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## Article

# Developing a Reference Framework for Claim Management Office: A Multi-Method Approach of an International Construction Firm

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**Abstract:** A claim management office (CMO) is a new intra-organisation fit based on an organisational project management (OPM) approach and deals specifically with improving claim performance. However, CMO is either misunderstood or often overlooked in construction companies, mainly due to ignorance of the OPM context but further exacerbated by a lack of real case study research on how to adopt CMO in these organisations. This study addresses this prevailing knowledge gap by investigating the nature of the construction industry from the CMO viewpoint and developing an extensive framework through which to improve organisational claims performance. Organisational ambidexterity theory integrated with X-inefficiency theory is adopted for claims performance outcomes, due to organisation intra-firm irrational decisions when managing such claims. Data was obtained and analysed from a international large construction company (which used CMOs) and its internal focus group discussion (as a multi-method approach). The reference framework provides new perspectives on how construction-related companies can adopt a CMO structure, which enables them to improve claims performance by planning in three interrelated activities viz. function-, process- and performance-based-. Furthermore, findings contribute to researchers and practitioners by providing a true understanding of the CMO-related mechanism and plausible roadmap for future work.

**Keywords:** claim management office (CMO); organisational project management (OPM); built environment; project-based organization (PBO); construction claim

## 1. Introduction

A construction claim is defined as a compensation request for unanticipated risks which may escalate to a dispute if not agreed (Kumar *et al.*, 2020) or settled by fulfilment of the contract provisions and detailed technical documents/ information (Gurgun and Koc, 2022). Arguably, the claim requests are rooted in reoccurring conflict (as a root cause) (Kumaraswamy, 1997) involving the contractual parties (Fitriyanti and Adly, 2022) (i.e., client, contractor and sub-contractor) (PMI, 2017). Managing such claims represent specific challenges and a heavily gated process that has been extensively researched (cf. Kululanga *et al.*, 2001; Makarem *et al.*, 2012; Abdul-Malak and Abdulhai, 2017). Barakat *et al.* (2019) developed the all-encompassing claim and dispute timeline, drawing on six widely adopted standard construction contract conditions viz. the American Institute of Architects (AIA), ConsensusDocs, Fédération Internationale Des Ingénieurs Conseils (FIDIC), Engineers Joint Contract Documents Committee (EJCDC), the New Engineering Contract (NEC) and Joint Contracts Tribunal (JCT). Mayer (2015) proposed 'conflict engagement' as a method for managing conflict and litigation. Considering the root cause and unanticipated risks of requests, claim management can be defined as a complex conflict engagement decision to compensate cost implication of unanticipated risks, whether at the project or organisation level.

Several factors are perceived to improve claim management at the organisational level, including: (1) considering the hard and soft categories of claims (Parchami Jalal *et al.*, 2021); (2) directing the relationship between roles of the organisation's various units and the claim administration (Abdul-Malak *et al.*, 2020); (3) focusing on the internal and external context in the organisation (Martinsuo and Geraldi, 2020); (4) relying on non-immediate resolution or understanding aspects of complexity (Shenhar and Holzmann, 2017); and (5) considering distinct categories of business disputes viz.: partnership, intellectual property and patent, contractual and employment (Trinkūnienė and Trinkūnas, 2022). Notwithstanding these, Locatelli *et al.* (2022) states that the project manager (who sets the 'iron triangle' of time, cost and quality benchmarks) priorities to manage construction law professionals (e.g., claim specialists, lawyers and others) but some of whom may have other priorities and concerns. Hence, governance (of project management) has been suggested for influencing decision making of policy, strategy, tactics and operations levels on projects and in project-based organisations (Turner, 2020). Miterev *et al.* (2017) proposed the modified 5-dimensional model which stipulates internal fit of project-based organisations (PBOs) to design their organisations. Müller *et al.* (2019) introduced the onion model of organisational project management (OPM) with 22 elements in seven layers and discovered how they are integrated. Accordingly, the organisational offices of PBOs can be developed by focusing on the approach level of OPM context. This point concurs with Karim *et al.* (2022) who confirmed that organisational aspects and practices for improving OPM maturity.

In a PBO, the improvement of claim performance is notoriously problematic because it represents an inevitable result of paradoxes, complexities and uncertainties encountered when managing behavioural intra-firm claim decisions. The claim management office (CMO) concept contributes to managing organisational-level related claims (Parchamijalal *et al.*, 2023); however, the claim and project performance indicators differ from each other (Seo and Kang, 2020). Due to this difference, the CMO functions must be separated from the project management office (PMO) and other organisational related units. CMO-related functions (i.e., dispute resolution and organisational ambidexterity management) have thus received specific attention in the project management discipline (cf. Echternach *et al.*, 2021; Jagannathan and Delhi, 2022; Shalwani and Lines, 2022; Gunduz and Elsherbeny, 2020; Senaratne and Wang, 2018). Understanding the CMO-related organisational ambidexterity helps a construction company to improve its performance (cf. Duodu and Rowlinson, 2021; Hughes, 2018), particularly when managing conflicts and ambidexterity (cf. Midler *et al.*, 2019; Wang and Wu, 2020). However, the performance dimensions and indicators with CMO-related levels and its intra-firm structure is yet to be fully understood. Some researchers (cf. Anago, 2022; Petro *et al.*, 2019) proffer that integrating organisational ambidexterity theory with X-inefficiency theory is relevant, resulting in more qualitative insights into intra-firms' behavioural dynamics. An unanswered question however, is how do PBOs design an OPM-based CMO approach for improving industry-related claim performance? A reference framework for understanding CMO structure and components (and inquiring its impact on claim performance based on the organisational ambidexterity and X-inefficiency theories) therefore remains wanting. This demonstrates a lacuna in the body of knowledge on implementing CMO within PBOs, particularly in large construction firms.

Against this contextual backdrop, this work integrates an organisational ambidexterity with X-inefficiency theory, generating a reference framework for CMO by probing its implementation in a large international construction firm. Concomitant objectives are to: 1) adopt the CMO functions and their subfunctions; 2) probe internal multilevel fit within PBOs for rational decisions when implementing CMOs; and 3) explore the claim performance indicators of PBOs for improvement. This reference framework will assist construction companies in devising plans for early management of their claims to improve claim performance, particularly claims related to global industry concerns. Further, the framework can be used for participants of wider industries when considering their claims. This study makes contributions to both research and practice by garnering true insight into the CMO concept, setting a solid reference for formulation of hypothesis and developing a practical roadmap for future work.

## 2. New OPM-based CMO approach for wide industry-related claims

Since the CMO is an under-theorised concept within the approach level of OPM, it is less common in project and organisational studies of PBOs. However, the different levels of the CMO

maturity model are well documented (Parchamijalal *et al.*, 2023). Thus, to set the context for this present research in the wider body of knowledge, particular attention is given to: 1) problems of managing built environment claims; and 2) theoretical foundations of CMO within PBOs. Based upon this synthesis of CMO-related literature, new basic CMO knowledge development within PBOs is generated.

