Was the Colosseum a Successful Project? *Reframing Project Value Generation Across Two Millennia* [1]

Arvin Prem Kumar and Idris A. Adelakun

School of Applied Professional Studies, College of Integrative Sciences and Arts,
Arizona State University, Arizona, USA

Abstract

The Colosseum is not simply an ancient relic, but a two-thousand-year-old experiment in value generation. This paper examines the construction of the Colosseum from a perspective of modern project management literature to assess whether ancient megaprojects can be understood in terms of modern definitions and governance structures. The research will begin by situating the Colosseum within the evolving definitions of a project, as defined by the PMBOK®® Guide Seventh and Eighth Editions, and determine whether these definitions are applicable to the construction of the Colosseum. Next, the research will analyze the project management approach used for the construction of the Colosseum and determine whether it is predictive, adaptive, or hybrid. Additionally, the research will analyze whether the historical objectives for the construction of the Colosseum align with contemporary benefits realization and determine whether the Colosseum's construction is an example of project management success or project success.

***Keywords*:** ancient megaprojects, hybrid project management approach, Project vs Project Management success, benefits realization, value generation

1.0 Introduction

If the Colosseum is a project to be succeeded by, it starts with how modern project management refers to a project. According to the PMBOK®® Guide Seventh Edition (PMI, 2021), a project is defined as a temporary endeavor carried out to create a unique product, service, or result, placing project management within a framework of principles focused on value, systems thinking, and adaptability. The Colosseum fits straight into this definition as a project. Its construction was time-bound it began under Vespasian in A.D. 72 and, to some extent, was completed under Titus by A.D. 80. The amphitheatre was a special architectural creation, unprecedented in Rome, both in its size and construction, as well as in its role as a symbol of Rome's political goals. It was by no means a permanent enterprise, but rather a finite undertaking with a start, resources mobilized, and an ultimate ceremonial climax in the inaugural games. In addition, it was situated within a larger nexus of stakeholder expectations that ranged from imperial authority to senatorial

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oversight and popular reception. As such, the Colosseum is a reflection of a project from a PMBOK®® 7 perspective, the characteristics of a temporary value-based endeavour defined by context and stakeholder demand.

The principles emphasized in the Seventh Edition include focusing on value, a holistic approach, and integration of quality into deliverables. From this perspective, the Colosseum can be viewed as a project aimed at creating value beyond its physical output. The conversion of Nero's private lake into a public amphitheater was a metaphor for restoring public space to the Roman citizenry. The Colosseum served as a tool for political consolidation in the aftermath of the upheaval in A.D. 69 and as a symbol of Flavian legitimacy. In this regard, the Colosseum can be viewed as a project in the principles-based architecture of PMBOK® 7, where success is not measured by conformance to constraints but by value and systems impact.

Nevertheless, the PMBOK® Guide Eighth Edition provides a more detailed and enhanced framework for definition. According to this edition, a project is defined as a temporary undertaking in a special context for the creation of value, and it is embedded in a system for value delivery (PMI, 2025). This edition also connects project management to governance, domains, and results, making it clear how organizational governance is linked to project governance. If this definition is analyzed, the Colosseum is seen to be an even better fit with modern definitions.

The temporality of the construction is still seen in the Colosseum, although the Eighth Edition's focus on contextual uniqueness offers greater depth in terms of analysis. The amphitheater was born in a very particular political context marked by the aftermath of Nero and the legitimacy crisis that came with civil war. The fact that it was built on the site of the Domus Aurea was not coincidental; it was strategic and marked a political U-turn. The Eighth Edition recognizes that projects are unique in the environmental conditions and strategic intentions that shape them, as well as the stakeholders involved. In this sense, the Colosseum was not simply a construction project; it was a state-level project as part of an imperial strategy.

More significantly, however, Eighth Edition introduces the idea of projects as components of an integrated value delivery system that ties portfolios, programs, projects, and operations together in an organization or business (PMI, 2025). Such a systemic approach enables us to understand the Colosseum not just as a completed project but as a strategically invested part of Rome's imperial governance system. The success of the Colosseum was not just about completing it as a project but also about its long-term political and social impact on Rome. The results, benefits, and value delivery of Eighth Edition provide a more operational approach to analyzing these results in comparison to the principle-centric approach of Seventh Edition.

The differences between PMBOK® 7 and PMBOK® 8 are quite instructive in this regard. PMBOK® 7 provides a conceptual, principle-based approach to projects that can support a value-based approach and value congruence with stakeholders, as seen in the Colosseum project.

PMBOK® 8, with its defined performance domains such as Governance, Scope, Schedule, Finance, Stakeholders, Resources, and Risk, can be seen as providing an opportunity to drill deeper into the value approach and how it is governed and monitored through these domains. The Colosseum's funding through *ex manubiis*[2] can be seen as being evaluated through the Finance performance domain, the fixed date of the Colosseum's inauguration through the Schedule performance domain, the structural integrity and the management of the crowds through the Risk and Scope performance domains, and the differentiated social audiences through the Stakeholders performance domain.

Categories of Existing Literature

Academic literature on the Colosseum typically falls into three categories:

- Historical and archaeological studies focusing on architecture, engineering, and imperial ideology.
- Political and sociological analyses examining the amphitheatre as a tool of legitimacy, propaganda, and social control.
- Megaproject and infrastructure studies that reference ancient works but rarely apply contemporary project management frameworks systematically.

Research Question

To what extent can the construction of the Roman Colosseum be interpreted as a project under contemporary project management frameworks, and what does this reveal about its governance, execution, and value delivery?

Unit of Analysis

The unit of analysis is the Colosseum construction project, treated as a megaproject embedded within the political, social, and governance systems of the Flavian dynasty.

Theoretical Lens

The theoretical lens combines the principles-based architecture of PMBOK® 7 with the performance-domain and value-delivery orientation of PMBOK® 8. PMBOK® 7 provides a conceptual foundation for understanding the Colosseum as a temporary, context-driven, value-focused endeavor. PMBOK® 8 deepens this analysis by framing the Colosseum as part of an integrated governance and value delivery system, enabling examination of domains such as Governance, Finance, Stakeholders, Schedule, and Risk. This dual-lens approach allows the study to interpret ancient decision-making, resource mobilization, and political strategy through contemporary project management theory.

