

Bridging IS and Project Management: A Framework for Understanding IS Project Specificity

Thibaut Coulon
ESG-UQAM
coulon.thibaut@uqam.ca

Simon Bourdeau
ESG-UQAM
bourdeau.simon@uqam.ca

Julie Delisle
ESG-UQAM
delisle.julie@uqam.ca

Dragos Vieru
TÉLUQ University of Québec
dragos.vieru@teluq.ca

Abstract

This study investigates how academic literature justifies the distinctiveness of Information Systems (IS) projects. While often viewed as difficult to manage, there remains no shared understanding of what makes IS projects unique. Based on a structured review of 137 articles from leading project management journals, the paper synthesizes the main arguments describing their specificities. Using the theoretical lens of temporary organizations, justifications are mapped across five dimensions: Task, Team, Time, Transition, and Context. Beyond recurring themes—such as technological uncertainty, stakeholder complexity, and strategic embeddedness—the analysis reveals cross-dimensional patterns, including blurred boundaries between task and team or between project and organizational time. These features contribute to unstable coordination and temporal uncertainty. The study proposes a conceptual framework that clarifies the distinct nature of IS projects and encourages dialogue between IS and project management communities, offering a foundation for future theorizing on IS project dynamics in volatile environments.

Keywords: IS Project Specificities, Temporary Organizations, Literature Review

1. Introduction

Information systems (IS) play a crucial role in enhancing organizational performance, contributing to efficiency, competitiveness, and value creation (Melville et al., 2004). While the benefits of IS for organizations are well-documented, their realization depends largely on the successful execution of IS projects, which remain challenging to manage (Iriarte & Bayona, 2020). As highlighted in numerous reports and publications, many IS projects exceed budgets, miss

deadlines, or fail to meet expectations (e.g., Standish Group, 2020). To address these challenges, extensive research has been conducted to better understand IS projects and provide guidance for both scholars and practitioners (Wu et al., 2023).

A project is “a temporary endeavor undertaken to create a unique product, service, or result” (PMI, 2010, p. 442). In the case of IS projects, this definition applies to the development or implementation of information technologies within an organization. Beyond this definition, scholars have conceptualized projects as temporary organizations, emphasizing their structural, temporal, and governance-specific characteristics (Bakker, 2010; Lundin & Söderholm, 1995). This perspective provides a conceptual basis for analyzing IS projects, understood as complex organizational endeavors that temporarily mobilize specific resources, expertise, and governance mechanisms to achieve both technological and strategic objectives (Xia & Lee, 2005).

Research on IS projects spans two primary fields: IS and Project Management. Rather than creating a disciplinary divide, this dual positioning offers complementary perspectives that enrich IS project research. Although managing IS projects draws on general project management principles, researchers have long argued that IS projects exhibit distinctive characteristics. These include evolving requirements (Fu et al., 2012), high interdependencies with existing systems (Jiang et al., 2018), and rapid technological change (Taylor et al., 2012). Additionally, IS projects often face heightened ambiguity and uncertainty due to the complexity of IT engineering, the variability of methods and technologies used, and the intricate nature of the products being developed (Morcov et al., 2020).

These complexities have led researchers to justify the necessity of studying IS projects separately. Some highlight the juxtaposition between IS strategic importance and the high failure rates of IS projects, reinforcing the need for dedicated research – an

argument like the one presented earlier in this paper. Others emphasize, for instance, the complexity of development processes (e.g., He et al., 2022), the use of different development methods (e.g., Thummadi & Lyytinen, 2020), the specialized competencies required (e.g., Dillon & Taylor, 2015), and the complexity of stakeholder management, where competing interests and tensions shape project outcomes (e.g., Jenkin et al., 2019).

Yet, the absence of a clear and shared understanding of what makes IS projects distinctive may limit theoretical consolidation, as researchers rely on fragmented and sometimes incompatible assumptions. It might also weaken the dialogue between IS and project management communities, reducing opportunities for cross-disciplinary integration. More broadly, it may hinder the recognition of IS projects as a coherent object of study, making it more difficult to delineate what defines them and to clarify their contributions to academic knowledge. The absence of a unified framework for these justifications thus contributes to the disciplinary ambiguity surrounding IS project research.

This study systematically examines how academic literature has justified the distinctiveness of IS projects. It identifies and categorizes the key arguments used to distinguish IS projects from other types of projects. These justifications are then synthesized using the theoretical lens of temporary organizations (Lundin and Söderholm, 1995), which offers structured dimensions—Transition, Task, Team, and Time—for interpreting the nature of IS projects as temporary organizational forms. Building on this framework, context is introduced as a complementary dimension (Bakker, 2010) that highlights how IS projects are embedded in broader organizational, institutional, and technological environments. This addition allows for a more comprehensive understanding of the situated nature of IS projects and the external forces that influence their dynamics.

