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SCHOOL OF COMMERCE

DEPARTMENT OF PROJECT MANAGEMENT

ASSESSING PLANNING PRACTICE OF MUSEUM CONSTRUCTION

PROJECT: THE CASE OF ADWA MUSEUM IN ADDIS ABABA

ETHIOPIA

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Declaration

I, Abenezer Temesgen, registration number GSR/4505/15, do hereby declare that this thesis is my original work and that it has not been submitted partially; or in full, by any other person for an award of degree in any other College/University/Institution.

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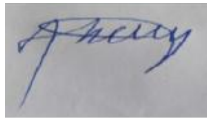
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Abbreviations and Acronyms

AM	Adwa Museum
BIM:	Building Information Modeling
CJI	China Jianguo International
ECWC	Ethiopian Construction work corporations
ECDSWC	Ethiopian Construction Design and Supervision Works Corporation
MPCO	Mega Project Construction office
PM	Project management
PMI:	Project Management Institute
UNESCO:	United Nations Educational, Scientific and Cultural Organization
VR:	Virtual Reality

ABSTRACT

The purpose of this study was to evaluate the planning practices of the Adwa Museum construction project in Addis Ababa, Ethiopia. This study used an descriptive design to describe and evaluate how planning methods were applied to this important construction project. This study mainly uses quantitative methods, including systematic data collection and statistical analysis, to understand various aspects of the planning process. Data for the study was collected from both primary and secondary sources. Primary data included interviews and surveys with key stakeholders such as contractors, consultants and clients involved in the Adwa Museum project. Secondary data was collected through the analysis of relevant documents, books, articles, and online resources. This approach allowed for a comprehensive examination of the planning practices, challenges, and perspectives within the museum construction sector. The study population comprised 33 individuals remaining from an original group of stakeholders involved in the project's planning phase. Purposeful sampling was used to select four key participants, including project managers and experts, to provide detailed insights into the planning practices. Data collection instruments included close-ended questionnaires and semi-structured interviews, designed to gather detailed information on planning practices, challenges, and stakeholder perspectives. Key findings indicate that while the project had strengths in areas such as timeline adherence, sustainability integration, quality control, and public engagement, significant challenges were identified in communication, risk management, long-term planning, and stakeholder coordination. These findings highlight the need for improved strategies in these areas to enhance future project planning practices. The study concludes with recommendations to improve stakeholder communication, enhance regulatory compliance, secure adequate funding, and prioritize inclusivity and accessibility. Implementing these recommendations will help ensure more effective and efficient planning processes for future museum construction projects, ultimately leading to more successful project outcomes.

Keywords: Project, planning, museum

Chapter one

Introduction

This chapter presents an overview of the study, encompassing the study's background, justification of the study, rationale of the study, problem statement, research questions, study objectives, significance, scope, Limitations and the organizational of the study.

1.1. Background of the Study

The construction of museums is a unique and complex endeavor that requires careful planning and execution (Alaloul et al., 2020). Museums are not only cultural and educational institutions but also serve as architectural landmarks that reflect the identity and heritage of a community (Alaloul et al., 2021). Effective planning is crucial in museum construction projects to ensure the successful delivery of these specialized facilities within the specified time, budget, and quality requirements (Alaloul et al., 2022).

Museum construction projects often face unique challenges that differentiate them from other types of construction projects. These challenges include the need to accommodate specialized exhibition spaces, climate-controlled environments, and complex security systems (Alaloul et al., 2020). Additionally, museum construction projects may involve the preservation and integration of historical structures, which adds an additional layer of complexity to the planning and execution processes (Alaloul et al., 2021).

Effective planning is crucial to ensure the success of such projects and to meet the diverse needs of audiences (Williams & Davis, 2021). In recent years, there has been a growing emphasis on sustainable practices in the construction industry, including within the museum sector (Jones & Garcia, 2023). Sustainable planning aims to minimize environmental impact and optimize resource utilization (Lee et al., 2020). Integrating sustainability into museum construction planning requires interdisciplinary collaboration and innovative design strategies (Chang & Smith, 2022).

However, the effectiveness of these approaches in the context of museum construction and their impact on project performance remains areas of ongoing research and investigation (Alaloul et al., 2021). Understanding the current planning practices and the challenges faced in museum

construction projects is crucial for developing strategies to enhance the planning and delivery of these specialized facilities (Alaloul et al., 2022).

Furthermore, technology has significantly influenced museum construction planning practice (Clark & White, 2023). Digital tools such as Building Information Modeling (BIM) and Virtual Reality (VR) simulations provide valuable insights into spatial configurations and exhibit layouts (Roberts et al., 2021). Incorporating digital technologies enhances efficiency and stakeholder engagement (Huang & Wang, 2022). Despite recognition of the importance of effective planning, challenges persist (Gupta & Patel, 2023). Budgetary constraints, regulatory requirements, and community opposition may hinder plan implementation (Nguyen and Tran, 2020). Addressing these challenges requires proactive risk management and transparent communication (Wilson & Thomas, 2022). Given the complexity of museum architectural planning, it is necessary to evaluate current practices (Anderson & Miller, 2023). Evaluation can improve project outcomes and contribute to the sustainable development of the cultural heritage sector (Taylor et al., 2021).

The construction of museums in Ethiopia is a critical component of the country's efforts to preserve its rich cultural heritage and promote tourism (Abebe & Abebe, 2021). Ethiopia is home to a diverse array of historical and cultural sites, many of which are recognized as UNESCO World Heritage Sites (Abebe & Abebe, 2022). The development of museums plays a vital role in showcasing these treasures and educating both local and international visitors (Abebe & Abebe, 2020).

However, the planning and execution of museum construction projects in Ethiopia face unique challenges that are distinct from those encountered in other parts of the world (Abebe & Abebe, 2021). These challenges include the need to integrate traditional architectural styles, accommodate the preservation of historical artifacts, and ensure the projects are aligned with the country's broader cultural and economic development goals (Abebe & Abebe, 2022).

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The construction of the Adwa Museum represents a significant endeavor in the preservation and promotion of Ethiopia's cultural heritage. It involves various stakeholders, including government authorities, cultural heritage organizations, architects, historians, and local communities. The planning practice for museum construction encompasses several crucial aspects, such as site selection, architectural design, exhibition planning, funding mechanisms, and community

engagement. Understanding how the construction of the Adwa Museum was planned is essential to ensure its successful implementation and effective use as a cultural institution. This study seeks to make a valuable contribution to the fields of museum studies and cultural heritage management by examining planning practices, identifying challenges faced and exploring potential prospects.