[2] "From the spoils" or "out of the war booty" of the Judaean War (First Jewish – Roman War)

Methodology

The study adopts a qualitative, interpretive methodology based on historical-document analysis and conceptual mapping. Primary and secondary historical sources are examined to reconstruct the governance structures, stakeholder landscape, and execution practices of the Colosseum project. These findings are then mapped against PMBOK® 7 principles and PMBOK® 8 performance domains to identify alignment, divergence, and hybrid characteristics. The methodology does not attempt to retroactively impose modern tools but instead uses contemporary frameworks as analytical heuristics to interpret ancient practices.

Benefits for Academic and Practitioner Readers

For academics, this study expands the scope of project management theory by demonstrating its applicability to historical megaprojects, thereby enriching discussions on governance, value creation, and hybrid approaches. For practitioners, the Colosseum offers a unique case illustrating how political context, stakeholder expectations, and strategic intent shape project governance—issues still relevant in modern megaprojects. The analysis highlights how long-term value delivery, not merely project completion, determines the enduring success of large-scale initiatives.

1.1 Purpose of the Study

The aim of this study is to evaluate whether the construction of the Roman Colosseum can be understood as a project through the lens of contemporary project management frameworks, specifically PMBOK® 7 and PMBOK® 8. In particular, this study examines the project management approach employed in the building of the Colosseum, identifying a hybrid model in which predictive methods were applied to governance structures, while adaptive methods guided project execution. The research further explores the benefits generated by the project and distinguishes between project success and project management success.

1.2 Research Objectives

The study is guided by the following objectives:

i. To examine the project management approach followed during the construction of the Colosseum and the extent to which it can be associated with predictive, adaptive, or hybrid governance approaches within the context of contemporary project management.
ii. To examine the ways in which value is generated and benefits are realized through the Colosseum Megaproject.
iii. To differentiate project success from project management success in the case of the Colosseum.

Disposition of the Paper

The remainder of the paper is structured as follows. The next section reviews the relevant literature on ancient megaprojects and modern project management frameworks. This is followed by a detailed analysis of the Colosseum's governance and execution through PMBOK® 7 and PMBOK® 8. Subsequent sections examine value creation, benefits realization, and the distinction between project success and project management success. The paper concludes with implications for theory and practice.

2.0 Literature Review

2.1 Hybrid Project Management in Complex and Construction Contexts

Project management theory has, over time, realized that neither predictive nor adaptive project management is universally applicable. Predictive project management is based on scope definition, phased approach, and control of time and cost. Agile project management is based on flexibility, iterative learning, and collaboration with stakeholders. Due to dissatisfaction with single-project management methodologies, there has been the development of hybrid project management as an integrated approach (Reiff & Schlegel, 2022).

Hybrid project management is not an attempt to find common ground between project management methodologies; it is rather an attempt to configure project management in a context-dependent manner to provide stability in project governance and flexibility in project operations. Reiff and Schlegel (2022), through their systematic literature review, have identified the relevance of hybrid project management models in project scenarios marked by uncertainty, diversity, and scale. Lalmi, Fernandes, and Souad (2021) have extended this debate in the context of project management in construction scenarios and have identified the relevance of hybrid project management models in large-scale infrastructure project scenarios, where traditional project governance has to be integrated with iterative problem-solving and lean optimization paradigms. Predictive project governance is essential to ensure compliance, fund allocation, and milestone achievement; adaptive project management "islands" are essential to facilitate engineering changes, material substitutions, and concurrent project execution.

PMBOK® Guide Eighth Edition supports this logic of hybridism with its recognition of hybrid approaches to development as a context-driven combination of predictive and adaptive practices within a value delivery system (PMI, 2025). Such a theoretical evolution is what creates the framework to re-examine historical megaprojects such as the Colosseum from a hybrid governance perspective.

2.2 Benefits Realization Management and Project Success

While hybrid governance identifies the logic of execution, benefits realization management, on the other hand, changes the perspective of evaluating project success. The conventional understanding of project success has been the quadruple constraints of scope, schedule, cost, and quality. However, the literature on benefits realization has shown that such an understanding of project success refers to project management success, not project success (Breese et al., 2015).

Recent research has also extended the scope of benefits realization in terms of time. For example, Delisle, Marnewick, and Romero-Torres (2025) have emphasized the need to manage benefits over various time horizons, as they can change, vary, and increase over and above the project life cycle. Stretton (2020) has also situates the concept of benefits realization within strategic management processes, with an emphasis on ensuring congruence between project outcomes and long-term business positioning.

Benefits are typically classified into strategic, tangible, intangible, economic, and reputational categories. These frameworks are conceptual tools to understand the long-term effects of large-scale projects beyond project completion.

2.3 Research Gap

Although there is a wealth of literature on hybrid models of project management, benefits realization management, and megaproject governance, there is a significant knowledge gap in applying these contemporary models to ancient megaprojects. Existing historical literature on the Colosseum is limited to innovation in architecture, engineering, and political and socio-economic factors (Adam & Mathews, 2005; Lancaster, 2005; Hopkins & Beard, 2005). Although these works discuss coordination models, financial structures, and labor models, there is a lack of interpretation of the Colosseum from a contemporary perspective of project management theory. Ancient models of megaprojects are not a part of mainstream project governance theory.

More specifically, there is a conceptual void regarding whether ancient megaprojects are legitimate "projects" using the contemporary definition provided by the PMBOK® Guide 8th Edition. Specifically, the contemporary definition provided by the PMBOK® Guide 8th Edition is: "A project is a temporary initiative to create value within a unique context and is part of a larger value delivery system" (PMI, 2025). While this definition has changed the focus from industrial-era execution to uniqueness, strategy, and value delivery, there has been little research on whether ancient megaprojects such as the Colosseum align with such contemporary definitions. In other words, there has been little research on whether foundational elements of project governance and performance control and benefits realization existed prior to their codification.

This research seeks to fill these intersecting gaps with an analysis of the Colosseum as a hybrid megaproject that meets the PMBOK® 8 definition of a project and has structured performance governance and benefits realization. In doing so, it contributes to historical scholarship and to current theory in project management, stretching the conceptual boundaries of what is considered a project and a megaproject in ancient times, and its place in the evolving discourse of value-driven governance.

