Tensions between project owner and manager in construction projects: A paradox perspective

1.Research Problem Statement

Project value creation relies on close collaboration between the project owner and the project manager (Pisotska et al., 2022; Turner & Müller, 2004). However, their inter-organizational tensions are not uncommon and remain under-researched. This research aims to explore *what tensions exist between the project owner and manager and how different types of tensions affect each other in construction projects*.

Project value creation focuses on both output delivery and outcome realization (Chih et al., 2019; Laursen & Svejvig, 2016), with responsibility remaining with the project manager and owner, respectively (Zwikael et al., 2019). *The project owner* is defined as a firm investing in projects to expand or upgrade its abilities to deliver goods/services to customers (Winch, 2014). It designs value propositions, proposes the business case at the project front-end stage, and operates the project to serve its customers during the operation stage (Winch & Cha, 2020). The project owner expects the intended outcome realization through the beneficial use of the delivered project output (Winch et al., 2022).

To ensure successful output delivery, a project plan should be developed based on the business case and guide the day-to-day project management (PM) during the project execution stage. However, in some cases, the owner may lack in-house PM capabilities due to the intermittent nature of construction project investment activities (Merrow, 2011; Winch, 2014) or may be unwilling to assume associated risk (Denicol & Davies, 2022). PM works will thus be delegated to an external PM firm, which is responsible for delivering project outputs on time, within budget, and to specifications (PMI, 2021). The separation of PM responsibility from project ownership induces frequent owner-manager interactions.

It is not uncommon to witness conflicts between the project owner and the external project manager at individual, group, and organizational levels (Müller & Turner, 2005; Tóth et al., 2018). *Tension* is defined as "contradictory yet interrelated elements that exist simultaneously and persist over time" (Smith & Lewis, 2011, p. 382). Conflicts result from tensions stemming from divergent perceptions and conflicting interests between the project owner and project manager (Chi et al., 2022; Smith & Lewis, 2011). For example, the project owner's expectations for technology-driven optimization of

project functions can lead to budget and schedule overrun, posing risks for the project manager to fulfill their contractual obligations and dampening collaboration enthusiasm (Malherbe, 2022). This tension between conflicting goals may further intensify tensions related to value creation and capture, as well as empowerment and control (Niesten & Stefan, 2019; Szentes & Eriksson, 2016).

Tensions have been widely discussed in the PM literature, particularly in the context of project network (DeFillippi & Sydow, 2016), inter-organizational value co-creation–value capture (Niesten & Stefan, 2019), multiple stakeholders in megaprojects (Wiewiora & Desouza, 2022). Studies have explored tensions more specifically in project managers' balancing objectives in sustainable construction projects (Sabini & Alderman, 2021), inter-organizational innovation projects (Malherbe, 2022), and temporal institutional field shifts (Hetemi et al., 2021). Particularly, large-scale and public projects have received more attention, such as the Sydney Opera House Project (Gaim et al., 2022), major public investment projects in Norway (Samset & Volden, 2016), and large-scale construction projects (Tóth et al., 2018). Nevertheless, few studies have addressed tensions between the project owner and the external project manager and how these tensions interrelate in the construction project context.

To recognize different types of tensions, Lewis (2000) and Smith and Lewis (2011) developed an integrative framework of organizational tensions. They classified organizational tensions into four types, namely tensions of learning, organizing, belonging, and performing. Learning tension is concerned with exploiting old knowledge and exploring new knowledge; organizing tension pays attention to empowerment and control; belonging tension focuses on the interplay between individual and the collective; performing tension focuses attention on conflicts arising from incongruence or divergent goals and interests. This tension taxonomy has been widely applied in tension research within the PM literature (Jarzabkowski et al., 2013; Wiewiora & Desouza, 2022).

Drawing on this paradox framework, this study uses a qualitative research and content analysis approach to identify different types of tensions between the project owner and project manager as well as delineate their interrelationship. The following sections include the research methodology, key findings, and implications.

2. Research Methodology

This study aims to investigate how paradoxical tensions emerge and different types of tensions affect each other between the project owner and manager in the construction project context. Given the

exploratory nature of this research and the need to understand the problems in a real-life context, a qualitative study approach is considered appropriate (Yin, 2009).

2.1 Data collection

Data was collected through archival documents and semi-structured interviews as multiple resources of evidence to enhance confidence (Yin, 2009). The semi-structured interview approach was chosen to keep the interviewees focused on the interview questions while leaving flexibility to discuss additional relevant practices. The interviewees included government officials, project owners, and external PM firms who had a deep understanding of owner-manager interactions in construction PM. The interviewees were asked to share their experiences and perceptions regarding owner-manager interactions over the project life cycle, such as the process of communicating project requirements. From 2017 to 2021, 60 interviewees were interviewed about how the project owner and project manager interact in construction projects (see **Table 1**). Besides, archival documents such as industry policy reports and the contracts between the project owner and manager were gathered to complement data from interviews.