The contribution of this study is twofold. First, it provides a structured synthesis of the fragmented arguments found in the literature, thereby clarifying what defines IS projects as a distinct research object. Second, by mapping these justifications onto the dimensions of temporary organizations, the study suggests a conceptual framework that facilitates theoretical consolidation and supports cross-disciplinary dialogue between the IS and project management communities.

2. Current Research on IS Projects

Recent research on IS projects covers multiple dimensions, reflecting both its complexity and evolving nature. Several studies have examined IS projects in

specific contexts, such as the implementation of Enterprise Resource Planning (ERP) (e.g., Bawack & Kala Kamdjoug, 2023) and Customer Relationship Management (CRM) systems (Beldi et al., 2010), often focusing on the challenges and success factors associated with large-scale system integrations. Additionally, IS projects have been studied in industries, such as healthcare (e.g., Bunduchi et al., 2020; Hung et al., 2014) or the public sector (e.g., Cranefield et al., 2018; Pang & Lee, 2022), where unique constraints, regulatory requirements, and stakeholder dynamics influence project outcomes.

Research has also explored different approaches to delivering and managing IS projects. Open source development has received significant attention (e.g., Di Gangi et al., 2023; Germonprez et al., 2021; Malgonde et al., 2023), while agile approaches remain widely studied (e.g., Bawack & Ahmad, 2021; Virag et al., 2024), along with hybrid models that integrate agile and traditional methods (e.g., Reed et al., 2024). Other studies have focused on outsourced IT projects (e.g., Vial & Rivard, 2016) and offshoring strategies (e.g., Wiener et al., 2015).

Beyond project delivery methods, studies have investigated leadership and executive support (e.g., van Laere & Aggestam, 2016), user expectations management (e.g., Banerjee et al., 2021; Yadav et al., 2016), and stakeholder management (e.g., Jenkin et al., 2019). Research has also addressed both risk management (e.g., Moeini & Rivard, 2019) and responses to unexpected events (Coulon et al., 2023). Additionally, studies have analyzed control mechanisms (e.g., Subasinghage et al., 2021), as well as project selection (e.g., Zamani et al., 2024) and program management (e.g., Jiang et al., 2018). Additional work has examined knowledge management (e.g., Gemino et al., 2015; Hetemi et al., 2022), team dynamics (e.g., Bourdeau et al., 2021; He et al., 2022), and IS project management education (e.g., Chua et al., 2024). Furthermore, research has explored the competencies required for IS project managers (e.g., Dillon & Taylor, 2015), emphasizing the skills and expertise needed to navigate complex project environments.

Overall, research on IS projects has explored a broad spectrum of dimensions, including strategic, technical, organizational, and human factors that influence project outcomes

3. IS Projects as Temporary Organizations

Temporary organizations (TOs) are a prevalent form of organizing in various industries, characterized by their finite duration and specific task orientation (Bakker, 2010; Lundin & Söderholm, 1995). They are designed to achieve particular objectives within a set

timeframe, often involving diverse and specialized teams (Bechky, 2006; Joyce et al., 2023). This concept has gained significant attention due to its applicability in various fields, such as project management, crisis response, and innovation-driven industries (Bakker, 2010). Indeed, the temporary nature of these organizations allows for flexibility and adaptability, making them suitable for dynamic and complex environments.

Temporary organizations can be understood through several key dimensions. These include time, task, team, and transition as the core elements that define this organizational form (Lundin & Söderholm, 1995). The time dimension emphasizes the finite and pre-defined duration of temporary organizations, distinguishing them from permanent structures. The task refers to the specific objective or mandate for which the organization was created. The team comprises individuals brought together—often from diverse backgrounds—to carry out the task within the given timeframe.

The transition dimension highlights the focus on progress and change, whether through the achievement of tangible outcomes or the transformation experienced by participants during the organization's lifecycle (Lundin & Söderholm, 1995).

Subsequent research has introduced a fifth dimension: context (Bakker, 2010). This acknowledges that temporary organizations are embedded in broader organizational, institutional, and societal environments. They draw resources, legitimacy, and meaning from these external structures, such as parent organizations, industry networks, and professional communities (Bakker, 2010; Stjerne & Svejenova, 2016; Sydow & Braun, 2018).

While Sydow et al. (2025) argue that the embeddedness of temporary organizations (context) is best captured through transversal tensions—such as the paradox between autonomy and embeddedness—that cut across the four original dimensions (task, team, time, and transition), the present study adopts a complementary approach by explicitly integrating context as a fifth dimension. This addition allows for a more direct engagement with the organizational, institutional, and societal environments in which temporary organizations operate, while acknowledging that these environments both influence and are influenced by project dynamics over time. As will be discussed further, context is particularly salient in the case of IS projects, where technological infrastructures, regulatory frameworks, and organizational legacy systems introduce unique constraints and enablers that shape the project's trajectory and outcomes.

