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<sup>1</sup>“ADCB” Islamic Bank JSC, Almaty, Kazakhstan<sup>2</sup>Dream Space Decoration Cooperation, Almaty, Kazakhstan**ANALYZING CRITICAL SUCCESS FACTORS  
AND RISKS IN PROJECT MANAGEMENT PRACTICES  
IN DEVELOPING COUNTRIES****Abstract**

Project management has primarily developed within high-income countries. However, over the last 15 years, capital-intensive projects have been shifting toward developing nations where conventional frameworks often underperform. Despite this, research on the critical success factors (CSFs) and risks influencing project outcomes in developing countries remains fragmented. This paper conducts a systematic literature review of 41 peer-reviewed articles published in the Scopus database in the last decade, covering 20 developing countries and 8 cross-country studies. Following the PRISMA protocol, this study identifies CSFs and risks in project management (PM) in developing countries through inductive review and deductive coding based on two theoretical lenses, namely, institutional and contingency theory. Furthermore, this paper analyzes the mechanisms and contextual dependency of these factors. The inductive findings identify 22 CSFs and 21 risk factors. In order to report the most critical ones, 8 CSFs and 8 risks are retained based on their frequency of occurrence. The results reveal that they form systematic corresponding pairs, with six of the eight CSFs directly mapping onto six risks. Moreover, institutional theory (IT) explains the dominance of external influences through coercive, normative, and mimetic mechanisms, as well as institutional voids, while the contingency theory (CT) shows variable outcomes across different project characteristics. Overall, the findings provide practical implications for project managers, policy makers and business organizations on managing projects in emerging countries. It is noted that project strategies should be adapted to project scale, with stakeholder-focused approaches in small projects, institutional building in medium projects, and macroeconomic and political risk management in large projects.

**Keywords:** Contingency theory, Critical success factors, Developing countries, Institutional theory, Project management, Risk factors, Risk management, Systematic literature review.

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## Introduction

Project management emerged as a formal professional discipline in the middle decades of the 20th century. For much of its history, PM theory and practice were developed in mature economies which have reliable contract enforcement, stable regulatory systems, specialized labor markets, and effective dispute-resolution mechanisms. However, these conditions are often underdeveloped in emerging economies.

Over the last fifteen years, there has been a growing shift of large-scale projects toward developing countries through initiatives such as the Belt and Road Initiative (BRI), public–private partnerships (PPP), and multilateral development programs. These programs accelerate infrastructure and development projects in Asia, Africa and other emerging regions, which are frequently exposed to high geopolitical risks and subsequent construction delays [1]. Despite this notable growth, empirical studies across construction, transport, energy, and information technology consistently report higher rates of cost overrun, scope changes, schedule delays, and project abandonment in developing countries than in developed countries [2]. This study employs a systematic literature review (SLR) approach to develop an integrated cross-country synthesis of CSFs and risks in PM in developing countries [3]. So, project outcomes are strongly influenced by contextual conditions such as political volatility, weak regulatory enforcement, volatile exchange rates, and limited access to finance.

The existing literature on studying the CSFs and risk factors in PM practices in developing countries demonstrates several consistent limitations. On the one hand, CSFs and risks are often studied separately. In practice, CSFs and risks are frequently mirror images of the same underlying phenomena. For example, effective stakeholder engagement and stakeholder conflict, or skilled personnel and shortages of skilled personnel. Thus, studying them as isolated research terms neglects their structural relationship, produces redundant data, and limits the development of integrated PM frameworks.

On the other hand, the field is theoretically underdeveloped. Many studies report CSFs and risks without explaining their mechanisms. Even when frameworks such as contingency theory and institutional theory are applied, they still lack analytical depth. As a result, the significance of this study lies in the following perspectives. From a theoretical perspective, this study addresses the limitation of separated research on CSFs and risks in existing literature by integrating them into a unified analytical framework. It provides cross-country evidence by applying institutional theory and contingency theory to interpret project outcomes systematically in emerging countries. From a practical perspective, this paper guides project managers, policymakers, and development agencies to align project strategies with contextual conditions and project scale, and improve risk management in resource-constrained environments.

Therefore, this study is designed to achieve the following research aims:

First, identify the CSFs and risk factors reported in the reviewed studies;

Second, explain the observed patterns using institutional theory as the primary theoretical lens and contingency theory as the complementary lens;

Third, provide practical implications and valuable insights for project governance in developing-country environments.

This analysis is guided by the following three research questions:

1. Which critical success factors are most frequently reported in empirical studies of project management in developing countries published between 2015 and 2025?

2. What risk factors are most commonly reported as constraining project outcomes in the reviewed literature?

3. How do these success and risk factors vary across different projects and institutional contexts in emerging countries?

## Materials and methods

### Research design

This study conducts a systematic literature review (SLR) approach to develop an integrated cross-country synthesis of CSFs and risks in PM in developing countries. It supports transparent study selection, systematic evidence synthesis, and comparative analysis across multiple developing-country contexts.

After collecting data from the Scopus database, this paper follows an inductive–deductive analytical logic to identify and code CSFs and risks from the reviewed studies. Then a descriptive frequency analysis is applied to prioritize the most frequently reported factors and examine their cross-country consistency. These patterns are further interpreted through a deductive lens informed by PM characteristics, institutional theory, and contingency theory.

### Material collection

The literature search was conducted in the Scopus database. The search was limited to peer-reviewed journal articles and conference proceedings published in English between 2015 and 2025. During this period, project activity increased in developing countries, such as the Belt and Road Initiative, the digitization of project delivery, and the disruption and recovery phases associated with the COVID-19 pandemic. Book chapters, editorials, technical reports, and unpublished materials were excluded to ensure uniform peer review standards.

The following Boolean string was applied to the title, abstract, and keyword field: TITLE-ABS-KEY ( ( “critical success factor\*” OR “CSF\*” OR “enabler\*” OR “risk\*” OR “challenge\*” OR “barrier\*” ) AND ( “project management” ) AND ( “emerging econom\*” OR “developing countr\*” OR “emerging market\*” ) ) AND PUBYEAR > 2015 AND PUBYEAR < 2026 AND ( LIMIT-TO ( SRCTYPE , “j” ) ) AND ( LIMIT-TO ( DOCTYPE , “ar” ) OR LIMIT-TO ( DOCTYPE , “cp” ) ) AND ( LIMIT-TO ( LANGUAGE , “English” ) ) .

### Screening and selection

Article selection was conducted according to the PRISMA protocol [4]. As illustrated in Figure 1, the article selection consisted of four sequential steps. At the first step, the initial retrieval from the Scopus database returned 298 articles. In the second stage, titles and abstracts were screened, and returned articles were classified into “Include,” “Possible,” or “Exclude” based on their relevance to the research scope. This step excluded 62 articles as being outside the scope of the study, leaving 236 articles for full-text analysis. In Step 3, full-text reading was conducted and excluded 195 articles based on predefined criteria, including studies not related to developing countries (n = 78), studies lacking empirical evidence (n = 42), studies not addressing critical success and risk factors (n = 51), and those without accessible full text (n = 24). This step resulted in 41 articles for final inclusion. Finally, 41 studies were analyzed through cross-validation of screening decisions among the authors to minimize selection bias.

### Data extraction and Data analysis:

After reading the full text of 41 articles, the authors constructed a standardized data extraction grid in Microsoft Excel, including baseline metadata such as title, authors, publication year, and journal name. To deepen the analysis, the grid also documented the empirical methodologies, analytical procedures, and country classifications. The findings from this analysis are presented in the first section of the Results and Discussion part. Then, texts, phrases, keywords, and sentences were extracted from the chosen articles, further analyzed, and coded into themes by the two authors based on common patterns across the studies. A certain level of conceptual interpretation was applied during this stage, where semantically similar factors reported across different studies were consolidated into common CSFs and risk categories.