3.0 Methodology

The research design of this study is historical analysis, and its objective is to examine the construction of the Colosseum as a first-century megaproject through the perspective of modern project management methodologies. While most research on the Colosseum would consider it an artifact of Roman engineering or politics, this research design is constructed to systematically reinterpret its construction and management models through the frameworks of hybrid project management methodologies, KPIs, CSFs, stakeholder management methodologies, and BRMs.

The objective of this methodological framework is not to anachronistically impose contemporary managerial terms on ancient practice but to establish whether it is possible to identify the logics of contemporary project governance methodologies from historical practice. Through an analysis of archaeological, literary, and inscriptional data against established project management methodologies, this study evaluates whether it is possible to establish whether the Colosseum is a project as defined by the PMBOK® Guide Eighth Edition: "a temporary initiative to create value within a unique context and to deliver value to an organization by satisfying its needs."

3.1 Research Approach

The present research is based on a descriptive historical interpretive design and not on an empirical or quantitative design. Moreover, it is not based on any attempt to explore or describe the linguistic origin of the terminologies of project management in antiquity. It is an attempt to interpret the construction and governance of the Colosseum in light of contemporary conceptual frameworks to explore structural parallels.

The research questions that inform the interpretive logic of the research include:

i. How can the construction of the Colosseum be interpreted through the framework of hybrid project management?
ii. To what extent does the Colosseum meet the PMBOK® Guide Eighth Edition's definition of a project as a temporary initiative that creates sustained value?
iii. How can the distinction between project management success and project success be understood through a benefits realization lens in this historical context?

The study utilizes contemporary project management constructs in a heuristic manner. They serve as tools for analysis and not as evidence of Roman officials' knowledge of modern methodologies.

3.2 Source and Evidence Base

The reconstruction process mainly draws on peer-reviewed literature on history, archaeology, architecture, and politics. The technical and structural elements of the Colosseum's building process are informed by Adam and Mathews (2005), Lancaster (2005), Manieri Elia (2003), Jackson and Marra (2006), and Claridge (1998) on architecture and engineering. These literature pieces offer in-depth analysis on the Colosseum's building process, including the use of materials, vaulting, masonry, quadrant building, and the use of materials and their sourcing strategies.

The politics and symbolism of the Colosseum are informed by Hopkins and Beard (2005), Elkins (2014), Coleman (1990), Morgan (2006), and Murray (1965) on politics, symbolism, and the restoration of imperial legitimacy. The labor and social dynamics are informed by Bradley (1994) and Harper (2017) on labor and the Roman economy.

The theory and framework of analysis are informed by the current literature on project governance, which includes the hybrid theory of project management (Reiff & Schlegel, 2022; Lalmi et al., 2021), megaproject governance (Flyvbjerg et al., 2003), salience theory (Mitchell et al., 1997), and the literature on benefits realization management. The PMBOK® guide eighth edition (2025) offers the definitional framework to assess the Colosseum's status as a project, considering its status as such

Furthermore, no primary administrative records are available to describe the reporting systems for the project. Thus, the analysis has been based on secondary sources of information, which interpret archaeological, inscriptions, and literary records. The sources were chosen on the basis of their academic rigor, methodological clarity, and their relevance to the process of construction, governance, and socio-political factors.

3.3 Analytical Strategy

The strategy is to develop correlations between historical data and modern concepts of project management using a structured interpretive approach. The strategy has four stages of analysis.

Firstly, there is an analysis of the structure of governance to establish if it is aligned with hybrid project management theory. There is evaluation of historical data indicating fixed scope, defined budgets, and politically determined milestones against predictive governance principles. There is also evaluation of archaeological data indicating quadrants of execution, concurrent workflow, materials adaptation, and lean optimization as adaptive constructs within a predictive framework.

Secondly, there is an analysis of key performance indicators to establish if historical data and materials indicate measurable performance control. Schedule adherence, fiscal control, seating capacity, exit safety, structural flexibility, materials diversity, and workforce management are key performance indicators.

Thirdly, there is analysis of critical success factors to establish if there is enabling potential for sustained value creation. Reputation rebuilding, strategic longevity, structural longevity, symbolic incorporation, and fiscal adaptability are critical success factors.

Fourth, a benefits realization framework is utilized to differentiate between project management success and project success. The analysis is conducted to identify whether there is a sustained strategic, economic, and symbolic value generated by the Colosseum consistent with a value-oriented definition of a project as provided in the PMBOK® Guide Eighth Edition.

Contemporary frameworks are used throughout this work to provide an understanding of how historical data functions within those frameworks. No assertion has been made that any form of management practice has existed among the Romans as we now define it. However, the challenge presented is to demonstrate that, through our current interpretation, there were, in fact, functional governance processes used in both the building of and the governance of the Colosseum.

4.0 Results

4.1 Project Management Approach

4.1.1 The Colosseum as a Hybrid Project Management System

The construction of the Colosseum cannot be explained through either traditional or agile project management approaches. On the contrary, if we apply modern principles of project management, it is clear that the construction of the Colosseum is one of the first examples of hybrid project management. Hybrid project management is defined as "the structured approach of combining predictive and adaptive approaches to project management in order to achieve strategic control and operational flexibility" (Reiff & Schlegel, 2022). In construction projects, hybrid management is considered to be more appropriate for large-scale construction projects with "environmental uncertainty and multiple stakeholders" (Lalmi et al., 2021). The construction of the Colosseum is characterized by all of these factors.

At the strategic level, it is important to point out that the project had clear boundaries in terms of scope, finance, and politically important milestones. For instance, it is important to point out that the Flavian administration had a fixed goal in that it decided to convert the grounds of Nero's Domus Aurea into a public amphitheater that would symbolize imperial restitution (Hopkins & Beard, 2005). Funding of the project from ex manubiis, or spoils of war from the Jewish War,

provided a bounded financial constraint that ensured accountability (Elkins, 2014). Similarly, it is important to point out that the opening of the amphitheater in 80 AD under Titus was not only a ceremonial opening but also a hard deadline (Morgan, 2006).