4. Methodology

This study is based on a descriptive literature review, following established guidelines for rigorous review practices in the information systems (IS) field (Paré et al., 2016; Paré et al., 2015; Paré et al., 2024). Descriptive reviews aim to analyze and synthesize patterns across a body of literature by applying structured search, selection, and coding procedures (Paré et al., 2015).

To examine how project management scholars justify the distinctiveness of IS projects, the review focused exclusively on articles published in four leading project management journals: *International Journal of Project Management*, *Project Management Journal*, *International Journal of Managing Projects in Business*, and *Project Leadership and Society*. Given their emphasis on general project management theory and practice, these journals offer a relevant perspective for analyzing how IS project management is framed as a specific subdomain within the broader discipline.

Our review focuses on project management journals as a first step. Future versions will integrate IS literature for cross-disciplinary comparison.

The search was limited to articles published from 2010 onward, using the keywords “*Information Technology*,” “*Information Systems*,” “*Digital*,” “*Software*,” and “*Hardware*,” to identify publications centered on IS-related projects. This initial search yielded 268 articles.

Titles and abstracts were then screened to assess the relevance. The inclusion criterion required that each article primarily address IS project management—defined as the management of projects involving the development, implementation, or integration of information technologies. Following this screening, 137 articles were retained for full-text analysis.

The selected articles were analyzed using NVivo software to support systematic coding. A combined deductive and inductive coding strategy was employed. Deductively, the four dimensions associated with temporary organizations—Transition, Time, Task, Team—and their Context served as initial analytical categories (Bakker, 2010; Lundin & Söderholm, 1995). Within these categories, an emergent coding approach was applied to identify specific arguments used to justify the distinctive treatment of IS projects in the literature.

An argument, in this context, refers to a recurring justification found in the literature that supports the idea that IS projects are different from other types of projects.

The coding was carried out by two researchers. One conducted the initial coding of arguments justifying the distinctiveness of IS projects, while the second reviewed

and validated the codes. Together, they refined and consolidated the emergent codes within each of the five analytical categories.

5. Results

The analysis revealed a wide range of arguments highlighting the specificities of IS projects. Most justifications could be categorized within the dimensions of temporary organizations: Context, Task, Team, Transition, and Time. However, one frequently

cited rationale did not align clearly with any of these dimensions: the high failure rate of IS projects. Although approximately half of the reviewed articles mentioned this issue as a motivation for studying IS projects, we chose to treat it separately. Indeed, a high failure rate is not a defining characteristic of IS projects per se, but rather an observed outcome. It does not contribute directly to the conceptualization of IS projects as a specific form of temporary organization. Table 1 presents the full set of specificities identified across the literature.

Table 1. Specificities of IS Projects Categorized by Dimension of Temporary Organizations

Dimension	IS Project Specificities	Frequency (n = 137)
CONTEXT	Technology uncertainty and quick obsolescence	15
	Volatile Project Environment	12
TRANSITION	Strategic Organizational Impact	38
	Complexity of stakeholder management	29
	Perceived value and intangible benefits	11
TEAM	Multidisciplinary Expertise	29
	Business–IT Knowledge Integration	12
	Cross-Functional Team Structure	11
	Active User Participation	10
	Technology-Specific Expertise	6
	Temporary and unfamiliar teams	6
TASK	Task uncertainty and variability	24
	Cross-Expertise Coordination	17
	Need for Tailored Approaches	15
	Technological complexity	13
TIME	Iterative development cycles	9
	Temporal Uncertainty	7

5.1. Context

Technology uncertainty and quick obsolescence – A distinctive feature (n=15) of IS projects lies in their exposure to technological environments that evolve at a fast pace, where rapid innovation and obsolescence make technical decisions structurally risky. Unlike projects in construction or engineering, which typically rely on stable technological foundations, IS projects must constantly adapt to evolving tools, platforms, and methods. It affects planning reliability, coordination efforts, and the long-term relevance of delivered outcomes.

Volatile Project Environment (n=12) – IS projects are typically conducted in fast-evolving business contexts. These changes—driven by changing market conditions, new regulations, or evolving organizational strategies—create continuous pressure to adapt project goals, requirements, and justifications over time. As a result, IS projects often face unstable

requirements and increased coordination demands, especially when stakeholder expectations must be repeatedly realigned.

5.2. Transition

Strategic Organizational Impact – One recurring theme (n=38) across the reviewed articles is the strategic importance of IS projects. These projects often affect core organizational interests—such as business process performance, interdepartmental integration, and relationships with suppliers and customers. Rather than simply introducing new technologies, IS projects are seen as enablers of strategic change and sources of competitive advantage. Their high-impact potential—both in terms of value creation and organizational risk—is frequently highlighted as a defining characteristic.

Complexity of stakeholder management – Another recurring argument (n=29) is the complexity of stakeholder management. These projects typically

involve a wide range of stakeholders—across functions, organizations, and levels of technical expertise—who often hold diverging or even conflicting expectations and objectives. Misalignment among stakeholders can result in misunderstandings, interpersonal conflict, and unclear project goals. The political dynamics, competing interests, and cross-functional tensions commonly observed in IS projects contribute to a level of stakeholder complexity that sets them apart from other types of projects.