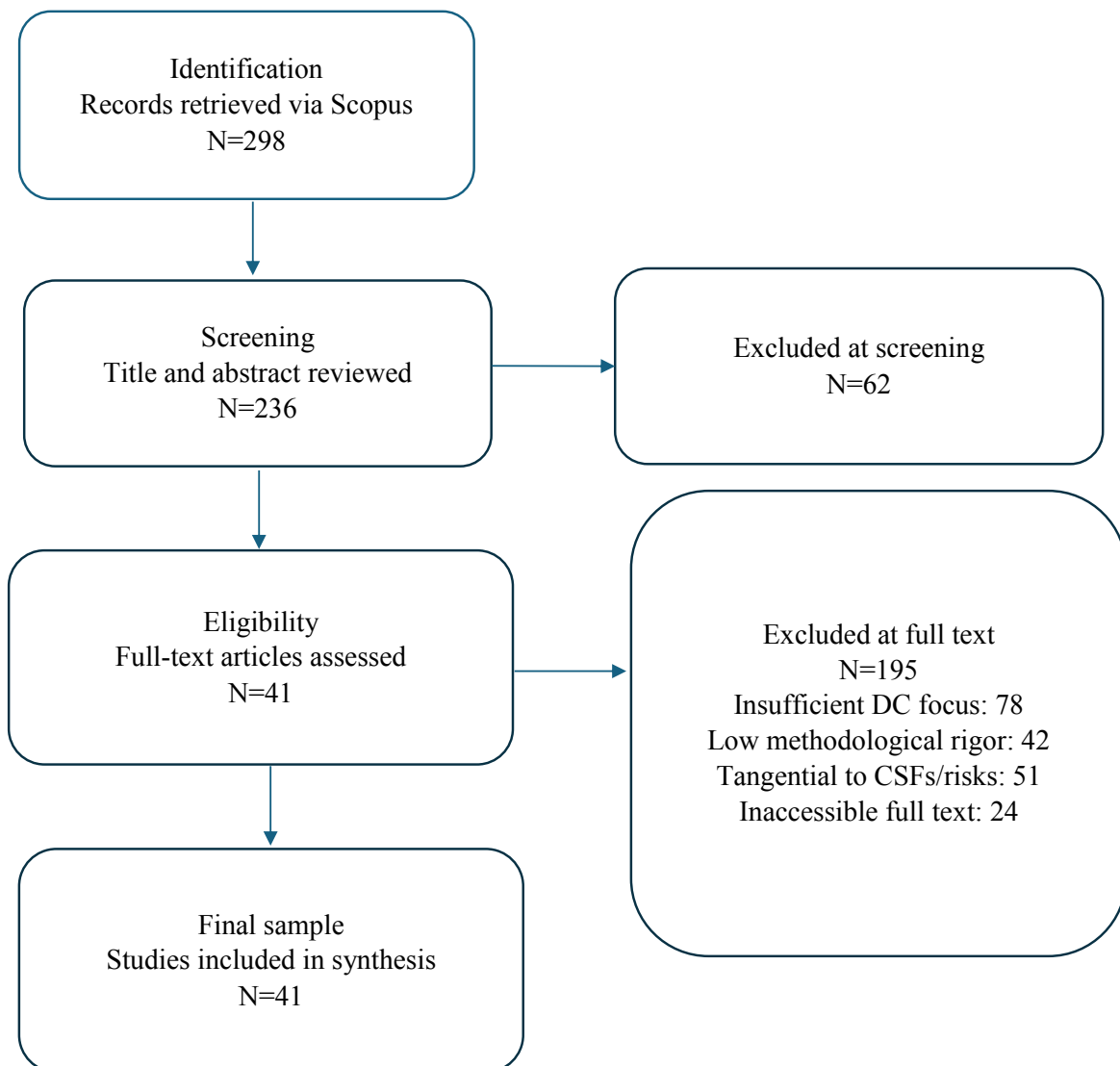


Figure 1 – PRISMA flow diagram

After that, the authors combined deductive and inductive approaches to identify structural dimensions and analytical categories of the final 41 articles. Table 1 presents the results of this step. The inductive approach was applied to identify recurring patterns of CSFs and risks in the reviewed articles. To select the most critical factors, the identified recurring CSFs and risk factors are further ranked by their frequency of occurrence across the reviewed studies. Ultimately, only factors reported in at least 20 papers were counted as dominant factors and were included in the detailed discussion. In addition, the deductive approach drew on three dimensions. Firstly, PM-specific structural dimensions were identified from reviewing previous research in PM [5, 6, 7]. Secondly, Institutional theory [8, 9] explains how the external environment shapes critical success factors and risks. Finally, Contingency theory [10, 11, 12] explains why these factors vary across project phases, sectors, and scales.

Table 1 – Structural dimensions and their analytical categories

Methods	Structural Dimensions	Analytical Categories
Inductive, based on the literature being reviewed	CSF categories (drivers)	Effective planning; project manager competence; effective risk management; stakeholder engagement; clear definition of project objectives; government support; monitoring and control; adequate financial capacity
	Risk categories (barriers)	Weak institutional capacity; weak regulatory framework; communication failures; lack of skilled personnel; bureaucracy; inadequate funding; political instability; corruption
Deductive, related to project management (PM)	Project type	Construction and infrastructure (incl. PPP, transport, housing, building); energy, oil&gas and utilities; IT and software, research and development; international development/donor-funded aid projects; not project specific
	Project phase	Feasibility; planning; bidding; execution; post-project
	Project scale	Small scale; medium scale; large scale; mega-project
Deductive, related to institutional theory (InstT) and contingency theory (CT)	Institutional environment (InstT)	Coercive pressures; normative pressures; mimetic pressures; institutional voids; institutional conformity mechanisms
	Contingency fit (CT)	Organizational-PM fit; Environment-PM fit; Strategy-PM fit; Multi-contingency alignment

## Results and discussion

### Characteristics of selected articles

It is clear from Figure 2, despite the Scopus search starting in 2015, the reviewed 41 articles only covered the period from 2017 to 2025. From around 2017 onwards, the integration of CSFs and risks in PM within emerging country contexts became more visible. Also, a notable concentration in 2021–2023 showed a broader expansion of PM research in developing countries during this timeframe. On the other hand, 33 of 41 articles were single-country studies covering 20 developing countries, while the remaining 8 articles adopt a multi-country or cross-regional approach. Although classified as single-country studies, many of them include cross-country references in their discussion sections, indicating a partially comparative interpretation of findings.

In terms of geographical distribution, Sub-Saharan Africa is the most represented region, with 10 articles (Ghana, Nigeria, Tanzania, Ethiopia, South Africa). The Middle East, North Africa, Afghanistan, and Pakistan (MENAAP) region is accountable for 12 articles (Pakistan, Yemen, Afghanistan, Egypt, Iran, Iraq, Jordan). Multi-regional studies are represented by 8 articles; East Asia and the Pacific – 4; Europe and Central Asia – 3 (including 2 from Kazakhstan); Latin America and the Caribbean – 2; South Asia – 2.

The selected 41 articles applied various research methodologies. By reviewing the primary research design of each study, the authors classified five types of them in Table 2. First, the most common approach is quantitative surveys and questionnaires using descriptive and inferential statistical techniques, such as relative-importance index(RII) and mean-item-score (MIS), chi-square tests, and other non-parametric methods. This approach accounts for 12 of the 41 articles.

Second, regression and structural equation modelling (SEM) also account for 12 studies. It includes Partial Least Squares Structural Equation Modelling (PLS-SEM), Confirmatory Factor Analysis (CFA), and factor analysis methods such as Exploratory Factor Analysis (EFA) and Principal Component Analysis (PCA).

