similarly, the challenge of geographic dispersion and the need for physical colocation for better coordination is addressed through the decision "*Where we organized insourcing instead. [...] We flew people in to live here during the week. Just to share location. So it was distributed by origin, but we wanted to cut the part where people were spread out. Because it's a pain. It's messy. Some people, you don't even know, are they working at all? Why is nothing happening? It's just silent until you ping them on Teams.*" (R8:26). This setup demonstrates how leadership sometimes must make logistical investments to foster better collaboration and oversight.

Strategic alignment is further emphasized through standardization efforts: "*[...] we have a strategic direction in many areas where we work with standardization. And when you've standardized, you can then digitalize, and when you've digitalized, you can then automate.*" (R9:6). Standardization serves as a prerequisite for successful digitalization and automation, aligning technical and organizational strategies across global teams.

Leadership challenges are not only technical but deeply human, as shown by the reflection "*And as a leader, it's always hard to know where to draw the line. How much artistic freedom should there be? And when do I put my foot down and say this is the setup you're getting. [...] But in the end, we're dealing with people and not everyone has the capability.*" (R9:12).

Balancing flexibility and control remains a difficult but crucial leadership task to ensure project alignment without demotivating team members.

Regular meetings are presented as a practical tool for ensuring ongoing alignment: "*[...]Early in the startup phase of projects, I usually just set up recurring meetings right away. Just regular time slots that suit everyone. And then we follow up on those. It could be just a regular sync meeting, to talk things through. Then of course there are also organized forums.*" (R1:20).

Maintaining visibility and inclusiveness within distributed teams is a clear leadership priority in global IT projects. The importance of ensuring that no team member is overlooked is emphasized in the statement "*And to give everyone equal attention so no one ends up in the shadows.*" (R1:24). Building on this, the creation of a collaborative and respectful environment is highlighted: "*And above all, it's about creating an environment. That applies whether you're sitting in the same room or spread out geographically – it's about creating. And if you look at it from a project manager role, it's about creating an environment where people respect each other, where they know what to do. You have transparency and somehow try to ensure that it's a good collaboration. I think it's very much about leadership there. Having a bit of sensitivity to push forward but still somehow try to include everyone. That's what's important.*" (R1:30). Similarly, inclusivity is reinforced through the structuring of project activities: "*[...] what that person can do is set up the structures, and they should be very inclusive, I think. So like, if there's a morning meeting, then the whole team should maybe be there, or at least certain meetings where the whole team needs to be present. Even if you might later break it down into smaller parts for other check-ins."* (R5:12). Together, these perspectives illustrate how leadership practices that prioritize inclusivity and visibility are essential for maintaining team cohesion in distributed settings.

The softer aspects of leadership are addressed in the emphasis on positivity and team protection: "*[...] Always stay positive and come in with a smile. And it even got to the point where the team said, when even you're not happy [Name], then things are really bad. So if you're the one up front, and everything is a disaster and totally messed up, try to throw on a smile anyway and be a bit cheerful and positive. Maybe it rubs off and you bring the team along with you. And it also kind of becomes a way of protecting the team. And that was another thing, if you're the one standing up front, take a bit of extra crap to protect the ones behind you. Because you'll benefit from that later, in the sense of having had a team that enjoys working together. Maybe protect them a little.*" (R2:10).

Finally, fostering team spirit through informal initiatives is viewed as an essential leadership tactic: "*So I think it's important to have a meeting that doesn't just have to be about work, for example a "celebration meeting." Where you celebrate like, when ending the week, you just take fifteen minutes and everyone says something like "this was awesome this week," and often that leads to people giving positive feedback to their teammates.*" (R5:12).

In summary, leadership and strategic alignment in global IT projects are tightly intertwined with the ability to create structure, foster communication, manage distributed settings, and cultivate positive and inclusive team cultures. Effective leadership must balance strategic rigor with human sensitivity to navigate the challenges inherent in geographically and culturally diverse teams.

4.6 Theme 6: Opportunities in Global Setups

The interviews reveal several opportunities that arise when operating IT projects in a global setup. A major advantage is the ability to mobilize expertise across borders to solve problems more quickly and effectively. As one respondent describes: "*Where a problem came up and I knew that if I talk to this person in [country in Western Europe] and [country in Southern Europe], and then there was also someone in [country in North America] who had worked with this, and then I could call them all into the same meeting. Say: this and this needs to happen. Who else is working on this? This and this needs to be done. And suddenly you get these people from different countries. Maybe some had met before, but then it became like "Oh, you also have the same problem we have. How can we solve it?"* (R2:16). This highlights the value of leveraging international networks for rapid and collaborative problem-solving.

In addition to facilitating problem-solving, global setups also promote stronger and more cohesive team development. One respondent points out: "*I would say that you actually get better at team building because you realize, like, oh wait, we need to pay attention here, we need to make sure everyone is connected. Both by having good structures for meeting, but also before a project starts you put a lot more energy into building the team.*" (R5:10). This reflects how working across multiple locations encourages more deliberate team-building efforts, which can contribute to greater cohesion and project success.

Another important opportunity lies in the ability to work continuously across different time zones. As stated: "*Also being able to produce material very quickly. Like having people working when you yourself are not working. Because of the time zone. That's also been very important during bidding. Because you need to be very fast, faster than the others.*" (R5:14). This suggests that global teams can maintain a near-constant workflow, enhancing competitiveness particularly in time-sensitive project phases such as bidding processes.

Beyond operational benefits, global networks can also be strategically leveraged for branding and market positioning. One respondent explains: "*We used the network to become, let's say, opinion leaders. So you could do a survey and say, "We've done a survey and we've got experts from New York and we've got this team from London, and we've talked to clients in Scandinavia, and we can say that this company thinks this, or that investors think this.""And suddenly you have something newsworthy*." (R5:37). This demonstrates how international collaboration can strengthen a company's public image and reputation, creating opportunities beyond project delivery.

In summary, the collected statements illustrate several key opportunities in global IT project setups, including faster problem-solving, enhanced team building, continuous productivity through time zone management, and strategic use of networks for external positioning. These opportunities highlight how global collaboration can not only improve internal project execution but also create broader organizational advantages.

5. Discussion

In this section, we reflect on our empirical findings through the lens of the selected theories and prior research. By relating the identified themes to existing literature and theoretical insights, we aim to better understand the underlying complexities of risk in distributed IT projects.

5.1 Explaining Theme Placement Across Research Questions

The thematic overlap across the two research questions reflects the interconnected nature of risk emergence and organizational response in distributed IT projects. While RQ1 explores the sources and nature of risks, RQ2 focuses on how organizations respond to these challenges. Below is a rationale for each theme's placement:

5.1.1 Geographical and Cultural Barriers (GB) – RQ1

This theme exclusively addresses the structural and contextual conditions, such as time zone differences and cultural diversity, that give rise to misunderstandings, coordination difficulties, and trust issues. These are foundational risk factors and are therefore discussed solely under RQ1, as they represent the origin of challenges rather than organizational responses.

5.1.2 Relationship-Building and Cohesion (RC) – RQ1 and RQ2

This theme illustrates how weak interpersonal bonds and lack of cohesion are perceived as risks that hinder collaboration in distributed IT projects, which aligns with RQ1 concerning the emergence of risk. At the same time, the theme also reflects how organizations respond to these challenges, addressed in RQ2, by implementing informal activities, inclusive leadership, and team-building practices. Thus, it represents both a risk factor and a strategic lever for mitigating distributed project complexity.

5.1.3 Communication and Information Clarity (CI) – RQ1 and RQ2

This theme highlights how miscommunication and digital misunderstandings act as major sources of risk in global virtual teams, which directly relates to RQ1 on how risk emerges in distributed IT projects. At the same time, the theme also illustrates organizational responses, addressed by RQ2, such as the implementation of documentation practices, multimodal communication, and culturally adapted messaging. Its dual presence reflects how communication functions both as a source of risk and as a key mechanism for managing distributed project complexity.

5.1.4 Risk Awareness and Flexibility (RF) – RQ1 and RQ2

This theme highlights the gap between formal risk frameworks and the dynamic realities of distributed work. From the RQ1 perspective, insufficient risk awareness and rigid practices exacerbate project uncertainty. For RQ2, organizations adopt more flexible, proactive, and culturally sensitive risk management approaches in response. The theme's placement in both categories underscores the importance of aligning awareness with action.

5.1.5 Leadership and Strategic Alignment (LS) – RQ2

Leadership structures and alignment strategies are responses designed to reduce ambiguity and promote coordination in distributed teams. They do not emerge as inherent risks but rather as intentional responses to address the challenges identified in RQ1. Hence, this theme is relevant only to RQ2.

5.1.6 Opportunities in Global Setups (OG) – RQ2

This theme reflects how some organizations not only cope with distributed complexity but leverage it strategically, e.g., through time zone advantages or global talent access. These insights relate directly to organizational adaptations and forward-looking strategies, placing them solely under RQ2.

Table 6 offers a structured overview of how each theme corresponds to our two research questions.

Table 6. Themes answering research question

Research question	**Themes**
RQ1: What risks emerge in distributed IT projects, and how can they be effectively managed?	Theme 1: Geographical and Cultural Barriers (GB) Theme 2: Relationship-Building and Cohesion (RC) Theme 3 : Communication and Information Clarity (CI) Theme 4: Risk Awareness and Flexibility (RF)
RQ2: How do organizations respond to the complexity and risk associated with distributed IT projects?	Theme 2: Relationship-Building and Cohesion (RC) Theme 3 : Communication and Information

	Clarity (CI) Theme 4: Risk Awareness and Flexibility (RF) Theme 5: Leadership and Strategic Alignment (LS) Theme 6: Opportunities in Global Setups (OG)

5.1 RQ1: What risks emerge in distributed IT projects, and how can they be effectively managed?

The findings of this study indicate that risks in distributed IT projects arise from a constellation of factors: geographical separation, cultural diversity, communication breakdowns, and a lack of shared contextual knowledge among stakeholders. These observations are consistent with Flyvbjerg et al. (2022), who argue that the high failure rate in IT projects is a systemic issue rooted in flawed assumptions about risk predictability. They highlight that project risks often follow a power-law distribution, where extreme outcomes are more common than expected, challenging conventional project management models.

Cultural and geographical barriers emerged as particularly prominent in our study. Several respondents emphasized how cultural misunderstandings, especially in relation to hierarchy, conflict avoidance, and feedback styles, caused project delays or inefficiencies. Hofstede et al.'s (2010) model of cultural dimensions helps explain how power distance and uncertainty avoidance affect communication and decision-making in multinational teams. These findings are further strengthened by Anglani et al. (2023), who argue that cultural intelligence is essential for navigating these barriers. Cultural intelligence enables team members and leaders to interpret and adapt to culturally influenced behaviors, which is critical when communication is virtual and context cues are limited.

Arcidiacono (2017) supports this by showing that lack of stakeholder alignment and cultural cohesion often leads to high rework rates and failures to meet project goals. This was mirrored by respondents who had experienced unclear roles, misaligned expectations, and duplicated work due to poor coordination across locations.

The theme of Communication and Information Clarity underscores how even in environments with advanced digital tools, effective collaboration cannot be taken for granted. Respondents described asynchronous communication, tool fatigue, and misinterpretations caused by language barriers. Morrison-Smith and Ruiz (2020) emphasize that virtual communication lacks the richness of informal interaction, which traditionally helps establish shared understanding and trust. Cheng et al. (2021) further highlight that virtual teams rely heavily on reliability- and openness-based trust to function effectively. Similarly, Alkoud et al. (2023)

categorize communication challenges in virtual teams as stemming from three sources: technological limitations, social dynamics, and diversity-related friction.

In explaining why some communication protocols fail to produce their intended effects, Institutional Theory offers valuable insights. Björck (2004) describes how organizations often adopt formal structures or processes not for functionality, but for legitimacy. Furthermore Björck (2004) applies this specifically to information security in IT contexts, arguing that risk policies are frequently implemented as symbolic gestures, what he calls "paper tigers". Respondents in our study echoed this, describing risk management procedures that were technically in place but rarely followed in practice.

Another key area is Risk Awareness and Flexibility. Traditional risk frameworks often proved too rigid in the face of emerging threats or shifting project contexts. Respondents described a reactive approach to risk that only engaged after problems became visible. Schmalz (2024) argues that one major limitation in software development projects is the inconsistent use of risk terminology and fragmented taxonomies, which undermines shared understanding. Shrivastava and Rathod (2017), in their empirical framework for distributed agile projects, identify five categories of risk and argue for embedding adaptive risk practices into project lifecycles. Their findings suggest that proactive and integrated approaches, particularly around stakeholder collaboration and group awareness, are necessary in globally distributed environments.

In summary, the risks identified in this study are consistent with previous research. However, our findings also highlight how these risks are connected in practice. For instance, cultural differences can increase communication challenges, which in turn can lead to misalignment among stakeholders. This suggests that effective risk management in distributed IT projects requires both structural adjustments and cultural awareness.

5.2 RQ2: How do organizations respond to the complexity and risk associated with distributed IT projects?

Our findings show that organizations deal with complexity and risk not only by following formal procedures, but also by adjusting how people work together and how projects are organized. These responses can be understood across several dimensions, including trust-building, leadership strategies and role clarity.

One prominent response theme was Relationship-Building and Cohesion. Respondents emphasized that trust between team members and across hierarchical levels is foundational for project success. Hacker et al. (2019) confirm that trust in virtual teams must be intentionally cultivated, often through transparent communication, shared goals, and consistency over time. Cheng et al. (2021) demonstrate that both reliability-based trust (delivering on commitments) and openness-based trust (willingness to share and be vulnerable) are essential for virtual team efficiency. Respondents described various practices to build cohesion, including onboarding sessions, digital coffee breaks, and the use of shared documentation platforms.

Cagiltay et al. (2015) stress the importance of structured feedback mechanisms and shared knowledge systems in fostering alignment and reducing misunderstanding. These findings were mirrored in the interviews where respondents mentioned the benefits of project retrospectives and shared digital spaces used to support coordination.

Leadership and Strategic Alignment was another central aspect. Respondents shared how leadership behaviors, such as being available, creating space for informal exchange, and investing in shared values, impacted project performance. Abakpa and Dvouletý (2024) caution that many organizations implement virtual team structures without adjusting their leadership styles or project governance, leading to mismatches between design and execution. This observation resonates with examples from our data where unclear prioritizations and inconsistent communication from leadership created confusion.

Several respondents mentioned the need for standardization as a foundation for digital coordination. This aligns with L'Erario et al. (2020), who propose communication frameworks that standardize distributed development workflows. Jain and Suman (2018) also argue that lacking standards increases the risk of misalignment in global software development.

Opportunities in Global Setups were also explored by respondents who saw value in access to global talent, time zone advantages, and increased resilience. However, they acknowledged that these benefits could only be realized through mature coordination practices. Zyberaj et al. (2023) provide a relevant example, showing how the automotive industry implemented a global testing network to improve collaboration. Schmidt (2023) complements this by noting that digital maturity levels determine how successfully organizations can adapt to distributed work models.

Finally, Khan (2025) found that organizations that engage in risk management from the project's initiation stage and continue throughout its lifecycle are significantly more successful. This emphasizes that effective responses are not one-time interventions but require ongoing engagement.

To summarize, organizations that succeed in distributed IT projects adopt a dual approach: they formalize structures such as communication frameworks and risk management systems while also enabling adaptive practices such as cultural learning, trust-building, and proactive leadership. As our findings and the reviewed literature demonstrate, managing risk and complexity in distributed IT projects is not solely a technical challenge, but a deeply human one that spans organizational, cultural, and strategic dimensions.

5.3 Methodological Reflection and Research Limitations

This study employed a qualitative research approach using semi-structured interviews to explore the complexities of risk and organizational responses in distributed IT projects. The choice of method was guided by the aim of capturing nuanced insights and context-dependent experiences that are difficult to access through quantitative means. However, this methodological approach also presents several limitations that must be acknowledged.

One key limitation of this study concerns the composition of the interview sample. A majority of the respondents have substantial experience and hold senior positions in international IT project environments. As a result, the voices of junior or operational-level professionals are underrepresented. This may limit the study's ability to capture a more comprehensive view of the dynamics and challenges in distributed IT projects across different organizational levels.

Additionally, the selection process relied on purposive and network-based sampling, which may have introduced some degree of selection bias. respondents were drawn from professional networks and LinkedIn, potentially favoring respondents who are more experienced or more positively disposed toward global collaboration.

Another limitation concerns the interview language and translation process. One interview was conducted in English, while the remaining interviews were held in Swedish, in accordance with the language respondents felt most comfortable using. The Swedish interviews were subsequently translated into English for the purpose of analysis and presentation. While every effort was made to ensure accurate and literal translation, there is always a risk that certain meanings, nuances, or expressions may have been lost or altered in the process. This is particularly relevant when discussing culturally sensitive topics, where phrasing can influence interpretation.

A further methodological constraint relates to the duration of the interviews. Several interviews were relatively short, ranging between 15 to 25 minutes. While shorter interviews can still generate valuable data, limited time may have constrained the depth and elaboration of respondents' reflections. This could have resulted in missed opportunities to explore certain themes more thoroughly, particularly in relation to more complex or context-specific risk dynamics. In some cases, time constraints may have also led to a focus on surface-level descriptions rather than deeper narratives or critical reflections. Future research may benefit from longer interviews or multiple touchpoints to enable richer data collection.

The interpretive nature of thematic analysis also introduces subjectivity. While steps such as double-checking codes and collaborative theme development were applied to increase reliability, the analysis remains shaped by the researchers' perspectives and experiences. Reflexivity was maintained throughout the process, yet the influence of researcher bias cannot be entirely eliminated.