### 2.1. Problems of managing project-based organizational claims

A claim request is rooted in triggering events of risk and conflict. Kumar *et al.* (2020) suggest that if the cost implications of unanticipated risks are not considered and agreed, claims formation and disputes occur. However, drawing on: the industrial classification of construction businesses (cf. Ye *et al.*, 2018); reframing construction within the built environment (De Valence, 2019); and the project and inter- and intra-organisational communication (Seo *et al.*, 2021), such claims are complex and diverse. This is because (apart from construction companies) many firms from other industries may be involved in other services provided to the built environment sector's supply chain (Ive and Gruneberg, 2000). Considering the industrial diversity of construction businesses, in particular international construction and entry mode, highlights the need to pay more attention to service-oriented built environment context with specific managerial process. (cf. De Valence, 2019; Kumar Viswanathan and Neeraj Jha, 2020; Obi *et al.*, 2020; Martek, 2022). Arguably, Alsamarraie and Ghazali (2022) concluded that cost overruns, schedule delays and erratic project performance are common triggering events of any organisation, some of which may lead to claims in such PBOs.

Numerous studies (cf. Chau, 2007; Tanand and Anumba, 2010; Guévremont and Hammad, 2018; Hadi, 2018; Ali *et al.*, 2020; Nafe Assafi *et al.*, 2022) have suggested feasible alternatives to performing a claim management process viz. artificial intelligence, software or online internet capabilities. Such alternatives however, typically encounter inherent problems. For example, framework constraints provided by building information modelling (BIM) include: the inherent complexity of a contract; different conditions of each contract; the necessity to use integrated project delivery (IPD) as a project implementation system; and a manual modification of the values due to the design change (cf. Charehzehi, 2017; Shahhosseini and Hajarolasvadi, 2018; Ali *et al.*, 2020). The dark side of projects accompanied with organisations' concerns (cf. Enshassi *et al.*, 2009; Bakhary, 2015; Locatelli *et al.*, 2022;) (in particular, the project claim management committee with no client focused of PBOs and their non-project works (cf. Henning, and Wald, 2019; Dang *et al.*, 2020; Parchamijalal *et al.*, 2023)), can be also considered as other problems in managing built environment claims. Notwithstanding these, Parchamijalal *et al.* (2023) suggested CMO as a solution for implementing process management to control, reduce and improve a construction organisation's claims performance using five-pronged maturity levels viz.: preliminary, awareness, standard, integrated and advanced. However, the functions, intra-organisational fit and its claim performance indicators remain undefined. By doing just these, a CMO can be used for managing the broad construction (as a built environment sector) claims, rather than focusing on narrow construction. According to Müller *et al.* (2019), the program and organisational office components are related to the organisational integration and OPM approach layers, respectively. Rijke *et al.* (2014) believed that program management constitutes a more strategic focus rather than project management, drawing on its effective/timely decision making and competences (Mitrev *et al.*, 2016; Trzeciak *et al.*, 2022). Shao *et al.* (2012) pointed that the program context has two dimensions of types and characteristics, which the organisation's claims can be effectively managed under such programs. Gebken and Gibson (2006) put disputed claims indicators into two categories; frequency indicator (i.e., company history and market environment) and severity indicators (i.e., direct, indirect and hidden costs). Seo and Kang (2020) also proposed three frequency performance indicators of claim management: entitlement miss, time-bar miss and lack of substantiation. Notably, as the company history and market environment are among the claim performance indicators, expanding the necessity for managing organisational ambidexterity will improve company performance.

Previous scholars (cf. Hughes, 2018; Duodu and Rowlinson, 2021) concluded that organisational ambidexterity, as an organisation- and management-focused theory, may effect operational and financial dimensions of firm performance. The concept of organisational ambidexterity consists of (Petro *et al.*, 2019): levels (strategic, projects, organization and individual); dimensions (knowledge, technology, behaviour and process); and mechanisms (structural, learning, selection and



communication). Although international construction company cases contribute to understanding the diversification of construction businesses (cf. Ye *et al.*, 2018; Martek, 2022), it is imperative to use relevant theories for generating a knowledge base of CMO.

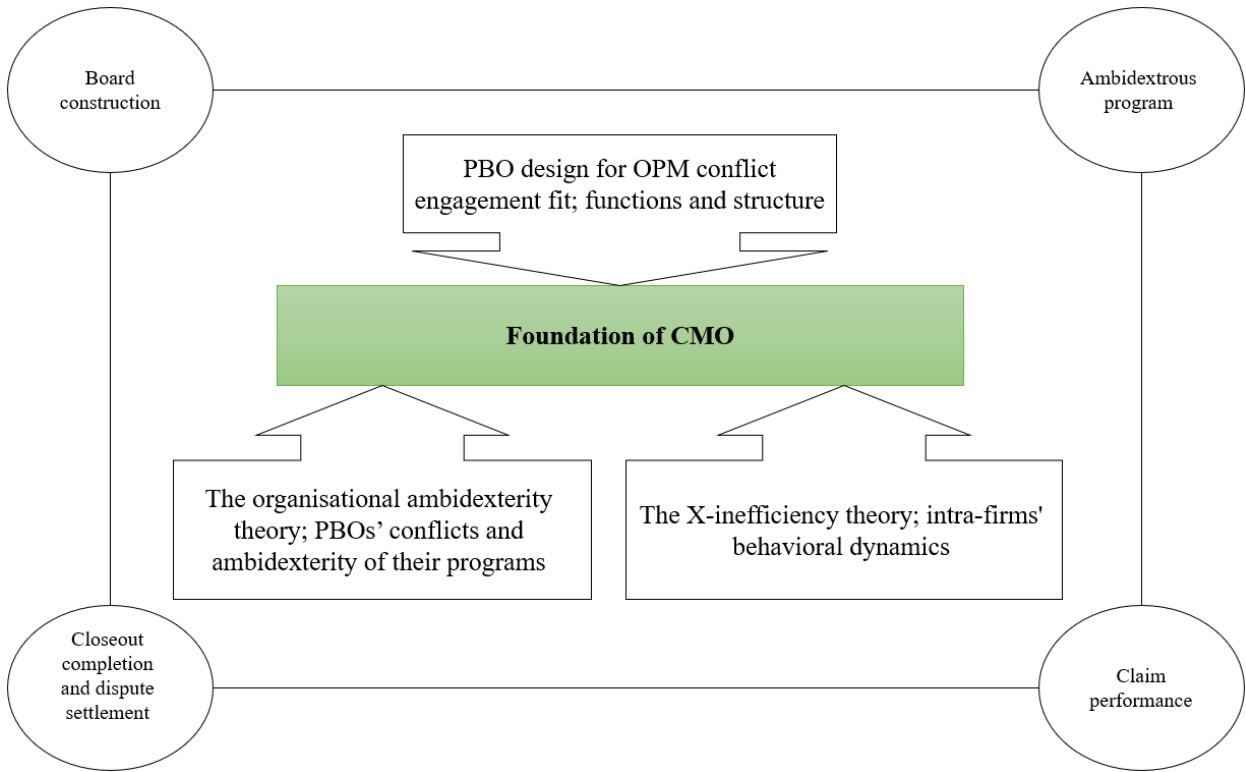
## 2.2. Theories foundations of CMO within project-based organizations