1.1.1. Justification and Rationale of the study

Integrity and Fairness of Work The construction of the Ethiopia Museum is an important part of the country's efforts to preserve its rich heritage and develop tourism. Ethiopia is home to many historical and cultural sites, many of which are listed as UNESCO World Heritage Sites. Museum development plays an important role in displaying these treasures and educating local and international visitors. However, planning and execution of museum construction in Ethiopia faces unique challenges unlike other parts of the world. From the perspective of Ethiopia, a recent empirical study has shown that work planning in construction museums is often general and formally incomplete, leading to inefficiencies and negative outcomes. Researchers stated that incorrect planning in these projects led to construction delays, excessive expenses and quality problems. In addition, research reveals the difficulties in combining the preservation of history and culture with modern design and needs, as well as the difficulty of participants in collaborating and working together. Additionally, existing literature in the Ethiopian context demonstrates the need for skills and knowledge in planning and managing museum projects. The special requirements and complexity of these special places often exceed the capabilities of traditional construction for the management of work in the country, causing additional difficulties in planning and completing these tasks. This study aims to address these important issues through a comprehensive evaluation of operational planning in museums in Ethiopia. This study aims to understand the planning process in the construction of the Adwa Museum in Addis Ababa, Ethiopia, by analyzing the current process, identifying critical problems and looking for improvement ideas. The findings of this research will assist policy makers, project managers and cultural heritage practitioners in improving the planning and use of spaces in museums to meet the cultural and economic development of the country.

1.2. Statement of the Problems

Studies in many countries show that museum infrastructure does not have a comprehensive planning process (Goulding and Domic, 2019; Lim and Wen, 2021). Researchers have found that the planning work in these projects is often unstructured, leading to underdelivery and ineffectiveness (Goulding and Domic, 2019; Lim and Wen, 2021). Lack of planning processes has been shown to cause delays, cost overruns, and quality issues (Goulding and Domic, 2019; Lim and Wen, 2021). Existing documentation also demonstrates the problems in combining the preservation of history and culture with modern designs and arrangements in infrastructure (Goulding and Domic, 2019; Lim and Wen, 2021). Researchers have shown that considering the need to preserve the authenticity and integrity of cultural heritage with the needs of today's audiences and the needs of the artefact is an important part of the planning and decision-making process (Goulding and Domic, 2019; Lim). and Wen, 2021). Research has shown problems with collaboration and collaboration with partners in museum design (Goulding and Domic, 2019; Lim and Wen, 2021). Researchers have shown that collaboration of various stakeholders, including government agencies, political authorities, and local communities, can create competitive partnerships and lead to conflicting goals and values (Goulding and Domic, 2019; Lim and Wen, 2021). Effective stakeholder management is considered essential in the successful planning and implementation of museum development projects (Goulding and Domic, 2019; Lim and Wen, 2021).

planning and management of art in museums requires skills and knowledge (Goulding and Domic, 2019; Lim and Wen, 2021). Research shows that the unique requirements and complexities of these specific sites often exceed the capabilities of traditional management systems (Goulding and Domic, 2019; Lim and Wen, 2021). This diversity of expertise has been found to contribute to problems in the planning and implementation of infrastructure projects in many countries (Goulding and Domic, 2019; Lim and Wen, 2021). From Ethiopia's perspective, the planning and management of museum construction faces many problems, as studies conducted in recent years have shown. The aim of this study is to follow the main themes in the existing literature in the Ethiopian context. The preparation of working practices in art museums often lacks a comprehensive and standardized approach (Abebe & Abebe, 2020; Abebe & Abebe, 2021). Researchers have stated that the plan used in these projects is inconsistent, leading to ineffectiveness and negative results (Abebe and Abebe, 2020; Abebe and Abebe, 2021). The

lack of a formal planning process has been shown to cause delays, excessive expenses, and quality issues in museum delivery in Ethiopia (Abebe and Abebe, 2022). Challenges to stakeholder engagement and collaboration in art museums (Abebe and Abebe, 2020; Abebe and Abebe, 2021). Researchers have shown that collaboration of various stakeholders, including government agencies, policymakers, and local communities, can create collaborative partnerships and cause conflicts over goals and values (Abebe and Abebe, 2022). Effective stakeholder management is considered important in the successful planning and implementation of museum projects in Ethiopia (Abebe and Abebe, 2020; Abebe and Abebe, 2021). The lack of a standardized planning process for museum design makes the work inconsistent and ineffective (Goulding and Domic, 2019; Lim and Wen, 2021). Researchers have found that the planning practices of these projects are often uneven, slow, costly and problematic (Goulding and Domic, 2019; Lim and Wen, 2021). From an Ethiopian perspective, recent research has revealed problems in planning museum construction, the lack of comprehensive information, and the difficulty of assessing updated conservation and adaptation (Abebe & Abebe, 2020; Abebe & Abebe, 2021).

Stakeholder engagement and expertise are also important in Ethiopia (Abebe and Abebe, 2020; Abebe and Abebe, 2021). Evaluating operational plans for Ethiopian infrastructure projects is important for compliance with resource use and cultural preservation goals (Tekle and Bekele, 2022). Challenges such as limited resources and skills hinder effective planning (Alemu and Tadesse, 2021). Examining current attempts at museum construction in Ethiopia reveals inconsistencies in addressing local needs and challenges, including neglect of community participation and bureaucratic issues (Tesfaye and Lemma, 2020; Abate and Woldemariam, 2023). Identifying key issues in planning public projects in Ethiopian museums is important for implementing interventions and policy reforms (Beyene and Ayele, 2021; Berhanu and Mulugeta, 2022). Recommendations include assessing capacity and using technology (Getachew and Birhanu, 2023; Kassahun and Abera, 2021).

Existing literature on museum development in Ethiopia focuses mainly on the general issue of heritage preservation and the role of museums in promoting tours, with less attention to the complexity of the planning and management processes involved in this particular activity. Although previous research has highlighted the importance of effective planning to ensure the success of museum facilities, a comprehensive evaluation of the planning process is currently not

available in Ethiopia. The research emphasized the need to better understand the specific challenges and constraints the group faced in planning and executing museum construction projects in Ethiopia. This study aims to address this gap by examining the planning process, key issues and strategies to improve infrastructure development in Ethiopia.

1.3. Research Questions

1. What are the existing project planning practices employed in museum construction projects?
2. How effective are the current project planning process in museum construction projects?
3. What are the key challenges encountered in planning public projects within the museum sector?
4. What recommendations can be made to improve project planning practices in museum construction projects?