Perceived value and intangible benefits – This specificity (n=11) lies in the intangible nature of IS project outcomes, whose benefits often take weeks or months to materialize. Unlike projects with clearly measurable deliverables, IS projects frequently produce outcomes such as increased flexibility, enhanced responsiveness, and improved decision-making, which are difficult to quantify in financial or operational terms. As a result, evaluations of success often rely on user expectations and subjective perceptions of service quality. Several studies note that IS projects may still be considered successful despite cost overruns or scope deviations, provided they deliver business value or enable organizational change.

5.3. Team

Multidisciplinary Expertise – A frequently cited (n=29) specificity of IS projects is the need to coordinate a wide range of technical, business, and domain-specific knowledge. IS project teams typically bring together individuals from diverse professional backgrounds, including developers, analysts, business users, and consultants. This diversity entails not only different areas of expertise, but also diverging terminologies, frames of reference, and project expectations. These differences create barriers to communication and shared understanding, making collaboration inherently complex.

Business-IT Knowledge Integration – While closely related to the broader theme of multidisciplinary expertise, this specificity (n=12) has been treated separately due to its recurring emphasis in the literature on the specific challenge of integrating technical and business knowledge. IS projects require not only a diversity of roles, but a deliberate coordination between two distinct domains of competence: IS development and business processes. These knowledge domains are typically embodied by different actors—such as IT professionals and business users—who often operate with diverging assumptions, goals, and vocabularies.

Cross-Functional Team Structure (n=11) – IS projects are frequently carried out by teams composed

of individuals from a wide range of functional areas, including technical, operational, managerial, and user-related domains. These teams often operate within matrix structures, with members reporting to multiple authorities and bringing varied goals, working styles, and definitions of success. This structural heterogeneity introduces coordination challenges that extend beyond individual roles or areas of expertise. It affects communication flows, decision-making processes, and overall project cohesion.

Active User Participation (n=10) – IS projects are consistently described in the literature as requiring active participation from end users throughout their lifecycle. Unlike other projects where users may only be consulted during requirements gathering or acceptance testing, IS projects position users as co-producers of value. Their domain knowledge, iterative feedback, and engagement are viewed as critical for aligning the system with organizational needs and for generating shared understanding between stakeholders. However, fostering meaningful user involvement is often complicated by unclear roles, limited availability, and communication barriers.

Technology-Specific Expertise (n=6) – IS projects often require highly specialized technical knowledge, particularly during critical stages such as prototyping, design, implementation, and testing. This includes familiarity with modeling techniques, programming languages, development environments, and system configuration tools. Due to the rapid pace of technological change, however, such expertise is frequently short-lived, requiring project teams to work with evolving or unproven tools and methods. The need to acquire, apply, and sometimes relearn technical skills within tight project timelines creates additional complexity.

Temporary and unfamiliar teams (n=6) – IS projects often require highly specialized technical knowledge, particularly during critical stages such as prototyping, design, implementation, and testing. This includes familiarity with modeling techniques, programming languages, development environments, and system configuration tools. Due to the rapid pace of technological change, however, such expertise is frequently short-lived, requiring project teams to work with evolving or unproven tools and methods. The need to acquire, apply, and sometimes relearn technical skills within tight project timelines creates additional complexity.

5.4. Task

Task uncertainty and variability – A defining specificity of IS projects (n=24) is the high degree of uncertainty and variability associated with the tasks to

be performed. Unlike projects with clearly specified deliverables, IS projects often begin with ambiguous goals, evolving requirements, and unclear work methods. The scope is likely to shift during development, making early estimates of time, budget, and effort unreliable. This uncertainty is not incidental but intrinsic to the task environment of IS projects, driven by technological complexity, stakeholder diversity, and the exploratory nature of system design.

Cross-Expertise Coordination (n=17) – As highlighted in the TEAM dimension, IS projects involve team members with diverse areas of expertise, often drawn from different departments or external organizations. Within this context, coordination emerges not merely as a supporting function but as a central team task. It involves clarifying roles, managing interdependencies, translating across knowledge domains, and continuously aligning contributions throughout the project's progression.

Need for Tailored Approaches (n=15) – A recurring theme in the literature is the recognition that IS projects rarely conform to a one-size-fits-all project management model. Instead, they require approaches that are tailored to their task characteristics, including uncertainty levels, stakeholder diversity, and technological complexity. Traditional plan-driven methods are often deemed insufficient in such contexts, while agile methodologies are valued for their adaptability and iterative nature. However, even within agile paradigms, practices must often be selected, combined, or adjusted to fit the specific dynamics of each project.