Wu *et al.* (2019) place indicators of project performance into five categories viz.: 1) the project's overall performance (i.e., time, cost and quality); 2) the project's multiple goals (i.e., claim management); 3) stakeholders' satisfaction (i.e., client, contractor and subcontractor); 4) potential future collaboration; and 5) capability enhancement. Similarly, Gunduz and Elsherbeny (2020) highlighted claim management is among measures of core competency function, as the main functions of contract administration performance framework. Therefore, claim management is a core competency for managing construction claims, with its specialised indicators and two levels of project and organisation. Such levels are echoed by several researchers (cf. Tochaiwat and Chovichien, 2004; Baatez; 2008; Stamatiou *et al.*, 2019) who use five processes of claim management (i.e., identification, notification, documentation, presentation and resolution). Duodu and Rowlinson (2021) claimed that the operational and financial dimensions of firm performance affected by the organisational ambidexterity is among the most important theories and constructs which are organisation- and management-focused (Hughes, 2018). The concept of organisational ambidexterity includes (Petro *et al.*, 2019): levels (i.e., strategic, projects, organisation and individual); dimensions (i.e., knowledge, technology, behaviour and process); and mechanisms (i.e., structural, learning, selection and communication).

Recently, organisational ambidexterity and X-inefficiency theories have gained some traction as a theoretical foundation to explain intra-firm related phenomenon (cf. Mirzaee *et al.*, 2022; Anago, 2022; Wilms *et al.*, 2019; Tamayo-Torres *et al.*, 2017). This present study attempts to integrate X-inefficiency theory with organisational ambidexterity theory, as a plausible choice to facilitate the declaration of improving organisational claim performance. This is because the X-inefficiency theory focuses upon the utilisation inefficiency of firm's sub-optimally claim performance (Leibenstein, 1979; Vanagunas, 1989), whilst simultaneously managing the exploration -and exploitation-related problems (O'Reilly III, 2013; March, 1991). Notably, integrating organisational ambidexterity (i.e., the organisation behaviour and selection levels) with the behavioural dynamics of X-inefficiency theory (i.e., quality decision-making), helps uncover CMOs' functions for improving claim performance. These functions are managing closeout completion claims, ambidextrous program management and dispute settlement (e.g., alternative dispute resolution, litigation and ambidexterity management). 'Closeout' management, as a main element of the contract administration performance framework, can engender optimal performance (Gunduz and Elsherbeny, 2020). However, managing its completion claim is complex and involves: 1) considering the rejected requests of project issue management. Shalwani and Lines (2022) proffer that issue management (as a project control technique) for mitigating of the project challenges, by using the issue log during execution for the remainder of the project; and 2) considering organisational project/ program management (cf. Havila *et al.*, 2013; Lee *et al.*, 2021). In addition, some scholars (cf. Jones *et al.*, 2019; Matthews *et al.*, 2015) claim that process improvement of organisational ambidexterity is critical to understanding its conflicting aims and contradictory variations. 'Ambidextrous program management' (as a new type of multi-project management), bridges the project management and ambidexterity literature (Midler *et al.*, 2019).

To effectively manage program conflicts, Wang and Wu (2020) suggest the program conflict management model (PCMM) including conflict identification, prevention, resolution and feedback, with unique causes, impacts and alternative resolution strategies. Nevertheless, disagreement abounds among researchers about dispute-related issues. For instance, some researchers (cf. Fenn *et al.*, 1997; Gebken and Gibson, 2006) believe that: conflict and dispute are two separate phenomena and that conflict cannot be avoided but instead should be managed and minimised. Hence, where conflicts lead to disputes, they should be resolved. In contrast, other researchers (cf. Acharya *et al.*, 2006; Osei-Kyei *et al.*, 2019) believe that conflict itself should be resolved and that a spectrum of conflicts can occur and culminate (or intensify) into disputes. Notwithstanding these, when a dispute emerges, alternative dispute resolution (ADR) methods are commonly adopted. ADRs (representing non-binding negotiation to binding arbitration) are alternatives to avoiding litigation in disputes

among contracting parties (cf. Lee *et al.* 2016). Haugen *et al.* (2015) split dispute resolution strategies into two dichotomous categories *viz.*: non-adjudicative (including negotiation, partnering, consulting and mediation); and adjudicative (such as arbitration and litigation). Surprisingly, Chaphalkar and Sandbhor (2015) believe that although ADR methods seek to avoid litigation, their implementation creates conflicts in defining the procedure and resource required. Although the non-fulfilment of resolution clauses is among the major causes of litigation (Sinha and Jha, 2020), there are some focus areas, people and behavioural factors and process which decode a decision to pursue litigation (DTL) and facilitate its management (cf. Echternach *et al.*, 2021; Jagannathan and Delhi, 2022; Jagannathan, Delhi, 2020).



**Figure 1.** Basic CMO knowledge development.

Consequently, based upon the literature and contributing towards organisational ambidexterity and X-inefficiency theories – in a construction context, basic CMO knowledge development is uncovered (refer to Figure 1). Thus, adopting a CMO foundation among the three main components of: 1) PBO design for OPM conflict engagement fit (functions and structure); 2) the organisational ambidexterity theory (PBOs’ conflicts and ambidexterity of their programs); and 3) the X-inefficiency theory (intra-firms’ behavioural dynamics) - this present study therefore proposes a CMO foundation that utilises these three components and other PBOs’ construction claims components (see Figure 1). Consequently, drawing on this foundation and using an international construction firm case, this work endeavours to develop a reference framework for a CMO.