1.4. Objective of the study

1.4.1. General Objective

The general objective of this research were to assess the planning practice of the Adwa Museum construction project in Addis Ababa, Ethiopia.

1.4.2. Specific Objectives

1. To assess the existing project planning practice in museum construction projects
2. To analyze the current project planning processes in museum construction projects.
3. To identify key challenges encountered in planning public projects within the museum construction project.
4. To propose recommendations for improving project planning practices in museum construction projects.

1.5. Significance of the Study

The study to evaluate planning for future museum construction in Addis Ababa, Ethiopia, has important implications for many stakeholders. First of all, the results of this study will provide insight to project management teams and architectural firms responsible for future museum

projects. By analyzing existing plans, identifying key issues and making recommendations, the research will provide the project team with perspective to improve planning and action to complete the construction of the museum in the future. This will ensure that future museums are completed within the required time, budget and quality standards. Second, this research benefits the overall museum in Ethiopia. The research will reveal best practices, lessons learned and ideas for effective planning of future museum design. This experience will also be useful for other museum initiatives and will allow the project team to learn from experiences in museum projects and implement recommendations to improve the planning and delivery of similar projects. Additionally, this study will provide important insights to policy makers and government agencies on monitoring and managing museums in Ethiopia. These findings will inform the development of policies, procedures, and support systems to improve the planning and execution of public projects at the museum. This will help improve the museum industry's project management practices. Additionally, this research will contribute to the project management and construction management literature in the future, especially in the context of museum development. The research will provide research data that can be used to expand understanding of planning, challenges and strategies in museum design. Researchers, teachers and students can use this information to explore and optimize project management in the field of culture. Finally, this study will complete the museum's future plans that benefit the society and the public. Timely and effective construction of the museum will help preserve cultural heritage, provide educational opportunities and enhance the cultural landscape of Addis Ababa, ultimately benefiting the public and visitors. Therefore, research on the future of museum construction will enable working groups, policy makers, academics and the public to have great influence, ultimately leading to the completion of future infrastructure projects.

1.6. Scope of the Study

1.6.1. Time Scope

The study covered the planning practices employed in the construction of the Adwa Museum in Addis Ababa, Ethiopia, from the project's inception on June 15, 2019, until the expected completion date of November 2023. Additionally, the study will utilize data, including primary data from interviews, and Questionnaires collected from the projects until May 2024.

1.6.2. Conceptual Scope

The study was focused on assessing the planning practices used in the construction of the Adwa Museum, including the existing project planning practice, the effectiveness of the current planning practice, the key challenges encountered in planning public projects within the museum sector and the recommendations for improving project planning practices in museum construction.

1.6.3. Geographical Scope

The study is conducted in Addis Ababa, Ethiopia, and will specifically focus on the Adwa Museum construction project.

1.6.4. Methodological Scope

The study will employ a mixed-methods approach, combining qualitative and quantitative data collection techniques. Methods include interviews with project stakeholders, review of project plan documents, and surveys to collect information from relevant stakeholders.

1.7. Limitations of the Study

The study conducted to evaluate the planning activities in the construction of the Adwa Museum in Addis Ababa, Ethiopia, has several limitations. First of all, the study were carried out in a specific period from June 15, 2019, when the project started, to June 2024. Second, this study were conducted on a limited budget, which will limit the ability and depth of data collection and analysis. This may limit the ability to work broadly, involve multiple stakeholders, or use advanced data analysis techniques. In addition, in this study, there may be problems in obtaining project information in a reliable and reliable manner and establishing dialogue with all stakeholders. This may limit the completeness of the data collected and insights gained. Additionally, the study focuses on the unique art of the Adwa Museum in Addis Ababa, Ethiopia. Although the findings shed light on planning efforts in museum construction, extrapolation of the results to other museum construction projects or geographically limited. Finally, like all good research, this research were subject to bias, which will affect the interpretation of data and the development of recommendations. To minimize this limitation, researcher was attempt to maintain objectivity and transparency throughout the study.

1.8 Organization of Thesis

This study is composed of five chapters. chapter one covers the background of the study, study project, statement of the problem, research questions, objectives of the study, significance of the study, scope of the study, limitation of the study, and organization of the paper. The second chapter concentrated on the definition of key terms and concepts, review of both theoretical study and previous empirical studies on the topic. The third chapter describes the methodology that was used for the study. It covers research design and approaches, type and source of data, study population, sampling technique and sample size determination, the method of data collection, the method of data analysis, and the validity and ethical considerations that were made for the study. The presentation, analysis, discussion and interpretation of results are covered in the fourth chapter. The summary of findings, conclusions drawn from the findings, and suggestions made by the researcher are presented in chapter five.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 Introduction

This section evaluates the planning practices involved in the construction of museums, aligning with the study's objective and research questions. It delves into various aspects such as the planning practice, challenges encountered, and future prospects of museum construction projects. The review begins with an overview of museum construction planning, followed by a comprehensive examination of relevant literature, both theoretical and empirical. Ultimately, a conceptual framework is formulated to guide the research direction.

2.2. Definition of Key Terms and concepts

Museum Construction Project: A museum construction project refers to the specific study or initiative designed to design, plan, and build new or renovated museums and expand the existing museum (Ambrose and Paine, 2018). **Planning:** Museum planning practice refers to the methods and techniques used by museum professionals, architects, project managers, and other partners to plan, organize, and complete the various phases of museum construction or renovation (Fu G and Dilkin, 2016).

Project Management: Project management in a museum is the use of knowledge, skills, tools and techniques to plan, organize and manage the various activities, resources and people involved in completing the project. Projects (Project Management Institute, 2017).

A museum construction project refers to a specific study or initiative designed to design, plan, and build new museums or renovate and expand existing museums (Ambrose and Paine, 2018). These projects involve complex and multifaceted processes that require the collaboration of many stakeholders, including museum professionals, architects, project managers and the development team. Planning practices in museum design refer to the processes and strategies that participants use to plan, organize, and execute the various phases of the program (Falk and Dierking, 2016). This planning process includes various activities such as feasibility studies, site selection, design, cost estimation, business planning and risk management. Effective planning is critical to the success of museum infrastructure because it helps ensure that the plan meets the unique needs and requirements of the museum, meets budget and time constraints, and is aligned

with the museum's overall vision (Ambrose and Paine, 2018). This planning process also includes consideration of factors such as accessibility, sustainability, and integrating the museum's purpose and function into the physical design of the space.