However, archaeological and material evidence suggests that it did not follow a strictly linear or centralized micro-managed pattern. It had distinct quadrants of construction, with concurrent multi-level construction and differing masonry techniques (Manieri Elia, 2003; Lancaster, 2005). Similarly, evidence of mortar usage indicates that there were multiple sources of pozzolana that were adapted to suit constructional needs, indicating contextual decision-making and not strictly adherence to a singular specification (Jackson & Marra, 2006). Such evidence points to adaptive behaviors that were embedded in a larger framework of construction.

Moreover, evidence of lean construction is also present in the differential usage of precision in finish and the optimized logistics of travertine transportation via the Aniene-Tiber route (Lancaster, 2005). Lalmi et al. (2021) point out that hybrid construction models often include lean construction to reduce waste and increase value generation. Similarly, efficient coordination and concurrency in material usage in the Colosseum indicate value optimization that is consistent with a lean construction paradigm.

Taken collectively, the governance structure of the Colosseum indicates the presence of predictive control in the strategic layer, adaptive flexibility in the operational layer, and efficiency optimization across the workflows. This satisfies the theoretical requirements for hybrid project management, as indicated in the literature (Reiff & Schlegel, 2022), and the hybrid development approaches as indicated in the PMBOK® guide Eighth Edition (PMI, 2025).

4.1.2 Which Hybrid Model does the Colosseum most closely align with?

Although it is obvious that there are hybrid characteristics, it is necessary to understand which model of hybrid the Colosseum Megaproject resembles. Generally, there are four types of modern hybrids, which are:

- Agile to Predictive Transition
- Predominantly Agile with Predictive Gates
- Parallel Predictive and Agile
- Predictive with Adaptive Islands

Table 1. Comparing the alignment of various Hybrid Models for the Colosseum

Hybrid Model Type	Alignment	Evidence & Supporting Citations
Agile → Predictive Transition	Weak	No evidence that the Colosseum began with exploratory, iterative prototyping and later consolidated into predictive rollout. Instead, the project began with a fixed political mandate and predefined objective (Hopkins & Beard, 2005; Morgan, 2006). Hybrid theory describes Agile→Predictive transitions as innovation-first models, which does not match the Colosseum's politically fixed scope (Reiff & Schlegel, 2022).
Parallel Agile and Predictive Streams	Moderate	Archaeological evidence shows quadrant-based concurrent construction and multi-level scaffolding, suggesting parallel execution streams (Manieri Elia, 2003; Lancaster, 2005). However, funding, scope, and milestone constraints remained centrally controlled, limiting full stream autonomy (Hopkins & Beard, 2005; Adelakun & Prem Kumar, 2026).
Predominantly Agile with Predictive Gates	Weak	Predominantly agile models assume evolving scope and flexible constraints. The Colosseum had fixed scope, fixed funding (ex manubiis), and a politically immovable inauguration date (Hopkins & Beard, 2005; Morgan, 2006). This contradicts agile-dominant logic (Reiff & Schlegel, 2022).
Predictive Backbone with Agile Islands	Strongest	Clear predictive governance at macro level: fixed political objective, structured funding, defined schedule (Hopkins & Beard, 2005; Morgan, 2006; Elkins, 2014). Adaptive execution at sector level: quadrant-based construction, material variation, concurrent workflows (Manieri Elia, 2003; Jackson & Marra, 2006; Lancaster, 2005). Lean efficiency embedded in execution (Lalmi et al., 2021). This aligns directly with hybrid theory for complex construction megaprojects (Reiff & Schlegel, 2022; PMI, 2025).

Source: Author's Construction based on inference from secondary sources

Consequently, the Colosseum best fits the Predictive Backbone with Adaptive Islands hybrid model, considering the need for governance and the achievement of the desired performance and schedule. This structure, therefore, was not just coincidental; instead, it was functionally critical for the politically prominent megaproject undertaken on such a massive and complex scale. Accordingly, the evidence supports the categorization of the Colosseum as not just being an

exemplary work of architecture, but also as one of the earliest examples of hybrid project governance.

4.2. Translating Historical Objectives into Project Management Benefit Categories

Modern benefits realization management understands projects as mechanisms for producing outputs that are converted into outcomes and benefits through conscious governance and practice (Breese et al., 2015). Using this approach to the Colosseum involves interpreting the historical objectives of the amphitheater and relating them to contemporary benefits and analyzing the process through which they were achieved.

4.2.1 Strategic Benefit – Regime Stabilization

Strategic benefits represent long-term benefits that impact and change the position of an organization or polity and warrant investment at the highest level (Breese et al., 2015; Stretton, 2020). For the Flavian regime, the strategic benefit was the stabilization of the regime. By repurposing Nero's Domus Aurea as a public amphitheater, there was communication of political restitution to Roman constituents and a renewed focus of attention to civic welfare. Strategic benefits are inherently intangible and political in nature and warrant sponsorship and portfolio-level support for delivery and monitoring (Kazmi et al., 2016). From a BRM perspective, this is considered a top-level benefit and would be attributed to an executive sponsor and monitored through proxies such as inscriptions, coinage, and ceremonies (Breese et al., 2015; Delisle et al., 2025).

4.2.2 Tangible Benefit – Public Venue Capacity

Tangible benefits are quantifiable and operational benefits that are directly enabled by the outputs of the project (Ashurst et al., 2008). The seating capacity, vomitoria, and walkways enabled the Colosseum to deliver an immediate and verifiable capacity benefit: the ability to accommodate tens of thousands for events. This is an exemplary output-outcome relationship whereby the output enabled operational activities that delivered short-term and ongoing benefits. Benefits realization capability models are used to document such tangible metrics and link these to downstream benefits such as utilization (Ashurst et al., 2008).

4.2.3 Intangible Benefit – Dynastic Legitimacy

Intangible benefits are associated with reputational, legitimacy, and cultural capital and are often measured through proxies and long-term metrics (Breese et al., 2015). The Colosseum delivered reputational and legitimacy benefits to the Flavian dynasty through the embedding of Flavian symbolism into the fabric of the city. Intangible benefits are often subject to measurement through

proxies and must be sustained over time to maintain their benefits (Stretton, 2020; Delisle et al., 2025).