**3. Research methodology**

Underpinning philosophies adopted within this present study are interpretivism and postpositivism (cf. Bortey *et al.*, 2022; Roberts and Edwards, 2022; Bayramova *et al.*, 2023) to test theories proposed using abductive reasoning. Specifically, the research process adopted consists of four main steps: 1) identifying knowledge base elements of CMO (see Figure 1), 2) sampling and data collection, 3) data analysis (root causes analysis); 4) multiple triangulation-based validation – refer to Figure 2. The research undertaken was governed by a strict ethical protocol guiding this work that included: anonymising all participants’ demographic details; holding all information in a secure location and neither disseminating or divulging to any third party without their express permission

in writing; and ensuring all participants could access results in aggregate form post research completion (cf. Fisher *et al.*, 2018; Law *et al.*, 2021; Taylor *et al.*, 2022)

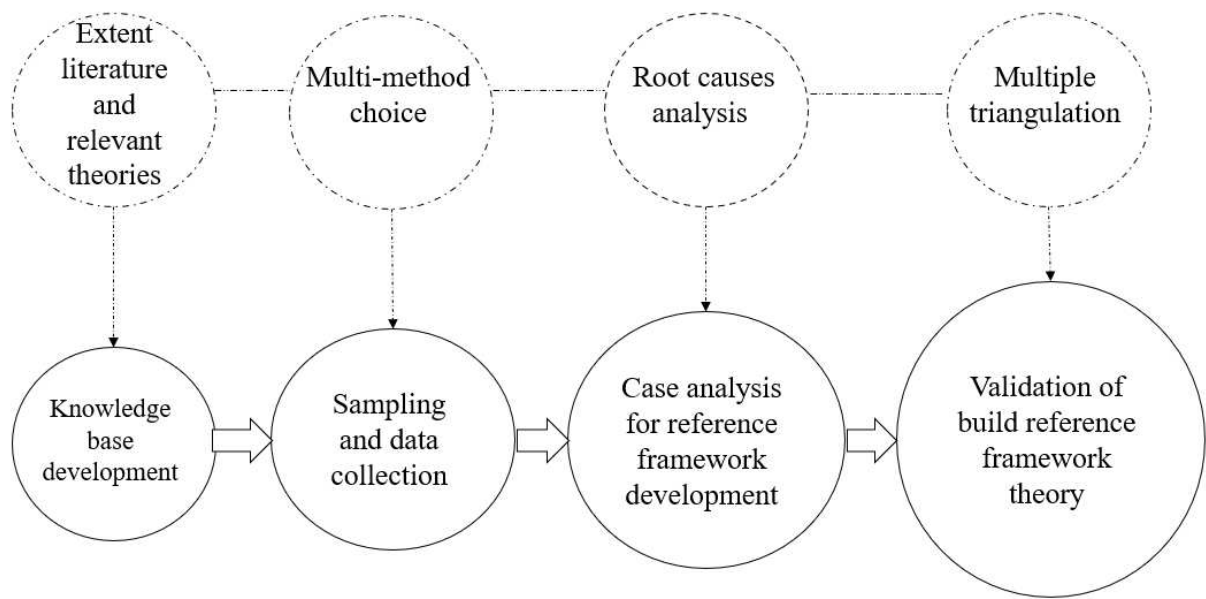


Figure 2. Research flow.

3.1. Sampling and data collection

Integrating an extensive review of extant literature and relevant theories resulted in the development of a knowledge base for CMOs (see Figure 1). A multi-method approach, including a single case study and an expert panel, was used for sampling and primary data collection. This approach is chosen because of its suitability for understanding complex and unique qualitative elements of a construction related phenomenon (cf. Lehtovaara *et al.*, 2022). Consequently, a case study strategy (cf. Fulcher *et al.*, 2022; Owusu-Manu *et al.*, 2022) is used for addressing knowledge deficit on the specific problems of ambiguous intra-firm related phenomenon and context. It should be noted that managing the sub-optimally and exploration -and exploitation-related problems of PBOs are ambiguous, owing to their inefficiency behavioural dynamics and organisational ambidexterity paradoxes, respectively. To this effect, a single case study focuses on phenomenon and context boundaries to clearly comprehend the dynamics existing within a single real-life context setting (Eisenhardt, 1989; Yin, 2009). Moreover, to achieve a good outcome from a case study, in addition to its archival documents, the voice of its participants must be included. By doing so, the mid- and top-level managers views of an international construction company were sought, by forming a focus group discussion (FGD), consisting of: Chairman of the Board, Director of CMO Department, Director of PMO Department, Director of Legal Department and Director of Financial Department. FGD is a dynamic and widely adopted qualitative method; for this present research it involves a group comprised of 5 – 10 participants which is facilitated by a mediator (the researcher) to add dimensions of interactions among them (Kitzinger, 1994; Aladag and Işık, 2017). FGD also considered a majority view to resolve any disagreements between participants. Previous research work (cf. Mirzaee *et al.* 2022a) adopted a case study and its internal FGD for developing strategies in board related construction. Thus, a multi-method approach has been used to discover the efficiency of adopting CMO in construction companies, to develop a reference framework.

3.1.1. Selection criteria

As an international firm with experience of Iranian domestic and international construction, Company B was selected for the case study and its intra-organisational structure in managing claims was reviewed based on the following criteria. First, managing international construction business requires comprehending the sector players (including the involved case firms (as a provider of projects)) and their countries (of primary location (e.g. headquarters) and operation) (cf. Martek, 2022;

Fletcher *et al.*, 2018). In this regard, Company B of Iran has involved to build international projects in Iraq. Second, Company B has encountered extrinsic macro-economic risks in domestic and international dimensions. It is because an international construction company comprises diverse risks and requires managerial best practice (Lee *et al.*, 2011). Third, Company B established a department for managing claims at the organisational level. Notably, the designed organisational structure for this department has fundamental differences with the PMO and legal departments, especially in terms of goals, strategies and organisational tasks. This point was echoed by Parchamijalal *et al.* (2023) who noted that the CMO maturity model contributes to managing such claims. Finally, in shedding light on the “selecting suitable case,” particularly in the period of time available for the case and its internal FGD, this international firm case can optimise organisational learning (Tellis, 1997).

### 3.1.2. Case and its participants description

Company B has a registered head office in Tehran and is a “first-grade” large (and general) contractor in six industrial fields of: buildings and structures; water; power; industry and mining; facilities and equipment; and roads and transportation. Established in the 1992, company B has participated in 51 large national projects and five international projects – with a variety of project delivery systems such as: engineering, procurement, construction (EPC); build, operation, transfer (BOT); and design, build, financing (DBF). Company B is also registered at four overseas “branch offices” and a “holding company” with five subsidiaries – in design, trade, machinery, steel works and insurance services. Company B’s man-power is divided into three main parts viz.: staff (388 members); onshore (around 4,000 members); and five main subcontractors. The company has had a five-year period (2011 to 2015) turnover of 216, 117, 129, 139 and 154 million dollars, respectively. Projects competed since establishment include: 54 Km of underground tunnel and metro lines; 7,500 MW (15 cooling towers) of power plants; construction of a 15,000 tons/day cement factory, 1.12 miles of bridges built; 700,000 M<sup>2</sup> building of building space; 600,000,000-litre fuel tankers; 147,500 seats stadium; 5,310 vehicle multi-story parking; and 600 hospital beds. In 2021, a new department created in company B named “*projects closing and follow-up*” was established for managing organisation claims as a bespoke team with functions that differ from the contract’s affairs office and PMO. All members of the FGD – with 20 to 35 years of management experience – hold main managerial positions within company B, who were somehow involved in settling the organisation’s disputed claims. Considering these, the B company and its internal FGD participants description meet the sample eligibility criterion for inclusion in this present research.