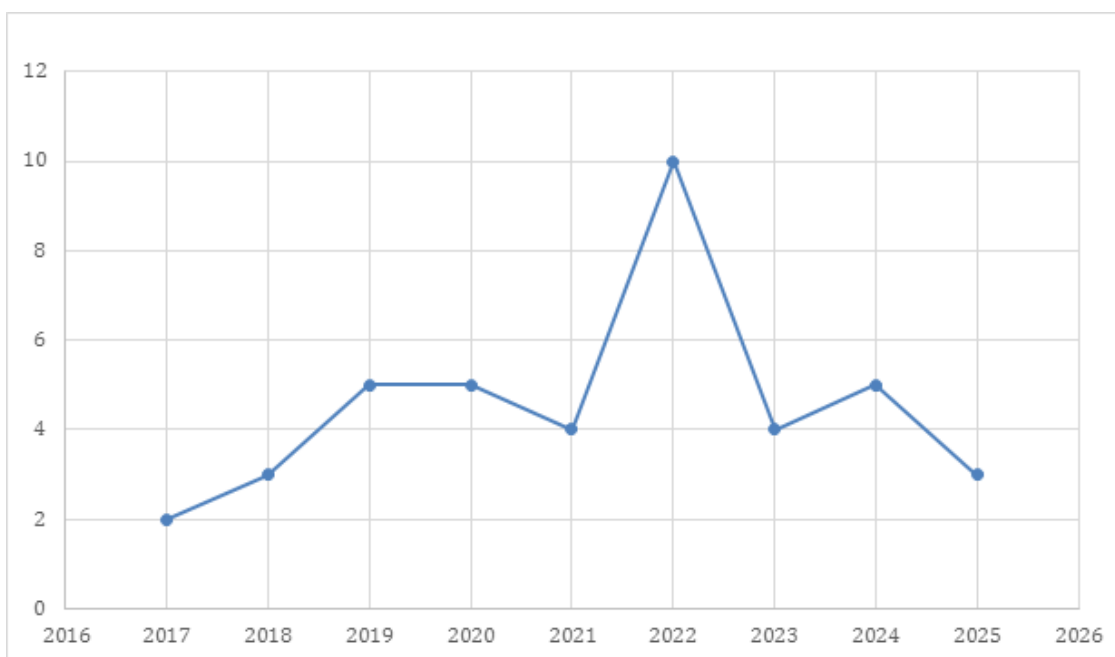


Figure 2 – Articles distribution by time period

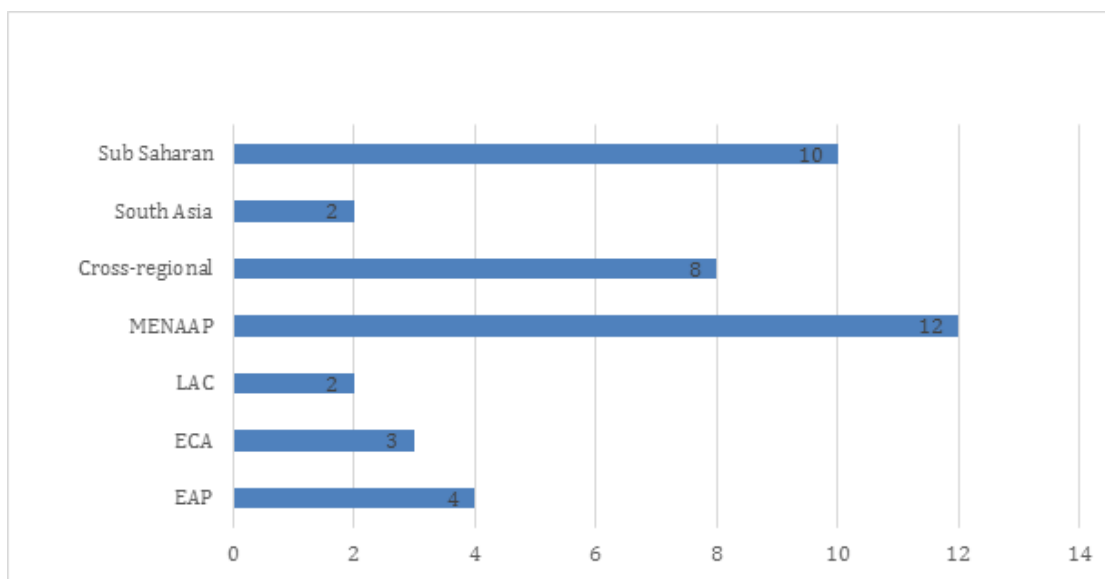


Figure 3 – Distribution of articles by region

Third, 8 articles adopt mixed-methods designs that combine qualitative and quantitative approaches in sequential or convergent configurations. Moreover, six articles solely use qualitative tools such as semi-structured interviews, content analysis, and in-depth case studies. Finally, multi-criteria decision-making and mathematical-modelling techniques appear in 3 studies, including the Analytic Hierarchy Process, the best-worst method, fuzzy comprehensive evaluation, and fuzzy-set qualitative comparative analysis.

Table 2 – Methodological Distribution of the Reviewed Articles

Methodology types	Reference article No.	Frequency
Quantitative Surveys and Questionnaires	S1, S5, S6, S9, S13, S14, S17, S20, S24, S26, S39, S41	12
Regression and SEM	S3, S8, S12, S18, S23, S25, S28, S30, S33, S35, S36, S38	12
Mixed Methods Design	S2, S4, S11, S15, S19, S27, S32, S34	8
Qualitative Studies	S16, S22, S29, S31, S37, S40	6
MCDM and Mathematical Modelling	S7, S10, S21	3

### Critical Success Factors

Inductive coding of the 41 articles identified 22 CSFs. The number of references and the occurrence frequencies are shown in Table 3, Among the 22 CSFs, eight were mentioned in more than 20, including effective planning (29 of 41 articles), project manager competence (28), effective risk management (27), stakeholder engagement (26), clear definition of project objectives (25), government support (24), monitoring and control (23), and adequate financial capacity (21). These eight CSFs are discussed below.

Effective planning is the primary driver of project success, as it requires thorough upfront preparation, a realistic definition of the scope, time and cost considerations, and a clearly defined work breakdown structure, particularly in developing countries. Shafiei and Puttanna [13] demonstrate this in the context of Afghan international development projects. Their five-factor EFA shows Project Cycle Management as the dominant dimension (29.08% of variance explained), with discipline on time/cost/quality and clear project goals ranking highest among the 31 items. Similarly, Durna et al. [14] support this in Turkish PPP infrastructure, where Detailed and Clear Project Identification is also ranked as a top CSF.

The project manager's competence ranked as the second most critical CSFs. Evidence from empirical studies validate this in both Vietnamese construction projects (n=216) [15], and Turkish infrastructure sectors (2–130 experts) [14]. These studies focus on specific rather than generic project manager competencies, particularly leadership ability, human resource management skills, and technical planning skills.

Effective risk management is a crucial connection between the CSFs and risk factors in this study. Saddiqa et al. [16] formally validated this in their study of an IT project in Pakistan. Their findings showed PM risk strongly affects project performance ( $\beta = 0.499$ ,  $p < 0.001$ ), and plays a fully mediating role between contract governance and project performance. This suggests that contractual terms do not improve project performance directly, instead, they operate indirectly by reducing or reallocating project risks. Conversely, Teklemariam and Mnkandla [17] highlight inadequacies in risk management systems in a software project in Ethiopia. The study showed that only 16% of organizations adopted a formal risk management model, and just 27% fully implemented the four steps of risk management. These findings indicate that simply having risk management software or tools is insufficient to guarantee effective risk control. Risk management is only effective when it is involved in regular project procedures and organizational practices.

Stakeholder engagement ranked as the fourth with 26 occurrences. In 2022, Sepúlveda-Rivillas et al. [18] demonstrated a very strong relationship between team management and stakeholder management ( $r = 0.91$ ). In the same year, Alade et al. [19] explained that stakeholder engagement is not a one-time event but an ongoing process. By tracking the Addis Ababa Light Rail project, this project emphasizes the importance of sustained collaboration among key stakeholders for delivering projects successfully.

Clear definition of project objectives was placed 5th. It serves as a foundational front-end enabler. For example, Durna et al. [14] rank clear project identification among the top success drivers in

Turkish PPP projects (mean 4.33), while Shafiei and Puttanna [13] find “clear goals” highest-rated in Afghan development projects (all  $M > 3.5$ ). This early alignment on scope provides a stable reference point for planning and monitoring.

Government support was placed 6th. As a vital institutional factor for project success, it operates in two distinct ways. First, it offers direct aid such as permits, subsidies, and concessional financing. Second, it creates the political and institutional stability needed for other CSF to work effectively. In the case of Kazakhstan, Kamar et al. [20] found similar evidence in the public sector, out of 40 analyzed factors, state policy and digital platforms received the highest weighted score ( $W = 2.38$ ), followed closely by the legislative framework for PM. ( $W = 2.30$ ).

Monitoring and control were ranked as 7th. Based on studying Tanzanian PPP housing projects, Kavishe and Chileshe [21] document the operational form of monitoring. Of the 14 PM practices identified, the three most frequently mentioned were site visits/inspections, inspection records, and site meetings. The study from Ghana in 2020 shows that contract monitoring is considered one of the most effective anti-corruption tools. However, none of these 26 anti-corruption measures reach the required effectiveness level. It reveals that although monitoring tools exist, they are not used effectively in practice.

The eighth CSFs in the developing-country context is the adequate financial capacity. This factor should be considered at the macroeconomic level, not at the project level. Because exchange rate volatility, inflation, timing of funding, and delays in government payments are outside the control of an individual project. This is evidenced by Nguyen et al. [22] in the Vietnamese PPP project studies. It shows that 60% of Vietnamese PPP projects have failed or been delayed partly because of the inadequate compensation mechanisms. Alawneh et al. [23] confirm this pattern for Jordanian green building context, with insufficient client funds is a major cause of cost and time overruns.

Taken together, the 8 retained CSFs work as an integrated system rather than as 8 independent levers [24]. The operational core includes planning, competence, monitoring and control. The coordination layer refers to objectives, stakeholder engagement and risk management. Government support and financial capacity form the institutional and macroeconomic environment within which the operational core operates.

Table 3 – Critical success factors of PM practices in emerging countries

Code	Critical Success Factors	References	Occurrence frequency
C1	Effective planning	S1, S2, S3, S4, S5, S6, S9, S10, S11, S13, S14, S15, S17, S18, S19, S20, S23, S26, S27, S28, S29, S31, S32, S33, S34, S35, S37, S38, S40	29
C2	Project manager competence	S1, S2, S3, S4, S5, S7, S9, S10, S11, S13, S14, S15, S17, S18, S19, S20, S23, S26, S27, S29, S30, S31, S32, S34, S36, S37, S38, S40	28
C3	Effective risk management	S1, S2, S4, S5, S8, S11, S12, S13, S14, S16, S17, S18, S19, S20, S21, S23, S26, S27, S28, S31, S32, S33, S36, S37, S38, S39, S40	27
C4	Stakeholder engagement	S1, S2, S3, S4, S5, S7, S15, S16, S18, S20, S21, S22, S23, S24, S25, S26, S27, S28, S29, S30, S31, S32, S34, S36, S38, S40	26
C5	Clear definition of project objectives	S1, S2, S4, S5, S6, S8, S9, S10, S13, S14, S15, S16, S17, S18, S19, S20, S23, S29, S31, S32, S33, S36, S38, S39, S40	25