Lastly, the complexity of the research topic, which intersects organizational behavior, global distance, and culture, posed challenges in achieving clear thematic boundaries. Some findings were relevant to multiple themes and research questions, requiring interpretive judgment in theme categorization. This could affect the clarity of distinctions between findings related to risk emergence versus organizational response.

Despite these limitations, the chosen methodology provided rich empirical data and offered valuable insights into the lived realities of global IT project management. Future research could benefit from combining qualitative and quantitative methods, expanding the respondent base, and incorporating longitudinal studies to observe changes over time.

6. Conclusion

This chapter summarizes the key findings of this study, which investigates the risks and organizational responses associated with distributed IT projects. It reflects on the contributions of the study, highlights its practical and theoretical implications, and outlines recommendations for future research.

6.1 Conclusions

The purpose of this study was to explore the risks that arise in distributed IT projects and to identify how organizations respond to these complexities. As organizations increasingly rely on virtual and geographically dispersed teams to execute critical IT initiatives, understanding the interplay between cultural diversity, communication, and organizational structures has become more important than ever. To examine this, the study was guided by two research questions:

RQ1: What risks emerge in distributed IT projects, and how can they be effectively managed?

RQ2: How do organizations respond to the complexity and risk associated with distributed IT projects?

To address these questions, a qualitative research approach was adopted. Empirical data were collected through semi-structured interviews with nine experienced professionals working in various roles related to international IT projects. Thematic analysis was applied, resulting in six key themes: Geographical and Cultural Barriers, Relationship-Building and Cohesion, Communication and Information Clarity, Risk Awareness and Flexibility, Leadership and Strategic Alignment, and Opportunities in Global Setups.

The findings highlight that distributed IT projects face a range of risks, particularly those related to geographical distance, cultural differences, and limited informal communication. These factors can disrupt collaboration and make it harder to build trust, especially when language barriers or differing cultural expectations are present. While organizations often assume that digital tools can solve these challenges, our results suggest that cultural understanding, deliberate trust-building, and adaptable leadership are just as important. Although not the main focus, technical risks such as system integration challenges were also noted by some respondents as contributing to coordination difficulties in global projects.

At the same time, the study reveals that organizations are not passive recipients of complexity. Instead, they actively respond through strategic alignment, structured leadership practices, inclusive routines, and leveraging global advantages such as around-the-clock productivity and access to international expertise. These responses are often shaped by institutional pressures and framed by the organization’s ability to process complex information in uncertain environments.

The study underscores the importance of combining formal risk management frameworks with adaptive and culturally sensitive practices. Successful navigation of global IT project

risks requires both structural and relational strategies that align with the social and organizational realities of distributed work.

6.2 Contributions

This study contributes to both theory and practice. Theoretically, it expands the understanding of how risk manifests in the intersection of IT project work and virtual collaboration. By applying Institutional Theory and Hofstede's 6-D model of national culture, the study demonstrates how formal structures, cultural intelligence, and information-handling capacity shape project outcomes.

Practically, the findings offer insights for project managers in distributed IT projects. They point to the need for clear communication, context-aware leadership, and trust-building strategies to mitigate risks in virtual environments. The study also offers evidence that distributed collaboration, when managed strategically, can create competitive advantages for organizations.

6.3 Suggestions for Future Research

Suggestions for Future Research could benefit from expanding the respondent base to include a broader range of roles, industries, or organizational levels to capture diverse perspectives. A longitudinal study could also provide insights into how risks and responses evolve over the lifecycle of a global IT project. Furthermore, it would be valuable to complement this qualitative study with a quantitative approach to assess the prevalence and impact of identified risks and practices across a larger sample.

In addition, future research could explore how technical infrastructure, such as platform-based feedback systems, may help mitigate complexity in global coordination.

Finally, future studies might explore how different organizational cultures and maturity levels affect risk perception and management in distributed IT projects, or compare distributed project practices across industries and national contexts.

Appendix A: AI contribution statement

In our master's study, we have integrated AI-based tools in several parts of the research process to support and enhance our work. One of the main uses of AI was for the transcription of interviews. By using Klang AI, we were able to convert our recorded Swedish interviews into written text in an efficient and accurate manner. This significantly simplified our empirical work, especially during the analysis and selection of interview quotes. All transcripts were reviewed and manually corrected to ensure their reliability.

Another important use of AI was in the writing and structuring of the study. With the help of ChatGPT, we improved sentence formulation and clarified the structure of our text. This was particularly useful in the abstract, introduction, method, and conclusion chapters. We also used ChatGPT for brainstorming during the early stages, which helped us refine our research problem and theoretical framework.

Additionally, ChatGPT assisted in translating interview responses from Swedish to English. These translations were carefully reviewed and edited to ensure they reflected the original meaning. We also used the tool to reflect on how certain academic sources could be interpreted in relation to our research questions. However, all theoretical analysis and conclusions were developed by us.

In summary, the use of AI contributed to improving the efficiency, clarity, and structure of our work. All AI-generated input was critically reviewed, and the final content of the study is entirely our own.

Appendix B: Interview Guide

Section	Question
Informed Consent	Your participation in this research is completely voluntary. You are free to decline or withdraw your participation at any time without explanation. The data collected will be used solely for our master's study and will be securely deleted upon completion. Your identity will remain anonymous, and you will have the opportunity to review the interview transcript prior to publication. Does this feel okay to you?
Background	Can you tell us about your current role and what it involves on a day-to-day basis?
	What kinds of IT projects have you been involved in?
	Have you worked with teams based in different locations? If so, how did that collaboration work in practice?
	Which locations were the team members based in?
	Did you notice anything that influenced the collaboration related to the different locations?
Team Setup & Interaction	What factors influence how your team works together when you're not in the same location?
	Can you describe an experience where working across locations impacted the project, positively or negatively?
Stakeholders & Roles	Who are the key stakeholders you typically interact with during a project?
	How do you go about ensuring that different people involved in a project are on the same page?
	Have you experienced situations where there were differing expectations or misunderstandings between people involved? How was that handled?
Risk	Have you experienced any particular risks or challenges in projects where teams are geographically distributed?
	How are risks managed in the IT projects you work on? Is there a clear strategy or division of responsibility?

Working Practices	What methods or practices are used in your projects to manage coordination across time zones or organizations?
	Are there particular tools or routines that help you manage collaboration across locations?
Reflection & Experience	Can you recall a project that stands out to you, either because it went particularly well or because there were challenges?
	What do you think helped or hindered the outcome in that case?
	Is there anything you would change in how distributed teams are organized or supported, based on your experience?
Closing	Is there anything else you'd like to share that you think is important for us to understand?

Appendix C: Interview Transcriptions

Interview 1

Transcript Respondent 1 (R1), Junior Management Consultant (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 25 min.

Amount of words: 3112

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	LW	Shall we just start with you approving that we record this?	
2.	R1	Yes, I approve that.	
3.	LW	And then some practical information about your participation. Your participation in this study is entirely voluntary. You have the right to withdraw at any time without having to give any explanation. The collected data will only be used for our master's study and will be deleted securely after the study is completed. Your identity will remain anonymous, and you will also have the opportunity to review the transcript before anything is published. Does that feel okay?	
4.	R1	That feels good.	
5.	LW	Awesome. Let's start. Our first question is if you could tell us a bit about your current role and what it involves in your daily work.	

6.	R1	I'm a project management consultant, so right now I have two different assignments where I'm a sub-project manager and project manager in two different IT projects. And on a daily basis, it involves a lot of project administration, a lot of stakeholder management, a lot of following up on activities, making sure we stay on track with the project plan. There's quite a bit of work with a backlog in the different projects, following up on various user stories connected to the projects. And one of these projects follows more of an agile and iterative process, so we're developing the system at the same time as we roll it out. So the users have started using the system, but we're still developing it, working on bugs and feature requests and all sorts of things during the process. The idea is to close the projects in about a year. The project's already been going on for almost two years, I think. So it's quite a large and comprehensive project at a global company, but it involves the factories. The factories are located all over the world, in China, the US, Germany. Yes, a lot of different places. I think it's five different countries involved. And the other project is a pretty small IT project focused on developing the user interface. That one will affect two different countries. So it's a bit less global. That's basically what I do. So there's a lot of project administration related to all this.	
7.	LW	Great, thanks. You mentioned that the projects you're involved in are global. So the next question is whether you've worked in any team where members are located in different geographical places, and how you think that collaboration has worked in practice.	
8.	R1	Yes, I do that a lot in the one project that follows the agile process where we're rolling out a new system for the people working in the factories. And there I'm in contact every week with super users who are located all over the world, and it works pretty well through Teams and so on. But of course, I haven't personally been out to meet these people on site. But I know that other project members sometimes go out and visit, and that's also quite an important part. I don't think it would work without those site visits. Because it involves a lot of change in a process like this. There's a lot of change management involved, and I think that part is very hard to do completely remotely. With change management, you need to be present and see how it's received and how it's actually being used. So I don't think you can do it entirely remotely. But you can still solve quite a lot.	GB GB

9.	LW	In which places are the team members located, if you're okay with sharing the countries?	
10.	R1	Yes, among others, China, the US, Germany, India, and what else? And Sweden too, of course. Yes. Different places in Sweden. Right now it's mostly, and soon the Netherlands too.	
11.	LW	Have you noticed anything in these projects that has affected the project and collaboration because the team members are located in different countries or places?	
12.	R1	Mm, well, sometimes we want to have meetings where everyone participates at the same time. That's also mainly for efficiency, because it's the same information that should go out to everyone. And there's also a point in getting them to start collaborating with each other. And there, the time differences are pretty big, which means we can't gather everyone at once. Which is a bit of a shame, so we have to split it up instead. And that can result in some people, who are in completely different time zones, kind of falling into the background and missing out on these opportunities. So that can be one consequence. Then there are also cultural differences that have quite an impact. I've noticed that a lot. I've done some fairly large surveys, like mid-surveys after half the implementation, and I've sent out questionnaires and done some research. And there you can see quite a big difference in how a system like this is received and attitudes toward it. That it can be cultural differences in that. In some cultures, people are more governed by, how to say it… hierarchy maybe. That you just listen, take it in, and do. And in other cultures people are more questioning and like that. You can really see a clear difference. So you don't always know if those who just listen a lot to their superiors and do what they're told, are they really satisfied or are they just saying they're satisfied because that's the norm in their culture? So there's some detective work involved in understanding that. So I'd say it's mainly the cultural differences and the time zone aspect that are the critical things.	GB GB GB
13.	LW	Could you describe or do you have a specific experience where you feel that working across geographical locations has affected the project? And it can be either positively or	

		negatively. Where you think that aspect has led to a particular outcome, so to speak.	
14.	R1	I think a positive effect is when we've managed to bring everyone together at the same time, which we've done on a few occasions. Then everyone actually got to meet in person. Not everyone, but maybe the managers of the different factories or the super users. There's a big benefit in that they learn a lot from each other in terms of how they work, and that there are big differences, and that you can pick the best from everyone's ways of working. So that's something. Otherwise, something that really differs, it's the culture. I think culture shows a lot. Otherwise, they work in quite similar ways. But also being able to benefit from cultural differences in some contexts. Like… yeah, I don't really know. That one was a bit hard.	GB, OG
15.	LW	Yeah, but great. Thanks. Now we're going to talk a bit about the different roles in projects. So we're wondering what people or groups or types of roles you usually have the most contact with in these projects. You mentioned super users earlier. Are there others you also work closely with?	
16.	R1	Yes, I understand. So in projects, there's… I think first and foremost there's a steering group for the project. They basically make the big decisions about the project or act like a management group. You have a lot of contact with them because that's where you often go for the big decision points. So there's quite a bit of contact there. Then in the project team, there are both, well, in this particular project, there are many developers working on the system. We now have an external supplier for the system, so we have a lot of contact with them weekly since it's an agile process. But we also have an internal development team and UX designers and so on. And we have a lot of contact with them for making smaller changes to the system. And then there are of course the users of the system, and that's mainly the super users. But then also the ones who use the system daily but aren't super users, they're still the end users. And they're really important to include and constantly check in with about how they experience it. They report bugs and other things, like feature requests, things they wish were different. And that's also a big part of the change management, to get them to adapt to a whole new way of working. A new system. That's also a big part. And then we also work a lot with CI, Continuous Improvement managers, but that's also because this project is connected to that a bit. So there's a lot of contact there too.	LS

17.	LW	Then we're wondering, when you're working in these projects with so many different stakeholders, how have you or your team worked to ensure that everyone involved in the project agrees on the goals and has the same understanding of the project and what you're working towards?	
18.	R1	Yes, that's a good question. I think that's generally pretty hard sometimes. Especially if it's an agile project, you don't always have… there's always a goal, maybe a benefit you want to achieve, but the actual final deliverables aren't always clearly defined. So then you might start out early in the project by saying: "This is the goal, this is what we want to achieve, this is the value we want to create." But then exactly how you get there can vary, and you can't say on day one: "This is what the system will look like," depending on what kind of system it is, of course. But often in an agile process, you can't say from the start exactly how the system will end up. So then you try to align around the benefit you want to create and get everyone on board with that value. That they see it as worthwhile. And then also get everyone to understand that it's an iterative process, and that they'll be able to contribute along the way. And then you do a lot of external communication toward the users throughout the course of the project.	LS
19.	LW	Have you or your team experienced situations where it became clear that there were different expectations or misunderstandings between the various stakeholders regarding the project's goal or how something should be carried out? And how did you handle that, if so?	
20.	R1	Yes, exactly. If I think about the other project I'm involved in, the one that's more about changing the user interface, there's been quite a lot of that problem, I would say. And I think it's because in that project, there are many different systems that need to work together to create the final product. And each product owner of these different systems often, well, I shouldn't say often, but in this case, they have quite different ideas about how extensive the change is, how much work needs to be done. And it can become a bit isolated. Each product owner focuses on their product and is very knowledgeable about it, but knows less about the others. Which means that they might not really see… they see their product and how it should be developed, but they don't see the final product where these different systems integrate. And I've noticed that's really difficult. So then it's mostly about getting all of them to talk to each other, as the project manager in that kind of situation. Because it's impossible, or, well, maybe not impossible, but for me it feels very difficult, to go in and fully	LS CI

		understand and create the complete picture. All of them really need to talk to each other to get that understanding. Yeah, something like that.	
21.	LW	Great. Now we'd like to talk a bit about practical working methods. So we're wondering what methods or practical approaches you use in your projects to handle coordination across different time zones or locations? So, technically speaking, how do you work, what tools do you use?	
22.	R1	Yes, in both of the projects I'm involved in now, we use Teams, for example. Yes, exactly. We mainly use Teams. We create channels there and have all our documentation in Teams and build it up there. Create channels, chats to coordinate things. So we try to collect everything in one place to make it easier. What else do we use? It can also be platforms like Viva Engage, for example, that's a Microsoft tool. That one is more for just spreading information, really. So I would say in both projects I'm in now, it's primarily Teams that we use.	CI
23.	LW	Have you set up any specific routines that have made collaboration between different geographical locations easier?	
24.	R1	Yes, we have. Early in the startup phase of projects, I usually just set up recurring meetings right away. Just regular time slots that suit everyone. And then we follow up on those. It could be just a regular sync meeting, to talk things through. Then of course there are also organized forums. For example, we have what we call the Super User Forum, where all the super users are included. There we have both a chat for quick communication and recurring monthly meetings, for instance. So it's mostly in that way, I'd say.	CI, LS
25.	LW	Now we've come to the final questions. So I'm wondering if there's anything you've thought about that you would've wanted to change or think could've improved the way of working when you're in these kinds of distributed teams across different geographical locations, based on your experiences?	
26.	R1	Yes.	

27.	LW	If there's anything you think is especially important to keep in mind, or something you think could've made it even easier than it is now.	
28.	R1	Yes.	
29.	LW	Or not. No.	
30.	R1	Right. I think a few weeks ago we had something like a training for all the super users. So we flew everyone from the different countries to one and the same place. So they could physically meet and be there together for three days. Attend training and do teamwork, well, just meet and do stuff. And I got a lot of feedback afterwards from those who were there that they thought it was super valuable and that it was really fun to meet the others. Just to talk and they learned a lot from each other. So I think that kind of physical meeting, even if it's spread out, if you have the opportunity to gather everyone a few times, that's really important. Then I also really believe in having some kind of standing, scheduled meetings at regular intervals. Just to talk. It doesn't have to be anything very specific on the agenda. But either way, people will start talking and they've encountered things and so on. So it can be valuable to have that anyway. And also to collect all important information on some kind of platform where everyone can access it easily and always go in, and also have live documents where people can go in and write their stuff and see what others comment and think and so on. I think that's important. And to give everyone equal attention so no one ends up in the shadows. That the work is visible to others, that others can see what they're doing in the system and what… like, that you can see how things are progressing. Because the pace can vary and some will move ahead in the development, some are faster. But still, making it visible to others in some way.	RC GB CI LS
31.	LW	Yes. Now we have a very open question, which is whether you've worked on any project that stood out to you, maybe because it went really well or because there were challenges. And it doesn't have to be an IT project. And if so, what do you think that was due to? Was there something that	

		contributed to it going really well or something that hindered the project, something general, so to speak.	
32.	R1	Yeah, I think… yeah, it's a bit difficult, I don't have a ton of experience yet. But maybe in one of the projects I'm in now. From the beginning, it wasn't an IT project, but a business development project. But part of the project is an IT, a digital delivery, and those who set up the business development project kind of… like, they treat the digital part, the IT part, a bit lightly. Like, they think "the developers will sort that out, it'll be quick, just put it at the end and they'll fix it in a few weeks." And I've heard that's a pretty common situation. That many people don't understand how complex it is, especially when several systems have to work together and integrate. And also that people don't really respect the long testing period that's required when developing a new system. Also the hypercare period after you've gone live with a system, that it also takes quite a while to maintain, stabilize, and handle bugs and so on.So I think that's it… when IT becomes part of another project, not everyone understands how long it takes. And that you really need to allocate time for developers and others. There's a lot of preparatory work that isn't always accounted for. So that's probably a challenge for me right now, and I've heard it's common.	RF
33.	LW	Yes, great. And now to our final, concluding question: is there anything else you'd like to share or that you've thought about during the interview that we haven't asked you about, but that you think is important?	
34.	R1	No, I think those were good questions. I'm thinking maybe something, like a global aspect, something I've noticed in the project where we're rolling out the system in factories around the world: there are certain basic things when it comes to, I don't know what the best word is, but… yeah, what was it… You probably know what it's called. But, like… their… okay, I'll just say it simply. Like, something as basic as the internet, how well it works. That can vary in different countries. And that, for example, has been a real obstacle for development in one of the factories, because they don't have working internet. And that's such a basic thing, really. But just something like that can differ and make things quite difficult. And there are many aspects like that. That's just one example. But we've encountered things like "oh, we didn't know they didn't have that." Like, because we're sitting here in Sweden and take it for granted, and then it causes huge problems for us.	RF

35.	R1	So yeah, things like that. That you maybe need to think about when rolling something out globally. But otherwise, it's the cultural aspect too, that it's important to be aware of. And I think change management is a huge part of many IT projects. Something that maybe isn't always top of mind. But not everyone is equally digitally mature.	
36.	LW	Yes, thank you so much.	
37.	LW	Thanks. Then we'll stop the recording.	