### 3.2. Data analysis

Data analysis techniques adopted follows a root-cause analysis process (cf. Liu *et al.*, 2015; Maemura *et al.*, 2018; Mirzaee 2022b). Accordingly, based on the CMO foundations diagram (Figure 1), root causes and organisational claim performance in company B was identified. Further, the FGD-based case analyses (derived from Figure 1) were discussed to developing a reference framework for CMOs, to improving claim performance of PBOs.

### 3.3. Multiple triangulation-based validation

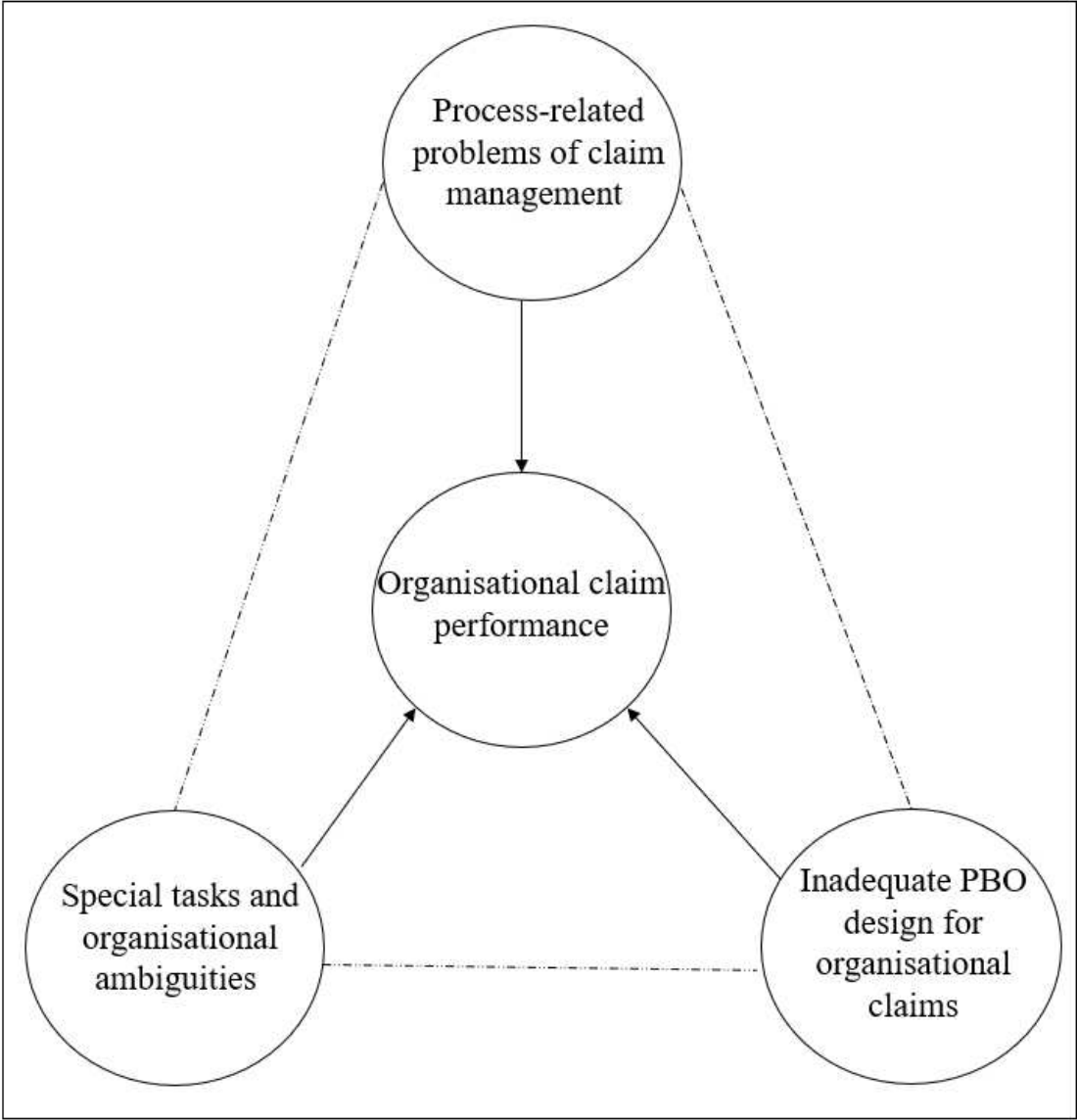
Akin to previous studies (cf. Aladağ and Işık, 2017; Mirzaee *et al.*, 2022a), a ‘multiple triangulation’ approach is used for validating the framework, by developing a FGD and the case data (see Figure 2). According to Kimchi *et al.* (1991), multiple triangulations can be fulfilled by developing an investigation triangulation and a data triangulation simultaneously. Notably, for avoiding human bias and more confidence, the views of a new (external) FGD (a senior expert panel with higher experience than the internal FGD) are taken to fulfilling the validity.

## 4. Root cause analysis: the multi-method results

Notable claim performance observed in company B were government related penalties, actual ending deviation and abounding of some projects, bank guarantees tensions, dissatisfied clients and seven of under legal (in the stage of arbitration or judicial proceedings) projects and market development issues– particularly, in terms of domestic construction. These negative outcomes stemmed from entitlement miss and time-bar miss when handling its projects claims, and ignoring



its financial and operational dimensions. Although the “*projects closing and follow-up*” was developed for managing such claims, company B has encountered several disputed claims (e.g., lack of substantiation) and severity indicators (e.g., direct cost of litigated cases). The causality diagram of knowledge depicts and claim performance of company B (refer to Figure 3), suggested by the internal FGD and shedding light on extant literature and relevant theories of the CMO foundations. This diagram consists of three root causes: 1) special tasks and organisational ambiguities; 2) process-related problems of claim management; and 3) inadequate PBO design for organisational claims and its solution. More depth, precision and validation details are clarified in the following sub-sections.



**Figure 3.** Causality diagram of claim performance in company B.

4.1. *Special tasks and organizational ambiguities*

The scope of managing projects claims within company B, according to the archival documents (refer to Table 1), was divided into ongoing and closing categories with special tasks.