Project management is a key component of the planning practice for museum construction projects, as it involves the application of knowledge, skills, tools, and techniques to effectively plan, organize, and control the various activities, resources, and stakeholders involved in the project (Project Management Institute, 2017). This includes developing the project plan, coordinating team members, monitoring and controlling project progress, and managing risks and issues that may arise during construction. The practice of planning a museum construction project is a complex and multifaceted process that requires the cooperation of various stakeholders and the application of specialized knowledge and skills. Effective planning practices are essential to successfully complete these projects and create museum facilities that meet the needs and expectations of the institution, its visitors and the wider community.

2.3. Theoretical Literature Review: Practice of Museum Construction Project

Museum practices have been the subject of many theoretical discussions in the fields of architecture and cultural management. Researchers investigate all aspects of museum design, from principles to the needs that make up the environment. One of the basic theoretical ideas in museum design is the idea that the museum is the "Temple of the Muses" (Hein, 2000). This theory has its roots in the classical Greek concept of museums, which clearly states that museums are sacred places for the storage and display of artifacts. Therefore, the design of museums is often influenced by the architectural language of religious and public buildings, with their entrances, majestic facades and carefully planned interiors (Newhouse, 2005). Another influential theoretical framework is the idea that museums are "contact zones" (Clifford, 1997) where different cultures and perspectives come together. This theory emphasizes the role of museums as places of cultural exchange and dialogue where physical design can facilitate or hinder visitors' disclosure of content (Hooper-Greenhill, 2000). The concept of "new museology" has also shaped the theoretical discussion of museum design (Vergo, 1989). This approach emphasizes the role of museums in meeting the needs and interests of diverse audiences, rather than focusing on the preservation and exhibition of objects. As a result,

elements that improve visitor experience such as interactive objects, learning areas and effective models have been added to museum design (Ambrose and Paine, 2012). Additionally, increasing concerns about sustainability and environmental responsibility have influenced the conceptualization of museum design. Researchers are exploring ways to incorporate sustainable design concepts such as energy efficiency, renewable energy, and cooling techniques into the museum (Falk and Dierking, 2016). The integration of technologies such as interactive, multimedia, and augmented reality is changing the way audiences interact with content at home (Parry, 2013). Researchers have explored the impact of these technologies on the creation of museum spaces, highlighting the need to adapt and adapt architecture to the digital media environment (Tallon and Walker, 2008). Another important theoretical perspective in museum design is the concept of "museum as a social space" (Carr, 2003). This perspective emphasizes the role of museums as public forums where visitors can meet, interact, and participate in social and cultural activities. As a result, elements that promote a sense of community, such as public gathering spaces, educational spaces, and social spaces, have been added to museum design (Janes & Sandell, 2019).

The concept of "overall design" has also received attention in theoretical discussions of museum design (Mace, 1998). This approach supports the creation of museum spaces to be accessible and inclusive to visitors of all levels, regardless of age, physical or cognitive limitations. Scholars have investigated the effectiveness of universal design, such as the integration of ramps, elevators, and exhibits, in museum design (Dodd & Sandell, 2001).

In addition, the theoretical literature also discusses the role of the museum building in the broader context of urban planning and community development. Scholars have investigated how museum design and installation contribute to urban development, culture, and the development of public interest and identity (Grodach, 2010). In summary, the theoretical literature on museum construction demonstrates the diversity and flexibility of the field. The diverse views and ideas presented in this review highlight the need for a unified, collaborative approach to the design and development of corporate culture arrangements, incorporating the changing needs and expectations of visitors and the wider community.

2.3.1. Social participation as a concept under construction of museum

One must understand the history and complexity of the concept of community participation as a concept in construction and recognize that it is used and achieved simultaneously through many actions in the research museum (Hipólito de Oliveira and Fernandes Bizerra, 2023). It is also important to realize that the meaning of participation and social participation is created by the relationship between individuals, who should be free to benefit from science and technology and promote justice, equality and diversity in museums (Hipólito) de Oliveira and Fernandez Bicerra, 2023). However, the meaning and implications of this word have ambiguous and unpleasant forms, including contradictions and contradictions (Hipólito de Oliveira and Fernandes Bizerra, 2023). Therefore, it is necessary to discuss voice diversity (Hipólito de Oliveira and Fernandes Bizerra, 2023). This study aims to develop and present a model of the concept of “community participation” in research archives, based on the analysis of Brazilian experts’ responses to two studies and data analysis (Hipólito de Oliveira and Fernandes Bizerra, 2023).

The term social participation is widely used and has many different meanings (Hipólito de Oliveira and Fernandes Bizerra, 2023). This article aims to advance the understanding of participation in museum research (Hipólito de Oliveira and Fernandes Bizerra, 2023). The research adopted a cultural-historical perspective and was carried out in 6 steps: (1) Research to determine the meaning of social participation and work is considered as part of the Brazilian science museum (2) Content analysis and coding; (3) Community participation;

The importance of data analysis; (4) Category analysis and revision; (5) Survey of teachers at the Brazilian Science Museum to determine the dimensions of the first survey; de Oliveira and Fernandes Bizerra, 2023). We therefore recognize five elements that contribute to the idea of participation in museum research: 'Access' - removing barriers to participation that encourage social isolation; "Integration and authoring" - encourage different types of interaction with the audience "Dialogue and discussion" - expand opportunities for interaction with the presentation; Fernandes Bizerra, 2023). Although this dimension enables understanding of collaboration between research libraries, there are limitations (Hipólito de Oliveira and Fernandes Bizerra, 2023). These factors can contribute to the improvement of museum practices, dialogue with communities, and public participation in research museums (Hipólito de Oliveira and Fernandes Bizerra, 2023).

2.3.2. Construction Project Organising

Extensive research on culture development through participatory research and project management, using the concept of chemical culture as a new concept to find new ways to transform the economy into a more dynamic, innovative and responsible business (Clegg et al. Ib., 2022). Culture must be changed at all levels, and to be effective, leadership must focus on daily change (Clegg et al., 2022). Organizational change projects can be “interim works” in which actors from different organizations share different functions, narratives, structures, and benefits, thus creating opportunities for experimentation, knowledge exchange, and behavior change (Clegg et al., 2022).). In this field, doing something unusual to exit the work process must be remembered in the process (Clegg et al., 2022). Unlearning involves the process of learning through teaching (Clegg et al., 2022).