Interview 2

Transcript Respondent 2 (R2), Senior Consultant (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 38 min.

Amount of words: 4279

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	RF	Your participation in this study is entirely voluntary. And you have the right to decline or withdraw your participation at any time without having to give any explanation. And the collected data will only be used for our master's study and will be securely deleted after the study is completed. And your identity will remain anonymous, and you will have the opportunity to review the interview before we publish it. Does that feel okay?	
2.	R2	Yes, completely okay. Absolutely.	

3.	RF	Great. So the first question then. Can you tell me a bit about your current role and what it involves in your daily work?	
4.	R2	Today I work at [big Swedish company] of Sweden which is [Big Swedish Company]'s. [Big Swedish Company] is divided into different parts. There's one part that owns and develops all the products, meaning all the furniture you see in the stores. And then there's a part that owns the concept. The concept is how it should look in the stores, what you are allowed to show, what you are not allowed to show, what you are allowed to do. And then you also have that both digitally and physically. And then there is a part that consists of the Franchisees. Where the biggest part is Ingka, which you have probably heard of. Ingka is also the largest in Sweden. It is where there are 400 stores and warehouses. So that's the biggest part of it. But I work at IOS, and what I'm doing right now is something as boring as actually trying to find a way to lower the barriers for customers to anchor their furniture to the wall. Because [Big Swedish Company] has paid out quite a lot of money, especially in the US, where accidents have happened. With furniture that has tipped over, unfortunately then, small children who have died. And what I do there as project manager is that we run, within a program called Stability, a part called commercial stability. Meaning that it's not just about screws and stuff or how you can redesign the furniture, but you look at the entire customer journey. How can we get customers to understand that they should fasten things to the wall? A bit like what happened before your time, when I was little, the seatbelt was introduced in the 60s sometime. But still, in the early 80s, you got bullied if you asked to bring a car seat or something like that. You've probably heard your parents talk about how they were lying in the backseat and all that. But it's kind of the same thing we're doing here, trying to find ways to lower the barriers. And then we divide it commercially. What information should you be met with in different parts of your customer journey? And of course, you should have solutions and. Yes, both digital and informational solutions so that you can be met by this. So it's very much about finding where you should meet the customer. What is already in place today and what can we drive forward? What I do is look at, for example, how you can provide screws. And how that is done both from the supply chain, how things are placed in stores, how it's presented on the web and so on. So it's pretty big. And at [Big Swedish Company], you have to be a bit humble because things get very, very big very, very quickly. If you're going to make any	

		change. Yes, exactly. If you go to [Big Swedish Company], there's Click and Collect for example. That was a solution that, when I was in my previous assignment at Ingka, it was like this, during the pandemic they shut things down. In Sweden they didn't shut down completely, but in the rest of Europe they shut down quite quickly, and then a solution was needed to sell outside the store very fast. So a solution was developed for that and rolled out, and when I asked, because I was project managing it, and when I then asked the developer, I said okay, but how many orders have gone through in two months? And then they said well, it's around four and a half million.	
5.	RF	Wow.	
6.	R2	And then you're like, okay. Yeah, and then I was like, okay, I had [Big Swedish Company]. Yeah, but it sells for a lot of money every day. But that's what I'm working on right now.	
7.	RF	Yes, interesting.	
8.	R2	So it's not like, if you look at it from an IT perspective and what you will also fall into. And what is somehow the systems scientist's world? You are a business developer and then you look at the whole instead of maybe just communication or just IT development, but it's about actually being able to look at a whole and how things should function.	
9.	RF	Yes, and the next question then. Have you worked in teams with people in different geographic locations and how does that collaboration work in practice?	
10.	R2	I once started at [Swedish company] in 1999. Back then it wasn't that many. Yeah, it was like you had people in Sundsvall and Östersund, but that wasn't that far. But then I worked quite a long time at Sony and then it was the whole world. The experience I have, when I started with that in 2005 this didn't really exist. There was definitely the possibility to have video calls and such, but then it was mostly telephone conferences which were quite difficult to manage and so on. Then sure, you need to meet physically sometime or a few times. And above all, it's about creating an	LS

		environment. That applies whether you're sitting in the same room or spread out geographically, it's about creating. And if you look at it from a project manager role, it's about creating an environment where people respect each other, where they know what to do. You have transparency and somehow try to ensure that it's a good collaboration. I think it's very much about leadership there. Having a bit of sensitivity to push forward but still somehow try to include everyone. That's what's important. Then when it comes to working with other cultures. That's also something you have to be humble about. I think people often say that because it's home. But I think from a Swedish perspective there's a – how should I say – there's a somewhat naive view of different cultures. We have, the cultural differences are maybe not as deep within us because we're very open. Regardless of what people say, we are very open and quite interested in other cultures. And we also live in an extremely secular and liberal society. Even if there are forces that want to change that, we live very liberally and in fact also in a very non-hierarchical society, even in the business world. And it's terrible to say, but it also concerns how women are treated in working life. It's still, if you take other countries, it could be that you're pushed aside and take on roles you perhaps shouldn't. And then it's about bringing that up. But it's also a cultural aspect you have to handle when you work with people in different geographic locations. You constantly have to keep in mind that okay, here I can't push too hard. Here I can't say what I think. Many times you have these differences… it becomes a bit stereotypical. But if you work with people from [country in South Asia], they always say yes. But if they say yes and nod a bit like this, then you know they're lying. Or they're not really sure about what they're saying. And if you talk to someone from the [country in Western Europe], you'll hear the truth every time. And there's a difference between the professional and the other. You get it straight. "No, but I don't agree." "Oh? Okay." A bit like the Swedish way where we don't really want to speak directly but wrap it up a bit and try to include it. So it's super interesting. But it's fundamentally about the basics of project management. That you have a vision of what you want to do. You make sure to bring along the people you need. You have clarity in what you're going to do. But then you add the dimension of distance. Try to maybe be even more repetitive. Speaking English, but alignment. That you constantly ensure everyone knows what they're supposed to do. And not micromanaging, but at least ensuring you have clear goals and clear requirements. And an extra dimension is the cultural one. That you still have to find ways forward and listen a lot. And also keep that in the back of your mind. I think that's	GB GB CI

		important. To have that in the background. Yes, in this situation maybe you can't push.	
11.	RF	You mentioned that these different team members were located in [country in South Asia] , the [country in Western Europe] and similar. Did you notice anything that affected the collaboration because the team members were in other or different places?	
12.	R2	Yes, I think it's the cultural aspect. And the hierarchical. It's like this, if you work with certain cultures, as soon as a higher manager enters, those you work with become silent. And then it's easy, if you're frustrated, to push that manager. But that's not very good either because it just makes things worse. Then there's an imbalance in how they work. So instead, you have to play along and then make clear demands on that person and then follow up with those you work with. So yes. If that answers the question.	GB
13.	RF	Yes, absolutely. And what factors affect how your team collaborates when it's not located in the same place?	
14.	R2	It's the distance, absolutely. And that you don't have the daily social contact maybe. Like meeting at the coffee machine and such. Then in recent years with COVID, it made a big difference. The whole pandemic made a pretty big change. First of all, the tools we use now, like we're talking through, developed extremely fast. Then also people got a new way of working. But I think it's about bringing the social part into it. Not just meeting, meeting, meeting, but actually being social and human. I think that's what's important. And make a clear distinction. If you are the one leading, you can open up and then say "now we start, now we begin the meeting." But at least always try to keep a social dimension to it. That you really… That you maintain a human side, otherwise it doesn't work. Often it has been challenging professionally to only be extremely focused on work. And I've been in environments where it's been extremely much like that. But even then, it creates insecurity if you can't open up. I think it's a lot about relationships. If you want to get something out of a group or from someone, then it's about having a relationship. And if you can create that relationship reasonably quickly and show that you are confident in what you want to do, then yes… it becomes more powerful. In this thing with working in geographically different places, it's still about the social dimension. You have to talk about how you are. How many children do you have? Where are you in life? What do you	GB RC RC RC RC

		do? This whole thing of actually creating a person on the other side. I often tell this, I sat in a meeting… and it was also during the pandemic. We were talking about people being locked in their apartments and working. And it was at the end of the pandemic. I had a meeting with someone in [country in Southern Europe]. In the summer. It's 30 degrees warm. They are locked in and their apartments aren't that big. Two-rooms, three-rooms and then they have three kids. And suddenly someone comes in, like we're sitting here, someone comes from behind and grabs the guy's hair and starts cutting it. And he is just so unbothered. But then I knew what that kid was called and so on, so you can kind of say… He popped his head in. So it's about keeping that humanity in it. I think that is the key, or one of the keys, when it comes to this. You have all the professional keys, but you also have a key in creating some kind of relationship, a social relationship. It doesn't have to be deep, but it's about feeling that you know the person.	RC
15.	RF	And then, we've touched on this, but can you describe an experience where working across geographic locations affected the project, either positively or negatively?	
16.	R2	Negative, I've had cases. And that was during the time with conference calls at Sony. We worked with a team in Italy or something like that. And we talked with one person. But we could hear people in the background and then we asked a few tough questions and suddenly it just went quiet. And there, you would have wanted to be in the room. To look people in the eyes and continue the discussion. So that was a really negative thing. But if you want a positive one, back to the pandemic again, when you had the chance to work more collaboratively and, in many cases, much more efficiently. Where a problem came up and I knew that if I talk to this person in [country in Western Europe] and [country in Southern Europe], and then there was also someone in [country in North America] who had worked with this, and then I could call them all into the same meeting. Say: this and this needs to happen. Who else is working on this? This and this needs to be done. And suddenly you get these people from different countries. Maybe some had met before, but then it became like "Oh, you also have the same problem we have. How can we solve it? How can we move forward?" So it's a bit like that. Just like if I had gone out and roughly knew who I had in the office and just grabbed three people and said: "Hey, we have this problem. I think you..." and then we move on. So yeah. It's about working methods and how you do it. But that's what it is.	OG OG

17.	RF	And what people or groups, stakeholders, do you usually have the most contact with during a project?	
18.	R2	Oh. It depends on what and when in the project you are. First you have to… In the beginning, it's a lot about getting… You'll notice, it's a lot about resource owners who are also stakeholders you need to talk to and make sure that they, first of all, get informed that something is happening. Second, that they understand and become interested. Then that they somehow assign you resources. That's where it depends. At the start it's a lot about stakeholder management. Then it decreases because you maybe get resources from them and then you continue working. Then it's the project team with the different competencies that you've mapped out. They are also stakeholders, but on different levels and for different purposes. I don't think you can point to just one thing. But that's also something, if you take the geographical aspect, it's quite good that when you're working with your stakeholders and starting up, that you meet physically. And then with your stakeholders you can have continuous contact and so on. But that's what expectation management is.	
19.	RF	Yes, exactly. We've touched on this too. But have you experienced situations where there were different expectations or misunderstandings between those involved? And how was it handled?	
20.	R2	Every day. That's very much what the project manager role is. Making sure there are different expectations. Then it can also be political. Like what we're doing now, I'm in a certain area of furniture, but it affects many others. You quickly notice if you step on someone's toes. Maybe they've tried to do the same thing before. There's so much you have to manage. So yes, absolutely. And then when you go into meetings, maybe there's a new stakeholder or someone who's gotten new information, you constantly have to repeat: Okay, this is the goal. This is what we're planning to do. We want to involve you. What do you think? That's what it's about. Managing the… now I'm switching to English again, expectations. That is, always working with it. What are the expectations for your project? What are the expectations of you? What expectations do you have of others? And how do we ensure that we have a shared goal? Everyone has a vision. Often people are very solution-focused. So if you present a problem, they immediately start thinking about a solution instead of breaking down the problem. So that's what you're working with a lot.	LS

21.	RF	And have you experienced that there are specific risks or challenges in projects where the teams are geographically distributed?	
22.	R2	Yes, definitely. Especially from a delivery perspective. Finding a way to do micromanagement. To see that there is progress. You don't want to stand there two days before and then some team sitting somewhere else has said for three weeks, "Yes, absolutely, everything is fine." And then two days before: "Well, no, actually we can't." And there the geographical aspect can be a problem. But it can also be that they're hiding in any office corner too. But yes, I can see that it can be a problem. And it's also like I said before, it can also be a cultural problem. That people just say "yes, yes, absolutely, we understand." And then it's like, what is it you understand? Can you give examples? What is it exactly?	RF
23.	RF	How do you manage risks in the IT projects you've worked on? Is there a clear strategy or division of responsibilities?	
24.	R2	You often use these risk models. From a project management perspective, it's about identifying the risks you have, both early in the project. And that's also part of, it's a building block when you run and lead something. Personally, I think it's something you should carry with you at all times. When I'm about to take the next step, what risks exist that could prevent me from reaching that goal? What's the list? What's the probability? What's the impact? You continuously work with that in your head. And what are your mitigation strategies? What do you do to take something to the next step? That you constantly look at your risks. Is there something you should… can you lower it? Should you raise it? Are there any new risks that have come in? How do you handle it? You should always manage it in relation to what you want to deliver, first of all. But also in what form it takes. Is there a stakeholder who doesn't agree with you? So it's always an extremely important puzzle piece. And somehow something that sticks in the back of your mind. Now I'm going to do this, what's the risk? What can happen? How can I get around it? Should I get around it? Or are we willing to take this risk? And that could be anything from, this person is going to develop something, but I'm not entirely sure if they're going to deliver or not. This group will deliver or not. Or like I discussed with lawyers this week: okay, if we don't do this, or if we deliver something that's a bit worse, what's the risk of being sued? So you're constantly working with that, carrying	RF

		it with you. I think it's an extremely important part to keep in mind, especially when you're working with both large and small projects.	
25.	RF	And what methods or approaches are used in your projects to handle coordination across time zones or between organizations?	
26.	R2	Clear documentation. For me, that's really it. And including that in the way you work. For those who can influence the risks, that you show it to them. Then maybe not show it to the team you're a bit unsure of. I don't think you should say "I see the risk as a five here that you won't deliver." That's not how you do it. But being open and clear in your documentation. Especially towards the stakeholders you have. Because then they can act on it too. Say it's the resource owner who owns the team where you see a bigger risk, that's the person you should go to and say, "Hey, I see this as a risk. How can we deal with it? What can we do?" And your project owner, of course. Work clearly with it. The tools are documentation and the models I talked about. Evaluation. What are the risks? What mitigation strategies are there? What's the probability? Those maps that I'm sure you've drawn too.	CI
27.	RF	Is there anything you would like to change in how distributed teams are organized or supported based on your experience?	
28.	R2	Yes. Now we're at [Big Swedish Company], and there's quite a lot of work around the operational part. Like: this is how we do a project. This is how we work, and so on. I think it's a natural development of this. But I believe that if a company wants to be as efficient or as good as possible, they should have training and a model for that company, like now when you join Deloitte: okay, how do we work in a distributed project? What are the pitfalls? What should you think about? So that you have, maybe a training but also a quick reference guide that says: these are the things you could think about when running a distributed project. So you create a sense of security. And that applies to those involved in the project as well. Not just the project managers. I really believe in the model that, yes, you have experts who help you in the project. But they should also understand the model they're working in and their part in the bigger picture.	

29.	RF	Can you remember a project that stands out to you, either because it went particularly well or because there were challenges?	
30.	R2	Yes, there are quite a few. But like I said before, [project name] was really interesting. It was super interesting. I sat in a department where we worked with all the countries in the world. We sat in the middle, with all the countries on one side and the 500 global development teams at [department name] on the other side. And we tried to ensure that the teams delivered what they were supposed to, and that they delivered on the requirements the countries had. And quite quickly, the countries requested a [project name] solution. The basic issue was: we need a way to sell in the parking lot and hand over safely without physical contact. And when I discussed with the senior managers in Supply and then Sales, they were completely fixated on developing the solution that already existed. Lockers, big lockers, like the ones you can find at [Big Swedish Company]. I think there are some in Malmö too. Where you can pick up your big [Big Swedish Company] orders using a code. That's what they wanted to do. "We're not doing this other thing." So I asked, "When will that be delivered then?" We're talking 2020, summer 2020. "2023." But the stores are closing now. What can we do now? "Well… we have our plans. We can't do anything." So it went out to the countries, and I asked if anyone had done something. And then, Sweden had actually started. And together with Spain and a few other countries, we developed it. The guy from Sweden was sitting in his dad's apartment in Grums, and a few were in [country in Southern Europe], someone in [country in Western Europe], someone in [country in North America]. And we developed this. And rolled it out really fast. Like two and a half, three months. To ten countries, pretty quickly. And that's because it was an exceptional time. But also because you couldn't really do anything else. No commuting. Nothing. People were on Teams at 8 in the morning and stayed there. The problem was more that people didn't get up. They didn't take breaks. So that was a positive experience and a positive project that rolled out very fast and got buy-in. It was exceptional, but yes.	
31.	RF	Is there anything else you would like to share that you think is important?	