4.2.4 Economic Benefit – Labor Mobilization

The economic benefits include employment, activation of the supply chain, and the resultant economic activity generated as a consequence of the project delivery (Ashurst et al., 2008; Kazmi et al., 2016). The Colosseum generated significant workforces, artisans, quarrying, and transportation activity, which provided an immediate economic stimulus and skills activation. Current Benefits Realization Management (BRM) methodologies advocate the realization of such economic benefits in terms of quantifiable measures such as person-days created, contractual activity, and trade (Breese et al., 2015).

4.2.5 Reputational Benefit – Public Approval

Reputational benefits reflect stakeholder sentiment and social license to operate. In the case of public projects, reputational benefits have a direct bearing on future political capital (Breese et al., 2015). The Colosseum benefited from public opinion by providing a previously private imperial space for use by the public and by offering entertainments that celebrated imperial beneficence. The benefits management literature underlines the importance of continuous engagement with stakeholders and reporting to maintain reputational benefits (Stretton, 2020; Delisle et al., 2025).

4.3 Benefits Realization Lifecycle Mapping

According to the literature on benefits realization, there is a lifecycle of benefits realization consisting of benefits identification, planning, delivery, and sustainment. Recent studies highlight that benefits realization is an activity that needs to be managed through its lifecycle and that capability, ownership, measurement, and time horizons are critical success factors of benefits realization (Breese et al., 2015; Ashurst et al., 2008).

4.3.1 Benefits Identification – Political Restoration Agenda

Benefits identification defines the purpose and outcomes that the project is intended to deliver and connects these outcomes to strategy (Breese et al., 2015; Stretton, 2020). The benefits for the Colosseum were identified and defined along political lines from the outset, with the project being conceived as a tool for restoring order and providing legitimacy for the Flavian dynasty. This identification process is comparable to providing a strategic business case for the project, providing visibility for the intended political outcomes to key stakeholders (Kazmi et al., 2016).

4.3.2 Benefits Planning – *ex manubiis* Funding

Benefits planning operationalizes the achievement, financing, and measurement of benefits (Ashurst et al., 2008; Breese et al., 2015). The decision to finance the construction of the Colosseum through *ex manubiis* provided a planned finance approach that linked finance to political narrative and constrained finance in such a manner that it enhanced accountability. Current BRM models underscore the importance of aligning finance, measurement, and ownership to achieve outcomes from outputs. The Colosseum is used to demonstrate the alignment between the decision to finance and the planned achievement of benefits (Kazmi et al., 2016; Stretton, 2020).

4.3.3 Benefits Delivery – Completion of A.D. 80 Games

Benefits delivery happens when the outputs of the project produce immediate results and benefits (Ashurst et al., 2008; Breese et al., 2015). The inauguration in A.D. 80 is the traditional benefits delivery point when the outputs of the amphitheater produced direct and reputational benefits, such as the spectacles and ceremonies, respectively. BRM best practice suggests monitoring these signals at this point to validate the business case and sustainment strategy. The Romans were able to attain measurable results, such as the number of attendees and ceremonies, which served as the signals of the realization of the benefits (Delisle et al., 2025).

4.3.4 Benefits Sustainment – Recurring Spectacles

Sustainment, on the other hand, emphasizes the integration of the benefits into operations, ensuring longevity, institutional ownership, and continuous stakeholder engagement (Breese et al., 2015). The Colosseum ensured the sustainability of its benefits through its operations, maintenance, and institutional ownership. Contemporary research indicates that benefits are not sustainable in the long term, but the Flavian administration ensured this risk was mitigated by the continuous operationalization of the amphitheater and the presence of the emperor (Ashurst et al., 2008; Delisle et al., 2025).

4.4 Long-term Value Generation

The long-term value generation of the Colosseum far exceeds the immediate political and operational benefits achieved at its inauguration in A.D. 80. While its primary objective was to stabilize the regime, restore the city, and entertain (Hopkins & Beard, 2005; Morgan, 2006), the amphitheater has now become a symbol of civilization. One of the most remarkable facets of value generation is structural endurance. The building was made using sophisticated engineering skills

of the Romans, which included travertine piers, radial vaults, and *opus caementicium*[3] (Adam & Mathews, 2005; Lancaster, 2005). The structure has now survived for nearly two thousand years, despite natural calamities like earthquakes, spoliation of building materials, and environmental forces. The survival of the structure is not coincidental but is made possible by designing it to last. One of the most incredible aspects of value generation is the endurance of the structure itself because it is not possible for a structure not designed to last to generate value in the long term. It needs to be designed to last for centuries in order to generate returns in terms of benefits.

In addition to physical endurance, there is also a demonstration of value transformation in terms of adaptability. After the decline of the Western Empire, there was a change in function from an amphitheater to a fortress, living quarters, a place of worship, and finally a cultural heritage monument. Today, the Colosseum represents one of the most visited monuments in the world, generating a tremendous amount of revenue for Italy in terms of tourism. The potential of the monument, originally meant for hosting events in ancient Rome (Claridge, 1998), is now utilized for heritage tourism, branding, and cultural recognition around the world. The revenue generated from tourism represents a continuation of the mobilization of resources in ancient times. The value of the project has not been static; rather, it has been redefined and utilized over time.

This is a long-term and constantly evolving value generation that aligns perfectly with the concept of a value delivery system that is reflected in the PMBOK® Guide 8, where a project is considered a temporal activity conducted to create value in a larger value delivery system (PMI, 2025). The construction of the Colosseum is a temporal activity, but it is important to point out that it did not produce temporal value. PMBOK® 8 recognizes that a project should not only be assessed in terms of delivery performance but also in terms of benefits realization and sustainment. The Colosseum is a perfect example of this concept on a massive scale. The value that it generated in Rome and Italy is still being converted into strategic legitimacy, civilizational symbols, and economic benefits today. The fact that it is still producing economic benefits and is being used as a symbol of Rome and Italy all over the world is a perfect example of a temporal activity that generated a long-term value delivery system that is still being sustained in multiple socio-economic systems. In this regard, it is safe to say that Colosseum is one of the most perfect examples of multi-millennial benefits realization.