2.3.3. Overview of Current Practices in Museum Construction Projects

Planning and executing an architectural museum design is a complex and multifaceted process that requires a good understanding of existing practices and processes (Shenhar and Dvir, 2007). Shenhar and Dvir (2007) argue that the success of museum construction depends on the effectiveness of project planning practices. This process includes many activities, including stakeholder engagement, risk management, budget allocation, and development time (Meredith and Mantel, 2011). The importance of observing and understanding existing methods for museum construction cannot be ignored (Kerzner, 2017). Kerzner (2017) argued that a comprehensive evaluation of current practices can provide insight into the strengths, weaknesses, and areas for improvement of planning efforts in the process. This information can be used to create effective and efficient planning strategies, which can ultimately lead to the successful completion of the museum project (Kerzner, 2017). Evaluating and understanding current work plans is important in museum construction for several reasons (Pinto, 2016). First, it allows managers and stakeholders to identify the strengths and weaknesses of the current system, which can inform the development of strategic plans (Pinto, 2016). By understanding current practices, project teams can improve performance and address areas for improvement, ultimately improving overall delivery plans (Pinto, 2016).

Furthermore, a detailed analysis of the current system can help identify potential bottlenecks, resource constraints, and other issues that may hinder the success of the previous museum implementation (Kerzner, 2017). This information can be used to address these issues during the

planning and execution of future projects, thereby reducing the risk of delays, overpayments, and other failures (Kerzner, 2017). Additionally, an evaluation of current systems can provide valuable information about leadership, communication patterns, and business decisions within the museum (Shenhar and Dvir, 2007). Understanding these elements can help teams adapt their planning and management to better suit the unique characteristics of the business, thereby leading to project success (Shenhar and Dvir, 2007). 2.3.4a. Current Planning: Procedures for Reviewing and Improving the Plan Reviewing current planning in the infrastructure is an important step in improving the overall effectiveness and efficiency of these practices (Meredith and Mantel, 2011).

According to Meredith and Mantel (2011), a comprehensive review of current systems can provide insight into strengths, weaknesses, and areas for improvement, ultimately leading to the development of effective and efficient planning strategies. One of the most important methods of analyzing the current business plan is the use of organizational structure and business analysis (Kerzner, 2017). Kerzner (2017) suggested that by visually representing the various steps, decision points, and information flows in the planning process, the project team can identify conflict, renewal, and good times. This information can be used to improve business planning, reduce waste, and improve overall performance (Kerzner, 2017).

Another important way to analyze current work plans is through the use of benchmarks and comparisons (Pinto, 2016). Pinto (2016) suggested that by comparing the plans used in museum construction projects with plans used in other businesses or projects, the project team identified best practices and new processes that could be adapted and implemented on a voluntary basis. This facilitates continuous improvement and ensures that planning follows business standards and project management processes (Pinto, 2016).

2.3.5. The Significance of a Thorough Analysis in Enhancing Planning Practices

The significance of a thorough analysis of current project planning practice in museum construction projects cannot be overstated (Shenhar&Dvir, 2007). Shenhar and Dvir (2007) suggest that by gaining a deep understanding of the existing practices, project teams can develop more effective and efficient planning strategies that are tailored to the unique requirements and challenges of the museum construction industry.

One of the key benefits of a comprehensive analysis is the ability to identify and address the root causes of planning-related issues and challenges (Kerzner, 2017). Kerzner (2017) argues that by delving into the underlying factors that contribute to project delays, cost overruns, and other planning-related problems, project teams can implement targeted interventions and solutions that address the core issues, rather than just treating the symptoms.

Moreover, a thorough analysis of current project planning practice can help to foster a culture of continuous improvement and innovation within the museum construction industry (Pinto, 2016). Pinto (2016) suggests that by regularly evaluating and refining the planning practices, project teams can stay ahead of evolving industry trends, technological advancements, and stakeholder expectations, ensuring that the planning practice remain relevant and effective over time.

The planning and execution of museum construction projects is fraught with unique challenges that can significantly impact the overall success of the project (Shenhar&Dvir, 2007). Shenhar and Dvir (2007) argue that the museum sector is characterized by a complex web of stakeholders, stringent regulatory requirements, and the need to balance the preservation of cultural heritage with the implementation of modern design and technology.

One of the key challenges in planning museum construction projects is the management of diverse stakeholder expectations and requirements (Pinto, 2016). Pinto (2016) suggests that museum projects often involve a variety of stakeholders, including government agencies, community groups, cultural organizations, and the general public, each with different priorities and interests. Resolving these conflicting interests and aligning them with project goals can be a major challenge for project teams, requiring effective communication, negotiation, and stakeholder management strategies (Pinto, 2016).

Another challenge specific to the museum sector is the need to balance the preservation of cultural heritage with the implementation of modern design and technology (Kerzner, 2017). Kerzner (2017) argues that museum construction projects must often adhere to strict historical preservation guidelines and regulations, which can limit the flexibility and innovation in the design and construction process. This can lead to increased complexity, extended timelines, and higher costs, all of which can impact the overall success of the project (Kerzner, 2017).

2.3.5. The Impact of Challenges on Project Planning and Execution

The challenges faced in planning museum construction projects can have a significant impact on the overall planning and execution of these projects (Meredith & Mantel,2011). Meredith and Mantel(2011)suggest that the complex stakeholder dynamics, regulatory requirements, and the need to balance preservation with modernization can lead to delays ,cost overruns, and other project management issues. For example, the management of diverse stakeholder expectations can result in prolonged decision-making processes, as project teams navigate the competing interests and priorities of various stakeholders(Pinto,2016). This can lead to delays in the planning and approval stages, ultimately impacting the project's time line and budget (Pinto,2016).

Similarly, the need to adhere to strict historical preservation guidelines can introduce additional complexity and constraints into the design and construction process, requiring project teams to explore innovative solutions and alternative approaches(Kerzner,2017). This can result in increased planning and coordination efforts, as well as the need for specialized expertise and resources, all of which can contribute to higher project costs and extended timelines (Kerzner,2017).

The challenges faced in planning museum construction projects highlight the critical importance of the objectives of this study (Shenhar&Dvir,2007). By assessing the existing project planning practice and analyzing the current practices employed in the museum construction sector, this study aims to provide valuable insights and recommendations that can help to enhance the overall effectiveness and efficiency of these planning practices (Shenhar&Dvir,2007).

The findings of this study can contribute to the development of more robust tailored planning strategies that address the unique challenges faced by project teams in the museum construction industry (Meredith & Mantel,2011). This can lead to improved project outcomes, including reduced delays, cost overruns, and stakeholder conflicts, ultimately ensuring the successful delivery of museum construction projects that preserve cultural heritage while meeting the evolving needs and expectations of the public (Meredith&Mantel,2011).