32.	R2	About risk or project management or what?	
33.	RF	No, just anything general you'd like to add. We're nearing the end here.	
34.	R2	No, but the advice to you, from a systems science perspective, is to stay curious and also understand that you are, to a large extent, a spider in the web. There are many people who can sell bricks, many who can do marketing, many who can develop. But being the one who connects things, leads projects, and sometimes takes on smaller parts like risk management and so on… but also lifts your gaze. That, I believe in. You will encounter resistance there. But what has helped me a lot is to lift my gaze and try to see the bigger picture. You don't always have to communicate that you do, you might step on people's toes. But try to find a way to understand that you are part of a bigger whole and how that works. Because then you can help, no matter what function you have, you can help. And don't be afraid to express your opinions and to lead. That's really part of this. That you take on things and also make sure you want to drive change. I think that's what project management is largely about, that you love to make things change. That you want to drive transformation. Change management is what matters.	
35.	RF	Thank you so much for the interview. I'll go ahead and pause the recording here.	

Interview 3

Transcript Respondent 3 (R3), Senior Role in Secure Software & Cyber Security (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 22 min.

Amount of words: 2793

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	RF	Your participation in this study is entirely voluntary. You have the right to decline or withdraw your participation at any time without giving any explanation. The data collected will only be used for our master's study and will be securely deleted after the study is completed. Your identity will remain anonymous, and you will have the opportunity to review the interview transcript before it is published. Does that feel okay?	
2.	R3	Absolutely. Great.	
3.	RF	Then I think we'll start with the first question. Could you tell me a bit about your current role and what it involves in your daily work?	
4.	R3	Yes, absolutely. As I said, I work at [a cybersecurity firm based in Northern Europe], which is a subsidiary of [the company]. And within our subsidiary, I'm the regional manager for [two Northern countries in Europe]. That means I have a group of consultants that I hire and take care of, and I sell them to local clients in our market down here. And I follow up on the business and so on. And then I myself also have a part-time assignment out at a client. So that's briefly what I do. And if you were to give it a title, then consultant manager is probably the general title for the role, you could say. Yeah.	
5.	RF	And what types of IT projects have you been involved in?	
6.	R3	Well, I'm an old Java developer from way back. I've worked a lot with Telecom, Ericsson, [Swedish company], Sony Mobile, France Telecom and a few others. But that was a long time ago. And now I'm working on a privacy GDPR project. Then my consultants are mostly, half of them are in development projects at places like [Big Swedish Company] or Bosch. We've been at Tetra Pak, Alfa Laval, Verisure and so on. And then I also have some security consultants who are working at Alfa Laval, Region Skåne, the City of Stockholm, and a few different places. So that's the kind of stuff we're doing.	
7.	RF	And have you worked in teams with people in different geographical locations? And how did you feel that collaboration worked in practice?	
8.	R3	Right now I'm working on a privacy project for a global corporation, and they are divided into EMEA, which is Europe, Middle East, and Africa, then they have APAC, which	

		is Asia Pacific, and then they have the Americas, which is North and South America. And we're doing all three at the same time, which means that in the morning you work with APAC before they go to bed around 9–10 am. In the middle of the day you can work with EMEA, which is in our time zone, and then in the afternoon you can work with the Americas when they wake up, so to speak. So that's one aspect of it. Then there are also some cultural differences. A big thing in APAC is that it's a much tougher climate, you could say. People don't dare to speak up to their boss and so on. It's probably like that quite a bit in the America too, that you do what the boss says even if you don't agree. In Europe it feels a bit more relaxed, I'd say. I don't know if there's something more specific you're looking for?	GB CI
9.	RF	No, that was super interesting. I'm thinking we'll move on. Where were these team members located? You mentioned it a bit.	
10.	R3	Well, within EMEA this company has a subsidiary in almost every European country. So we're typically talking about capital cities. When we talk about the Americas, it's mostly Boston, because they run everything for North and South America. That includes Canada in the north down to Mexico, Brazil, and several countries there. And then in APAC, it's typically Singapore, Shanghai, Hong Kong, and then Melbourne and Australia as the main hubs. The others are smaller representative offices that report to them.	
11.	RF	Yeah, and did you notice anything that affected collaboration because team members were in different locations?	
12.	R3	The best thing is to talk to a team member who is close to their boss. That's what I feel. And if someone is maybe out in Australia but the decision-maker is in Shanghai, it can be harder to reach decisions. Sometimes when we ask difficult questions, they don't really dare to answer and instead have to go ask their boss. And that's harder if the boss isn't in the same place.	CI
13.	RF	And what factors affect how your team collaborates when you're not in the same location, would you say?	
14.	R3	Well, hard to say. What we try to do is always sit and look cheerful because we come with a pretty boring topic. No one really enjoys working with privacy and GDPR. So we try to make some jokes. But being clear and well-prepared is a good thing. And usually when you're going to meet another culture, typically in APAC, if you're clear in the invitation and you're inviting someone lower in the organization, that person might, probably without us even knowing, go to their boss and ask. Now HQ in Lund wants to talk to us about this. Am I allowed	CI GB

		to attend the meeting? Yes, you are. And sometimes the boss suddenly joins the meeting too. Because the boss wants to hear what you're going to talk to their employee about. And this company I'm working with, maybe we can leave the company name out of the recording, but I can tell you later who it is, has its headquarters in Lund, and everything is run from Lund. What they say in Lund is what goes. And depending on how far from Lund you are, people listen to that to varying degrees.	
15.	RF	Can you describe an experience where working across geographical locations affected the project, either positively or negatively?	
16.	R3	We had a nightmare case where we met a finance manager who was very skilled and had great control of the situation. But she had invited her boss to a second meeting and didn't get to speak even though she was the one who knew things. The boss wanted to do the talking and was almost rude to her subordinate. So it became a clear cultural issue, we didn't get the answers we wanted because the boss was there and more or less overrode the employee. But it became a clear cultural thing that we didn't get the answers we wanted because the boss was involved and more or less ran over his subordinate. Then we scheduled another meeting without the boss, and then we got the information we wanted. Culture is quite a big thing when working with other countries. And it's kind of funny too, if you're going to meet someone from Japan, you get back an email like 'Hello [Name] San!' Okay, how should I respond? Should I add 'San' to your name too? Should it be first name or last name? In what order do your names come? First name first or last name? Family name first, and so on. That kind of stuff is pretty tricky.	GB
17.	RF	And which people or groups, stakeholders, do you usually have the most contact with during a project?	
18.	R3	In this Privacy project, we typically meet with an HR manager, a sales manager, a marketing manager, and maybe a finance manager, because those are the areas we're working with. And then back at headquarters we ultimately report to the CIO, who is the one that owns all the information in a company. The Chief Information Officer.	
19.	RF	And how do you make sure that everyone involved in a project agrees and has the same understanding? How do you ensure that everyone has the same vision, basically?	
20.	R3	Well, we get a clear assignment from a manager we report to. We turn that into a plan that we go over with the manager, asking. Is this what you ordered from us? And we do that together as a team. I, as project manager, will be the one at the front, standing behind what we say. But if I don't have the	

		team with me, and we haven't agreed on what's reasonable, how many meetings should we have, can we be done with the task by this week, if we haven't discussed and committed to that plan, then it's not going to work. Then we report that upwards, to our client. At the same time, there's also a cultural difference. It's very good if a high-ranking manager from Lund reaches out to their counterpart in APAC and says, this project is coming, I ordered it, I want you to talk to everyone under you and let them know it's important. So when [Name] gets in touch, you should take the meeting and help them with it. If I just invite some random person and ask for help, they're like, why should I do this? I've got other, more fun stuff going on. So getting management to pave the way and say this project is coming, you should support it, that's important.	GB
21.	RF	And have you experienced situations where there were different expectations or misunderstandings among those involved? And how was that handled?	
22.	R3	Yes, you could say that. A few weeks ago, we had a pretty tough meeting where, with the support of our client, we suggested that tasks should be carried out out in the region. We met with fairly high-level managers and said: this is our proposal. We want you to handle it this way. And those managers said no, we don't want to do that. We think selling is much more fun. We don't make any money from doing what you're proposing. So we had to take that back to our steering group, which is like the board of the project. And it ended up escalating up the organization to a high enough manager who could talk to a high enough manager on their side. And then they had to agree. And when they've agreed, hopefully on what we wanted, we can go back and say: okay, so now we got what we wanted after all. So escalation paths are pretty useful. And if you know that you have your client's blessing to do things, but the others out there don't want to, then you can go back to your client and tell it like it is and escalate: I have this problem. And then they can help out that way.	
23.	RF	Have you experienced that particular risks or challenges arise in projects where teams are geographically dispersed? You've touched on it a bit before.	
24.	R3	Yes, time zones are a huge thing. Cultural differences are also a tricky one that you have to learn and that are hard to predict. And then I come with privacy. It's not the most exciting topic in the world. So we try to joke about it a bit. And it's also that it's not the most important thing on their calendar, and you have to respect that. We need to have a meeting, but maybe not during a quarter close because then a finance manager is busy closing quarterly reports. Then we just have to wait another week. Or if it's like Chinese New Year, it's the biggest celebration over there for three weeks. You can forget trying	GB GB

		to book a meeting then. And then there's the physical meeting. If I've met someone in person, it's much easier to have a Teams meeting later. But only using Teams, there are so many personal dimensions that you just can't read. That's a challenge too, I think.	
25.	RF	And how do you handle those risks in the IT projects you work with? Is there a clear strategy or division of responsibilities?	
26.	R3	All global companies basically face the same challenges. At the company I work with, they try to push out this Swedish culture. Sure, maybe you're sitting in China and the labor laws are different than in Sweden. But we still want you to treat your staff in a Swedish way because those are the values we stand for. And it's the same thing, even if you don't have GDPR, it's important to us that you still handle personal data in what we think is the correct way and what Europe requires, since it's legislation. I don't know if that answered the question, but...	GB
27.	RF	Yes, definitely. What methods or practices do you use in your projects to manage time zone differences between organizations?	
28.	R3	Outlook is great because it grays out the times that are outside working hours in that time zone. So I, who book all the meetings, can see if someone's workday ends, and of course I have to respect that. But if we're going to have a meeting with Melbourne, which is ten hours ahead of us, that means if it's 8 AM here, it's 6 PM there. So we've had meetings at 6 in the morning to accommodate them and show some goodwill. We get up early for you once, and then you stay late for us once. It's not really a special method. But everyone I know I'm going to meet, I know what time difference they're in, and I try to handle it and schedule accordingly. And here in Lund, we can't have a meeting at 6 in the morning and then another one at 6 in the evening, that's a really long workday. But sometimes that's just how it is. You just have to push through.	
29.	RF	Is there anything you would like to change in how distributed teams are organized or supported based on your experiences?	
30.	R3	Well, it's pretty good to have a dedicated speaking partner on the other side. For us in North and South America, it would be great to have one person in North America I know I can go to, who knows everyone behind them, and maybe one in South America who knows everyone there. Then you have a single point of contact, and there are people behind them I might not need to keep warm all the time. I can go to the first person, and maybe that leads to more people getting involved. It's like, say it's a development team, I'd rather talk to the project manager than every single project member. And can you recall	CI

		a project that stands out to you? Either because it went particularly well or had big challenges?	
31.	RF	And can you recall a project that stands out to you? Either because it went particularly well or had big challenges?	
32.	R3	The same company I'm working with now, I was involved in implementing GDPR. We started in 2017. On May 25, 2018, the legislation took effect, so to speak. And that was one of the toughest things I've been through. Because the person who owns the information and privacy sees this as really important. But a marketing department wants to use personal data as much as possible to send out marketing messages or campaigns to grow the business and increase sales. And this was all new with GDPR, and no one really knew how to interpret it. How strict should the interpretation be? What kind of fines are possible? Can you go to jail? And in some countries in Europe, if you're the CEO of a subsidiary, you are personally responsible for complying with the legislation. And it was really tough, people even burned out from this project because it had such a huge impact on the company. In the end, it had to be handled at the very top level, where they had to mediate and find a middle ground. Where we as a project could introduce just the right amount of change to get it implemented. So it worked out in the end, but at a very high cost in terms of stress. People actually burned out, and some resigned, it was very tough. But it was a tough topic to work with.	
33.	RF	Is there anything else you'd like to share that you think is important regarding this topic?	
34.	R3	It's also a reflection from that 2017–18 project. Always stay positive and come in with a smile. And it even got to the point where the team said, when even you're not happy [Name], then things are really bad. So if you're the one up front, and everything is a disaster and totally messed up, try to throw on a smile anyway and be a bit cheerful and positive. Maybe it rubs off and you bring the team along with you. And it also kind of becomes a way of protecting the team. And that was another thing, if you're the one standing up front, take a bit of extra crap to protect the ones behind you. Because you'll benefit from that later, in the sense of having had a team that enjoys working together. Maybe protect them a little.	LS
35.	RF	Yes, that was everything we had. So thank you so much. Thanks for the interview. Thanks a lot. We can stop the recording now.	

Interview 4

Transcript Respondent 4 (R4), Head of Sales & Marketing (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 35 min.

Amount of words: 4537

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	LW	Okay, let's begin. Your rights first. Your participation in this study is completely voluntary and you have every right to decline or end your participation at any time without having to give a reason. The collected data will only be used for our master's study and will be securely deleted once the study is completed. Your identity will remain anonymous and you'll have the opportunity to review the transcription before anything is published. Does that sound okay to you?	
2.	R4	Yes, that's fine.	
3.	LW	Then we would like to begin by asking you to tell us a bit about your current role and what it involves in your daily work.	
4.	R4	Yeah, I'm a sales, marketing and IT person. We don't really call ourselves managers here, but I guess that's what we are. We're so few, but I work with IT, marketing and sales at [company in Sweden]. We sell foundations and pools. So it's mostly my IT background here and maybe before that might be interesting to you, right?	
5.	LW	Yes. Would you like to tell us a bit about different types of IT projects you've been involved in? What you've worked with in those cases?	
6.	R4	Yes, recently or over my whole life?	
7.	LW	Your whole life.	

8.	R4	Okay. Well, I started at [American company] back in the day. Big American company. So I was a consultant for, what was it, four years. Worked with [Swedish company]. Met a lot of Indian consultants. It's a lot about India these days. So I've worked a lot with outsourcing, that's what it's called. So that's kind of my thing. Then I've had many international clients. [Swedish company] has operations in many countries. Then I also worked on various IT projects for an energy company. Had nothing to do with international stuff. Very local. It was called [Swedish energy company] back then. Then I quit there and joined some banner ads company, supposed to become a billionaire company like all the others in 2000. It was super educational actually. So I worked a lot with [American company]'s database during the [American company] days. Then I moved on and built IT systems. But what's stuck with me throughout is custom developed CRM systems, CRM stands for customer relationship management. That's something I actually know quite well. Since I've worked with it since '97. So billing and customer management are recurring themes. But back then it was a banner ads company and we were supposed to collect data to build a billing system. It was going to take over the whole world, of course. That didn't happen. We sold to one telecom operator and made 100,000 kr and burned a million a month. But it was super educational actually. So when I hear someone say, and this is relevant for you too, when someone says "there are a billion banners sold per day. If we just take a milli-percent of that, we'll be millionaires," then you should be very skeptical, because that's not a market plan. That's not how you build a company. But they tried to do that, and I bought it. The first time you fall for it. The second time, you don't. Then I started at a [American financial company]. The company built trading systems. I was working on their trading platform there. That's when I really encountered international work for the first time. Then we built trading systems for Stockholm stock exchange, Helsinki, Copenhagen, Oslo, USA. A lot. NASD, which owns [American financial company], was one of the clients. So we built a lot of weird systems for them. They have way more systems than people think. But it was mostly that the clients were international. Not so much else. [Informal conversation omitted].	
9.	R4	Okay. Well, I started at [American company] back in the day. Big American company. So I was a consultant for, what was it, four years. Worked with [Swedish company]. Met a lot of Indian consultants. It's a lot about India these days.So I've	