4.5 Distinguishing Project Success from Project Management Success

A distinction that makes a difference in terms of project management success and project success requires that we identify what critical success factors were in place that allowed us to sustain our value generation beyond mere completion of a project. Critical Success Factors, in contemporary

[3] Roman hydraulic concrete composed of lime mortar, water, rubble aggregate, and pozzolanic volcanic ash, which allowed it to set underwater and achieve high compressive strength (Lancaster, 2005). In the Colosseum, it formed the structural core of vaults and radial walls, enabling large-scale load distribution and reduced dependence on costly travertine ashlar (Lancaster, 2005; Jackson & Marra, 2006).

project governance literature, are structural conditions that are required to be in place in order to realize strategic benefits of a project.

With regard to the Colosseum, it is possible to identify a number of Critical Success Factors that were in place from a historical point of view. First and foremost, there is a question of reputation. With Nero and A.D. 69 being a tumultuous period in Roman history, it is possible to argue that the Flavian administration had to re-establish a sense of public trust (Morgan, 2006). The decision to substitute a private lake with a public amphitheater in the Domus Aurea was a reputational repositioning strategy (Hopkins & Beard, 2005).

Second, long-term strategic orientation was integrated into the design and purpose of the amphitheater. The Colosseum was designed, not as a short-term ceremonial space, but as a long-term institution with the capability of supporting repeated spectacles and thereby perpetuating imperial presence (Coleman, 1990). This forward-thinking strategy aligns with the principles of contemporary BRT, which recognizes the need to ensure alignment with long-term strategic objectives, not short-term results.

Third, structural durability served as a critical CSF. The structural integration of travertine[4], tufa[5], and opus caementicium facilitated long-term durability (Adam & Mathews, 2005; Lancaster, 2005). The fact that the Colosseum has survived for nearly two thousand years suggests that long-term lifecycle performance was implicitly considered during its original design. This practice aligns with the principles of designing for long-term asset value, as opposed to short-term acceptance.

Fourth, symbolic integration into civilizational identity facilitated long-term intangible benefit realization. The Colosseum has evolved from an imperial arena to a global icon of Rome and Italy. Its cultural value extends far beyond its original purpose, reinforcing national identity and generating tourism revenues to the government. This evolution represents the principles of long-term benefit realization, as recognized in the context of contemporary value frameworks.

Fifth, economic adaptability ensured that the project's value had the potential to accrue over time. In the ancient world, the amphitheater facilitated the mobilization of labor and the economy (Lancaster, 2005). In the contemporary world, it has the potential for generating significant tourism revenue and employment.

[4] strong limestone commonly used for load-bearing elements
[5] softer volcanic stone

All these CSFs set the stage for the Key Performance Indicators to manifest into long-lasting success. Adelakun & Prem Kumar (2026) trace several KPIs that suggest the presence of performance management during construction, such as:

- Adherence to the construction schedule to be ready for the A.D. 80 inaugural ceremony
- Financial discipline through ex manubiis funding
- Optimizing seating capacity
- Ensuring exit safety through 76 vomitoria
- Structural tolerances
- Diversified material sourcing
- Labor productivity

From the point of view of project management, the achievement of these KPIs indicates the success of the project execution process. The amphitheater has been completed on time, within the fiscal constraints, and with high structural integrity. However, the success of the project in its true sense has to be assessed in terms of the realization and sustainment of the CSFs mentioned above. The Colosseum has not only achieved its KPIs, but has also realized its long-term stabilization in terms of politics, reputation, and the economy, and has created cultural value over the ages.

The success of the project management process has been achieved in terms of the realization of the KPIs, whereas the success of the project has been realized in terms of the sustained realization of its strategic, reputational, economic, and cultural value over the past two millennia.

Table 2. Two-Dimensional Success Matrix: CSFs x Core Performance Domains

Critical Success Factors (CSFs)	Core Performance Domains				
	Scope	**Schedule**	**Cost**	**Quality**	**Resources**
Reputation Restoration	Public transformation of Domus Aurea into civic infrastructure (Hopkins & Beard, 2005)	On-time A.D. 80 inauguration reinforced legitimacy (Morgan, 2006)	ex manubiis funding avoided fiscal backlash (Hopkins & Beard, 2005; Elkins, 2014)	Engineering excellence signaled imperial competence (Adam & Mathews, 2005)	Coordinated labor and material flow prevented visible failure (Lancaster, 2005)
Strategic Longevity	Monument designed as permanent	Timely completion enabled	Controlled funding supported	Durable structural system	Sustained workforce and quarry

	civic institution (Coleman, 1990)	recurring spectacles (Morgan, 2006)	sustainability (Hopkins & Beard, 2005)	ensured centuries of use (Lancaster, 2005)	logistics enabled continued operation (Lancaster, 2005; Bomgardner, 2000)
Structural Durability	Large-scale permanent architecture embedded in scope (Adam & Mathews, 2005)	Milestone control prevented rushed compromise (Morgan, 2006)	Budget prioritized load-bearing travertine and concrete (Lancaster, 2005)	Vaulting systems ensured firmitas (Manieri Elia, 2003; Adam & Mathews, 2005)	Skilled labor retention and diversified pozzolana reduced structural risk (Jackson & Marra, 2006; Bradley, 1994)
Symbolic Embedding	Scope aligned with imperial restitution narrative (Hopkins & Beard, 2005)	Inaugural games created ritual legacy (Morgan, 2006)	Spoils funding reinforced victory symbolism (Elkins, 2014)	Monumental façade became civilizational icon (Claridge, 1998)	State-organized mobilization reflected imperial power (Bomgardner, 2000)
Economic Adaptability	Large-capacity venue enabled recurring value creation (Claridge, 1998)	Completion created operational revenue platform (Morgan, 2006)	Fiscal discipline preserved long-term viability (Hopkins & Beard, 2005)	Structural longevity supports modern tourism asset (Lancaster, 2005)	Labor mobilization stimulated ancient economy and modern tourism ecosystem (Lancaster, 2005)
Governance Discipline	Clearly bounded political objective (Hopkins & Beard, 2005)	Hard deadline enforced administrative control (Morgan, 2006)	Dedicated funding ensured accountability (Elkins, 2014)	Quality oversight preserved imperial image (Manieri Elia, 2003)	Muster rolls and quadrant supervision monitored productivity (Bomgardner, 2000)