Technological complexity (n=13) – IS projects are frequently described as involving a high level of technical complexity, often exceeding that of projects in other domains. This includes the integration of diverse hardware and software components, compatibility with legacy systems, interoperability requirements, and the use of evolving or unfamiliar technologies. Such complexity places a significant cognitive and coordination burden on project teams, especially given the limited timeframes typical of temporary organizations. The tightly coupled nature of IS architectures also means that small technical issues can escalate rapidly, affecting system-wide performance.

5.5. Time

Iterative development cycles (n=9) – A temporal characteristic of IS projects is the tendency to follow iterative and cyclical patterns rather than linear, sequential phases. This reflects the uncertain and evolving nature of requirements, as well as the need to test, refine, and adapt solutions over time. Rather than

progressing through fixed, sequential phases, IS projects often rely on repeated cycles of design, feedback, and revision. These iterations serve not only to manage risk but also to support knowledge acquisition and problem redefinition throughout the project lifecycle.

Temporal Uncertainty (n=7) – A common temporal challenge in IS projects is the volatility of requirements. User needs, technical conditions, and organizational priorities often shift during the project, making early specifications unreliable. This ongoing evolution of requirements undermines traditional planning efforts and contributes to frequent revisions in scope, timelines, and resource allocation. It creates planning fragility and necessitates continuous re-evaluation of project objectives, sequencing, and delivery strategies. As a result, IS projects require flexible time management practices that can accommodate late-emerging needs and evolving project boundaries.

6. Rethinking IS Projects as a Distinct Form of Temporary Organization

This study offers important insights for theorizing IS projects as a particular instantiation of temporary organizations (TOs). While the dimensions of Context, Transition, Task, Team, and Time proved useful for categorizing the justifications found in the literature, the way these dimensions manifest in IS projects points toward a more nuanced understanding of temporary organizing in IS environments.

6.1. Blurring the Line Between the Dimensions

The analysis reveals a recurrent theme across the literature: IS projects are often justified by both the complexity of the task—such as evolving requirements and technological uncertainty—and the diversity of the team, frequently described as cross-functional and multidisciplinary. These aspects appear closely linked, suggesting that task and team are not distinct entities but dynamically interconnected. The team's composition and coordination evolve in response to shifting task demands, requiring flexibility and adaptation.

This interdependence aligns with more recent perspectives on temporary organizing. While early models treated task and team as distinct elements (Lundin & Söderholm, 1995), subsequent research has emphasized the need for flexible team configurations, role negotiation, and informal coordination in response to task uncertainty (Bechky, 2006; Burke & Morley, 2016).

These internal dynamics are further complicated by the external environment. IS projects often involve diverse stakeholders with misaligned goals, overlapping responsibilities, and varying degrees of influence. This stakeholder complexity reinforces the need for adaptable structures and continuous coordination. Studies of temporary organizations have documented similar challenges, especially in interorganizational contexts where alignment depends on negotiation rather than hierarchy (Sydow & Braun, 2018). In such settings, stakeholder management becomes part of the task itself, and team boundaries expand to include influential external actors (Burke & Morley, 2016).

This boundary blurring is also reflected in the evolving role of end-users. Rather than passive recipients, users often contribute domain knowledge, provide ongoing feedback, and shape deliverables. Their involvement challenges the distinction between internal and external participants. In the literature on temporary organizations, this is captured through the notion of boundary work, where coordination requires negotiating across organizational and professional divides (Stjerne & Svejenova, 2016). Bechky (2006) Similarly, it shows that roles in temporary settings are continuously reshaped through interaction. In IS projects, user participation is not simply consultative—it actively reconfigures team boundaries and coordination processes in real time.

These findings open several avenues for future inquiry. Longitudinal and process-oriented studies could examine how task–team configurations shift over time, and how coordination mechanisms adapt across project phases (Bakker, 2010; Sydow & Braun, 2018). Finally, given the iterative nature of many IS projects, further work could explore how collaboration histories influence current team dynamics and stakeholder relationships (Sergeeva & Roehrich, 2018).

6.2. Rethinking Time in IS Projects

Although the Time dimension was less frequently cited in the reviewed literature, it reveals a central feature of IS projects: their temporal dynamism. Unlike traditional projects with linear trajectories, IS projects are shaped by evolving requirements, short technology cycles, and iterative development methods. This nonlinearity blurs phase boundaries and challenges the notion of temporary organizations as goal-driven entities progressing toward closure (Lundin & Söderholm, 1995).

Recent work emphasizes the need to reconceptualize temporality in temporary organizing, not as a fixed constraint but as an emergent property

of project dynamics (Bakker, 2010; Stjerne & Svejenova, 2016). In IS projects, timelines are not only bounded but continuously reconfigured, making project structure and objectives inherently unstable over time. This underscores the relevance of process-based and temporally embedded perspectives (Sergeeva & Roehrich, 2018), and calls for future research into how actors construct, negotiate, and adjust temporal structures under conditions of uncertainty.