		worked a lot with outsourcing, that's what it's called. So that's kind of my thing. Then I've had many international clients. [Informal conversation omitted] So that was that. Then came [Swedish TV company]. I became the team lead for an IT department of the company, the IT department at [Gaming company]. There we worked with the Nordics, Estonia, Latvia, the whole Baltics. Then I was actually involved in trying to launch in Ukraine. So [Swedish TV company], it was satellite dishes back then. This was a long time ago, around 2004. So we were going to enter Ukraine. Good thing they didn't do that. We were there rebuilding all the systems so they would handle Russian characters, or Ukrainian characters I should say. Cyrillic. So that's something to take with you. These are things you take for granted. It's all about character sets. Like ÅÄÖ. It's much more complicated than you think. Maybe not in modern IT systems I haven't built systems like that in a while, but back then, it was really important that stuff like character sets worked properly . It's harder than people think. But now there's Unicode and all sorts of stuff that makes it easier for sure. Then I started at [Big Swedish Company]. Through [American company] as a consultant, that's how I got in, and that was the real deal, you could say. I'll wrap up when I'm done telling my story. But it's all things I've learned that you can take with you. At [Big Swedish Company] the projects were huge. When we did a merge with the Stockholm stock exchange, that is [American financial company]. When we merged the Swedish, Finnish, and Danish exchanges. That was about 20,000 hours or so. That was kind of a medium-sized project at [Big Swedish Company]. There were departments that just rolled out systems. Back then, [Big Swedish Company] was growing really fast. I don't know if they still are. But there was this guy whose job was just rolling out IT systems to new stores and his backlog just kept growing. For every year he worked with rolling out his system, more stores had started than planned. It was like pushing a rock uphill. That's where I really encountered outsourcing. They wanted to outsource everything to India. Which they bitterly regretted later, I can tell you. I was brought in to do just that. So I worked a lot with Indians and built a bunch of relationships over there. It was very educational. But what people don't know is that there's operations and then there's development. Development should be close to the business. They started by outsourcing the development. Operations can be managed by... not a monkey, but by skilled technicians who look at a screen. But developers need to sit with the business and understand what they're doing. And they did the exact opposite. They outsourced the developers to India. Completely brainless. It	

		was kind of political. If you said something, then you couldn't continue. You just had to go with it. But it was really stupid in hindsight. Then I started on my own, and there I brought in my own Indians. [Informal conversation omitted].	
10.	LW	Great. You mentioned several times that you've worked in teams where people are in different geographic locations, in other countries. How do you think that kind of collaboration has worked in practice?	
11.	R4	Yeah, so what do I really think? It's just the way things are today, but something I've learned is that it's much more about having skilled people, but as soon as the word global is in front of something, like "global helpdesk," then it doesn't work anymore. When you know someone who can help... Now, you've worked, I'm referring to Rebecca since I haven't met you before, Lovisa, but I can imagine some doctor called you when you were at [Finish IT company], right? And then you built a relationship, like "this girl understands what I'm saying." And maybe that's because there are three or four people on the helpdesk. Or five. But if there are a hundred? You lose that. It's not the same anymore. People stop caring. You create a ticket. You resolve the ticket. And you're measured on how many tickets you close. So the incentives are often wrong. On a small scale, it probably works. It works for me and [Name], we talk every day. But in a big global helpdesk with 200 employees for [American company] or something… or take [Swedish company] or some other Swedish giant. I don't know how well it really works. I would've tried to create teams that are closer to the customer. That's really it. And if they come from India, it doesn't matter where they're located. What's important is that they get to know each other.	GB
12.	LW	Have you noticed any other factors that affect collaboration in a team specifically because of the geographic distance?	
13.	R4	Language is important. English is the big language, of course. It's the one everyone uses. And [country in south Asia] speak English from childhood. But they really don't. Nine out of ten [south Asia citizens], you can't understand what they're saying. You hear them, you understand the words, but you're like "wait, did he say that?" and by then he's already said ten more sentences. So I've had [south Asia citizens] who couldn't speak English, and it didn't work at all. They can speak English, but they… was there a thumbs-up just now? Did a thumbs-up pop up in the middle?	CI

14.	LW	Yeah, it looked like it.	
15.	R4	I don't use Teams much so I get all like "what?" Anyway, I've had [south Asia citizens] who can't speak English and it doesn't work. Now I have one, [Name] speaks English really well. So they need to be a bit Western in their mindset. But yeah, that was about language.	
16.	LW	Okay. Do you have, or could you describe, a specific experience where you worked in a team across geographical locations and it affected the project, either positively or negatively?	
17.	R4	Yeah, another important factor is how the company is doing. It might sound silly, but it makes a huge difference. A company that's growing like crazy, then things probably work fine. A company that's struggling or under pressure to deliver, it becomes political right away. So we were sitting there when [Big Swedish Company] IT had to downsize and many services were being outsourced to [country in South Asia]. Instead of 100 employees and 1,000 consultants, it would become one service provided from [country in South Asia]. And we talked to the service manager, and there were all these SLAs and we worked with contracts. What was the question again?	
18.	LW	If you have a specific experience?	
19.	R4	Right, exactly. In times of success, when a company is doing well, people don't guard their turf. When things go badly, I've experienced this myself, at [Tech company] they laid off two to three hundred out of a thousand people. Everyone starts acting like scared mice, holding onto their tasks because they're afraid of getting fired. That has a massive effect. Just look at what's happening with Trump, that lunatic over there. He wants to bring everything back to the U.S. It's not going to work out well, I can tell you. So it works well when people feel secure and overworked and want help, and the company is growing. But once it plateaus, then everyone starts becoming a "hero," and the heroes begin building political walls and want to keep their skills to themselves. And once things start declining, then everyone just sits there like mice. And almost all companies end up there eventually. I have a friend who's a manager at [Swedish gaming company]. [Informal conversation omitted] And she told me very clearly, when [big American company] bought [Swedish gaming	

		company], that it's exactly like that. Even when things are going really well, politics can still creep in.	
20.	LW	Now we have some questions about stakeholders and roles within a team. So our first question is: which people or roles in a team do you usually have the most contact with when you work on a project?	
21.	R4	Developers are the main roles. Then project managers, project managers and developers. In large companies, you also have testers. In my role, the one I've had all along. And it's actually pretty important that the test department isn't made up of developers, but that they're a bit square, just testing. Because you have to think like a user. A user isn't a developer, often. So it usually works well with relatively non-technical testers who are good at testing but are a bit rigid and tick things off a list and so on. Whereas a developer is like… I've met all kinds. They're bad at testing. That's what I'm trying to say.	
22.	LW	Then we're wondering how you ensure that everyone involved in a project is on the same page and has the same understanding of the project, and that you're all working toward the same goals. How do you handle that?	
23.	R4	It might sound very... yeah, we have meetings. But it's like this. What came to mind was [Swedish TV company], when I worked there. So someone said, "Can you rebuild this billing system in this amount of time?" So I got, let's say, 10,000 hours. And I said, "I'll check." So I went back and said, "It'll cost about 11,000 hours. But there's a risk in this and it's a three-year project." "Three years?! You're crazy. It has to be done in one year." Then I said, "Well, then you'll have to multiply the hours. For every year you want to compress this, you have to add more people, right?" And then the complexity in IT increases exponentially. And that's because of what we talked about earlier, that people talk past each other. You've probably heard of that game where someone whispers to the next person, and then you hear what the first person said. And it's not even close. That's how it is. People misunderstand, they don't want to understand, or they can't. So meetings, meetings, meetings. But the more people you have, the worse it gets.	GB
24.	LW	You mentioned risks a bit earlier, and now we'd like to ask if you've experienced any particular risks or challenges in projects where the teams are geographically distributed?	
25.	R4	At [Big Swedish Company] there were two departments. One was in [city in Sweden] and the other in [city in Sweden]. One	

		was responsible for operations and the other for development. And they didn't talk to each other. And people said, "It's not possible. It can't be done." It was really like the operations side didn't want to accept the system. Because they were measured on uptime, how stable the system is. And if the system, take a checkout system at [Big Swedish Company], if that goes down, it ends up in the news. So what do you do as the operations manager? You never change it. You don't want to change the checkout system. So that kind of thing can lead to... but my point was: even if you're sitting in [city in Sweden] and [city in Sweden], it's not like it's [city in South Asia], it's still really hard to communicate because they're driven by different goals. So in that case, we just had to meet, meet, meet, meet, understand, get to know each other, be able to call someone, get to know the operations manager for my system. As soon as you're sitting in your own meetings and not meeting up, it's so easy to just say, "Oh, it's the ops team again." Then it becomes impossible to work together. And I think it's very much like that.	
26.	LW	How would you say you handle the different risks that exist when running an IT project? And do you have clear strategies and divisions of responsibility when it comes to risk work?	
27.	R4	Yesterday, did you see that [Swedish digital bank] was down? In the middle of a stock market crash. That IT manager probably didn't feel great. So how do you handle that kind of risk, that the IT system is down when everyone needs to use it? When I worked a lot with performance, and performance means the more you load something, and this goes beyond IT, the more likely it is to break, and the bigger the consequences. That's kind of what we were talking about earlier. That's why everything just slows down. The bigger an organization gets, the slower and slower IT moves. You try to predict every risk and say, "This must never happen again." I don't know how many times I've experienced that. On the stock exchange it was extreme. You couldn't even publish anything. So what happens, and what we're getting to, which I talked about before at [American financial company], [American financial company] is outstanding at testing. They had an automated test system that was checked into CVS at the time. It's called something else now. What are those version control tools called nowadays? There's one everyone talks about. I've forgotten the name. You check in the code, and then it's locked. At night the exchange would run, I think it was 11,000 test cases automatically. In something called determinism. What does that mean? Well, it means that... the stock exchange had a log that made it so... what I'm trying to say is	RF

		that IT architecture is super important. Like, how have you built your IT system so it can be tested automatically? By doing that, you handle the risk by being able to run many test cases, and in that way reduce the risk of the exchange going down. Because if the stock exchange goes down, it's immediately in Dagens Industri. All the managers start demanding answers. So it becomes really expensive to develop like that. But for critical systems, it's worth it. And the trick for a manager, a project manager, and a client is always: what's the budget? It's never infinite. So there will always be some risks that slip through. But by applying determinism, what they could do at [Tech company] was take the day's trading log and run it through their test system. And it should produce exactly the same result every time. That's determinism. If you run the same flow again, you don't suddenly get two orders skipping over each other. First comes order one, then order two, then order three, then order four. This is just one way to manage it. I'm rambling. But to enable testing, you have to think it through. And if you do that, then you can manage a lot of risks.	
28.	LW	Yes, now we have some questions about the practical side, how you've worked in your IT projects. So what we'd like to know is whether you have any specific methods, approaches, or technical solutions that you use in projects to handle being located in different geographical places, and what you use in those situations?	
29.	R4	Well, for the last 15 years or so, since 2008, I've been working in a small company. So I'm not really in the game anymore, to be honest. But the tools being used today are called things like Slack. I work a lot with... what's it called? Is it WhatsApp? Yeah, WhatsApp. Before, it was Skype a lot. Teams, of course. All those kinds of meetings. But the question was, how do you work across borders with risks? No, what tools?	
30.	LW	We shifted a bit toward tools, but our next question is also whether you've worked with any specific routines that have made collaboration across, for example, time zones easier?	
31.	R4	And that's what I meant with automated test cases. If you think through your IT architecture in a way that constantly creates lots of logs and makes it possible to automatically test things, then you've gained a lot. Because then you can run lots of test cases automatically, which is very helpful. I keep finding things in my IT systems that I use with my Indian guy, and I sit there thinking, why didn't I take the time to develop this so that we do it automatically? Because if I change	

		something over here, it affects something over there. And that's because you're not running these automated things. At [American financial company], the test department's code was much, much, much, much more than the code that was being tested. And who tests that, then? As soon as something changes here, then you have to change all the tests. In the end, it becomes a giant blob, and at some point it's just not worth it. So that's one thing. The automated testing tool is an important tool for handling things across borders, so that everyone works in the same way. But I've never seen a good tool for testing user interfaces. They really tried there. Tried to record things, and I think AI will become very important for that, so it can understand. So AI will be really interesting.	
32.	LW	You've probably mentioned this a bit throughout the interview, but is there anything you've thought about that you would like to change in how distributed teams are organized and work, something that, based on your experience, you think would make the work easier?	
33.	R4	Yes, maybe that you should actually let certain geographical departments become really good at something. If we take this case, and it's incredibly complex with [Big Swedish Company], but maybe I can explain it a bit. It's pretty interesting. Because when [Big Swedish Company] started, it was in the Nordics. Then they maybe had, let's say, 40 systems in the Nordics. And then they grew. And then it was like: "We don't have time, we need to hire people." So they just took the Nordic setup and did a copy-paste. And then they hired people in Germany and said, "Here you go, just use this." That's what they did. And this thing had a name. Instead of thinking about what kind of value Germany could have added to this, could we move people in Sweden so they become really good at, say, something close to the core? In [Big Swedish Company]'s case, that was everything around Älmhult. That's the heart of [Big Swedish Company], the articles, the products, all of that. While maybe distribution could have been handled by Germany. But they didn't do that. Instead, Sweden or the Nordics had their own distribution department and their own distribution process. IT is just a reflection of processes, right? So what happened was that when Asia got going, they used Sweden again, or the Nordics, and sent that over to Asia. And then when the US started up, they sent it there again. So they ended up with four originally identical systems that diverged over time. And when I came in, they were like, "Why is everything so broken and why is IT at [Big Swedish Company] so insanely expensive?" Well, no shit, you have four IT systems. You have four IT worlds.	GB GB GB GB

		What do you call it? Four IT departments. Four times forty. They all did the same thing in the beginning. So you have four business processes, four sets of business processes floating around. And to get out of that, your question was, let Germany be good at something. In the US, distances are long. So they got good at transport. Germany got good at distribution. That's maybe how I would have set it up today. You know, all those warehouses and stuff. Meanwhile, transport and warehousing also existed in the US. So if I had been in an IT department there, I would have tried to get everyone to... and then they'd have to feel secure, of course. That way you avoid all the politics. And maybe Asia, instead of hiring someone new in Sweden, you do it in Asia. They provide support, and maybe you build helpdesks and things like that. I don't know. Like I said earlier, as soon as you put the word "global" on something, it stops working.	
34.	LW	Yeah. Thanks! Now we're getting to the final questions, and they're a bit more open-ended. So we're wondering if you have a specific project that stands out to you, either because it went really well, or because there were challenges, and what you think contributed to that outcome?	
35.	R4	Oh my god, I had a lot of challenges. But it's very clear what was both my biggest success and my biggest failure at the same time. I remember when we were merging Helsinki and Stockholm. First Denmark and Sweden merged their stock exchanges, and then Helsinki was going to be added into the mix. Oslo was also involved. So it was a huge project. Like I said, around 20,000 hours or something. And then all the broker firms trading with the exchange had to rebuild their systems and everything. For a week, and, the thing was, we weren't allowed to talk to the business side because it was political that we had already started building the system. So they didn't want to release the budget, but [Tech company] made the decision to start developing the solution anyway. "Because we know they'll place the order, I've heard it in the corridors," kind of thing. And eventually that's what happened. So it was the right decision in a way. But we weren't allowed to talk to the business, so we sat there, a group of developers, trying to figure out what to build. And it ended up being like 90% right. But the 10% that didn't work, when things started getting heated and the customer had just signed and there was only six months left to launch… It sounds like a long time, but in that world, six months is nothing. And the money was gone already. But then there were quality issues because that 10% was missing. And I have to say, everyone was working 60–70 hours a week. Just	

		working themselves to death. And they had just done a round of layoffs where they let go of 30% of the workforce. So that was my biggest success, I was almost newly hired and still got to stay. So that means you've probably succeeded, I think. You became a key person in like six months, or a year. That was cool. But when you're working 70 hours a week and one week before launch, one week before launch, they come in, because they had lost confidence in us due to the missing 10% and say, "After the launch, we're shutting this system down, and you're all going to be let go. We'll keep two people." I walked into the office and quit on the spot. And it was chaos. Because then I was risking the entire project. They thought it was disloyal. It was a total mess. But the leadership was just so bad. People were working 70 hours a week. So there you go, everything in one story.	
36.	LW	Yeah, absolutely. Then we only have one last question, and that is if there's anything else you'd like to share that you think is particularly important regarding what we've talked about today?	
37.	R4	No, it's this thing... I believe in small-scale setups. As soon as you throw in 100 people, it just... If you have 10 people, and by "people" I mean men and women, 10 people will do a better job than 100. Shorter decision paths and so on. If you're going to have 100 people, then you... it doesn't go faster. There are more mistakes and it just gets expensive. So I'd rather let 10 men and women have a bit more time.	
38.	LW	Great, thank you so much. We're going to stop the recording now.	

Interview 5

Transcript Respondent 5 (R5), Growth Focused Business Developer (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 19 min.

Amount of words: 2614

Language: Swedish, translated to english

#	Person	Conversation	Code

1.	LW	So. Yes, so your rights then. Your participation in this study is entirely voluntary. You have the right to decline or withdraw your participation at any time without having to give any explanation. The collected data will only be used for our master's study and will be securely deleted after the study is completed. Your identity will remain anonymous. You will have the opportunity to review the interview transcript before anything is published. Does that feel okay to you?	
2.	R5	That sounds good.	
3.	LW	Great. Then we'd like to ask if you could tell us about your current role and what it involves in your daily work.	
4.	R5	My current role is business coach or startup coach. Where we work with startups. So early-stage companies that are about to raise their first venture capital. So we basically help and coach them to become ready. And then we arrange various meeting places where they can meet investors.	
5.	LW	Okay. And the next question then is: what different types of IT projects have you been involved in?	
6.	R5	Yes, IT projects. I worked first at [CRM software company based in Northern Europe], as it was called, [company Name]. There it was mostly smaller projects. We sold to small and medium-sized companies. So there maybe, I don't know, I don't remember how many systems I sold, maybe… but I probably had, well let's say at least 30 different clients, companies per year. Which is quite a lot in one year. I mean, not that much, but then thinking about my next role, which was at [global consulting firm]. There we maybe worked with one client for three years. So very different project sizes. So, anyway, that's what I did at Lundalogik and then I worked at [global consulting firm]. I didn't really work directly in the IT project department but in what is called management consulting. But we were often connected as a front unit or some sort of addition to the IT projects. So yes, I ended up in quite a few different projects with very large companies during those years. And then, let's see, after that I worked at [European car manufacturer] and the IT projects we had there were pretty much predetermined since they came from the factory, so we had very little influence. We were just supposed to roll it out. There was nothing really to have an opinion about. So those were a few different types of IT projects.	