Moreover, the insights gained from this study can help to foster a culture of continuous improvement and innovation within the museum construction sector, as project teams and industry stakeholders work together to refine and enhance the planning practices employed in these complex and high-stakes projects(Pinto,2016). This can contribute to the overall advancement

of the project management discipline and the successful delivery of public infrastructure projects that serve the needs of diverse communities (Pinto,2016).

2.3.6. Key Challenges in Planning Public Projects: Exploration of Challenges Specific to the Museum Sector

Another significant challenge in museum construction projects is the need to accommodate the unique requirements and constraints of the museum's operations and programming (Kerzner, 2017). Kerzner (2017) argues that museum projects must often be planned and executed in a way that minimizes disruptions to the ongoing activities and exhibitions within the existing facility, which can introduce additional complexities and coordination requirements. This can include the need for phased construction, temporary relocation of collections, and the implementation of specialized security and environmental control measures, all of which can impact the overall planning and execution of the project (Kerzner, 2017).

Furthermore, the museum construction sector is often subject to stringent regulatory requirements and oversight, which can further complicate the planning and execution of these projects (Pinto, 2016). Pinto (2016) suggests that museum projects may be subject to a wide range of regulations and guidelines related to historical preservation, environmental protection, accessibility, and public safety, among others. Navigating this complex regulatory landscape and ensuring compliance can be a significant challenge for project teams, requiring specialized expertise, extensive coordination, and the allocation of additional resources (Pinto, 2016).

The challenges faced in planning museum construction projects can have a profound impact on the overall success and outcomes of these projects (Meredith & Mantel, 2011). Meredith and Mantel (2011) argue that the unique challenges associated with museum construction can lead to a range of project management issues, including delays, cost overruns, and the failure to meet stakeholder expectations. For example, the need to accommodate ongoing museum operations and programming can result in extended construction timelines, as project teams must carefully coordinate their activities to minimize disruptions and ensure the continued functioning of the museum (Kerzner, 2017). This can lead to delays in the project schedule, which can have cascading effects on the overall budget and the ability to deliver the project on time (Kerzner, 2017).

Similarly, the complex regulatory environment and the need to comply with a wide range of guidelines and requirements can introduce additional planning and coordination challenges, as project teams must navigate the approval processes and ensure that the design and construction activities meet the necessary standards (Pinto, 2016). This can result in increased costs, as project teams must allocate resources to address regulatory compliance and potentially implement additional measures to meet the specific requirements of the museum sector (Pinto, 2016).

The unique challenges faced in planning museum construction projects underscore the critical importance of the objectives of this study (Shenhar&Dvir, 2007). By analyzing the current project planning practice employed in the museum construction sector and identifying the key challenges and their impact on project outcomes, this study aims to provide valuable insights and recommendations that can help to enhance the overall effectiveness and efficiency of these planning practices (Shenhar&Dvir, 2007).

The findings of this study can contribute to the development of more robust and tailored planning strategies that address the specific needs and constraints of the museum construction industry (Meredith & Mantel, 2011). This can lead to improved project outcomes, including reduced delays, cost overruns, and stakeholder conflicts, ultimately ensuring the successful delivery of museum construction projects that preserve cultural heritage while meeting the evolving needs and expectations of the public (Meredith & Mantel, 2011).

Moreover, the insights gained from this study can help to foster a culture of continuous improvement and innovation within the museum construction sector, as project teams and industry stakeholders work together to refine and enhance the planning practices employed in these complex and high-stakes projects (Pinto, 2016). This can contribute to the overall advancement of the project management discipline and the successful delivery of public infrastructure projects that serve the needs of diverse communities (Pinto, 2016).

2.3.7. The challenges in planning public projects in Ethiopia, focusing on the museum sector

In Ethiopia, planning and execution of public services, especially museums, are often affected by many challenges. These challenges cut across all levels, including but not limited to political,

economic, social and environmental. Getahun and Melesse (2018) argued that one of the main challenges facing public sector planning in Ethiopia is the lack of effective governance, which often leads to ineffectiveness and slow operation. This situation crosses the country's red line and corruption problem (Kifle, 2019). Private museums face unique planning and execution challenges. As highlighted by Kasa and Mengistu (2020), the lack of funding and financial assistance poses a major challenge to the development and maintenance of museums in Ethiopia. Budget constraints limit the scope of the project and prevent the acquisition of critical resources and expertise needed for effective project planning and execution. Additionally, the museum lacks human resources and expertise, making planning and execution difficult. As Tadesse (2017) points out, there are no trained professionals, including architects, historians, and curators, with the necessary expertise for the museum development plan. This deficiency not only delays the project, but also affects the quality and stability of the museum facilities. In addition, social culture also plays an important role in the problems encountered in the planning of museums in Ethiopia. The country's diverse geography requires careful consideration of local traditions, cultures and sensitivities in the design and implementation of museum projects. Failure to follow these good practices can lead to social resistance, conflict, and ultimately project failure (Yirga et al., 2021).

Moreover, the impact of environmental factors cannot be ignored in the context of museum planning. Ethiopia is vulnerable to natural disasters such as earthquakes and floods, posing a major risk to the preservation of museum heritage (Ayele and Beyene, 2018). Therefore, appropriate construction strategies and hazard prevention must be combined to ensure the long-term safety and re-functioning of museum infrastructure. In conclusion, the challenges faced by the Ethiopian museum sector in planning public services indicate the need for effective strategies to solve problems such as lack of management quality, financial constraints, human resource shortage, cultural and environmental risks. By understanding and mitigating these issues, stakeholders can improve project planning and ultimately contribute to the preservation and promotion of Ethiopia's rich cultural heritage.

2.5. Empirical Literature Reviews

Research by Ge and Jiang (2018) demonstrates the use of Internet of Things (IoT) technology in the creation of “smart museums”. The author defines smart museum as a high level of education, digitalization and smart museums that use various information technologies such as the Internet of Things and low technologies such as new energy and energy saving (Ge and Jiang, 2018). The main findings of this study show that the integration of these technologies can help museums achieve the best combination of information technology and culture, enabling them to preserve, preserve and study cultural heritage more easily, with value and tradition. (2018). Events in the literature show that there is interest in the integration of digital technologies (such as the Internet of Things, augmented reality and virtual reality) into museums (Tallon and Walker, 2008; Styliani et al., 2009). This technology has the potential to increase audience engagement, improve collection management, and facilitate remote access to archives. However, implementing this technology requires careful consideration of factors such as user needs, organizational capacity, and ethics. Fiona Cameron's (2003) research explores the impact of digital technologies on the preservation and construction of knowledge and culture. The authors argue that the use of digital technology in warehouses has always been determined by needs, but there is an increasing need to consider the practical and theoretical impact of the technology. The main findings from this study show that the integration of digital technologies leads to new ways of thinking about the preservation of museums and the quality of museums and their visitors. The author draws on user research in the Escape from Virtual Collections project and the work of authors and media theorists to examine how technology shapes our understanding of what is stored and how information is created and presented (Cameron, 2003).