In addition to these internal temporal challenges, many IS projects are also closely tied to broader organizational transformations. Their temporary nature does not prevent them from contributing to long-term change. The following section explores how IS projects, while time-bound, often play a lasting role within ongoing strategic trajectories.

6.3. When Temporary Projects Drive Enduring Change

Although the reviewed literature does not explicitly frame IS projects as embedded within permanent organizational structures, several of the recurring justifications—particularly those coded under the Context and Transition dimensions—suggest a more complex reality. Many IS initiatives are presented as being of strategic significance and closely tied to broader digital transformation efforts. These projects rarely operate at the periphery; rather, they are deeply entangled with how organizations adapt, restructure, and innovate in response to technological change. This suggests a form of embedded temporariness, where projects, though formally bounded in time, contribute to and are shaped by ongoing organizational trajectories.

While transition is often described as a progression from a “before” to an “after” state (Lundin & Söderholm, 1995), such a view tends to underplay the influence of the broader environment in which this progression unfolds. In IS projects, transitions rarely unfold in stable or neutral contexts. They occur amid shifting technological landscapes, evolving priorities, and fluid stakeholder constellations.

These external dynamics are not peripheral—they actively shape how transitions are perceived, managed, and enacted. As a result, transitions in IS projects rarely follow a linear path; they reverberate across all other dimensions of temporary organizing, amplifying task complexity, disrupting temporal structures, and requiring continuous adaptation in team composition and coordination. Transition, therefore, is not merely a project-internal phase but an embedded, ongoing process shaped by its surrounding context.

This perspective finds resonance in recent theoretical developments. Rather than viewing temporary and permanent forms as fundamentally separate, scholars increasingly conceptualize them as interdependent and overlapping (Burke & Morley, 2016; Goetz & Wald, 2022). IS projects are frequently conducted in environments where temporary and enduring structures coexist—often within project-based organizations or in sequential programs where one initiative builds upon the next. In this sense, the temporary form becomes a means of organizing for change, rather than a self-contained endeavor.

As Stjerne and Svejnova (2016) argue, the boundary between temporary and permanent organizing is not fixed but negotiated. Their work on sequential projects highlights how present initiatives are shaped by past experiences and future expectations, reinforcing the idea that temporality is not necessarily episodic but part of a continuum of action and learning. IS projects, which often unfold in iterations, with overlapping teams and shared infrastructures, exemplify this dynamic.

Future research could explore how IS projects act as interfaces between short-term delivery requirements and long-term strategic aims. In particular, studies adopting longitudinal or processual approaches could shed light on how capabilities, roles, and institutional arrangements evolve across successive initiatives. Investigating how actors manage tensions between autonomy and integration, or between project logic and organizational stability, would refine our understanding of IS projects as sites of embedded, rather than exceptional, organizing.

To summarize these findings, Figure 1 presents a conceptual model that integrates the identified specificities across the five dimensions, illustrating how they interact to define the distinctive nature of IS projects.

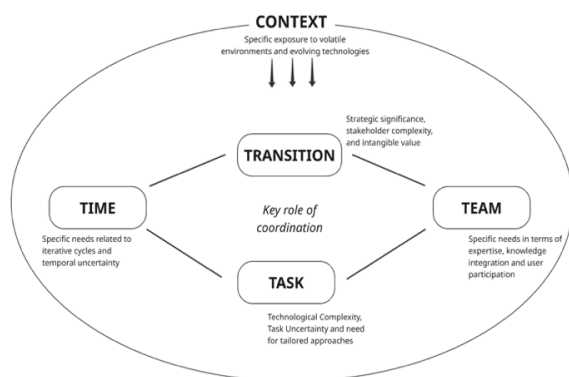


Figure 1. A Conceptual Model of IS Project Specificities

7. Conclusion

This study aimed to clarify how academic literature justifies the distinctiveness of Information Systems (IS) projects. Through a review of 137 articles published in project management journals, the paper identifies and categorizes the main arguments used to portray IS projects as a special case. These justifications are mapped across five dimensions—Task, Team, Time, Transition, and Context—offering a structured synthesis of a fragmented body of work. The analysis also highlights how these dimensions intersect, particularly through coordination challenges and evolving project dynamics.

Beyond this descriptive contribution, the study enriches the conceptual framing of IS projects by explicitly incorporating context as a fifth dimension and by reframing transition as a process embedded in unstable and strategically significant environments. The findings reveal that boundaries between dimensions—such as task and team, or project and organizational time—are often blurred, suggesting that the distinctiveness of IS projects emerges from the interplay of multiple factors rather than from any single feature.

The study focuses on how IS project specificities are constructed discursively in academic literature, rather than through direct observation of project practices. It also draws exclusively on project management journals. Future work could extend this analysis to IS journals to examine whether similar patterns appear or whether new themes emerge. Comparative and longitudinal studies could also explore how IS and non-IS projects differ in practice, and how temporary and permanent structures interact over time in complex environments.