7.	LW	Have you worked in teams with people who are located in different geographical places, and how did that work in practice?	
8.	R5	I have, even at little [CRM software company based in Northern Europe] we worked very closely with Gothenburg and Stockholm, which is also a distance even if you don't really think about it. But at [global consulting firm], we were often in teams with colleagues from other European countries, sometimes someone from the US, and large parts in India. So there we had a lot of people to keep track of. In addition, the client's employees maybe weren't always located where we were. So it ended up like that. There were many different setups. And then at [European car manufacturer], we worked a lot with [city in Europe]. That was basically where our main team was. We got our directives from [city in Europe] and then rolled it out. I was responsible for [multiple countries in Europe]. So that was the region.	
9.	LW	Did you notice anything specific that affected the collaboration because the teams were in different locations?	
10.	R5	I would say that you actually get better at team building because you realize, like, oh wait, we need to pay attention here, we need to make sure everyone is connected. Both by having good structures for meeting, but also before a project starts you put a lot more energy into building the team. That was nice, I can say.	OG
11.	LW	Yes, you touched on it a bit, but what factors do you think affect how a team collaborates when you're not in the same place?	
12.	R5	Yes, but it's like… what should I say, there are probably many different dimensions to it. But partly, as a project manager, whether you have that role yourself or someone else does, what that person can do is set up the structures, and they should be very inclusive, I think. So like, if there's a morning meeting, then the whole team should maybe be there, or at least certain meetings where the whole team needs to be present. Even if you might later break it down into smaller parts for other check-ins. So I think it's important to have a meeting that doesn't just have to be about work, for example a "celebration meeting." Where you celebrate like, when ending the week, you just take fifteen minutes and everyone says something like "this was awesome this week," and often that leads to people giving positive feedback to their teammates. So I think that has worked really well. Then there are, like,	RC LS RC, LS LS

		informal aspects that also work. Like all those things where, often when you work with teams in different places, it's not uncommon to travel too. You stay in hotels, so you get to know the people you work with really well, and actually do that. Spend time on it and show interest. Because those teams have been really fun to work in. Where you've also done things together. Like going out for a jog in the morning, that's what you do. So those are some of the things. But I'd say a lot of it really comes down to the leadership style of the project manager.	
13.	LW	Could you describe an experience where working across geographical locations affected a project? And it can be either positive or negative.	
14.	R5	Okay, there's so much to say about positive things, I can tell you. And of course, there are negative ones too. But positive, we used it a lot, like when we were selling in large projects. IT projects. Which you'll probably do soon in your next job. And then it's kind of like, in Scandinavia, little Scandinavia, maybe we ended up on projects where we hadn't worked with that type of client or in that area before. But then you had other people who had. So we used that a lot, just pulling in experts who could be included in the offer and say: these people will be in the steering group for the project later. They might not actively work in the project. Also being able to produce material very quickly. Like having people working when you yourself are not working. Because of the time zone. That's also been very important during bidding. Because you need to be very fast, faster than the others. So we used that a lot.	OG OG
15.	LW	Like calculating prices, how many hours, in those cases we had maybe a group in India doing that while we were out doing something else. And then you come back and have great material to continue with. And the same with tidying up a presentation, if there's a team working on that, you can just send it over and it comes back looking really nice. Now maybe there's a chatbot involved too. But those are the positive things. That you become much bigger and stronger than you are locally. Then the negative side is, of course, that you have to document a lot when teams are large and not in the same place. So it can become a bit over-administered. And that there are rigid processes too for what's supposed to happen if you need to change something or backtrack. So it becomes quite… yes, hard to maneuver, simply.	GB
16.	LW	What different people, groups, or roles do you usually have the most contact with during a project?	

17.	R5	In my current role, I mostly have contact with entrepreneurs and business angels. Those are the two groups that need to be matched together. Then we have a lot of contact with our colleagues. [company in Northern Europe] also exists in [multiple cities in the North] There we share certain tools. We actually don't work very closely together. But we share things we can split costs on. Like websites and portals for companies. We have a portal that's kind of like Hemnet, but for companies. So you can post: "Hi, this is us, and we're looking for funding for this." So we share that. So it's little things like that. But wait, back to the question, what was it again?	
18.	LW	Which roles you usually have the most contact with during a project?	
19.	R5	Right. Well, like if you take [global consulting firm], where we had the large IT projects, then it was your closest project manager, and then you had a career counsellor who was actually the person you spoke with the most. The project you were on changed all the time. But the career counsellor was the same person who followed you. So that you had some sort of stable team. And then of course the others in the immediate team. And then you always had some contact persons from the client side. Right.	
20.	LW	And how do you ensure that everyone involved in a project is aligned and has the same understanding and is working toward the same goal?	
21.	R5	Well, that goes a bit back to the start. Are you starting the project yourself, or are you jumping into something? It could be that someone else has moved on or that it's time, or something hasn't worked. Or whatever the case may be. I think those are pretty different starting points in how you can set it up. But it always comes back to something I'm actually worst at, structure. So then it's good if there are some guidelines around that. Then it works itself out. But it's structures, it's check-in meetings, and so on.	LS
22.	LW	Have you been in situations where there were different expectations or misunderstandings between those involved in a project? And how did you handle it then?	
23.	R5	Yes, of course that's happened several times, I would say. Most often it's like a kind of negotiation, just like when you're selling something for the first time. Whether it's internally, where maybe some people feel they're working too much or whatever it might be, or if it's something with the customer. It	

		becomes kind of like a new sales pitch. You have to back off and see, what can we do that still makes it work for both parties? With that approach, I think it's usually worked out. And you shouldn't be afraid to use the different structures that exist. There are more senior people you can escalate to if things get too messy. So that's also an option.	
24.	LW	Have you experienced that there are specific risks or challenges in projects where teams are geographically distributed?	
25.	R5	Yes, there's always more risk when things are spread out. It's both language that can go wrong. That you can't just easily meet up and solve things. You can of course also have different assumptions about how things should be done. Like "this is how we do it here", but that might not be how it's done somewhere else. So there can definitely be some misunderstandings. But you have to stay alert to that.	GB
26.	LW	How have you handled risks in the IT projects you've worked on, and have there been clear strategies or divisions of responsibility?	
27.	R5	Yes, there have been. And all of that was actually documented. Back then, it's probably changed now, it was Excel files with everything. There were different modules, different things. Who's responsible and who escalates if this doesn't work? Yes, there was always a clear structure.	
28.	LW	And what methods or working approaches are used in your projects to manage coordination across time zones or between different organizations?	
29.	R5	Like what tools?	
30.	LW	Yes.	
31.	R5	Where I work now, it's only video, like Zoom, Google Meet. And right, we also use Google Documents. So we have shared documents. We can work in the same file if we need to do something together. Then you're in the same file working. I think that's a big difference compared to when we used to send Excel files back and forth. But that was also many years ago.	CI

32.	LW	Is there anything you would like to change in how distributed teams are organized or supported, based on your experiences? Something you think would be beneficial?	
33.	R5	I can add Slack to the list of tools. If one were to change or do something differently... No, I don't know. What you do feel is that the teams that have worked best, of course, it hasn't exactly benefited the environment, flying people back and forth, but actually getting to meet sometimes. That, I think, has made all the difference. When we've done that, everything has worked much, much better. And then you don't need to do it all the time. Then you manage just fine with digital tools. That's clear. It's become very smooth. But at [European car manufacturer] I can say, we spent a lot of time on that. Or rather, not "we." It was someone from [country in Europe] when they were about to roll out a really big project. And I thought, how can they spend so much time on this? But it also turned out really well. Everyone was very motivated and wanted to be part of it and understood what we were doing.	
34.	LW	You kind of mentioned this just now, but our next question is if you can recall a project that really stands out to you, either because it went especially well or because there were challenges.	
35.	R5	That would be the one that went really well. It really should've become a challenge. What we did should have been met with some resistance. But what was fun was that the project team from [city in Europe] didn't treat us like, "okay, now they're just going to go implement this." They really courted us as if we were clients, even though it was actually internal within our own organization. So they came and had really nice meetings and sometimes brought pastries. There were a lot of things we didn't expect from our [European country] colleagues. They also saw the internal project as very important. So that was a good recipe.	GB
36.	LW	And now we're at our final question, which is whether there's anything more you'd like to share that you think is important regarding what we've talked about today?	
37.	R5	No, but I can say there's so much to gain from having people in different locations, in different networks. What we did a lot at Accenture wasn't just about a project delivery, but also to differentiate ourselves from other companies. We used the network to become, let's say, opinion leaders. So you could do a survey and say, "We've done a survey and we've got experts from New York and we've got this team from London, and	OG

		we've talked to clients in Scandinavia, and we can say that this company thinks this, or that investors think this." And suddenly you have something newsworthy. So I think you can use that too. You don't just have to use your network for delivery, but also to position yourself in the market. And that's something we still do even now at little Connect. We work with this. So we interview to become thought leaders or opinion leaders in investments in startups. We interview our business angels and then we can call it the Investor Barometer, and say "This is what investors are thinking right now." And then you can get news articles and stuff from that. And you'll probably see the same thing in big companies – that they work a lot with this. So that's definitely something you can make use of in your international networks.	
38.	LW	Thank you so much. I'm starting with the interview. I think we'll go ahead and stop the recording now.	

Interview 6

Transcript Respondent 6 (R6), Senior Role in Information Technology (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 16 min.

Amount of words: 2016

Language: English

#	Person	Conversation	Code
1.	RF	So your participation in this research is completely voluntary. You are free to decline or withdraw your participation at any time without explanation. The data collected will be used solely for our master study and will be securely deleted upon completion. Your identity will remain anonymous and you will have the opportunity to review the interview transcript before publication. Does this feel okay for you?	
2.	R6	Yeah, sounds good.	
3.	RF	So can you tell us about your current role and what it involves on a day-to-day basis?	

4.	R6	Yeah, so I'm working as a head of IT with a company named [company in Northern Europe]. It's a company based in [Northern Europe], but I work from our office in Sweden. And my responsibilities are basically to take care of IT support services within the company. We provide help desk support to our colleagues plus at the same time some other cloud based IT services. Yeah.	
5.	RF	Yeah. What kind of IT projects have you been involved in?	
6.	R6	With my current organization, I believe that's yeah. So it's been different projects starting with, as an example, basically streamlining our device management, meaning how different IT and security policies should be implemented on the devices. How devices should be protected across the company. We have our presence within EU at different locations. So people work from different locations. We want to make sure that regardless from where they are, their devices are protected. So there was one specific project where we actually did this kind of setup. Yeah.	
7.	RF	Have you worked with team based in different locations? And if so, how did that collaboration work in practice?	
8.	R6	Yes. The same project I was referring to, it was actually a collaboration with colleagues from different countries coming with different working culture, different local cultures where we work cross-team basically with them to get this project done. Yeah.	
9.	RF	And I think you mentioned some, but which locations were the team members based in?	
10.	R6	Yeah, there are different locations, but just to give you an example, it could be people working from Norway, Sweden, it could be from the Western European countries, for example, Italy, Spain and France. Yeah.	
11.	RF	Did you notice anything that influenced the collaboration related to the different locations?	
12.	R6	I think the thing which influenced the most is basically I would say the people who are working with us, how mature they are when it comes to IT background, how much they know about IT security and let's say IT policies. If they have a good knowledge behind it, and then it become much easier than you actually talk person to person on the same frequency level, right? It's much easier to explain than to a person who has no understanding like how IT stuff work.	

13.	RF	Yeah. And what factors would you say influence how your team works together when you're not at the same location?	
14.	R6	I think the most common factor is trust towards each other. That how teams, members actually trust each other and that comes with time. It's not something you build over time, sorry with a short time. You need to work with them, you need to have maybe some collaborative meetings, in-person meetings. Then it's the communication, how good people are in communicating, in documentation, in verbal speaking because I work in highly in an environment where culture differs from one location to other location. Maybe something which is good for me is not good for other person and vice versa.	RC
15.	RF	Yeah. Yeah. Could you describe an experience where working across locations impact the project? It could be both positively or negatively?	
16.	R6	I have actually both examples. I would say positively in a sense that there was one particular office where we are rolling out these policies I was mentioning before for our devices. It was much easier to explain it to our local colleagues because they had some background with the similar things already. So when we approached them and we said that this is what we would like to do and they said yes and it went pretty smooth. It was much easier. And then on the other hand I was doing the similar project for other location where people did not had these policies before. It was completely kind of a startup environment where you can do whatever you want. So it was much difficult to convince our colleagues but then eventually everyone got it. But there was influence definitely. As I said how much you know beforehand. If you are mature from security settings and IT setting then adoption is much easier.	
17.	RF	Yeah. And who are the key stakeholders you typically interact with during a project?	
18.	R6	It depends from project to project. Since I work with IT, so my stakeholders are usually local or let's say a particular office management because that's where I usually kind of present the project I would like to do and get their support. So it's IT colleagues in a particular location and also the local management. These are my main stakeholders. And then of course, the users, they are also there. Yeah.	
19.	RF	Yeah. How do you go about ensuring that different people involved in a project are on the same page?	

20.	R6	It's with, I would say, communication. And in communication, it could be in writing communication, it could be like Teams communication, what we are doing right now, or it could be also some reference documentation. And then I prefer to have a follow up what we have said and everyone basically be on the same page when it comes to responsibilities. Who is supposed to do what and by when? Yeah.	RC, CI
21.	RF	Yeah. Have you experienced situations where the different expectations or misunderstandings between people involved? How was that handled?	
22.	R6	I think usually sometimes people have different understanding level of how the communication is being done towards them. So let's say if someone is not comfortable enough in English language, they might say yes we understood but reality might be different. And then let's say if I have this impression that person yes he's saying or she's saying that they understood but they haven't. And after one week or two weeks when we are doing the follow-up they didn't actually understood anything. So to counter that I prefer to do both kind of communication verbally plus also in writing. And then I see that they actually understood or not. Yeah.	CI
23.	RF	Have you experienced any particular particularly risks or challenges in projects where the teams are geographically distributed?	
24.	R6	Not that much but there have been a little bit risk with the time of the project delivery. As I said there are factors related to the local culture as well because some colleagues I have found that I don't want to name by location but some people are basically you know a little bit slow when it comes to the working routines. They feel that okay take it easy no stress. But then some people are very structured and they know that okay if it's first off particular month then it's first off particular month. They go by you know by the book.	GB
25.	RF	Yeah. Yeah. And how would you say that risks are managed within the IT projects you have worked with? Is there a clear strategy or division of responsibility?	
26.	R6	Yeah. So I usually take some advice from my line management when we are doing some projects. Like I usually share, I feel that these kind of risks are there and then I take some help how to manage those risks. Just to give some example, if it's related to time, if we feel that, okay, project can be done in seven working days. So to keep a risk margin	

		there, probably I will go for 10 to 14 days. Keep extra on the side just in case there are any late deliveries. Yeah.	
27.	RF	Yeah. What methods or practices are used in your project to manage coordination across time zones or organizations?	
28.	R6	In my organization or you mean like in general how we are doing the project?	
29.	RF	Yeah, more in general I would say. But even in yours if you have experience.	
30.	R6	Yeah, I think it depends on the project to project again. But just to say the general project management, the routine is around having maybe some project plan, some template where everyone has access to the main project is breakdown, to tasks, what we will do within that project. Then basically having a project stand up meeting or project meeting after every regular interval, maybe after a week or two weeks and then discuss all those points with the people who have assigned responsibilities.	
31.	RF	Yeah. Do you use any particular tools as we just mentioned when it comes to this?	
32.	R6	Yeah. So we use different tools. So let's say for communication, it's Microsoft teams and that's our communication tool. When it comes to the project tracking, we use, for example, Atlassian and Jira. We break down the project into subtasks and then assign it to individuals and then follow up on that one and for a high level overview it could be an excel sheet or simple table as well. Yeah.	
33.	RF	Yeah. Can you recall a project that stands out for you? Either because it went particularly well or because there were challenges?	
34.	R6	I would take an example of the same project I was mentioning, securing our devices across the company. That has been the key project I have handled within this particular organization. And the highlights were like how we went from device protection, how it was before, to the current state to meet standard requirements from EU regulations like GDPR, NIS2 and ISO. Yeah.	
35.	RF	Is there anything you would change in how distributed teams are organized or supported based on your experience?	

36.	R6	I wouldn't change that much because that is the existing setup or it works. What I would suggest is that when the key factor when you are working in a cross team collaboration is that the person who are working with you from different teams and they get some free time from their existing responsibilities, right? You can just focus on one thing at a time as a human nature. So they should get some free time from their line management that this is what you are able to do and this is your time. Sometime I noticed that people have double responsibilities to work on a project at the same time to their existing response. So that's where, you know, problem starts. They cannot deliver on both sides at the same time.	
37.	RF	Yeah. So is there anything else you would like to share that you think it's important for us to understand within this subject?	
38.	R6	Related to project management?	
39.	RF	Yeah. Yeah.	
40.	R6	Yeah. I would say it's important that team who is handling the project, let's say a project manager, let's start with that. That person should have a clear understanding of the project. What exactly that person is going to do. It can also be said as a project subject matter expert. A person knows in and out what they are trying to do. Then that person should have some help from technical experts if it's needed. And the selection of team is very important. It's crucial. People who are relevant they are supposed to be in the team. And while any project is being run, communication is very important time to time towards the steering group or the project manager whoever is reporting to. For example, CTO or CEO or whomever you are reporting to. Keep transparency, right? If this is happening, we feel that we might get delayed because of this reason. And when it's closure, it's very important to do a good documentation because it's easy to forget. Just write down one thing what we have done. I know sometimes it could be sound theoretically that's why we have to write down learning. But it's important. I have seen in practical life it helps quite a lot.	
41.	RF	Yeah. That was actually all of our questions. So we will stop the recording now.	