Continuation of table 3

C6	Government support	S2, S3, S4, S5, S6, S8, S12, S15, S16, S19, S21, S22, S23, S24, S25, S26, S28, S29, S30, S32, S34, S37, S39, S41	24
C7	Monitoring and control	S1, S2, S3, S5, S6, S9, S13, S16, S17, S19, S20, S21, S26, S29, S30, S31, S32, S33, S35, S36, S37, S38, S40	23
C8	Adequate financial capacity	S1, S2, S3, S4, S5, S6, S7, S10, S17, S18, S19, S23, S28, S29, S31, S32, S35, S38, S39, S40, S41	21
C9	Competent project team	S1, S2, S3, S5, S6, S13, S15, S18, S19, S20, S22, S23, S26, S31, S32, S34, S38, S40	18
C10	Effective contract management	S2, S4, S6, S16, S20, S21, S22, S23, S26, S27, S28, S29, S30, S32, S33, S35, S38, S40	18
C11	Top management support	S1, S3, S5, S6, S8, S15, S17, S19, S20, S21, S23, S24, S25, S30, S31, S32, S38, S41	18
C12	IT and technology adoption	S1, S2, S3, S4, S7, S14, S19, S21, S22, S23, S24, S26, S29, S30, S37, S38, S39, S41	18
C13	Sound legal framework	S2, S4, S5, S6, S7, S16, S19, S21, S22, S23, S30, S31, S32, S38, S39, S40, S41	17
C14	Capacity building	S2, S15, S19, S22, S23, S24, S26, S29, S30, S31, S32, S37, S38, S40, S41	15
C15	Organizational capacity	S2, S3, S4, S5, S6, S7, S19, S21, S23, S25, S26, S30, S31, S32, S38	15
C16	Innovation	S2, S7, S8, S15, S19, S21, S22, S23, S24, S25, S21, S31, S37, S40, S41	15
C17	Feasibility analysis	S2, S4, S5, S13, S16, S20, S23, S26, S28, S29, S31, S32, S34, S40	14
C18	Continuous learning	S1, S2, S22, S23, S24, S25, S29, S30, S34, S37, S40	11
C19	Risk allocation	S4, S5, S8, S12, S16, S21, S27, S28, S32, S40	10
C20	Anti-corruption measures	S6, S16, S19, S22, S27, S30, S32	7
C21	Cross-cultural management	S1, S23, S27, S28, S29, S34	6
C22	Local participation	S16, S23, S28, S29, S32	5

### Risk Factors

Inductive coding resulted in 21 risk factors for the 41 articles. (See in Table 4) Since the minimum occurrence threshold was set at 20, 10 of 21 risk factors met this requirement. Hillson [25] identifies “being late for a milestone” and “exceeding the authorized budget” as examples of risk effects. Accordingly, among these ten factors, schedule delays and cost overruns can be treated as the outcomes of risk occurrence rather than risk factors, indicating project performance deficiencies instead of underlying risk drivers.

Therefore, they are included in the appendix for reporting purposes but excluded from the ten risk factors selected for detailed analysis. Following the exclusion, the remaining eight risk factors were ranked according to their occurrence frequency: weak institutional capacity (39 of 41 articles), weak regulatory framework (34 articles), communication failures (31 articles), lack of skilled

personnel (30 articles), bureaucracy (27 articles), inadequate funding (25 articles), political instability (24 articles) and corruption (23 articles).

Weak institutional capability and weak regulatory framework are the most frequently reported key risk factors, appearing in 39 and 36 of 41 the analyzed articles, respectively. It refers to the gap between institutional structural formalism and their actual project performance, including inefficient regulatory bodies and inconsistent implementation of procurement policies. The existence of such disparities is described by Kambar et al. [20] for the Kazakhstani public sector. The authors reveal that the two most prevalent political risks in their case study are bureaucratic inertia and weaknesses in anti-corruption mechanisms. Moreover, about three-quarters of respondents evaluated the implementation of a national program across central and regional administrations at level 2–3 on a five-point scale, which demonstrates organizational disintegration despite a formal structure.

Communication failures are ranked as 3rd. In a PLS-SEM analysis of delay factors in Pakistani construction projects, information and communication issues are the strongest predictor of time overrun, and lack of coordination within it records the highest single factor loading (0.87) in the entire model [26]. Kwofie et al. [27] refine this pattern in PPP contexts across Ghana and South Africa. Misunderstanding is identified as a universal issue in these two countries, although other communication-related problems vary by context. For example, Ghana is more affected by delays and conflicting information, whereas South Africa faces more challenges related to poorly defined roles among project participants.

The fourth most critical risk factor is lack of skilled personnel. This issue is observed in the Tanzanian case of PPP housing projects by Kavishe et al. [28]. The lack of adequate PPP skills and knowledge emerges as the first out of 19 assessed risks with a mean score of 4.82. 69.2% of respondents in this research have received no formal training in PPPs, even being actively involved in PM, representing a gap between formal qualifications and practical competencies. This finding is supported by Shafiei and Puttanna [29] in Afghan IDP projects, where improper appointment of project managers is identified as the fifth most important failure variable among 30 factors.

Bureaucracy refers to administrative delays, multilayered approvals, and procedural rigidity. Evidence from multiple studies confirms its negative impact on PM. In Ghana, Amoah et al. [30] find that span of control, as a bureaucratic indicator, significantly reduces project management success. In Nigeria, Owusu et al. [31] show that bureaucratic procedures in corruption reporting rank second among 17 anti-corruption barriers, with an impact index of 3.75. This risk remains predominantly procedural. It disrupts projects most heavily during procurement and permitting phases, creating direct vulnerabilities to corruption.

Inadequate funding was placed 6th. At the project level, insufficient client liquidity leads to cost overruns and schedule delays, particularly when combined with additional fiscal pressures such as the higher costs of sustainable materials [23]. Vietnamese PPP projects also present that limited private-sector financial capacity results in failures in approximately 60% of initiatives [22].

Political instability and corruption represent two distinct but interrelated institutional risk categories and were ranked 7th and 8th respectively. Political instability is a highly context-dependent mechanism. For instance, In the Yemeni case, its direct statistical effect on project outcomes is unexpectedly weak, which is attributed to the normalization of chronic instability [32]. In high conflict settings such as Afghanistan, political instability results in operational barriers, such as demining requirements that directly stop the project execution [1]. Cross-country comparative evidence also suggests that only a very small subset of political risk factors remains consistent across emerging markets [33], indicating that “political instability” functions more as an umbrella term than as a single stable mechanism.

On the other hand, corruption demonstrates a different but equally systemic pattern. In Afghan IDP projects, it is identified as one of the top three failure factors (RII = 0.876) [29]. In road construction projects, political interference in consultant selection and procurement processes directly contributes to project failure [35]. In Nigeria, corruption-related risks are further amplified by external disruptions such as kidnapping, banditry, fuel subsidy removal, currency volatility, and cybercrime, creating a highly unstable operational environment [36].

Table 4 – Risk factors of PM practices in emerging countries

Code	Risks	References	Occurrence frequency
R1	Weak institutional capacity	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S25, S26, S28, S29, S30, S31, S32, S33, S35, S36, S37, S38, S39, S40, S41	39
R2	Weak regulatory framework	S2, S3, S4, S5, S6, S7, S8, S9, S10, S12, S13, S15, S16, S18, S19, S21, S22, S23, S24, S25, S26, S27, S28, S30, S31, S32, S34, S35, S36, S37, S38, S39, S40, S41	34
R3	Communication failures	S1, S3, S4, S5, S6, S7, S8, S9, S11, S13, S14, S15, S17, S18, S19, S20, S21, S22, S23, S27, S28, S29, S30, S32, S33, S34, S35, S36, S38, S39, S40	31
R4	Schedule delays	S1, S4, S5, S6, S7, S8, S9, S10, S11, S12, S14, S15, S17, S18, S19, S20, S21, S22, S23, S26, S27, S28, S29, S30, S31, S32, S34, S35, S38, S40	30
R5	Lack of skilled personnel	S1, S2, S3, S4, S7, S8, S9, S10, S11, S13, S14, S19, S20, S21, S22, S23, S24, S26, S27, S28, S29, S30, S31, S32, S34, S35, S37, S38, S40, S41	30
R6	Cost overruns	S1, S4, S5, S7, S9, S10, S11, S12, S14, S15, S17, S18, S19, S20, S21, S22, S23, S26, S27, S28, S29, S30, S31, S32, S35, S38, S40	27
R7	Bureaucracy	S1, S3, S4, S5, S6, S7, S8, S9, S12, S13, S16, S18, S19, S20, S21, S22, S26, S27, S28, S30, S31, S32, S34, S35, S36, S37, S38	27
R8	Inadequate funding	S2, S4, S5, S6, S9, S10, S11, S13, S15, S16, S17, S18, S19, S20, S21, S22, S23, S24, S27, S29, S31, S32, S35, S37, S38	25
R9	Political Instability	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S12, S13, S16, S19, S20, S21, S22, S23, S27, S28, S30, S36, S37, S38	24
R10	Corruption	S1, S3, S4, S6, S8, S9, S11, S12, S13, S16, S18, S19, S20, S21, S22, S25, S27, S30, S32, S34, S35, S37, S38	23
R11	Procurement failures	S1, S6, S7, S8, S9, S20, S21, S22, S23, S27, S28, S29, S30, S32, S34, S35, S40	17
R12	Poor project design	S1, S8, S9, S10, S11, S13, S20, S22, S23, S31, S32, S34, S35, S38, S40	15
R13	Scope changes	S4, S5, S11, S13, S16, S20, S21, S22, S23, S27, S29, S32, S35, S38	14
R14	Cultural barriers	S1, S12, S17, S20, S22, S23, S28, S29, S30, S31, S34, S39, S41	13
R15	Security threats	S1, S9, S12, S13, S16, S22, S27, S28, S30, S34, S37, S38	12
R16	Resistance to change	S2, S19, S22, S23, S24, S25, S29, S30, S31, S37, S38, S41	12
R17	Inflation	S9, S20, S21, S22, S23, S28, S29, S35, S37, S41	10
R18	Lack of transparency	S4, S6, S18, S19, S22, S23, S25, S27, S30, S32	10
R19	Digital infrastructure gaps	S2, S17, S19, S22, S24, S26, S29, S37, S39, S41	10
R20	Force majeure	S9, S12, S16, S20, S21, S27, S31, S34, S37	9
R21	Communication opposition	S12, S13, S16, S21, S27, S29, S34, S36	8