8. References

- Bakker, R. M. (2010). Taking stock of temporary organizational forms: A systematic review and research agenda. *International Journal of Management Reviews*, 12(4), 466-486
- Banerjee, S., Singh, J. P., Dwivedi, Y. K., & Rana, N. P. (2021). Social media analytics for end-users' expectation management in information systems development projects. *Information Technology & People*, 34(6), 1600-1614
- Bawack, R. E., & Ahmad, M. O. (2021). Understanding business analytics continuance in agile information system development projects: an expectation-confirmation perspective. *Information Technology & People*, 34(6), 1551-1569
- Bawack, R. E., & Kala Kamdjoug, J. R. (2023). Managing client–consultant relationships to derive benefits from

- ERP projects. *Information Technology & People*, 36(4), 1669-1702
- Bechky, B. A. (2006). Gaffers, gofers, and grips: Role-based coordination in temporary organizations. *Organization Science*, 17(1), 3-21
- Beldi, A., Cheffi, W., & Dey, P. K. (2010). Managing customer relationship management projects: The case of a large French telecommunications company. *International Journal of Project Management*, 28(4), 339-351
- Bourdeau, S., Barki, H., & Legoux, R. (2021). Investigating the role of tenure diversity in information system project teams: a multilevel analysis. *Communications of the Association for Information Systems*, 49(1), 42
- Bunduchi, R., Tursunbayeva, A., & Pagliari, C. (2020). Coping with institutional complexity: Intersecting logics and dissonant visions in a nation-wide healthcare IT implementation project. *Information Technology & People*, 33(1), 311-339
- Burke, C. M., & Morley, M. J. (2016). On temporary organizations: A review, synthesis and research agenda. *Human Relations*, 69(6), 1235-1258
- Chua, C. E. H., Storey, V. C., & Wallace, L. (2024). Project Wars: A Serious Game to Teach Decision Making in Project Execution.
- Coulon, T., Paré, G., & Barki, H. (2023). Unexpected Events in IT Projects: A Conceptual Review and Research Agenda. *Communications of the Association for Information Systems*, 52(1), 41
- Cranefield, J., Oliver, G., & Pries-Heje, J. (2018). Political satire and the counter-framing of public sector IT project escalation.
- Di Gangi, P., Teigland, R., & Yetis, Z. (2023). How do different stakeholder groups within an open source software project influence the project's development: a case study of OpenSimulator. *Information Technology & People*, 36(7), 3048-3078
- Dillon, S., & Taylor, H. (2015). Employing grounded theory to uncover behavioral competencies of information technology project managers. *Project Management Journal*, 46(4), 90-104
- Fu, Y., Li, M., & Chen, F. (2012). Impact propagation and risk assessment of requirement changes for software development projects based on design structure matrix. *International Journal of Project Management*, 30(3), 363-373
- Gemino, A., Reich, B. H., & Sauer, C. (2015). Plans versus people: Comparing knowledge management approaches in IT-enabled business projects. *International Journal of Project Management*, 33(2), 299-310
- Germonprez, M., Gandhi, R. A., & Link, G. (2021). The routinization of open source project engagement: The case of open source risk management routines. *Communications of the Association for Information Systems*, 49(1), 39
- Goetz, N., & Wald, A. (2022). Similar but different? The influence of job satisfaction, organizational commitment and person-job fit on individual performance in the continuum between permanent and temporary organizations. *International Journal of Project Management*, 40(3), 251-261
- He, W., Hsieh, J., Schroeder, A., & Fang, Y. (2022). Attaining Individual Creativity and Performance in Multidisciplinary and Geographically Distributed IT Project Teams: The Role of Transactive Memory Systems. *MIS Quarterly*, 46(2)
- Hetemi, E., Pushkina, O., & Zerjav, V. (2022). Collaborative practices of knowledge work in IT projects. *International Journal of Project Management*, 40(8), 906-920
- Hung, S.-Y., Chen, C., & Wang, K.-H. (2014). Critical success factors for the implementation of integrated healthcare information systems projects: An organizational fit perspective. *Communications of the Association for Information Systems*, 34(1), 39
- Iriarte, C., & Bayona, S. (2020). IT projects success factors: a literature review. *International Journal of Information Systems and Project Management*, 8(2), 49-78
- Jenkin, T. A., Chan, Y. E., & Sabherwal, R. (2019). Mutual Understanding in Information Systems Development. *MIS Quarterly*, 43(2), 649-A617
- Jiang, J. J., Klein, G., & Fernandez, W. D. (2018). From project management to program management: an invitation to investigate programs where IT plays a significant role. *Journal of the Association for Information Systems*, 19(1), 1
- Joyce, E., Ozturk, P., & Pike, J. C. (2023). Effective Organizing on the Fly: Social Capital in Temporary Organizations. *Journal of Computer Information Systems*, 63(5), 1213-1227
- Lundin, R. A., & Söderholm, A. (1995). A theory of the temporary organization. *Scandinavian Journal of Management*, 11(4), 437-455
- Malgonde, O. S., Saldanha, T. J., & Mithas, S. (2023). Resilience in the Open Source Software Community: How Pandemic and Unemployment Shocks Influence Contributions to Others' and One's Own Projects. *MIS Quarterly*, 47(1)
- Melville, N., Kraemer, K., & Gurbaxani, V. (2004). Information technology and organizational performance: An integrative model of IT business value. *MIS Quarterly*, 283-322
- Moeini, M., & Rivard, S. (2019). Sublating tensions in the IT project risk management literature: A model of the relative performance of intuition and deliberate analysis for risk assessment. *Journal of the Association for Information Systems*, 20(3), 1
- Morcov, S., Pintelon, L., & Kusters, R. J. (2020). Definitions, characteristics and measures of IT project complexity-a systematic literature review. *International Journal of Information Systems and Project Management*, 8(2), 5-21
- Pang, M.-S., & Lee, G. (2022). The impact of IT decision-making authority on IT project performance in the US federal government. *MIS Quarterly*, 46(3), 1759-1776
- Paré, G., Tate, M., Johnstone, D., & Kitsiou, S. (2016). Contextualizing the twin concepts of systematicity and transparency in information systems literature