**Table 1.** Special tasks for managing project claims of Company B.

Row	Ongoing	Under closing
1	Continuous monitoring:	Closeout management:

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	<ul style="list-style-type: none"><li>• Review of contract status and material balance reports from PMO and contract affairs units</li><li>• Follow-up to finalize invoices from the Clients in order to reduce and release the guarantees</li><li>• How to behave in partnership agreements</li><li>• Documentation for referral to dispute resolution authorities</li><li>• Divers insurances for labor complaints and project all risks</li><li>• Follow up on HSE related documents</li></ul>	<ul style="list-style-type: none"><li>• Document and record management</li><li>• Verify physical works completion</li><li>• Timely issue taking over certificate</li><li>• Notify employer about due payments</li><li>• Site dismantling and machinery transferring</li><li>• Timely release retentions</li><li>• Timely processing final account</li><li>• Document lessons learned and best practices</li></ul>
2	Intersection and/or termination in coordination with the legal and contract affairs departments	Alternative dispute resolution management
3	Documents evaluation by using document control center (DCC) system	Follow up on insurance and tax issues
4	Performing other tasks assigned by the senior managers of the organisation	File a lawsuit and litigation management

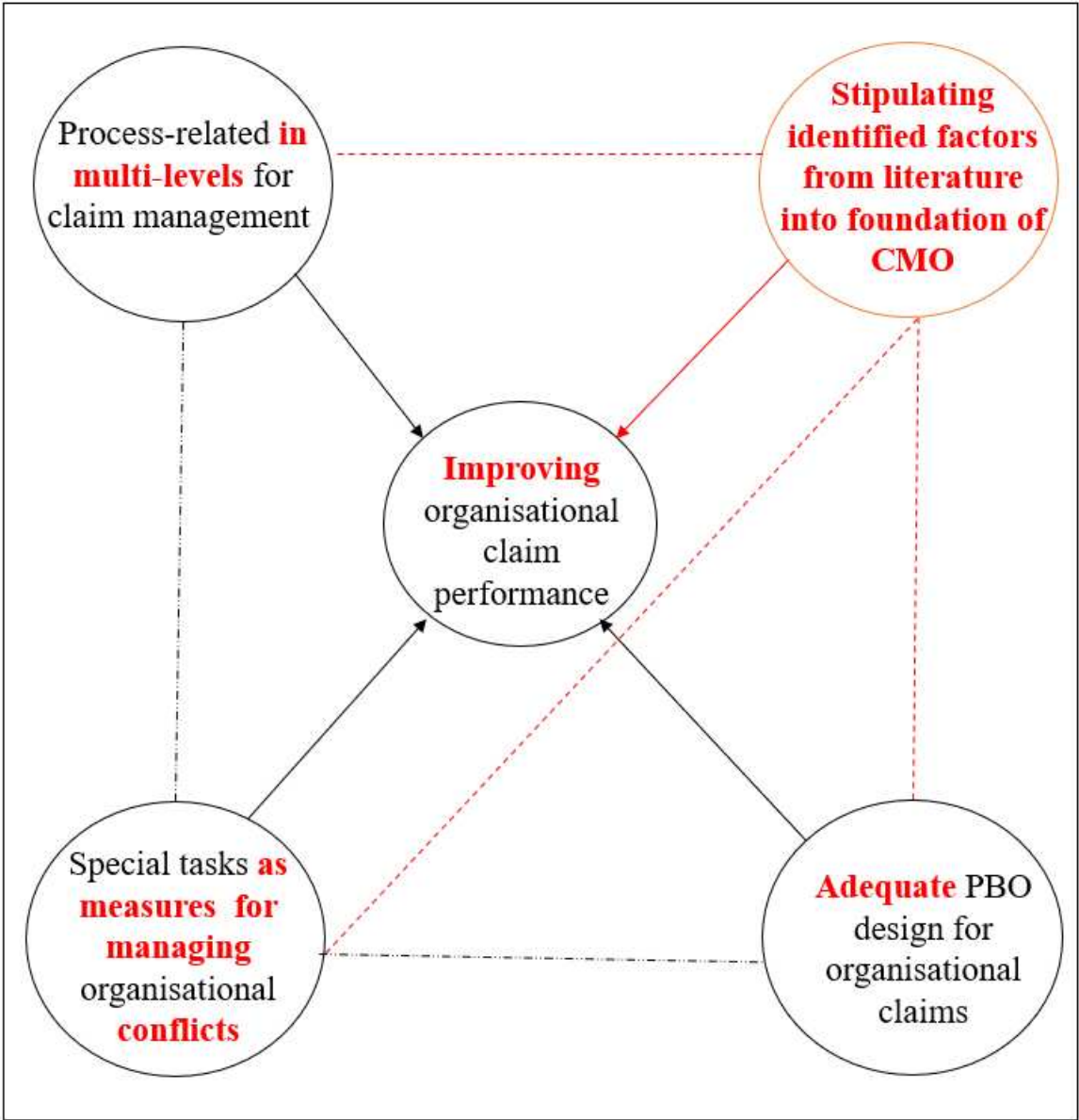
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Although managing the issues and claims (in both the projects and company B’s organisation levels) can be achieved comprehensively under these categories, the “*projects closing and follow-up*” was faced with some organisational ambiguities, namely: 1) overlapping with other departments. The claim performance indicators have been neglected, as the time and cost deviations are related to the PMO’s monitoring function. The balance of materials and contract status reports, and staff complaints are also related to the contract’s affairs and legal departments, respectively; 2) boundary between the issue and claim management. It is because issue management (as a promising project control toll), deals with project’s matters which their request’s forms were agreed between contracting parties previously. Notably, such matters can be settled by claim management when the issues remain dissolved. However, the “*performing other tasks assigned by the senior managers of the organization*” has not been related to project claim management due to its organisational nature; 3) managing organisational ambidexterity. This encompasses paradoxical decisions for the chief executive officer (CEO) of company B, particularly in the people-oriented and work-oriented imbalances and environmental dynamism for the company’s survival. Some members of the FGD believed that the CEO is more work-oriented rather than being economic-oriented, shedding light on the continuous discussion among them – the economic-oriented replaced with people-oriented. They concluded that

work and economy are intertwined and inseparable categories, and an influencing factor of people is emotion (i.e., emotional intelligence) due to its closely coupled relationship with conflict. However, all the members agreed the continuity of work harmonisation may effect on entire projects' economic viability; and 4) dispute resolution as a specific function of the department. The FGD accepted that the '*managing completion closeout claims*' can be considered as a specific function for the CMO, which it may complete with the dispute settlement. It is because actual ending deviation and abandoning of some projects were the main problems of company B thus, optimal closing of these problematic projects was a priority for handling. To this effect, the concept of managing ambidextrous programs were considered by the department. However, such closing of projects resulted into organisational paradox conflicts, some of which required the ADR and litigation method. Besides, managing ambidexterity in some cases accompanied by adopting effective dispute settlement methods overlooked in company B.