Interview 7

Transcript Respondent 7 (R7), Director of Regional Airports (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 17 min.

Amount of words: 2189

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	LW	Alright. Okay, so your participation in this study is completely voluntary, and you have the right to withdraw or stop your participation at any time without needing to give any explanation. The collected data will only be used for our master's study and will be securely deleted after the study is completed. Your identity will remain anonymous and you will have the opportunity to review the interview transcript before anything is published. Does this feel okay to you?	
2.	R7	Yes, sure.	
3.	LW	Great. Then we'd like to ask if you could tell us about your current role and what it involves in your daily work.	
4.	R7	I am responsible for [a group of transport hubs]. [The organisation] is a state-owned company. We have [a number of such hubs] in our portfolio. The largest and most well-known is [a central hub], followed by [other locations]. I oversee [a subset of them] and sit on the executive management team.	
5.	LW	What different types of IT projects have you been involved in?	
6.	R7	Oh, there are many over the years. Before I came to [company name], I spent 22 years at [European energy company] and there we changed IT systems several times. Both upgrading business systems but also managing systems where you optimize and control production. We implemented trading systems, for example. At [company name] I haven't been involved in any system changes either, and maybe also due to the role I have now, I'm not involved in the projects in the same way. But there are currently many large integration projects underway that aim to share data and share information within our company.	

7.	LW	Have you worked in teams with people in different geographical locations, and how did that collaboration work in practice?	
8.	R7	Yes, I've done that a lot at [European energy company]. [European energy company] is an international company and there it looked different. Before Teams and those kinds of solutions, there were a lot of video conferences and that type of both phone and video conferencing for many years. That was the hottest way to collaborate. A kind of telepresence you've probably also heard of, I don't think they exist anymore. That's how it looked, and now it's just Teams, I would say, that is the collaboration platform.	
9.	LW	In which locations have team members been based? If you could mention some countries, for example.	
10.	R7	A lot in [country in Western Europe], of course. [European energy company] is a [country in Western Europe] company. And then basically all European countries, but mainly [country in Western Europe] and [country in NorthWest Europe]. But also [multiple countries in Europe]. That's how it looked there. Then in several different places in [country in North Europe]. Naturally, I have that today as I mentioned. We have airports in ten different locations so we have daily digital contact in different ways and collaborate.	
11.	LW	Have you noticed anything that affected the collaboration because team members were in different locations?	
12.	R7	Of course it affects things. It's much easier to be a leader if you are in the same geographical location. In my previous role, I was manager at [transportation hub]. And leading an operation where you are physically present every day and can talk and give feedback and see what happens between meetings is something completely different from leading an operation remotely. Where you have to rely only on what you see in the meeting and don't know what's happening when you disconnect. It's a huge difference.	GB
13.	LW	And what different factors affect how your team collaborates when you're not in the same geographical location?	
14.	R7	It's about whether you can still manage to create a sense of presence. That it's easy to pick up the phone. That it's easy to give feedback and connect. What I think is the problem is when I, as a leader of other managers, try to get in touch. Their daily schedules are very full. Mine is very full. Finding those moments when both are green in Teams and can connect	GB, RC

		and give feedback or follow up or something. That's what's difficult. Finding that feeling of "I'll take it when it happens." Because that doesn't work. Then people aren't available. That's the hardest feeling to create. Which you can capture in another way when you sit in the same hallway. When you say, "They're done now, they're about to leave. But before you go, come into my office." It's very difficult to make that kind of ongoing collaboration work remotely. You can never really replace it. So it's important to still have a few occasions when you meet in person.	
15.	LW	Could you describe an experience where working across geographical locations affected a project either positively or negatively?	
16.	R7	Yes, I think we experience that all the time based on the way we work. Because each [transportation hub] is populated with its own individuals and their competencies. Right now, we are about to implement a new major regulation that the EU has developed. And we need to be compliant at every [transportation hub]. So there are maybe 8–10 functions that must exist and be distributed among the staff at each [transportation hub]. But since we're dealing with people and not Lego blocks, it never works exactly the same. There's an organic structure and each airport is its own organism with its own people. So even if you try to roll out the same thing everywhere, it still never ends up exactly the same. Even if you do it in one place. But there is an expectation that you should be able to reproduce the same thing at each new location. But that's not possible because people are so different. And you just have to relate to that. And as a leader, it's always hard to know where to draw the line. How much artistic freedom should there be? And when do I put my foot down and say this is the setup you're getting. You're not allowed to have more. Or this person must combine these two roles. But in the end, we're dealing with people and not everyone has the capability.	GB LS
17.	LW	Thank you. What different people or groups do you usually have the most contact with during a project?	
18.	R7	It's usually my direct reports. It's through them that I lead. It might look a bit different if you work in a project, but usually that's how it is. I steer through those who report to me. Then they take it further into their organizations.	

19.	LW	And how do you ensure that everyone involved in a project agrees and has the same understanding and goal of the project?	
20.	R7	We spend quite a bit of time before starting up a project defining what the impact goals of the project are. We create a project directive that quite clearly stipulates what should be achieved. Normally, we also procure the projects. Either through framework agreements, but usually we go out to tender. Since we are a state-owned company, it's public procurement. Then there's an enormous amount of work before we go out with a tender. Then it's very clearly defined exactly how the project should be delivered and with which systems it should interact. There's a lot of preparatory work before a project to ensure that, I would say. At least as much as the implementation itself, many times.	CI
21.	LW	Have you experienced situations where there were still different expectations and misunderstandings between those involved in the project, and how do you handle that?	
22.	R7	Yes, of course. Not all projects turn out well. Whether it's IT projects or construction projects. If it's a construction project and there have been differences in expectations, you handle that with change orders and so on. IT projects you often have to resolve along the way. But it's not uncommon for there to be disputes or that things don't work out. Those are difficult situations. It leads to additional costs and that's especially the case if you haven't done your preparatory work. And written very clear procurement documents. So we have a large legal department and a large procurement department that ensures exactly that these things don't happen. But it can still happen. But you need a lot of legal expertise in the procurement process.	RF
23.	LW	Have you experienced that there are any particular risks or challenges in projects when the teams are geographically spread out?	
24.	R7	Not if they are spread out within [country in Northern Europe]. If they are spread across different countries, then you might have different regulations in each country. Within the EU it's reasonably simple, but there are still differences. And the application of the regulations can look a bit different. So yes, there can be greater risks, especially since the complexity of the projects increases, and as soon as the complexity increases, the risks also increase.	RF

25.	LW	How do you manage risks in the IT projects you've worked on, and is there any clear strategy or division of responsibilities?	
26.	R7	And I don't dare answer that because I haven't been that involved in them lately. So I actually don't want to say.	
27.	LW	Now, let's move on then. What methods or working approaches are used in your projects to handle coordination across time zones or between organizations? I think you've mentioned it a bit earlier, but practically, how do you work with it?	
28.	R7	There is always, whether it's at the EU or [company name], a fairly robust project organization set up where it's clearly defined who is responsible for what. There is always at least one steering group. Sometimes you have both an operational and a strategic steering group, depending a bit on how the project is staffed. But usually, there is very clear governance in the projects with clear project sponsors. And if the project is really large, there are always project sponsors from the group executive management involved. To ensure insight and understanding. And then you set very clear boundaries, you always have risk reserves, and as soon as you see that the project cannot stay within budget or something happens, it has to be escalated, and then there are very clear paths for how, what decisions may be made, and so on, at different levels.	RF
29.	LW	Is there anything you would like to change in how distributed teams are organized or supported based on your experiences?	
30.	R7	No, I don't feel that. These are usually very large, complex issues. It needs to be coordinated centrally. There, a balance is usually struck between local autonomy and how it's coordinated centrally, whether it's within [country in Northern Europe] or in Europe. They've found an interface, and it shifts a bit over the years depending on where they think that boundary should be. Sometimes there's a push for centralization, sometimes a push for decentralization.	
31.	LW	Then we've come to the last questions, which are perhaps a bit more open. If you can recall a project that stands out a bit for you, either because it went particularly well or because there were major challenges.	
32.	R7	Yes, in 2016–2017 the [European energy company] was split into two parts. I had left our trading operations a couple of years earlier, but the trading operations had been centralized down to [country in Western Europe], and they had come to	

		visit us when we were living there. So we had moved the systems across borders down there and were supposed to trade from [country in Western Europe]. That worked as long as things remained as they were. And then about eight years later, the group decided to split into two parts, and the part that is today [European energy company] took the trading operations with them, which meant that the current [European energy company] essentially stood without access to the financial and physical markets it needed to trade in. The systems followed [European energy company], so we had to, at record speed, procure both systems for financial trading and systems for physical trading and connect them both with the systems we still had and out to the market. So it was extremely pressured. It was really tough, because we had a clear split date, after this date we would be split, and if we didn't have market access, we had to have it in place. So those were quite chaotic years because I had to change roles and go back to working with that since I was one of the few left in [country in Northern Europe] who knew the trading operations at that point. And it had to be moved back to [country in Northern Europe] from [country in Western Europe] again. So it was extremely stressful and costly, because we had to bring in huge amounts of consultant help just to make it work. So that's what stands out, it's not the way you want to carry out a project. That you get such a strict deadline, because it becomes expensive when you have to solve something at all costs by a tough deadline.	
33.	LW	And now we've come to the final question, and that is whether there is anything else you would like to share and think is important regarding everything we've talked about today, or if there's anything we haven't asked about that you feel is relevant.	
34.	R7	I think the importance of good preparation and not having time pressure are my take-aways to avoid going under.	RF
35.	LW	Yes, great. Let's see, I'll stop the recording now.	

Interview 8

Transcript Respondent 8 (R8), Technology Consultant (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 30 min.

Amount of words: 3747

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	RF	Super. So your participation in this study is completely voluntary and you have the right to decline or withdraw your participation at any time without needing to give any explanation. The collected data will only be used for our master's study and will be securely deleted after the study is completed. Your identity will remain anonymous and you will have the opportunity to review the interview transcript before it is published. Does this feel okay?	
2.	R8	Absolutely.	
3.	RF	So to the first question then, can you tell us a bit about your current role and what it involves in your daily work?	
4.	R8	My current role and what it involves? So right now I work as a Group Architect at a European healthcare company. And what that means is that I bounce between lots of different companies in the group and loads of different projects and try to be a wise guy. And organize things, see scale benefits, and connect the dots. Because otherwise, there's a big risk of everything becoming siloed in large organizations where everyone only thinks about their budget, their interests, their project, and optimizes for that, not for the greater good. So I work with a bunch of other groups within, like, business development units and head of innovation and so on, and try to pick up on things and say, wait, wait, we should invest a few million more here and make this bigger instead of just optimizing this little piece, and try to scale up where needed. And get rid of things that aren't needed. There are more of those than things that are actually needed in large companies.	
5.	RF	Yes, and what types of IT projects have you been involved in?	

6.	R8	So my, yeah, that's tied to my career, and IT projects, well, depending on definition, but I've been working with software and software development since the late 80s in all its forms. And during the first 15 years I worked in product companies, and there IT projects were R&D, software development, packaged products, services. So I worked a lot in that setting, structured software development in lots of different roles. From developer, architect, engineering manager, director in various settings at different companies. And the past 15–20 years I've worked as a consultant in various consulting roles. I've had roles like CTO at consulting firms for the longest period, Chief Technology Officer. And then I've had all kinds of short-term assignments. The big shift there is that more and more traditional companies bring in people like me who say you need to redefine yourselves. You shouldn't see yourselves as a distributor or a vegetable seller, but as a software company. Otherwise, you'll just keep bringing in people like me for short gigs and it'll turn into crap. All traditional companies are trying to build this muscle with varying degrees of success, I can tell you. And over the last ten years, there have literally been hundreds, 200–300 if you call them IT projects, that I've been involved in over the past 15–20 years at least. And before that it was just structured software development for product education.	
7.	RF	And have you worked in teams with people in different geographical locations, and how did that collaboration work in practice?	
8.	R8	Yes, I've done that many times. Among other things, at a large furniture retailer where I was in their engineering organization. That was very much outsourced. So both outsourced and insourced staff and a mix, hybrid setups. And it's messy as hell. But it depends on how it's set up. I'm sorry, there are no short answers to anything, I hope you have time. So here's the thing: it depends a lot on time. A team needs time to work together. Remote work can absolutely work well. But these big portfolio projects, especially when made up mostly of consultants, tend to be everything but that. You plug in, plug out. Suddenly someone new is there, then they switch to someone else. Suddenly someone from the Balkans is in your team because the consulting firm replaced someone. That replaceability works terribly. And it works even worse when it's remote and across time zones. So technically, working with Bangalore, during COVID I was there, and everyone was working from home. And home meant in the suburbs of Bangalore. That means a cow walks by the phone line and the connection breaks. It was incredibly frustrating trying to get	RC RC

		anything to work. If the team can work together for a longer time and you get to know each other, and they're skilled people, which is a requirement for everything, then it can absolutely work great. My experience is that it's hard. Something happens when you share a physical whiteboard, sit in the same room, week in and week out. You get to know each other. You go to lunch together. It's a totally different thing. So that sums it up.	
9.	RF	You touched on it a bit, but did you notice anything that affected the collaboration specifically because team members were in different places?	
10.	R8	Well, the cows in Bangalore. Yeah, cultural differences are very obvious when you work in time zones to the east especially. But also when you work with Americans, it's very... it's these small differences in how business works. It's enough to cross the strait to Denmark and you'll find differences big enough to mess things up, to make it necessary to learn how people work. It takes time. And then you can flip it. I usually say, okay, he's American, then I know how to... So I stereotype him based on that. And then it turns out the opposite, he's an American who just says "yeah, great man," but he's not actually like that, because not all Americans are packaged and molded the same. And the same goes for Indians. I still have great contact with former team members from India. We got along fantastically well. There were never any issues with time zones. They're insanely skilled and all that. So it depends a lot on the people. But culturally, they say yes when they mean no. And when they do that, they mean something else entirely. It's incredibly hard to interpret. Especially when you're sitting in Zoom calls and Teams meetings.	GB
11.	RF	Can you describe an experience where working across geographical locations affected the project, either positively or negatively?	
12.	R8	Yes, the negative is that it can be hard as hell to interpret what the task really is, so you have to spend a ton of time prepping it. It's almost like a Hollywood production you have to put together to create, "This is what we're going to build." A backlog or a requirements spec isn't enough, you really have to get everyone to lean in and be super engaged and truly immersed in what we're building, whatever it is. And if you manage that, then it can turn out great. And the negative, well, it's when absolutely nothing happens, and what comes out of the project is wrong and misunderstood, so 75% of the time	GB

		just goes into backtracking. Sometimes it's like one step forward, nope, two steps back, falling behind, now we've got four new members, and so on. But it's not just about culture, pick any big company in southern Sweden and walk through the doors, and it's the same. It's just slow. And you compare that to your years of building companies and teams, now we're two people, now we're three, now six, now eight. The speed there,software moves so damn fast if you have the right team setup. But when the big manufacturing companies that have existed for 150 years try to do it, then it's still fuck all, frankly.	
13.	RF	What people or groups do you usually have the most contact with during a project?	
14.	R8	Yeah, that depends on my role, of course, but in projects, it varies a lot. Sometimes the project setup includes a product owner or a scrum master. Sometimes it's the team members, sometimes it's stakeholders of different kinds. So it totally depends on the type of project. Where I am now, it's businesspeople I try to herd in the right direction. So I kind of become a project manager, even though there is a project manager who sits there tracking timelines and stuff. So it really depends. But I'm technical,that's my area, so it's mostly developers, architects, people trying to make things happen, designers.	
15.	RF	Yes. How do you ensure that everyone involved in a project is aligned and has the same understanding?	
16.	R8	Is that the question? Has everyone understood? Does anyone have questions? That depends too. If you're a stable team, you can feel it in the air. Because you know that if anything's unclear, Pelle will speak up. But otherwise, it's about trying to get buy-in and ask questions. And unfortunately, even if it was crystal clear from my perspective what we were supposed to do, still someone goes off the rails out in the field and comes back with something we absolutely didn't agree on. And then you have to redo it. So it's hard. You can't get people to put their thumbprints down, it just turns out the way it turns out. And you try to create as much clarity as possible. And very often it's unclear, it's not the individuals' fault. But it takes a lot of human psychology in these big projects to understand the human side of things. It's not about tech architectures or requirement diagrams, but about how people are feeling today and so on. We used to talk a lot about those DISC models, it	RC

		was trendy up until five, ten years ago. Do you know them? The yellow, green, red personality type stuff? Yeah, people got ID cards like “I’m blue-red” and “I’m yellow-green” and so on. And when putting together a project group, you were supposed to not only have blue people. But... well, we dropped that pretty fast, I think. It wasn’t that simple. But somewhere in that mix is probably the secret to creating high-performing teams, that you don’t only have one type.	
17.	RF	Yes. You touched on it, but have you been in situations where there were different expectations or misunderstandings among those involved, and how was that handled?	
18.	R8	Yes, every project. Hundreds of projects. There’s not a single one where it hasn’t happened. “No, but that’s not what I meant.” On different levels. And how it’s handled, it just becomes part of the project. It’s not like... and you’ve probably noticed this too. Back in the day, it used to be like this: “Here’s a 360-page requirements spec. We’ve worked on it for four years. Now you can build it, thanks.” That’s how it was. Not anymore. Now it’s all quick iterations, you show things, you adjust along the way. Which is great. Super frustrating and very exploratory. But it’s the only thing that works. Nothing else does. So then the course correction from misunderstandings just becomes part of the project. “We thought,” “we tested,” “we assumed you would,” “if only we had...” That just gets handled. And sometimes it’s a super frustrated stakeholder who doesn’t get it. And it’s super common that someone ordering something has no intuition or understanding of software development or how it works. They treat it like laying cobblestones or building a gate. “When I build a gate, I do it like this”, and they take that analogy. But that’s not how software works. Yeah.	
19.	RF	And have you experienced any particular risks or challenges in projects where the teams are geographically distributed?	
20.	R8	Risks, or what did you say? Risks or...? Particular challenges. Yes, cultural things. Geographically distributed usually means people from different countries. But even just in Sweden, like where I sit now, we’ve got some people in Gothenburg, some in Tagen, and someone in [nonsense sound]. So, spread out. The risk is communication. How is communication handled? Because it has to be more written down and more asynchronous, instead of being fast and direct. The benefit of sitting in the same room, close together, is that you can just say, “Let’s do it like this instead of that,” and look around and	RF