Table 1. Profile of interviewees

NO.	Position	Organization	Duration (min)
1	Government officer	Government Construction Department	494
2	Government officer	Government Construction Department	150
3	Government officer	Government Construction Department	32
4-7	Government officer	Government Construction Department	45
8-13	Project manager	Construction management agencies from five cities	
14-23	Government officer	Government Construction Department	55
24-33	Project manager	Construction management agencies from nine cities	
34	Project manager	Construction management agency	165
35-37	Project manager	Enterprise of state-subsidized housing	90
38-41	Project manager	Construction management agency	
42-44	Project manager	Enterprise of urban construction	
45-47	Project manager	Construction management agency	110
48-50	Project manager	Construction management agency	95
51	Project manager	Agent construction firm	82
52	Project manager	Construction management agency	51
53	Project manager	Construction management agency	86
54	Project manager	Construction management agency	
55	Project owner	Women’s and Children’s Hospital	65
56	Project owner	Dental Hospital	52
57	Project owner	Dental Hospital	67
58	Project owner	Dental Hospital	87
59	Project owner	Institution Hospital	52
60	Project owner	Women's and Children's Hospital	87

Note: Part of interviews are multiple people interview

2.2 Data analysis

The unit of analysis is the relationship between the project owner and project manager. Using content analysis, we coded data obtained from interview transcripts and archival documents in NVivo software. During this process, we focused on conflicting goals and preferences between the project owner and project manager, instances of dissatisfaction and complaints from one to the other, and their push-pull relationship. With a theory-driven approach (Malterud, 2012), the identified tensions were categorized into learning, organizing, belonging, and performing tensions. Additionally, we evidenced that these tensions were not independent, but rather interrelated. The interwoven relationship between different tensions was further explored and delineated.

3. Key Findings

Drawing upon the paradox theory (Lewis, 2000; Smith & Lewis, 2011), this research delineated four categories of tensions and their interrelationship, see **Figure 1**.

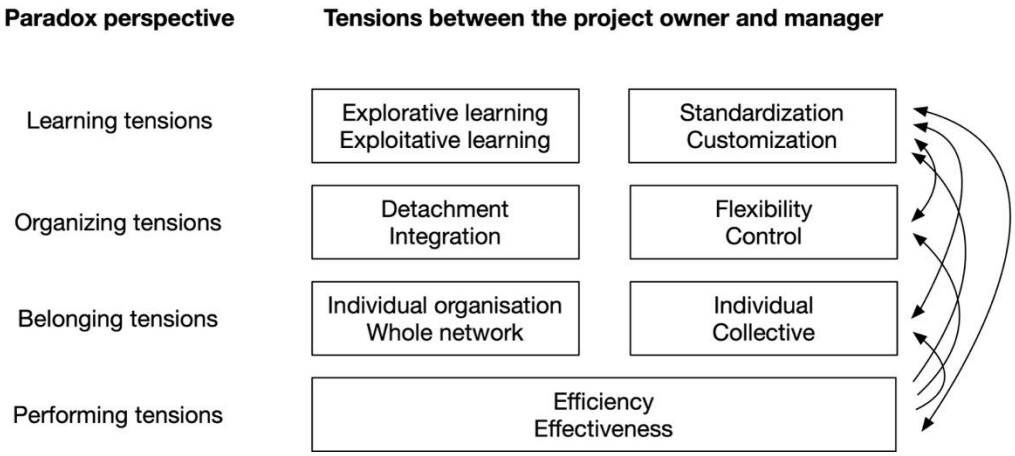

Figure 1. Interwoven tensions between the project owner and manager

3.1 Learning tensions

A learning tension between explorative learning and exploitative learning was identified. Exploitative learning was evident in two ways: 1) developing the project manager's capabilities to gain more market opportunities; and 2) creating benefits for the project owner by improving project delivery efficiency and effectiveness, such as cost savings. However, exploitative learning required more capital and time investment, and brought about the risk of innovation failure. Under the schedule pressure, project managers intended to pay more attention to the exploitation of existing knowledge rather than explorative learning or innovation, as innovation imposed a risk of delayed delivery.

Further, the tension between standardization and customization was categorized into a learning tension. Project managers had extensive management experience that enabled them to implement standardized PM practices, benefiting from scale economy. However, each project in different industries had unique characteristics and specific requirements from the project owner and its customers. Standardization could become inefficient when projects involved unique or innovative requirements that required customization. As a respondent stated, "*The project manager specializes in the management of concrete pours, but not in knowing the owner's requirements." (#1, 55)*

Based on these findings, we propose:

> **Proposition 1**: Learning tensions between the project owner and project manager encompass exploration-exploitation and standardization-customization.