Based on the findings above, a partial structural correspondence between CSFs and risk factors across the reviewed literature can be identified. According to Table 1, six of the eight CSFs have direct or indirect counterparts in risk factors, revealing that many CSFs and risks represent opposite sides of the same underlying conditions. For example, government support corresponds to political instability, a strong legal framework corresponds to weak regulatory conditions, adequate financial capacity corresponds to insufficient funding, and competent project teams and managers correspond to a shortage of qualified personnel. Similarly, effective risk management represents a positive practice, the absence of which is reflected in a broader diffusion of operational risks.

However, this mirror relationship is not fully symmetrical. Remaining risk factors, like corruption, cultural barriers, and inflation, do not have clear positive equivalents among CSFs. This asymmetry is analytically important, because it suggests that CSFs research tends to emphasize desirable enabling conditions, whereas implicitly neglecting adverse conditions that are directly addressed in risk literature. Theoretically, this relationship suggests that CSF and risk literature should not be treated as separate analytical streams but should be integrated into a unified framework for understanding project performance.

#### Project types

Construction and infrastructure projects dominate the corpus, accounting for over half of the 41 articles (28 articles). It includes Public-Private Partnership (PPP), transport, housing, and general building projects. Such projects face a full risk profile, such as weak institutions, funding gaps, communication breakdowns, and political exposure. However, these risks are balanced by effective government support and risk management. Within this context, PPP variants introduce additional risks, including concession, guarantee obligations and contract renegotiation risk [14, 27, 28].

Energy, oil and gas projects form the next group (3 articles). External risk and stakeholder conflict are central here with financial capacity and risk allocation as the main enablers [37, 32]. This cluster maps primarily onto political instability and regulatory weakness as dominant risks. Consequently, adequate financial capacity and robust risk management emerge as the critical enabling CSFs.

IT and software projects (3 articles) change the picture. Requirements volatility, contractual governance and project management risk lead, while skilled staff and clear objectives drive success [17, 16]. Research and development and donor-funded projects make up a smaller group. There, stakeholder alignment, capacity building and steady funding matter most [38, 20]. Ugonna et al. [39] further extend this scope to public R&D organizations in Nigeria. Unlike infrastructure projects, this cluster identifies communication failures and a lack of skilled personnel as the primary risks; consequently, project manager competence and the precise definition of project objectives emerge as the critical enabling CSFs.

International development and donor-funded aid projects form the fourth cluster (3 articles). The dominant top risks in this project type are weak institutional capacity and lack of skilled personnel. The corresponding enabling CSFs are stakeholder engagement, government support, and effective planning, since donor frameworks presuppose a delivery capacity that the local environment must be built up to supply.

At last, the other cluster comprises non-project-specific research (4 articles), including practitioner surveys, value-management analyses, and innovation-adoption studies. These studies provide essential input for the inductive factor extraction, although they do not align with any single project type.

#### Project phases

The reviewed literature covers five distinct project phases: feasibility, planning, bidding, execution, and post-project. Execution-stage studies dominate due to the data availability and measurable performance indicators, particularly within quantitative survey-based research. Moreover, early project stages are mainly associated with decision-making and structuring processes. At the bidding stage, a substantial proportion of PPP challenges originate in procurement and preparation, showing that early contractual arrangements shape downstream performance outcomes. In contrast, post-project evaluation remains underexplored. This indicates a methodological bias toward implementation-focused research, potentially limiting insights into full lifecycle learning.

### Project scale

The corpus distinguishes between small-scale, medium-scale, large-scale, and mega projects. The risk profile changes systematically across these scales (See Table 5).

First, small-scale projects are typically valued below USD 10 million. These projects rely heavily on stakeholder alignment, community acceptance, and funding continuity. Research by Kavishe et al. [28, 21] on Tanzanian PPP housing, Shih et al. [40] on construction in Saint Lucia, and Sarvari et al. [41] on Iranian construction SMEs confirms this pattern.

Medium-scale projects are characterized by institutional voids and cross-border coordination challenges. This cluster is exemplified by Durna et al. [14] on Turkish PPPs, Nguyen et al. [22] on Vietnamese PPP infrastructure, and Kassem et al. [37] on Yemeni oil-and-gas operations, where institutional logics begin to dominate. Large-scale projects span larger budgets while still being managed as bounded undertakings.

Mega projects (above USD 1 billion) are structurally different due to their duration, technical complexity, and multi stakeholder environments. Evidence from Yemeni mega projects [32], Chinese international projects [42], and the Addis Ababa LRT [19] shows that complexity and delivery system design are the primary drivers of performance outcomes in mega projects [43]. Consistent with this, De Marco et al. [44] demonstrate that cost contingency management directly shapes final estimates. This confirms that mega project cost outcomes depend on project-level delivery rather than the macro context.

Overall, these findings suggest that risk governance must adapt to various project scales. Small projects require attention to stakeholders, community, and funding continuity, while medium projects depend on institutional coordination. However, medium-scale projects are particularly challenging as they operate across both institutional and operational domains. Finally, large and mega projects require attention to political, institutional, and macroeconomic exposure.

Table 5 – Synthesis of dominant CSFs and risks across different project scales

Project scale	Dominant CSFs	Dominant risks
Small	F4 Stakeholder engagement; F5 Clear definition of project objectives; F8 Adequate financial capacity	R3 Communication failures; R8 Inadequate funding
Medium	F6 Government support; F2 Project Manager Competence; F7 Monitoring and Control	R1 Weak institutional capacity; R2 Weak regulatory framework; R7 Bureaucracy; R5 Lack of skilled personnel
Large	F1 Effective planning; F3 Effective risk management; F6 Government support	R9 Political instability; R10 Corruption; R2 Weak regulatory framework; R1 Weak institutional capacity
Mega	F1 Effective planning; F3 Effective risk management; (emphasis on risk allocation / contractual governance)	R9 Political instability; R2 Weak regulatory framework; R1 Weak institutional capacity

### Institutional theory patterns

In this part, the authors used institutional theory to explain how the external environment shapes critical success factors and risks. Institutional theory functions as the primary theoretical lens. Each mechanism is treated below as a standalone analytical unit before any synthesis.

Coercive isomorphism occurs due to coercion by dependent organizations and societal expectations. Based on the reviewed articles, it can be observed that state regulatory capacity is the main source of coercion. It is important to note that state regulatory capacity acts variably in developing countries due to differences in institutional strength. Ullah et al. [2] provide empirical

evidence in the case of Pakistani construction projects, revealing that coercion acts through multinational clients' demands and not domestic regulations. Multinational clients, international aid donors, and multilateral institutions apply contract and lending conditions that act as a de facto compliance policy. In contrast, Kambar et al. [20] observe the opposite trend. Coercive pressure originates from the state, but its substantive effectiveness depends on unequal enforcement.

Normative isomorphism is the result of professionalization, it conveys expectations through educational systems, professional bodies, and certification programs [5]. Ullah et al. [2] report the effect of this normative pressure on adopting sustainable project management practices, which is statistically significant but much lower than mimetic pressure. Evidence from Cambodia regarding awareness is provided by Kang et al. [45] shows that 48.6% of surveyed people were aware of construction management, whereas the other part was either unfamiliar with the concept or just heard about it, but the importance of the field was recognized by 98.6% of participants after being explained. Normative pressure does exist, but the lack of diffusion channels hinders its implementation on a population level.

Mimetic isomorphism is defined as the imitation of practices deemed legitimate by other organizations under uncertainty. It is the most frequently observed institutional channel among those studied. According to Ullah et al. [2], mimetic pressures exert the highest standardized path coefficient of sustainable project management in Pakistan. Mimetic pressure is significantly higher than normative pressure ( $\beta = 0.276$ ,  $f^2 = 0.101$ ) used in the same context and surpasses all the possible coercive paths of the host-state institution. The rationale behind the mechanism lies in the imitation of competitor practices rather than following the industry norms. As Pakistani businesses treat sustainability as a competitive requirement than regulatory obligations.