Source: Author's Construction based on inference from secondary sources

5.0 Discussion

On the basis of the findings from the secondary research and the analytical framework adopted in this study, it may be inferred that the Colosseum construction took place with an established system of governance characterized by a hybrid system of predictive control and adaptive execution. For instance, the fixed inauguration date of 80 AD, the publicly disclosed formula of ex manubiis, and the precise nature of its design with regard to vaulting systems and exterior wall alignments all indicate an established system of schedule stability, cost stability, and structural quality stability (Hopkins & Beard, 2005; Morgan, 2006; Adam & Mathews, 2005). Although no direct evidence of dashboards or reporting systems exists, archaeological timelines, quadrant-based construction methodologies, and diversified material procurement systems all indicate an embedded system of performance expectations and supervisory monitoring (Manieri Elia, 2003; Jackson & Marra, 2006), thus indicating an embedded system of predictive control with localized adaptive islands, thereby aligning with the hybrid system of "Predictive Backbone with Adaptive Islands" as discussed in hybrid theory of contemporary relevance (Reiff & Schlegel, 2022; Lalmi et al., 2021; PMI, 2025).

When considered from the lens of benefit realization, it can be argued that the Colosseum goes beyond project management success and into project success. In terms of project management success, it can be argued that it achieved reconstructed project success measures, which included schedule adherence, financial discipline, structural integrity, seating capacity, and coordinating resources (Adelakun & Prem Kumar, 2026). In terms of strategic project success, it can be argued that it rebuilt trust within the population after Nero's rule, it created an ongoing event paradigm, and it embedded legitimacy within the city of Rome (Morgan, 2006; Coleman, 1990). Finally, in terms of structural project success, it has endured earthquakes, political change, and environmental exposure over the past 2,000 years (Lancaster, 2005). In terms of economic and symbolic project success, it continues to generate revenue and represents Rome and Italy as a symbol throughout the world. This represents project success over time and is consistent with the notion of project management as represented in the PMBOK® Guide Eighth Edition, which represents project management as temporary initiatives to create long-term value within a larger system of value delivery (PMI, 2025).

As such, it is important to differentiate between project management success and project success. Accordingly, it is important to realize that, although the Colosseum did meet all of its performance metrics when it was first completed, it is also important to realize that it also provided strategic, reputational, economic, and civilizational benefits throughout its long history. In this regard, it is important to realize that there is a significant amount of evidence to demonstrate that the Flavian Amphitheatre not only met all of the technical criteria to be considered a successful construction project but also that it was an exemplar of hybrid governance and benefits-based project logic. Although it is certainly interpretive to suggest that it utilized many of the current terminology that

is utilized in this space, it is also important to realize that there are structural patterns that provide a significant amount of evidence to suggest that proto-governance principles were certainly present in imperial Rome.

6.0 Conclusion

From the evidence provided above, it is apparent that there is a layered system of governance that is very close to what contemporary theorists consider to be an ideal hybrid model of project management. Strategic objectives were secured through sponsorship, funding constraints, and politically determined milestones. There is also evidence of adaptive execution through quadrant-based construction methods, diversified procurement routes, and parallel work streams. It is submitted that this is most indicative of a 'Predictive Back Bone with Adaptive Islands' model of hybrid project management theory.

Aside from its delivery performance, another compelling example of benefits realization sustainability is exemplified by the Colosseum. It achieved its key performance indicators in terms of its delivery schedule, cost control, structural soundness, capacity utilization, and resource utilization. What is more compelling is that it achieved its critical success factors in terms of its reputation rehabilitation, strategic sustainability, structural soundness, symbolic incorporation, and economic flexibility. Its structural sustainability and revenue generation through global tourism activities over two millennia exemplify benefits realization sustainability. From a perspective aligned with the PMBOK® Guide Eighth Edition, it is clear that the Colosseum was a temporary endeavor that generated sustained benefits within a larger value delivery system. The distinction between project management success and project success is vital. The Colosseum achieved both.

Limitations and Future Research:

- Retrospective alignment of modern project management concepts with first-century Roman practices can also imply bias; historical data is incomplete and based on inference.
- The absence of surviving administrative project documentation limits verification of formalized performance systems, requiring reliance on archaeological, inscriptional, and literary correlation.
- Evaluation of a historical case is necessarily limited in its generalizability, as quantitative estimates of labor force size, funding magnitude, and performance thresholds are approximations based on secondary analysis.
- The Roman imperial governance context, characterized by centralized authority and patronage systems, differs structurally from modern organizational environments, which may limit direct theoretical transferability.

References

Adam, J. P., & Mathews, A. (2005). *Roman building: materials and techniques*. Routledge. https://doi.org/10.4324/9780203984369

Adelakun, I.A., Prem Kumar, A. (2026). Reimagining the Origins of Project Management through the Colosseum Proto-Megaproject. *PM World Journal*, Vol. XV, Issue III https://pmworldjournal.com/article/reassessing-the-origins-of-project-management

Ashurst, C., Doherty, N.F., Peppard, J. (2008). Improving the impact of IT development projects: the benefits realization capability model. *European Journal of Information Systems.* https://doi.org/10.1057/ejis.2008.33

Ball, L. F. (1994). A reappraisal of Nero's Domus Aurea in Rome, *Journal of Roman Archaeology: Supplementary series, 11*. 182-254. https://doi.org/10.1017/S1047759400016251

Bomgardner, D. L. (2000). *The Story of the Roman Amphitheatre*. Routledge. https://doi.org/10.4324/9780203187982

Bradley, K. (1994). *Slavery and society at Rome*. Cambridge University Press. https://doi.org/10.1017/CBO9780511815386

Breese, R., Jenner, S., Serra, C. E. M., & Thorp, J. (2015). Benefits management: Lost or found in translation. *International Journal of Project Management, 33*(7), 1438–1451.