#### 4.2. Process-related problems of claim management

In the "*projects closing and follow-up*" department, different processes were involved in different groups' levels with multi-levels within each group: 1) *claim phases and timeline*. Documentation (i.e., quality and completion records) and presentation (i.e., ill-presented and soft claims) were the main concerns when managing organisational claims. The FGD disclosed that in some projects the shop and/or as built drawings were not submitted for arbitrators, which was a root cause for their unfair decision when the votes are announced. Arbitrators also encountered some limitations (such as delayed payment, tax and insurance penalties) because of poor statement of claims and legal remedies for soft claims. 2) *maturity model*. This model within company B was identified under preliminary claim management, due to a lack of clear planning towards claims, and its transition stage was based on organisation awareness claim management. However, the FGD claimed that by supporting the board of directors and CEO, the claim submission strategy should be promoted. To this effect, the financial resource and authority were the main problems to implementing this strategy, since these are prerequisites for upgrading the level of maturity even to the advanced level. 3) *business context*. The internal FGD within company B highlighted the crucial role of business context process, as some of which operated outside the international (not domestic) market. Drawing on how the company claims can be comprehensively identified, the business levels were intra-organisation (four foreign branches and a holding company with five subsidiaries), inter-organisation (clients, sub-contractors and governments institutions) and trans-organisation (global construction and national culture) levels. According to the FGD, these multi-levels process were identified as the potential process in a broad construction perspective, in particular, international entry mode. 4) *intra-firm structure*. Some functions of the "*projects closing and follow-up*" implemented through coordination with other internal departments (see Table 1) e.g., contract affaires, PMO, financial and legal offices. Although outputs of such offices in claim-related issues was finalised by the "*projects closing and follow-up*" office, the FGD prescribed an insightful understanding of the PBO design framework to facilitate rational decision making.

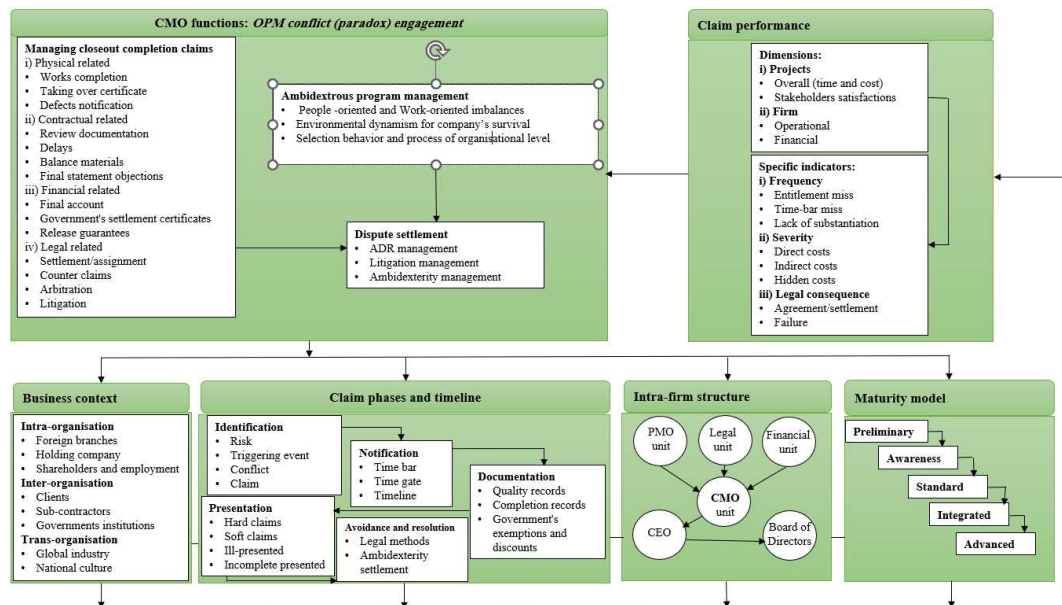


**Figure 4.** Primary solution framework for improving claim performance in company B.

4.3. Inadequate PBO design for organizational claims and its solution

Although structure and process were considered as the main aspects in PBO design of company B, the FGD members suggested that the strategy, behaviour and human resource aspects also should be considered for achieving a fit design. As a first stage towards providing a solution, Figure 4 outlines the FGD’s comments for improving the root causes of claim performance in company B, drawing on its causality diagram (see Figure 3). To address these commitments, as a refined and final stage, the reference framework for claim management office (RFCMO) is presented in Figure 5. The developed basic knowledge, causality diagram and initial solution outlined for CMO, intertwined with its functions, processes and claim performance dimensions/indicators are the basic components of the framework.





**Figure 5.** Reference framework for implementing claim management offices.

#### 4.3.1. Validation of the framework as build theory

The case study (with its internal FGD) reaffirms the framework's validity, as a data triangulation element of the multiple triangulation approach. In this regard, for validating of the reference framework, all of the basic components (including the knowledge base, causality diagram and primary framework) were considered by an external FGD from four high-ranking national organisations including: 1) two of the three members of the Supreme Technical Council of Iran's Construction Industry, which deal with arbitration of disputed infrastructure projects; 2) the CEO of the construction companies syndicate of Iran, which deal with all contractors affairs; 3) a board member of Iran Technical and Engineering Service Exporters Association, which deal with international firms issues; and 4) the CEO of a large Iranian construction company with more than 35 years managerial experience.

Regarding the stages of development of this senior specialist panel; at first, the CEO of company B was requested to recommend panel members, and then to obtain their final informed consent by following up. The CEO of company B has accrued significant managerial experience in all of the four mentioned organisations, and is still an active and well-known member of them – hence their input was invaluable. Experts' feedback received suggested minor improvements in the CMO context and generality of the framework as follows: 1) adopting CMO for managing projects and 'guild' (or contracting guild/or union) claims of PBOs. That is, the project claims are specific for a project managed by the company, but the guild claims are general for all contractors (i.e., insurance and tax issues); 2) as the framework contributes to international large companies, it should be customised for SMEs; and 3) claim performance also may be affected by emotional conflict among the claim team thus, cumulative emotional intelligence within the team should be fulfilled in the maturity model of the framework (as a required resource when upgrading to higher levels of the maturity model). Notwithstanding these, this FGD fully affirmed the consistency and comprehensiveness of the framework and its inputs. Thus, taking advantage of this investigation triangulation and the data triangulation provided valuable and validated the RFCMO for managing project and guild claims of a large contractor.