Institutional voids refer to the absence or failure of institutions required for effective market operation [34]. It is the most frequently coded theme in the corpus. The construct supplements the original DiMaggio–Powell framework by incorporating North's [9] institutional-quality dimension.

Four different void types can be identified from the reviewed literature. Procurement-rule voids are most common in the sub-Saharan African region. The research of Barajei et al. [35] on consultants' recruitment in Ghana, Owusu et al. [31] on anti-corruption approaches in Ghana, and Aghimien et al. [46] on sustainable construction in Nigeria and South Africa support this finding. Void of enforcement is common in cross-border jurisdiction studies. Examples include analysis carried out by Ahmad et al. [47] between Nepal and Pakistan, and Kambar et al. [20] in Kazakhstan for public projects. On the other hand, dispute-resolution voids have been identified in studies on PPP projects in Tanzania and Vietnam. Also, Kavishe et al. [28] examine this in 2018 through PPP contract bias favoring the private sector, while Nguyen et al. [22] linking dispute-resolution voids to compensation disputes as a cause of project failure. Regulatory-competence voids surface in IT and emerging-technology adoption studies. This pattern is documented by Olusola and Phung [48] regarding smart-contract adoption in Nigeria, and Teklemariam and Mnkandla [17] concerning Ethiopian software risk management.

The fifth group of institutional categories describes how organizations respond after receiving the institutional pressure. The corpus presents three different types of responses. First, active conformity occurs when organizations embrace institutionalized practices in reality. Sepúlveda-Rivillas et al. [18] document this in a Colombian sample. Second, ceremonial conformity refers to organizations adopting the structural form of a practice but not its substantive content. Aghimien et al. [46] identified this pattern in Nigeria and South Africa concerning sustainable construction. This research reveals a gap between the awareness and application of the practice, where awareness levels in sustainable construction greatly surpass those in actual sustainable material use. Third, resistance is organizations actively resisting institutional pressure. This pattern is revealed in the research by Ebekozi et al. [36] on Nigerian cultural inertia and Olusola & Phung [48] on Nigerian smart-contract resistance, respectively.

Two main themes can be identified across these five institutions' categories. The use of institutional pressure in the developing-country context is multi-channel and imbalanced. Organizations prefer to adopt institutional labels at a much higher rate than implementing institutional substance.

### Contingency theory patterns

Although applying institutional theory clarifies the broader macro-environment, it fails to capture the reasons for various project outcomes within the same national borders. Contingency theory can solve this issue by analyzing data points to four distinct dimensions of fit, which is explained in the following.

**Organizational-PM Fit.** This refers to the extent of consistency between the complexity of the project management process and organizational capacity necessary for implementing that process. If the PM requirement matches the organizational capabilities, projects are more likely to succeed. Saddiqa et al. [16] tested that the PM risk has a significant impact on project performance ( $\beta = 0.499$ ,  $p < 0.001$ ), and completely mediates the effect of the dimensions of contract-based governance on performance. Another complementary piece of evidence comes from the findings of Sun et al. [42]. These researchers discovered that Chinese construction companies achieve better results in collaboration with Chinese designers than with foreign designers when implementing complex projects. This can be explained by organizational-PM fit between design and execution is inherently stronger within a shared institutional template.

**Environment-PM Fit.** Environment-PM fit is that PM procedures are aligned with external macro-environmental factors. External factors directly link to our findings, including political stability, regulatory framework, institutional capacity, market volatility, and cultural norms. Many of the identified risks in this paper can be interpreted as manifestations of Environment-PM misfit, conversely, CSFs function as adaptive mechanisms that reduce the degree of misfit. Kassem et al. [32] validate the strong influence of external environments for mega projects by revealing that 74.3% of the variation in project success in Yemen can be explained by Environment-PM fit. This challenge is structurally driven. On the grounds that, most PM models originating in developed countries often assume specific institutional foundations and organizational conditions, which may not be present in developing countries. Therefore, when PM practices are mismatched with the local institutional environment, the project effectiveness can be significantly limited.

**Strategy-PM Fit.** Among these four contingency dimensions, Strategy-PM fit is the least developed dimension. The possible reason is that strategic alignment is a higher-level decision-making process, while PM has traditionally focused on the operational level. Besides this, few studies measure it directly because of its abstract nature and the difficulty in collecting data. In emerging economies, a higher degree of strategic ambiguity is observed, due to the fact that Strategic-PM alignment is often constrained by institutional instability, shifting policy priorities, and external stakeholder influence. Consequently, project teams frequently operate without clear objectives, because projects in emerging countries are not purely strategy-driven, but may be government-driven and donor-driven, or highly influenced by political decisions. Still, the importance of Strategy-PM fit cannot be neglected. Ugonna et al. [39] reveal that the alignment between the strategic positions of project teams and organizational strategy is the most highly evaluated element, based on a sample of Nigerian R&D projects. As a result, this misfit leads to inefficient resource allocation, unclear priorities, and inconsistent performance evaluation criteria, which directly result in project failure.

**Multi-contingency alignment.** The current dimension refers to the scenario where all contingency factors interact to influence project outcomes. This brings a cumulative effect, whereby project success depends on the combination and compatibility of multiple contextual variables. This finding is supported by Sun et al. [42]. Through multiple correspondence analysis of 112 international architectural projects, they identified two potential structural dimensions, namely an adaptability dimension and a complexity dimension. The former includes technical standards, project location, and the nationality of the design firm; the latter includes project cost and project type.

In addition, significant contextual differences were also observed at the institutional and risk levels. Based on the findings of Ali et al. [33], only 4 out of 20 political risks were cross-nationally universal across five emerging markets, and the remaining risks differ across institutional realities. It can be concluded that risk exposure is not static but highly depends on interaction of the institutional environment, project characteristics, and industry conditions.

Furthermore, failing to adequately consider the integration of multiple contingency structures during cross-context transfer leads to mismatches. For example, mimetic institutional adoption in international construction and PPP projects often results in scale-related systemic mismatches. Therefore, replicated PM models are often built on institutional foundations which may be inconsistent with the local environment. Moreover, communication failure is identified as a universal risk across all projects, but its manifestations and severity depend on project size, industry complexity, and institutional environment.

## Conclusion

This study has explored critical success factors and risks in PM practices in emerging countries. Following the PRISMA protocols, 41 articles were retrieved and screened from the Scopus database that are highly relevant to the research field. Based on the findings, 22 CSFs and risks were identified and further ranked by their occurrence frequencies. As a result, top 8 CSFs and 8 risks were explained and compared through deductive dimensions, including project characteristics, institutional theory and contingency theory. Top 8 CSFs are effective planning; project manager competence; effective risk management; stakeholder engagement; clear definition of project objectives; government support; monitoring and control; and adequate financial capacity. While top 8 risks include Weak institutional capacity; Weak regulatory framework; Communication failures; Lack of skilled personnel; Bureaucracy; Inadequate funding; Political Instability; and Corruption.

However, this paper has several limitations. The major one is that Scopus was the only database used for data extraction. Thus, several regional journals and studies from other sources may have been underrepresented. Second, only English-language articles were included in the search, which may have led to the exclusion of some relevant articles in other languages, especially in emerging-country contexts. Third, the coding process involved only two coders, so the findings may contain a certain level of subjectivity and bias despite a structured protocol.

Based on the synthesized data, this paper provides the following implications from four various perspectives, which are practical, policy, development agencies and multilateral financiers, and future research directions.

From a practical perspective, four guidelines emerged for managing risks in developing countries. First, selecting a risk management strategy should consider the size of the projects. Second, communication should be improved as it acts as the strongest indicator of time delays in the literature. It implies that the corresponding stakeholder engagement critical success factor becomes more important. Third, the competence of the project manager is particularly vital when there are significant institutional voids in the country, especially in donor-financed development projects [28, 29, 39]. Fourth, the emulation of PPPs and sustainability systems from advanced nations should come with clear local adaptation. [22, 47].

From a policy perspective, the institution voids, rather than the existing formal institutions, seem to be the critical factor that needs to be addressed. The procurement-rule void in sub-Saharan African PPPs [35, 31], the enforcement void in inter-jurisdictional initiatives [47, 20], and regulatory competence void in emerging technologies [48, 17] have been evident throughout the literature.

For development agencies and multilateral financiers, the findings suggest that con dictionary PM frameworks often assume organizational capabilities which the local environment may not have at its disposal. Thus, investments made in terms of capacity building efforts prior to project execution aimed at building the capacity in terms of the skilled manpower required could potentially yield greater results than making incremental adjustments to frameworks.

For future researchers, considering several limitations in this paper, the authors suggest the following four research directions. First, extending the databases by involving articles from sources other than Scopus, such as Web of Science and Google scholar, to ensure the richness and reliability of extracted data. Next, the use of multi-coder reliability measures will enhance the procedural integrity of the synthesis and enable the calculation of inter-rater statistics. Third, further testing of

the integrated framework combining institutional and contingency perspectives is necessary. Future studies could use surveys or case studies in regions that are less studied in the current literature to validate the framework and conduct deeper analysis. Finally, adopting longitudinal approaches to study the evolution of CSFs and risks can address one of the most crucial limitations in cross-sectional approaches.