Information on the impact of technology on the preservation of museums and the development of knowledge and culture is still scarce, especially when focusing on art and digital technology work in museums. Cameron's (2003) work makes important contributions to the field because it emphasizes the need to consider the conceptual and theoretical implications of these ideas. Updates in the literature indicate interest in the intersection of museum studies, media theory, and digital society, according to researchers and experts. Medical research aims to understand how digital technologies change, disseminate and use cultural knowledge (Parry, 2013; Giardi, 2012). There is also an increase in user principles for the design and use of technology in the museum environment, with a focus on improving guest experience and experience (Tallon and

Walker, 2008). Goulding and Domic's (2019) study examined the planning process used in the new construction of the National Museum in Doha, Qatar. Researchers interviewed the project manager, architects and others involved in the project. They found that planning practices include community engagement, multi-stakeholder collaboration, and attention to sustainability and culture (Goulding and Domic, 2019).

Another study by Lim and Tan (2020) investigated the planning process used in the new construction of the National Museum in Singapore. Researchers analyzed project data and conducted interviews with the project team. They found that planning activities focused on preserving the historical and cultural significance of the site with a commitment to sustainability and accessibility (Lim and Tan, 2020). A study by Wang and Zhang (2021) examines the planning used in the construction of the Zeitz Museum of African Contemporary Art in Cape Town, South Africa. Researchers analyzed project data and conducted interviews with the project team. They found that planning practices focused on architectural design, community participation, and the integration of museums into the urban landscape (Wang and Zhang, 2021). Finally, a study by Choi and Lee (2022) investigated the planning used in the renovation of the Louvre Museum in Abu Dhabi. Researchers analyzed project data and conducted interviews with the project team. They found that planning should take into account cultural and environmental considerations and focus on incorporating local materials and designs (Choi and Lee, 2022). A study by Abebe and Mekonnen (2020) examined the plans used in the construction of the New Ethiopian National Museum in Addis Ababa. The researchers interviewed the project manager, architects, and others involved in the project. They found that the planning study emphasized the importance of preserving the cultural and historical significance of the site and focused on the integration of Ethiopian products and materials (Abebe and Mekonnen, 2020).

Another study by Desta and Yimer (2021) examined the plans used in the construction of the New Ethiopian Museum of Ethnology in Addis Ababa. The researchers analyzed project data and conducted interviews with the project team. They found that planning activities focused on community engagement and museums were created as venues for cultural exchange and education (Desta and Yimer, 2021).

A study by Tesfaye and Kebede (2022) examined the plans used in the construction of the new Aksum Museum in Aksum, Ethiopia. Researchers analyzed project data and conducted

interviews with the project team. They found the planning study aimed at preserving the archaeological and historical significance of the site with a commitment to design and sustainable development (Tesfaye and Kebede, 2022).

Overall, these studies suggest that planning practices in the creation of museums in Ethiopia share some similarities with planning practices in other parts of the world, such as community engagement, cultural preservation, and sustainable design. But they also reference the cultural and historical symbols of Ethiopia that shaped the planning and construction of these museums. Episode Those who refuse to accept defeat (2022) Tesfaye and Lemma (2020) examined the importance of community participation in museum development projects in Ethiopia. This study highlights the importance of involving local communities in planning practices to ensure projects are sustainable and relevant to local culture.

Abate and Woldemariam (2023) explore bureaucratic issues and management issues in the case of museum development in Ethiopia. This study identified management issues and management challenges that often delay project implementation and increase costs. Alemu and Tadesse (2021) took the example of managing the competition in the Ethiopian context by focusing on the museum building project. The study found that issues such as inadequate allocation of resources, poor coordination between stakeholders and inadequate skills have a significant impact on project success. Beyene and Ayele (2021) examined the risk management of museum construction in Ethiopia. This study highlights the importance of risk analysis and mitigation strategies to deal with threats such as financial instability, political uncertainty and the environment. Getachew and Birhanu (2023) examined the collaboration strategy for museum planning in Ethiopia. Research shows the need for transparent communication, partners' talent, and collaborative decision-making ability to build trust and consensus among stakeholders. Effective planning is essential to the success of Ethiopian museum design. This review of the evidence reveals the importance of community engagement, project governance, risk management, and stakeholder engagement in achieving this goal for the project. Future research should focus on resolving the identified problems and developing solutions to improve business planning in Ethiopia.

2.4 Research Gap

Despite the important role that museums play in preserving Ethiopia's rich heritage and promoting tourism, little research has examined planning activities and their impact on the work of museums in the country. Existing studies have mostly focused on the broader challenges of heritage conservation and the role of museums, with little attention given to the complexity of planning and management processes in these specific areas. Existing literature on museum planning in Ethiopia shows a lack of design and planning process, leading to inadequate provision and ineffectiveness of facilities. Researchers revealed the problems of combining the preservation of history and culture with modern design and needs, as well as the difficulty of hand-in-hand participation of participants. Moreover, the study in Ethiopia shows that planning and management of infrastructure requires special skills and knowledge due to specific needs and complexity. These facilities often exceed the capacity of traditional construction methods to manage the nation's operations. This difference in skills has been shown to cause greater difficulty in planning and executing museum designs. To complement this research, this study focuses on a comprehensive evaluation of the operational planning of museums in Ethiopia. By analyzing the current system, identifying key problems, and exploring improvement strategies, this research aims to understand the effective planning that continues to create in Ethiopian museums.

Chapter Three

Research Methodology

3.1 Introduction

This chapter describes the research techniques used. It included a description of the study areas, the research approach and design, the type and source of data, the study population, the sampling method, the sample size determination, and the instruments used to collect the data, the method used to analyze the data, and ethical considerations.