## 5. Discussion and contributions

RFCMO is based on integrating ambidexterity theories with X-inefficiency and the case study, generating a reference framework for adopting CMO. As demonstrated in Figure 5, the suggested framework encompasses comprehensive areas of the CMO concept. The RFCMO has six main parts, namely: 1) CMO functions; 2) claim phases and timeline; 3) maturity model; 4) intra-firm structure; 5) business context; and 6) claim performance outcomes that tailors theories, strategies and lessons learned for improvement of claim performance. The RFCMO (refer to Figure 5) suggests that the

functions (as main responsibilities) of the CMO manager include: '*managing closeout completion claims*', '*ambidextrous program management*' and '*dispute settlement*'. Each of them was subsequently distinctly classified into several sub-functions. Namely, sub-functions of the managing closeout completion claims are: physical related (i.e., works completion); contractual related (i.e., delays); financial related (i.e., release guarantees); and legal related (i.e., counter claims). Such organisational sub-functions, in addition to the program-related requirements, should be implemented; where some of the contract issues may not be impossible to manage by a project team. The sub-functions of the ambidextrous program management are: economic-centric and obligation-centric imbalances; environmental dynamism for company's survival; and selection behaviour and process of the organisational level. In this part, such paradoxes can be resulted in better (constructive) task and process conflicts instead of destructive relationship conflict –as a method for managing organisational claims of firms. This point echoed by Mayer (2015) as the conflict dialectic; better paradoxes bring better conflict. The ADR, litigation and ambidexterity management are also identified as the sub-functions of dispute resolution. Hence, a CMO manger should focus on the sub-functions of the other two parts, where some of the contractual issues and/or firm's paradoxes may result in destructive conflicts. Notably, the reference framework (refer to Figure 5) provides three main functions, along with 20 sub-functions, which can be used systematically by firms considering the multiple level's groups. Moreover, some of the parts in Figure 5, remain true to previous studies concluded viz.: 1) closeout claims (cf. Gunduz and Elsherbeny, 2020); 2) improvement of organisational ambidexterity (cf. Wang and Wu, 2020; Midler *et al.*, 2019; Petro *et al.*, 2019; Jones *et al.*, 2019; Matthews *et al.*, 2015); 3) dispute settlement (cf. Echternach *et al.*, 2021; Jagannathan, Delhi, 2020; Lee *et al.*, 2016; Chaphalkar and Sandbhor, 2015 ); 4) claim phases and timeline (cf. Baatez, 2008; Barakat *et al.*, 2019; Stamatiou *et al.*, 2019); 5) CMO maturity level (cf. Parchamijalal *et al.*, 2023); and 6) claim performance indicators (cf. Gebken and Gibson, 2006; Seo and Kang, 2020 ). However, as previous scholars have reported on OPM-related decisions (cf. Karim *et al.*, 2022; Turner, 2020; Müller *et al.*, 2019), past research has not figured out how all of these behavioural-based concepts can be integrated, to the design structure of CMO in firms' organisations. That is, the X-inefficiency and ambidexterity theories-based framework contributes to addressing the ambiguous intra-firm related phenomenon. Accordingly, 24 sub-levels under 13 levels, when undertaken in an intra-firm structure with five elements, facilitate the intra-firm decision and behaviour necessary to improve frequency, severity and legal consequence indicators of claim performance.

### 5.1. Contributions to theory

This study's principal contribution is that integrated X-inefficiency and ambidexterity theories (which captures the intra-firm irrational managerial decisions, particularly in international firms) can improve claim performance. Specifically, this research contributes to current CMO literature by developing the reference framework. That is, previous research focused on how to design maturity model to effectively claim management process, ignoring the CMO functions and its specific performance indicators. This study extends the CMO literature by exploring the reference framework, which have not yet been investigated in a OPM context. Hence, this study tailors theories, strategies and lessons learned to understand how claims performance of firms can be improved. By doing this, the RFCMO establishes a solid foundation and a road map for future empirical research in CMO context.

### 5.2. Practical implications

This work offers significant implications for five groups of PBOs managers and teams including top managers, program managers, project managers, claim managers and claim teams. The developed knowledge base, causality and primary solution diagrams (as presented in Figures 1, 3 and 4), will inform these five groups of international construction firms to choose a CMO approach for managing OPM-based conflicts. These diagrams act as guidelines to motivate top managers of large construction firms, for rational claim decisions, shedding light on the RFCMO (see Figure 5). The proposed framework can help the project and program managers gain a true understanding of claim performance, accompanied with its four dimensions and six specific indicators, to clarify the dark side of project management and ambidextrous programs. According to the reference framework, the claim managers and teams of PBOs are involved in three main groups of practices (at

six parts)—function-, process- and performance-based activities—all of which are crucial for improving claim performance. While these practices are specific to international large construction firms within construction industry, a large international construction firm serves as a recognised proxy of broad construction, and thus can be considered to provide lessons broadly across the PBOs of other industries.

## 6. Conclusion

This study develops an OPM-based RFCMO for PBOs to improve their claim performance. For this purpose, ambidexterity theory was integrated with X-inefficiency theory, and the multi-methods of an international construction firm applied, as the theory building based of RFCMO. Emergent research findings reveal that the suggested framework includes ‘managing closeout completion claims’, ‘ambidextrous program management’ and ‘dispute settlement’ along with 20 sub-functions. To implement CMOs with optimal claim performance within PBOs, five group levels with 24 sub-levels under 13 levels proposed by improving the four dimensions and six specific indicators of claim performance. That is, it facilitates rational intra-firm decisions to improve claim performance by the function-, process- and performance-based activities. Further, a new perspective at six parts enables managers to determine how to design an organisational structure for adopting an OPM-based CMO in their PBOs, particularly in international construction firms. This would enable them to clarify the dark side of project management/ ambidextrous programs thus helping them to make rational claim decisions.

There are some limitations associated with this research. First, as the managing closeout completion claims are project- and program-based, the research findings require future projects and program case studies. This is because ‘program closeout’ may improve firms’ claim performance and has specific indicators. Second, as the FGD noted the current level of the CMO maturity model can be promoted by equipping financial and team emotional intelligence resources. Third, Wang and Wu (2020) developed a program conflict management model with specific elements, some of which are under the CMO functions. In this regard, the ‘program conflict (paradox) engagement’ aspects remain unknown. Fourth, the FGD highlighted findings contributes to specific large contractor firms, other contractor firm types (i.e., SMEs) may need some changes in the framework. The CMO structure also shows the consensus on the effectiveness of contractors’ firms. Considering these, the clients, consultants and construction law firms, in addition to the other types of contractor firms will need additional case studies. Further, the average practitioner may be unfamiliar with the scientific instruments adopted in the framework. Hence, future work is required to develop a graphical user interface (GUI) front end and relational database backend to create user friendly software that enables practitioners use the developed framework and predict the risk level posed in practice. However, the framework could be performed for other (types of contractors) firms and industries to boost PBOs managers into improving claim performance. By using the RFCMO and appointing the director of CMO, they will also enable to select a specialist dispute review board or arbitrator(s), as conflict specialist, when PBOs want to settle their disputes professionally and efficiently.

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