		everyone nods, and then you go. But when you have different ways of working, different people have different working styles. Some people don't like reading, for example. Think it's boring to read long texts. Your generation is getting more and more difficult that way. And then it can be tough. All the stuff needed to change details and update things, it has to be written down, and then you have to make sure the others understood it. And working in different time zones or even just in different places in the same time zone, like one person in [city in Sweden] and one in [city in Sweden], how do you ensure that I've seen the update? There are tons of tools, but everyone has to use the tools the right way. And there are millions of ways to do it. And Teams and stuff like that is a pain in the ass as a project tool. But it's the most lightweight, so people tend to go with it. So it's messy, you don't get that glance and nod in everyday work. And sure, you can share a whiteboard, even though there are perfect tools for that too, but there's something about two or three people, or a group, sharing a physical space. Ending with a high five and going out to keep working. That's the most effective. Everything else is progressively worse.	LS
21.	RF	And how do you handle those risks in the IT projects you work with? Is there a clear strategy or division of responsibilities?	
22.	R8	No, there's mine, but now I'm being a bit blunt, cut this out if you're going to show it to anyone, but so many steering groups and little forums and boards get built the bigger the project is, just because there's a lot of money and risks need to be handled. But when you escalate stuff to those boards and steering groups, fuck all happens. They can't prioritize, they don't know what the issue is. At those steering group meetings, you get eight minutes because everyone is so damn busy and think they can understand a technical issue in eight minutes and then make a smart decision. No. "Roll with the punches" is what works in most projects, even if there are structures for it. I've never actually seen it work, except when you've had a clear stakeholder who controls the budget, is deeply engaged in the project, and also has the knowledge to contribute instead of messing things up through ignorance. Then it works great. But that's often in lighter-weight projects.	
23.	RF	Yes, and you mentioned earlier that you use Teams when working across time zones. Are there other working methods used in those projects?	

24.	R8	Tons. The most common tool you probably run into, and probably already have, is Atlassian's Confluence slash Jira. And lots of plugins and layers in that product family. That's how you manage work, output, communication, project control, documentation, wiki-style. And there are lots of alternatives to that, JetBrains, Tassin, and a bunch of others. There are three or four major ones. Microsoft has Tassin in Azure DevOps, which is a big platform and used in a lot of projects. Tends to be moving more and more toward GitHub, not just for source code but also for collaboration. But not that common yet in the enterprise world. But it's a messy mix of tools. What I personally think works best are the "eternal canvas" type tools like Miro or Whimsical. They're super damn important when you're working. That you can draw and sketch freely, and that you have brainstorming areas that persist over time so you can come back to them. And they're super good. Whimsical is my personal favorite. It's totally magical for collaboration. Fast and has just the right features.	
25.	RF	Is there anything you would like to change in how distributed teams are organized or supported, based on your experiences?	
26.	R8	What would I change? Not having distributed teams. But that's one... yeah, one thing. So for ten years I sat in the management team for a consulting company in Malmö. And we always had problems with getting big projects but never having enough resources. And it's damn hard to find good people in a small pond. So we wanted to source elsewhere. And we had contact with companies both in India and down in the Balkans and some other Eastern European places. Where we organized insourcing instead. So it was cheaper and more effective overall. We fixed apartment hotels in Malmö. We had an eight-month project. We flew people in to live here during the week. Just to share location. So it was distributed by origin, but we wanted to cut the part where people were spread out. Because it's a pain. It's messy. Some people, you don't even know, are they working at all? Why is nothing happening? It's just silent until you ping them on Teams. So you have no clue what's going on. So that was a good setup. And the other good thing was flying in some kind of team lead, so at least you had one person who had contact back and could bridge the culture and language stuff. So that was a try to change things. But in big global companies, it's impossible. One stakeholder is in the US. One is in Ireland. One is in Bulgaria. That's just how it is. And then they say, "Now you're going to work together." I don't know how to change that. Other than getting better at asynchronous work. But	LS

		again, especially with the younger generation, it sounds like I'm picking on them, but it's really empirical. If something's more than four paragraphs, people don't read. It's too much text. Too many difficult words. "I can't be bothered. Can I get it as an audiobook instead?"	
27.	RF	Yes, so now we've come to the final questions. And the question is: can you recall a project that stands out for you? Either because it went particularly well or because there were challenges. And you did mention one a bit earlier.	
28.	R8	Projects are messy by definition. But it's like everything else in life. It's so damn tough when you're in the middle of it. Then when it finally comes out, even if it's 50 percent delayed and 70 percent more expensive, which projects tend to be, it doesn't matter. It's human endeavors. If you're going to build a house, it always ends up more expensive. It's never on time, on budget. The Öresund Bridge might be the exception. But when you get to the end, you only remember the good parts. You tend to forget all the crap. And it's the same with most things in life. You remember the fun stuff and tend to forget the bad. So it's hard. There are lots of successful projects, but in the day-to-day they were a mess. It's hard for people to collaborate. And software is incredibly difficult. Because it's not like, now we have a new type of roof beam, let's learn it. No, it's like week by week the toolkit changes. And how do you make sure everyone knows the new tech? And before the project's done, four new versions have come out that change the playing field and the requirements change. "But why aren't we doing this with AI?" That makes projects chaotic. But they still end up successful. So I don't know. Right now I'm in a tough project, one of the big ones, because resources keep getting pulled. We plan once, and then day by day we hear, "Now we have to do this instead." Everything is ad hoc, and that creates enormous frustration, both for those being pulled in every direction and for people like me trying to make it happen. And then I have to stand in front of the same steering group and explain why it's delayed, even though it's the same steering group that deprioritized my project in another meeting and then asks, "Why is it going so slow?" Grown adults, and yet... But many projects, you just have to accept that they'll be expensive and tough. But the outcomes can be massive. If people are interested in return on investment or becoming more efficient, then there are really cool things you can do that have huge positive impact. But it's messy as hell. I don't know if that gave you anything.	

29.	RF	Yes, I think it did. Is there anything else you'd like to share that you think is important regarding everything we've talked about today?	
30.	R8	Knowledge. That's my thing. What I've always believed is this: you can, well, two things, knowledge, and stable teams. I mentioned that earlier. You can build as many control mechanisms and checks and balances as you want. But if you staff a project with people, now, software is different from a lot of other professions. A carpenter, you can have a bad carpenter who's worked ten years, sure. But still, if you've hammered and sawn off your thumb enough times, you become okay. But with software, no matter what you're doing, if you're not deeply interested in it, and therefore not subconsciously putting in the time needed to keep up and learn super complex stuff, then it won't work. You need people who are super motivated and knowledgeable. And those two go together. If they're motivated, interested, and skilled, then you can solve almost anything. But if you remove the other component, which is pressure and time, and the human side, if people are going to collaborate, you've probably noticed yourselves, it takes a lot of time and interpersonal stuff. Lunches, getting along, clicking. Understanding what someone means. What does it mean when their eyebrow lifts? "Now I'm tired," "Now I'm sad", how do I see that in different people? Because that affects performance, and thus the project. Those two things are so important. Everything else is just formalities. That you've got a great steering board, that's marginal. That we draw Gantt charts. Whether we use Jira or GitHub, it doesn't matter. Teams or Zoom, makes no difference. If you have motivated and competent people, it's like sports, like anything. You can't become a good skier if you don't have grit and interest.	RC RC GB
31.	RF	Thank you so much. I think we'll stop the recording there.	

Interview 9

Transcript Respondent 9 (R9), CEO of Western European Company (title)

Interviewers: Lovisa Wendel (LW) & Rebecca Froborg (RF).

Length: 19 min.

Amount of words: 2229

Language: Swedish, translated to english

#	Person	Conversation	Code
1.	LW	So, let's see. So your rights. Your participation in this study is completely voluntary and you have the right to decline or withdraw your participation at any time without needing to give any explanation. The collected data will only be used for our master's study and it will be deleted securely after the study is completed. Your identity will remain anonymous and you will also get the opportunity to review the interview transcript before anything is published. Does this feel okay?	
2.	R9	Yes, sure.	
3.	LW	Great. So then we'd like to start by asking you to tell us about your current role and what it involves in your daily work.	
4.	R9	I am the CEO of [Western European Company] and that means I steer and lead the operations for our businesses in the [place in Europe]. It's not so much about operations as it is about strategic direction and following up and driving and developing the business forward. But also developing staff. And then I still have, I've been internationally responsible for large parts of [company name] European operations, and I still have some of those responsibilities too. So that's essentially my role.	LS
5.	LW	And could you tell us a bit about the different types of IT projects you've been involved in?	
6.	R9	There's been a large number of IT projects over the years. But when you look at a large group, there's a tendency to make sure that you have as many shared systems as possible. Which means that we have a strategic direction in many areas where we work with standardization. And when you've standardized, you can then digitalize, and when you've digitalized, you can then automate. This means that for example in terms of IT systems, the more you can standardize, the more widespread systems you can have across the group. We have several such projects where we look at how we can roll out, for example, something called Enterprise Asset Management, how we manage our assets and control and operate them. And we're working on standardizing processes and are now implementing these shared systems. And the benefit of that is instead of, for example, having 30 different systems if you're	LS OG

		in 30 countries, which is quite inefficient, you can, at least in the cores where you have shared processes, develop and implement and update the systems simultaneously. Which means you can roll it out to all 30 countries at once. And that gives you benefits. And then there's also a trend where you try to ensure that you standardize data but still can have, now I know you're engineers so you know this, but you have open APIs so that you can use fairly flexible systems for the purpose you have, as long as you have the same standardized platform and base. And a lot of it is also about trying to pick up as much as possible in cloud-based solutions so we don't have these monolithic systems.	
7.	LW	Have you worked in teams with people in different geographical locations and how did that collaboration work in practice?	
8.	R9	So the question is whether I've had employees who were in different locations and had to work through that?	
9.	LW	Yes, exactly.	
10.	R9	Okay, in my previous role I had ten countries where the CEOs reported to me. And even though there were a lot of on-site visits, most of it was still managed through digital meetings. And the pandemic really made a huge leap forward in that. It's incredibly easy to meet and discuss things. As long as you know each other, it works well. If you don't know each other beforehand, I think it's a bit awkward. And then there are some meetings that just don't work at all. I think if you have a clear purpose and a fairly standardized agenda, you can get through it. But if you're going to brainstorm and develop things, then I think it's harder.	OG
11.	LW	What different factors would you say affect how a team collaborates when you're not in the same location?	
12.	R9	I think a lot of it is about having a shared understanding of what you're supposed to do in the meeting. That is, that there is a clear agenda. And that everyone has actually done their homework. So I believe the purpose has to be clear. And then it also requires, I think it works really poorly if some people are present physically and some are digital. And if you do have some in the same room, we've done it so that everyone opens their laptop and all have their screens on, so that it becomes a bit more clear how people are present. So those are probably the simple things.	LS CI

13.	LW	Could you describe an experience where working across geographical locations affected the project? It could be either positively or negatively.	
14.	R9	You mean in a digital context?	
15.	LW	Yes.	
16.	R9	I think it becomes very clear when you have quick check-ins, when you know each other, when you've worked through things and have a direction going forward. Then it's very clear, if you've lived in the old world where you had to travel and now you don't need to do that anymore, that it's incredibly efficient. So that's really positive and you really notice how much time you save. One meeting in Stockholm is enough, you don't need to go up there because a whole day can be spent on just a couple of hours of meeting. So that I think is positive. What I think is negative are those... a lot happens between meetings or during the meeting that you don't get when you're digital. It becomes very black and white. And that's just how it is. It's really hard to have an informal chat by the coffee machine when you're digital.	OG
17.	LW	And what different people or groups do you usually have the most contact with during a project?	
18.	R9	In my role, I mostly have external contacts. But if that's the case, then it's my direct reports, or the project manager, or the steering group.	
19.	LW	And how do you ensure that everyone involved in a project is aligned and has the same understanding and goal for the project?	
20.	R9	It's super important to be very clear about what is supposed to be achieved. And often, if we're talking about IT projects, when things go wrong, it's usually about scope creep. Either you haven't defined exactly what is to be delivered. And it's also about ensuring that it's the business side that will receive it. Usually, it's the business, someone needs to receive the system, not the IT department or those executing it. That there's a clear role distribution, that there is ownership in the business. To own the system. If that doesn't exist, the project won't succeed. That's one part. And the other is that it's very important to be clear about what the direction is, what should be accomplished. And also to be crystal clear about not adding new things. But to be crystal clear about the consequences,	RF

		resources, costs. We work a lot with this thing that when you have a deviation in some form, there should be a root cause analysis. What's the reason we're deviating from the plan? And then there should be a "go back to green" plan. That is, what do we do about it? And that whole governance is super important. And usually, when you look at lessons learned from projects that have gone to hell, it's usually something in those factors I just mentioned that has failed.	
21.	LW	Have you experienced that particular risks or challenges arise in projects where the teams are geographically distributed?	
22.	R9	I don't think it's so much about the geographical distribution. We have a lot of projects with many different nationalities. And then I think it's important to establish how you're going to work together. But I believe the greater risks are linked to cultural aspects. And what people mean when they express themselves in a non-native language. There's a risk of misunderstandings that way. And if you add the digital layer on top of that, then it becomes even more difficult.	RF
23.	LW	How do you handle the risks that arise in the IT projects you work on? Do you have clear strategies and divisions of responsibility for risk management?	
24.	R9	In all major IT projects, there is a risk reporting process. And it is continuously updated. And then it's the project manager's responsibility to manage the risks and make them clear to the steering group. And the steering group has a responsibility to ensure that the risks are raised and captured, and that the project manager has the resources and conditions needed to handle them. Then there are certain risks that you can never mitigate, but you still have to be aware of them. And there it's also important to have a contingency budget for the unforeseen. That it exists. And that it's appropriately sized for the projects.	RF
25.	LW	And what different methods or working approaches are used in your projects to manage coordination across, for example, different time zones or between different organizations?	
26.	R9	Say that again. It cut off here.	

27.	LW	Yes, so what different methods or working approaches, for example, practically, how do you work to handle the fact that people are in different locations or working between different organizations?	
28.	R9	Well, yes. I'm not very involved in the projects myself, so I actually can't answer that. What we ensure is that the right conditions are in place for everyone working, both to be able to meet physically and digitally. And then it's up to them to decide how to manage that. But if I take my management meetings as an example, we have management meetings every other week, group executive meetings. And those are physical. There are always extreme exceptions. Then we can have guests who either come physically or digitally. But they are physical. And every other week we have a short digital check-in. Or physical. People can choose themselves, since everyone is on the move.	
29.	LW	Based on your own experiences, is there anything you would like to change in how work is conducted when sitting in distributed teams? Something you think might make collaboration easier, for example?	
30.	R9	No, not spontaneously. But I think people underestimate the importance of really spending time at the start. To go through, not just getting to know each other, but being clear about what roles people are going to have. And especially being clear about what the common goal is. And then I think there's something, something many companies struggle with, and that is that projects are often staffed with the same people. It's often the same names that pop up. Because they're capable. And that you have to systematically work to broaden and give others the chance to grow. And then, I lost my train of thought here, but I'm thinking also about priorities. Right, that when you assign people to a project, sometimes it's as an additional task on top of their operational role. And then you can get priority clashes or conflicts of interest. And there it's also important to be clear about what should be prioritized. So that the project doesn't suffer if the operational work takes more time, for example.	RC
31.	LW	Now we move into the more concluding questions. And then we wonder if you remember any specific project that stands out a lot for you, either because it went particularly well or because there were many challenges.	
32.	R9	Yes, there is one. And what I think of spontaneously are actually the ones, we do quite a lot of lessons learned. And	

		that's about learning both what worked well and what didn't work well. But I think again, there are projects that stand out because there wasn't a clear definition between the business, the receiving organization, and IT, those who are actually supposed to build the systems. And then it's also the case that many projects are, what I'm thinking of, when you're breaking new ground, it's also not very easy to make a plan that will hold. So it's important that when you don't know, that you're also clear about what you don't know and what the uncertainty is. And that you work to break the elephant into pieces. And in my experience, when you're dealing with that type of project, you need to handle it very carefully to ensure that the business is continuously involved and can confirm that what we're doing now makes sense. Because otherwise it just becomes a technology project. And if it goes to hell, then the IT department gets blamed.	
33.	LW	Yes, and then we really only have the final question left. And that is whether there is anything else you would like to share or that you think is important regarding what we've talked about.	
34.	R9	No, but I think what's important is a couple of things. One is that when you look at IT, it's not there for IT's sake. It's there because, just like we have people or machines, it's there to be useful. And for me, it's important to be clear that IT has an operational role but also a strategic role to drive and help develop the business. And that's the most important part I think to keep in mind, that IT should never exist for its own sake, it must be tightly intertwined with the business.	
35.	LW	Yes, great. Then I'll go ahead and stop the recording here.	

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