Claridge, A. (1998). *Rome: An Oxford Archaeological Guide*. Oxford University Press. https://doi.org/10.2307/3184887

Coleman, K. M. (1990). 'Fatal charades': Roman executions staged as mythological enactments. *Journal of Roman Studies, 80*, 44–73. https://doi.org/10.2307/300280

Delisle, J., Marnewick, C., & Romero-Torres, A. (2025). Exploring temporal dimensions of benefits realisation management in agile IT environments. *International Journal of Information Systems and Project Management, 13*(4), 1-17. https://aisel.aisnet.org/ijispm/vol13/iss4/4/

Elkins, N. (2014). The procession and placement of imperial cult images in the Colosseum. *Papers of the British School at Rome*, *82*, 73-107. https://doi.org/10.1017/S0068246214000051

Flyvbjerg, B., Bruzelius, N., & Rothengatter, W. (2003). *Megaprojects and Risk: An Anatomy of Ambition*. Cambridge University Press.

Harper, K. (2017). *Slavery in the late Roman world, AD 275–425*. Cambridge University Press. https://doi.org/10.1017/CBO9780511973451

Hopkins, K., & Beard, M. (2005). *The Colosseum*. Harvard University Press.

Jackson, M., & Marra, F. (2006). Roman stone masonry: volcanic foundations of the ancient city. *American Journal of Archaeology*, *110(3)*, 403-436. https://doi.org/10.3764/aja.110.3.403

Kazmi, S. S., Rafi, A., & Hassan, M. (2016). Impact of Benefit Realization Management on Two-dimensional Model of Project Success: Evidence from Pakistani Telecom Industry. *International Review of Management and Marketing, 6*(4), 32–37. https://izlik.org/JA26NP55PU

Lalmi, A., Fernandes, G., & Boudemagh Souad, S. (2021). A conceptual hybrid project management model for construction projects. *Procedia Computer Science, 181*, 921–930. https://doi.org/10.1016/j.procs.2021.01.248

Lancaster, L. C. (2005). The process of building the Colosseum: The site, materials, and construction techniques. *Journal of Roman Archaeology*, *18(1)*, 57–82. https://doi.org/10.1017/S1047759400007212

Manieri Elia, G. (2003). *The Colosseum: Quality and efficiency of construction*. *Proceedings of the First International Congress on Construction History*, *Madrid* (pp. 1344–1356).

Mitchell R. K., Agle B. R., Wood D. J. (1997). Stakeholder identification and salience: Defining the principle of who and what really counts. *Academy of Management Review*, 22, 853-886.

Morgan, G. (2006). *69 A.D.: The year of four emperors*. Oxford University Press. https://doi.org/10.1111/j.1540-6563.2008.00205_60.x

Mossalam, A., & Arafa, M. (2016). The role of project manager in benefits realization management as a project constraint/driver. *HBRC Journal, 12*(3), 305–315. https://doi.org/10.1016/j.hbrcj.2014.12.008

Murray, O. (1965). The 'quinquennium Neronis' and the Stoics. *Historia: Zeitschrift für Alte Geschichte, 14*, 41–61. https://www.jstor.org/stable/4434867?seq=2

PMI (2021). *A guide to the Project Management Body of Knowledge (PMBOK®® guide)* (7th ed.) Project Management Institute (PMI).

PMI (2025). *A guide to the Project Management Body of Knowledge (PMBOK®® guide)* (8th ed.) Project Management Institute (PMI).

Reiff, J., & Schlegel, D. (2022). Hybrid project management – A systematic literature review. *International Journal of Information Systems and Project Management, 10*(2), 45–63. https://doi.org/10.12821/ijispm100203

Stretton, A. (2020). Relating three prominent program-related benefits management processes with organisational strategic management sequence. *PM World Journal.* Vol. IX, Issue IX https://pmworldjournal.com/article/relating-three-prominent-program-related-benefits-management-realisation-processes

About the Authors

Arvin Prem Kumar

Instructor, School of Applied Professional Studies,
College of Integrative Sciences & Arts
Arizona State University, USA

Arvin Prem Kumar, MPM, PMP, PMI-ACP, GPM-b, PMI-PMP is an Instructor at Arizona State University with industry experience spanning engineering, construction, and project delivery environments prior to transitioning fully into academia. His professional background includes applying structured project controls, schedule development, cost management, and stakeholder coordination within technical and infrastructure-focused settings, providing him with practical insights that inform his teaching. He holds a master's in project management from Arizona State University and a Bachelor of Engineering in Civil Engineering from Anna University, Chennai, India. Arvin maintains multiple industry-recognized credentials, including Project Management Professional (PMP)®, PMI Agile Certified Practitioner (PMI-ACP)®, Certified Green Project Manager (GPM-b™), and PMI's PMP® Train the Trainer designation.

Arvin also actively contributes to the profession through volunteer leadership, serving as a facilitator for the PMI-Arizona Chapter's inaugural PMI-ACP® certification study group and supporting initiatives that advance professional development within the project management community. At ASU, he has worked at scale to systematically rebuild and modernize project management courses, leading comprehensive curriculum redesign efforts that strengthen alignment of learning outcomes, scaffold competency development across modules, integrate predictive and agile methodologies, enhance assessment rigor, and ensure vertical alignment across program levels. His work emphasizes instructional coherence, industry relevance, measurable learning performance, and sustainable course architecture designed to support long-term program quality and student success. He can be contacted at anola259@asu.edu

Idris Adelakun, Ph.D.

Assistant Teaching Professor,
Arizona State University, USA

Idris Adelakun, Ph.D., P.Eng., PMP, CPEM, SFC, GPM-s, CSPM-s, CAC, CPBA, SFC is an Assistant Teaching Professor at Arizona State University. Idris holds a PhD in Leadership (High Distinction) with a specialization in Organizational Management from Carolina University, USA, an MSc in Biosystems Engineering and a certificate in Supervisory Management from University of Manitoba. He also earned a BSc in Agricultural and Environmental Engineering from University of Ibadan and a diploma in Agricultural Engineering from the Polytechnic Ibadan. Idris serves as a Sustainability Champion with PMI-GPM.

Idris holds professional certifications including Project Management Professional (PMP), Professional Engineer of Manitoba (P.Eng.), Certified Professional in Engineering Management (CPEM), Certified Sustainable Project Manager Specialist (CSPM-s), Scrum Fundamentals Certified (SFC), Certified Agile Coach (CAC), and Certified Professional Business Analyst (CPBA). He can be contacted at idris.adelakun@asu.edu