## REFERENCES

- 1 Kadry, M., Osman, H., and Georgy, M. Causes of construction delays in countries with high geopolitical risks. *Journal of Construction Engineering and Management*, 143 (2), 04016095 (2017). [https://doi.org/10.1061/\(ASCE\)CO.1943-7862.0001222](https://doi.org/10.1061/(ASCE)CO.1943-7862.0001222)
- 2 Ullah, M., Khan, M.W.A., Kuang, L.C., Hussain, A., Rana, F., Khan, A., and Sajid, M.R. A structural model for the antecedents of sustainable project management in Pakistan. *Sustainability*, 12 (19), 8013 (2020). <https://doi.org/10.3390/su12198013>
- 3 Tranfield, D., Denyer, D., and Smart, P. Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14 (3), 207–222 (2003). <https://doi.org/10.1111/1467-8551.00375>
- 4 Page, M.J., McKenzie, J.E., Bossuyt, P.M., et al. The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, 372, n71 (2021). <https://doi.org/10.1136/bmj.n71>
- 5 Project Management Institute. *A Guide to the Project Management Body of Knowledge (PMBOK Guide)*, 8th ed. (Newtown Square, PA: Project Management Institute, 2025).
- 6 Kerzner, H. *Project Management: A Systems Approach to Planning, Scheduling, and Controlling*, 12th ed. (Hoboken, NJ: Wiley, 2017).
- 7 Flyvbjerg, B. What you should know about megaprojects and why: An overview. *Project Management Journal*, 45 (2), 6–19 (2014). <https://doi.org/10.1002/pmj.21409>
- 8 DiMaggio, P.J., and Powell, W.W. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48 (2), 147–160 (1983). <https://doi.org/10.2307/2095101>
- 9 North, D.C. *Institutions, Institutional Change and Economic Performance* (Cambridge: Cambridge University Press, 1990). <https://doi.org/10.1017/CBO9780511808678>
- 10 Lawrence, P.R., and Lorsch, J.W. *Organization and Environment: Managing Differentiation and Integration* (Boston: Harvard Business School Press, 1967).
- 11 Donaldson, L. *The Contingency Theory of Organizations* (Thousand Oaks, CA: Sage Publications, 2001). <https://doi.org/10.4135/9781452229249>
- 12 Wadongo, B., and Abdel-Kader, M. Contingency theory, performance management and organisational effectiveness in the third sector: A theoretical framework. *International Journal of Productivity and Performance Management*, 63 (6), 680–703 (2014). <https://doi.org/10.1108/IJPPM-09-2013-0161>
- 13 Shafiei, N.A., and Puttanna, K. Critical success factors for international development projects in Afghanistan: An exploratory factor analysis. *Journal of Project Management*, 7 (3), 173–188 (2022). <https://doi.org/10.5267/j.jpjpm.2022.5.001>
- 14 Durna, E., Ozorhon, B., and Çağlayan, S. Identifying critical success factors of public-private partnership projects in Türkiye. *Sakarya University Journal of Science*, 28 (2), 1–14 (2024). <https://doi.org/10.16984/saufenbilder.1334483>
- 15 Pham, V.Q., Nguyen, B.K.Q., Van Tu, B., Pham, H.T.T., and Le, T.Q. Critical success factors of project management: The case of construction related projects in Vietnam. *Journal of Asian Finance, Economics and Business*, 6 (2), 223–230 (2019). <https://doi.org/10.13106/jafeb.2019.vol6.no2.223>
- 16 Saddiqa, A., Shehzad, M.U., and Mohiuddin, M. Effects of contractual governance on IT project performance under the mediating role of project management risk: An emerging market context. *Information*, 14 (9), 490 (2023). <https://doi.org/10.3390/info14090490>
- 17 Teklemariam, M.A., and Mnkandla, E. Software project risk management practice in Ethiopia. *Electronic Journal of Information Systems in Developing Countries*, 79 (1), 1–14 (2017). <https://doi.org/10.1002/j.1681-4835.2017.tb00583.x>
- 18 Sepúlveda-Rivillas, C.I., Alegre, J., and Oltra, V. The core functions of project management in an emerging economy: A new measurement scale. *International Journal of Project Organisation and Management*, 14 (4), 401–428 (2022). <https://doi.org/10.1504/IJPOM.2022.125878>

19 Alade, T.A., Bukoye, O.T., Roehrich, J.K., and Edelenbos, J. Cross-national collaboration in strategic transport projects: The impact on benefits realization. *International Journal of Project Management*, 40 (4), 347–361 (2022). <https://doi.org/10.1016/j.ijproman.2022.03.009>

20 Kamar, R., Ismailova, R., Aitbayeva, A., Mukhamejanuly, S., and Zharov, Y. Assessing the implementation of project management in public administration: A PEST analysis approach. *Journal of Governance and Regulation*, 14 (4), 220–231 (2025). <https://doi.org/10.22495/jgrv14i4art20>

21 Kavishe, N., and Chileshe, N. Identifying project management practices and principles for public-private partnerships in housing projects: The case of Tanzania. *Sustainability*, 10 (12), 4609 (2018). <https://doi.org/10.3390/su10124609>

22 Nguyen, P.T., Likhitrungsilp, V., and Onishi, M. Success factors for public-private partnership infrastructure projects in Vietnam. *International Journal on Advanced Science, Engineering and Information Technology*, 10 (2), 631–637 (2020). <https://doi.org/10.18517/ijaseit.10.2.5839>

23 Alawneh, R., Jannoud, I., Rabayah, H., Asaad, S., Almasaeid, H., Imam, R., and Ghazali, F.E.M. Development of a new method for assessing project risks in sustainable building construction projects in developing countries: The case of Jordan. *Buildings*, 14 (6), 1573 (2024). <https://doi.org/10.3390/buildings14061573>

24 Ottaviani, F.M., Zenezini, G., Saba, F., De Marco, A., and Gavinelli, L. System-level critical success factors for BIM implementation in construction management: An AHP approach. *Systems*, 13 (2), 94 (2025). <https://doi.org/10.3390/systems13020094>

25 Hillson, D. Project risks, causes, and effects. Project Management Institute (2000). <https://www.pmi.org/learning/library/2019/04/07/15/14/project-risks-causes-risks-effects-4663>

26 Memon, A.H., Memon, A.Q., Khahro, S.H., and Javed, Y. Investigation of project delays: Towards a sustainable construction industry. *Sustainability*, 15 (2), 1457 (2023). <https://doi.org/10.3390/su15021457>

27 Kwofie, T.E., Aigbavboa, C.O., and Thwala, W.D. Communication performance challenges in PPP projects: Cases of Ghana and South Africa. *Built Environment Project and Asset Management*, 9 (5), 628–641 (2019). <https://doi.org/10.1108/BEPAM-11-2018-0137>

28 Kavishe, N., Jefferson, I., and Chileshe, N. An analysis of the delivery challenges influencing public-private partnership in housing projects: The case of Tanzania. *Engineering, Construction and Architectural Management*, 25 (2), 202–240 (2018). <https://doi.org/10.1108/ECAM-12-2016-0261>

29 Shafiei, N.A., and Puttanna, K. An investigation into the factors causing international development project failure in developing countries: Focus on Afghanistan. *Journal of Project Management*, 6 (3), 133–142 (2021). <https://doi.org/10.5267/j.jpm.2021.2.002>

30 Amoah, A., Berbegal-Mirabent, J., and Marimon, F. What drives project management success in developing countries? The case of Ghana. *Tec Empresarial*, 16 (2), 22–46 (2022). <https://doi.org/10.18845/te.v16i2.6186>

31 Owusu, E.K., Chan, A.P.C., and Hosseini, M.R. Impacts of anti-corruption barriers on the efficacy of anti-corruption measures in infrastructure projects: Implications for sustainable development. *Journal of Cleaner Production*, 246, 119078 (2020). <https://doi.org/10.1016/j.jclepro.2019.119078>

32 Kassem, M.A., Khoiry, M.A., and Hamzah, N. Assessment of the effect of external risk factors on the success of an oil and gas construction project. *Engineering, Construction and Architectural Management*, 27 (7), 1683–1715 (2020). <https://doi.org/10.1108/ECAM-10-2019-0573>

33 Ali, T., Butt, A., Arslan, A., Tarba, S.Y., Sniazhko, S.A., and Kontkanen, M. International projects and political risk management by multinational enterprises: Insights from multiple emerging markets. *International Marketing Review*, 38 (5), 957–983 (2021). <https://doi.org/10.1108/IMR-03-2020-0060>

34 Khanna, T., and Palepu, K.G. *Winning in Emerging Markets: A Road Map for Strategy and Execution* (Boston: Harvard Business Press, 2010).