3.2 Organizing tensions

Organizing tensions manifested themselves in two ways. First, the tension between owner-manager detachment and integration existed. The project owner and the external project manager were distinct legal entities operating in the market. Their detachment meant a clear inter-organizational interface, which allowed for accountability assignment and attribution. However, this detachment increased the difficulty of owner-manager communication in requirement delivery and output handover, which could be better addressed in a joint PM team.

Second, the tension between flexibility and control was ubiquitous in owner-manager interactions. To ensure efficient and flexible PM, the project manager should be authorized some decision rights. Nevertheless, due to the intangibility of PM service, the project owner could not distinguish whether the project manager will act to the maximum benefit of the owner. The owner would therefore control and monitor the project manager to prevent opportunism. This rigid control, in turn, led to resistance and even hostility from project managers who desired more discretion. A respondent expressed, "*the intervention from the owner was too much*." *(#35, 53)*

Therefore, we put forward the second proposition:

> **Proposition 2**: Detachment-integration and flexibility-control were identified as two organizing tensions between the project owner and project manager.

3.3 Belonging tensions

Belonging tensions included the tension between the individual organization and the whole network. For example, diverse views from the project owner and manager might delay project decision-making progress, although various perspectives facilitated project innovation. Besides, belonging tensions existed between the individual and the collective within an organization (the project owner or the project manager) due to individuals' or groups' differentiated views, perspectives, and values. As respondents argued, "*inter-departmental conflicts within the project owner greatly affected the overall project schedule*." *(#56, 57)*

We propose:

> **Proposition 3**: Two belonging tensions between the project owner and manager include the tension between the individual organization and the whole network, and the tension between the individual and the collective within an organization.

3.4 Performing tensions

Performing tensions were reflected in conflicting organizational interests between the project's long-term and short-term goals. One respondent (#60) commented that "*our project is just one of the hundreds of projects managed by this project manager. But for the whole hospital (the owner), our employees will operate this project to provide medical services in the next 5 years*." As a point of distinction, the project manager paid attention to short-term project efficiency objectives (i.e., cost, time, and quality), which had been integrated into their reward structure in contracts. By contrast, the project owner was concerned about project outcome effectiveness during the operation stage. However, their interests sometimes conflicted with each other. For example, as technology evolved, new requirements from the owner required the manager to invest more effort into the project, which might lead to project cost and budget overruns.

These findings lead to the following proposition:

> **Proposition 4**: The project owner and manager experienced tension in achieving the project's long-term and short-term goals, which arose from their different preferences.

3.5 Interrelationship between different types of tensions

It was found that the exploration-exploitation tension intensified the organizing tension between flexibility and control. The main reason is that the implementation of explorative learning required more flexibility, but in fact might induce stricter control from the owner. For example, when the project owner found it indistinguishable whether delivery delays came from the project manager's error or explorative learning, control would be tightened and inhibit the potential for explorative learning. Therefore, the learning tension and the organizing tension would intensify with each other.

The exploration-exploitation tension would also intensify the performing tension. For example, performing tension was exacerbated by the competition for ownership of property rights over innovation outcomes (i.e., value capture).

Furthermore, the exploration-exploitation learning tension were closely interconnected with belonging tensions. Explorative learning benefited from the diversity of individuals, groups, or organizations, and vice versa. Exploring how to balance differentiated perspectives and holistic goals would likely act simultaneously on both kinds of tensions.

At last, the performing tension from different interest groups could intensify learning tensions, organizing tensions, and belonging tensions due to the difficulty of aligning interests. We propose:

> **Proposition 5**: The appearance of the learning tension intensifies the organizing and performing tensions, and in turn, the organizing tension will intensify the learning tension. The belonging tension and the learning tension can affect each other due to the close relationship between diversity and exploration learning. Additionally, the performing tension could intensify the learning, organizing, and belonging tensions.

4. Implications

This study contributes to PM literature by explicating tensions between the project owner and manager in construction projects. It extends the understanding of tension by focusing on the project owner and the external project manager, two key players in value creation. This would complement the current literature about tensions in the inter-organizational relationship (Niesten & Stefan, 2019) and the project network (DeFillippi & Sydow, 2016). Further, the interconnectedness between four types of tensions is emphasized in this research, advancing the understanding of tensions in paradox theory (Lewis, 2000; Smith & Lewis, 2011). This research also provides managerial implications to project

owners and managers by empirically delineating interwoven tensions, which is the prerequisite for effectively managing tensions.

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