- reviews. *European Journal of Information Systems*, 25(6), 493-508
- Paré, G., Trudel, M.-C., Jaana, M., & Kitsiou, S. (2015). Synthesizing information systems knowledge: A typology of literature reviews. *Information & Management*, 52(2), 183-199
- Paré, G., Wagner, G., & Prester, J. (2024). How to develop and frame impactful review articles: key recommendations. *Journal of Decision Systems*, 33(4), 566-582
- Reed, A. H., Angolia, M. G., Baham, C., & Igah, R. (2024). Usage of Hybrid Project Management Approaches and Influences on Approach Selection. *Communications of the Association for Information Systems*, 54(1), 21
- Sergeeva, N., & Roehrich, J. K. (2018). Temporary multi-organizations: Constructing identities to realize performance improvements. *Industrial Marketing Management*, 75, 184-192
- Standish Group. (2020). CHAOS Report: Beyond Infinity. *The Standish Group International. EUA*
- Stjerne, I. S., & Svejnova, S. (2016). Connecting temporary and permanent organizing: Tensions and boundary work in sequential film projects. *Organization Studies*, 37(12), 1771-1792
- Subasinghage, M., Sedera, D., & Srivastava, S. C. (2021). Governing Intra-project Modular Interdependencies in ISD Projects: A Control Theory Perspective. *Communications of the Association for Information Systems*, 49(1), 9
- Sydow, J., & Braun, T. (2018). Projects as temporary organizations: An agenda for further theorizing the interorganizational dimension. *International Journal of Project Management*, 36(1), 4-11
- Taylor, H., Artman, E., & Woelfer, J. P. (2012). Information technology project risk management: bridging the gap between research and practice. *Journal of Information Technology*, 27(1), 17-34
- Thummadi, B. V., & Lyytinen, K. (2020). How much method-in-use matters? A case study of agile and waterfall software projects and their design routine variation. *Journal of the Association for Information Systems*, 21(4), 7
- van Laere, J., & Aggestam, L. (2016). Understanding champion behaviour in a health-care information system development project—how multiple champions and champion behaviours build a coherent whole. *European Journal of Information Systems*, 25(1), 47-63
- Vial, G., & Rivard, S. (2016). A process explanation of the effects of institutional distance between parties in outsourced information systems development projects. *European Journal of Information Systems*, 25(5), 448-464
- Virag, P., Bernroider, E. W., & Remus, U. (2024). Agile Project Management Styles and Control Ambidexterity in Agile Information Systems Development Projects: An Exploratory Case Study. *Journal of the Association for Information Systems*, 25(5), 1274-1302
- Wiener, M., Remus, U., Heumann, J., & Mähring, M. (2015). The effective promotion of informal control in information systems offshoring projects. *European Journal of Information Systems*, 24(6), 569-587
- Wu, X., Tsai, J. C.-A., & Lei, Y. (2023). Information technology project management research: A review of works by influential pioneers. *Project Management Journal*, 54(4), 366-391
- Xia, W., & Lee, G. (2005). Complexity of information systems development projects: conceptualization and measurement development. *Journal of Management Information Systems*, 22(1), 45-83
- Yadav, V., Adya, M., Nath, D., & Sridhar, V. (2016). Considerations for effective requirements analysis in offshore software development projects: Lessons from multi-method research. *Communications of the Association for Information Systems*, 39(1), 11
- Zamani, E. D., Griva, A., Spanaki, K., O'Raghallaigh, P., & Sammon, D. (2024). Making sense of business analytics in project selection and prioritisation: Insights from the start-up trenches. *Information Technology & People*, 37(2), 895-918