35 Barajei, C., Kusi, E., Ackon, F., Osman, A.M., Mohammed, A.M.Z., Simpeh, F., and Gyimah, F. Success factors of the consultant selection stage of the Ghanaian public construction projects: The road sector's perspective. *Construction Economics and Building*, 24 (1/2), 1–20 (2024). <https://doi.org/10.5130/AJCEB.v24i1/2.8660>

36 Ebekozi, A., Aigbavboa, C., Samsurijan, M.S., Ahmed, M.A.H., Akinradewo, O., and Omoh-Paul, I. Managing construction project risks in turbulent times: A stakeholders' perspective. *International Journal of Building Pathology and Adaptation*, 42 (3), 445–463 (2024). <https://doi.org/10.1108/IJBPA-01-2024-0003>

37 Kassem, M.A., Khoiry, M.A., and Hamzah, N. Risk factors in oil and gas construction projects in developing countries: A case study. *International Journal of Energy Sector Management*, 13 (4), 846–861 (2019). <https://doi.org/10.1108/IJESM-11-2018-0002>

38 Dufková, G. Time and budget overruns on Czech international development projects. *Ekonomický časopis*, 70 (7–8), 651–671 (2022). <https://doi.org/10.31577/ekoncas.2022.07-8.04>

39 Ugonna, D.C.U., Ochieng, E.G., and Zuofa, T. Augmenting the delivery of public research and development projects in developing countries. *Journal of Building Pathology and Adaptation*, 42 (3), 445–463 (2024). <https://doi.org/10.1108/IJBPA-01-2024-0003>

40 Shih, H.-S., Chen, I.-F., Munier, N., and Alcide, Z. Investigating risk-constraint nexus of construction projects in Caribbean small island developing states. *SAGE Open* (2023). <https://doi.org/10.1177/21582440231158023>

41 Sarvari, H., Chan, D.W.M., Alaeos, A.K.F., Olawumi, T.O., and Abdalridah Aldaud, A.A. Critical success factors for managing construction small and medium-sized enterprises in developing countries of Middle East: Evidence from Iranian construction enterprises. *Journal of Building Engineering*, 43, 103152 (2021). <https://doi.org/10.1016/j.jobe.2021.103152>

42 Sun, H., Tang, W., Duffield, C.F., Zhang, L., and Hui, F.K.P. How to get international construction projects delivered on time: From Chinese contractors' perspective. *Journal of Civil Engineering and Management*, 28 (5), 365–377 (2022). <https://doi.org/10.3846/jcem.2022.16381>

43 De Marco, A., and Narbaev, T. Factors of schedule and cost performance of tunnel construction megaprojects. *The Open Civil Engineering Journal*, 15 (1), 15–38 (2021). <https://doi.org/10.2174/1874149502115010038>

44 De Marco, A., Narbaev, T., Ottaviani, F.M., and Vanhoucke, M. Influence of cost contingency management on project estimates at completion. *International Journal of Construction Management*, 24 (9), 935–945 (2024). <https://doi.org/10.1080/15623599.2023.2239487>

45 Kang, Y., Jin, Z., Hyun, C., and Park, H. Construction management functions for developing countries: The case of Cambodia. *Journal of Management in Engineering*, 34 (4), 04018017 (2018). [https://doi.org/10.1061/\(ASCE\)ME.1943-5479.0000609](https://doi.org/10.1061/(ASCE)ME.1943-5479.0000609)

46 Aghimien, D.O., Aigbavboa, C.O., and Thwala, W.D. Microscoping the challenges of sustainable construction in developing countries. *Journal of Engineering, Design and Technology* (2019). <https://doi.org/10.1108/JEDT-01-2019-0002>

47 Ahmad, M.I., Sukamani, D., Wang, J., and Kusi, M. Risk factors and their impact on the success of construction firms: A comparative study between Pakistan and Nepal. *IAENG International Journal of Applied Mathematics*, 52 (3), 518–527 (2022).

48 Olusola, J., and Phung, Q. A framework for adopting smart contracts in the Nigerian construction industry. *International Journal of Construction Management*, 25 (1), 45–58 (2025). <https://doi.org/10.1080/15623599.2025.2550478>

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## ДАМУШЫ ЕЛДЕРДЕГІ ЖОБАЛАРДЫ БАСҚАРУ ТӘЖІРИБЕСІНДЕГІ МАҢЫЗДЫ ТАБЫС ФАКТОРЛАРЫ МЕН ТӘУЕКЕЛДЕРДІ ТАЛДАУ

### Аңдатпа

Жобаларды басқару саласындағы зерттеулер жоғары табысты институционалдық ортада кеңінен дамыған. Алайда соңғы 15 жыл ішінде капиталға бай жобалық қызмет дамушы елдерге ауысты, мұнда стандартты басқару шеңберлері көбінесе өз тиімділігін көрсете бермейді. Бұл зерттеу 2015–2025 жж. аралығында жарияланған, 20 дамушы ел мен 8 көпұлтты ортадағы жобаларды басқарудағы маңызды табысқа жету факторлары (Critical Success Factors – CSF) мен тәуекелдерді қарастырған 41 рецензияланған эмпирикалық мақаланы жүйелі түрде талдауға негізделген. Шолу әдебиеттегі үш тұрақты олқылықты жоюға бағытталған: табысқа жетудің маңызды факторлары мен тәуекелдердің ұғымдық тұрғыдан ажыратылмауы, дамушы елдерге бағытталған зерттеулердің шектеулі болуы және елдер арасындағы тәжірибені

біртұтас теориялық шеңберде біріктіретін интеграциялық синтездің болмауы. PRISMA хаттамасына сәйкес зерттеуде институционалдық теория мен контингенттік теорияға негізделген дедуктивті жіктеу тәсілі эмпирикалық материалды индуктивті кодтаумен ұштастырылды. Индуктивті кодтау нәтижесінде 22 маңызды табыс факторы және 21 тәуекел факторы анықталды. Олардың ішінен 8 маңызды табыс факторы мен 8 негізгі тәуекел факторы іріктеліп, екі теориялық көзқарас тұрғысынан синтезделді. Институционалдық теория саяси және институционалдық факторлардың басымдығын мәжбүрлеуші, нормативтік және миметикалық механизмдер, сондай-ақ институционалдық олқылықтар арқылы түсіндіреді. Ал контингенттік теория жобаның көлеміне, секторына және іске асыру әдісіне байланысты жүйелі айырмашылықтарды ескеруге мүмкіндік береді. Зерттеу нәтижелері жоба тәуекелдерінің сипаты жобаның көлемі ұлғайған сайын жүйелі түрде өзгеретінін көрсетті: шағын жобаларда негізгі тәуекелдер мүдделі тараптардың үйлесімділігімен байланысты болса, орта көлемді жобаларда институционалдық әлеует мәселелері алдыңғы орынға шығады, ал ірі жобаларда макроэкономикалық және саяси тәуекелдер басым болады. Зерттеу қорытындылары жоба менеджерлеріне, мемлекеттік институттарға және даму қаржы институттарына практикалық ұсыныстар ұсынады.

**Түйін сөздер:** дамушы елдер, жоба менеджменті, жүйелі әдеби шолу, институционалдық теория, табысқа жетудің түйінді факторлары, тәуекел факторлары, тәуекелдерді басқару, шұғыл жағдайлар теориясы.

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## АНАЛИЗ КЛЮЧЕВЫХ ФАКТОРОВ УСПЕХА И РИСКОВ В ПРАКТИКЕ УПРАВЛЕНИЯ ПРОЕКТАМИ В РАЗВИВАЮЩИХСЯ СТРАНАХ

### Аннотация

Исследования в области управления проектами широко развивались в институциональной среде стран с высоким уровнем дохода. Однако за последние 15 лет капиталоемкая проектная деятельность сместилась в сторону развивающихся стран, где стандартные рамки зачастую не дают ожидаемых результатов. За основу взят систематический анализ 41 рецензируемой эмпирической статьи, опубликованных в период с 2015 по 2025 гг. и посвященных критическим факторам успеха (КФУ) и рискам в управлении проектами в 20 развивающихся странах и 8 странах с многонациональной средой. В данном обзоре рассматриваются три постоянных пробела в литературе: концептуальное разделение КФУ и рисков, ограниченность исследований, посвященных развивающимся странам, и отсутствие интегративного межстранового обобщения в рамках единой теоретической концепции. В соответствии с протоколом PRISMA в статье применяется качественный контент-анализ, сочетающий дедуктивную категоризацию на основе институциональной теории и теории непредсказуемости с индуктивным кодированием эмпирического корпуса. В результате индуктивного кодирования было выявлено 22 КФУ и 21 фактор риска. 8 КФУ и 8 факторов риска были отобраны и проанализированы через призму двух теорий. Институциональная теория объясняет доминирование политических и институциональных факторов с помощью механизмов принуждения, нормативности и миметизма, а также концепции институциональных пробелов, в то время как теория контингенции учитывает систематические различия в зависимости от масштаба проекта, сектора и метода реализации. Результаты исследования показывают, что проектные риски систематически меняются в зависимости от масштаба: в небольших проектах они связаны с согласованностью действий заинтересованных сторон, в проектах среднего масштаба – с институциональным потенциалом, а в крупных проектах – с макроэкономическими и политическими рисками. Сделаны выводы для руководителей проектов, государственных учреждений и институтов финансирования развития.

**Ключевые слова:** институциональная теория, критические факторы успеха, развивающиеся страны, систематический обзор литературы, теория непредвиденных обстоятельств, управление рисками, факторы риска.