3.2. Description of the Study Area

Adwa Museum is a public institution located in the heart of Addis Ababa, the capital of Ethiopia. The museum was founded in 2024 and is dedicated to preserving and presenting the history, art and culture of the Adwa region and its people. The museum's permanent collection contains approximately 8 million works, making it one of the largest and most comprehensive collections in existence. The collection includes numerous artifacts, documents and other documents that tell the story of the 1896 Battle of Adwa, an important event in Ethiopian history. Planning and Development, 2024. The museum's mission is to educate visitors about the significance of the Battle of Adwa and its lasting impact on the nation's history and the nation's personal. Adwa Museum aims to preserve and promote the heritage of the Adwa region through exhibition, education and research activities, while also serving as a center for change leadership and understanding. The museum's collections and programs draw from many sources and reflect the diverse thoughts and experiences of those affected by the events of the Battle of Adwa. As a public institution, Adwa Museum plays an important role in the cultural landscape of Addis Ababa and Ethiopia as a place of education, reflection and celebration of the country's rich history and culture. <http://adwamuseum.com>

3.3 Research Design and approaches

A process called research design aimed to address the research problem and provide an answer to the research question (Ngechu, 2010). According to Kothari (2019), descriptive design focused on describing the features of a particular situation. This research was a descriptive design because it focused on describing and assessing the planning practice of a museum construction project: The case of Adwa museum in Addis Ababa, Ethiopia. It aimed to illustrate and clarify

how the planning practice was applied. The goal of quantitative research was to create and use mathematical models, theories, and hypotheses related to natural phenomena (Kothari, 2019). Statistical analysis was used in this quantitative research to produce findings. Its primary characteristics included the formal and systematic measurement of phenomena and the use of statistics. The systematic and formal measurements of phenomena, as well as the use of statistics, were key features of this research (David, 2015). Since this research involved systematic collection and measurement of data, as well as the application of statistical tools to obtain the findings, it was classified as a quantitative research study.

3.4 Types and Source of Data

The research includes interviews with project stakeholders, data analysis of project plans, and surveys to gather stakeholder input. The archive focuses on planning practices, challenges and stakeholder perspectives in the field of museum construction. Primary and secondary data were used to obtain reliable data in the study. The main documents are from; the contractor of Adwa Museum (China Jiangsu International E.T.CC), the engineer (Ethiopia Architectural Design and Supervision Engineering Company) and the client (Mega Project Construction Office), especially those involved in the planning work of the project and repair projects. Secondary data includes data that are used to support research, such as government plans and procedures, documents, books, journals, magazines and online information. A combination of primary and secondary research provides a focus on the Adwa Museum plan as well as a better understanding of planning, challenges and stakeholder perspectives in infrastructure development. Important information is gathered by gathering relevant ideas through interviews and observations with stakeholders. Secondary data was obtained by analyzing data in project planning documents. This different approach provides a better understanding of planning, challenges and stakeholder perspectives in the field of museum design, especially Adwa Museum.

3.5 Study Population, Sampling method and Sample Size Determination

3.5.1. Study population

According to Bryman (2022), population research is essentially the unit from which the sample is selected. Therefore, the researchers of this study include different individuals with different roles, including project stakeholders, architecture, engineering or project management professionals involved in the planning of the construction of the Adwa Museum. The total number of participants was 33.

3.5.2. Sampling methods

In this study, purposeful sampling method was used in selecting the sample size. This method involves selecting participants based on their unique characteristics or experience with the research topic. In this context, researchers aimed to gather deep insights from key actors with knowledge and experience in planning the construction of the Adwa Museum. The three main partners (project managers, architects and engineers) were selected based on their expertise and involvement in the project.

3.5.3. Sample size determination:

The sample size for the study was determined based on the purposeful sampling method used. Since the researcher aimed to gather in-depth insights from key participants, they selected a sample size of four participants. This sample size was considered sufficient to obtain valuable information from the selected participants. The researcher ensured that the participants had the relevant experience and knowledge to provide insights on the research topic. In summary, the study used purposeful sampling to select a sample size of key participants from the Adwa Museum Office who worked in the construction of the museum. The researcher aimed to gather in-depth insights from these participants, who had relevant experience and knowledge related to the planning of the Adwa Museum construction.

3.6 Instruments of Data Collections

This study aims to collect information on planning practices, challenges encountered and stakeholders' opinions in construction of Adwa Museum. To achieve this goal, information on the research topic was reviewed to prepare and administer surveys and interviews to collect primary data. The survey includes a five-item Likert survey of project stakeholders, data

analysis of the project plan, and a survey to gather stakeholders for understanding. The archive focus on planning practices, challenges and stakeholder perspectives in the field of museum construction, with a particular focus on the Adwa Museum. To gain a deeper understanding of art museum planning, a literature review was conducted and surveys, interviews, and secondary data were developed as information gathering tools. The closed survey was created using a five-point Likert scale with 1 = strongly agree, 2 = agree, 3 = neutral, 4 = disagree, and 5 = strongly disagree. Likert scales are a good tool to measure participants' attitudes (Creswell, 2022).

This study also use semi-structured interviews to collect information from selected stakeholders including the contractor (China Jiangsu International C.J.I), consultant (Ethiopia Architectural Design and Supervision Engineering Company E.C.S.C) and client (Mega Project Construction Office). Interview questions was prepared based on the understanding gained from the literature review. The interview were conducted by the project manager, contractor specialist and expert from the Adwa Museum office. In addition to primary data collected through interviews, secondary data will also be used in this study. These include reading and reviewing relevant information such as government documents, books, journals, magazines and relevant online research topics. Secondary sources were used to supplement data collected through interviews and provide a better understanding of planning, challenges and stakeholders' perspectives in museum design.

3.7 Method of Data Analysis

The data obtained from the closed-ended questionnaire was analyzed using Microsoft Office software. This software was utilized to perform a descriptive analysis of the collected data, presenting the findings in the form of frequencies, percentages, means, and tables. The data gathered through the semi-structured interviews was analyzed by classifying the common themes and concepts emerging from the responses. This thematic analysis was conducted to organize the interview data in a format that facilitates the generalization of the findings.

3.8 Validity and Reliability

The degree to which the research findings accurately reflected what actually occurred in the situation is referred to as validity. When compared to phenomenological research, validity was thought to be higher but was actually very low in positivist research. The latter's main goal was

to extract data that was full of valuable information and essence of the phenomenon (Collis, J & Hussey, R, 2014).

The researcher piloted tested the questionnaire with some of the respondents in order to ensure its validity and reliability before using it to collect data. By removing the items from the test, it was possible to produce data that was useful. This phase demonstrated how well the tools and methods used in the study worked. In turn, this allowed for the early identification of questionnaire errors and distortions, which were then fixed.

3.9 Ethical Consideration

In order to achieve the best results, it was customary and essential to take a number of ethical considerations into account. The research was conducted in a way that commanded the respondents' respect and acceptance. The researcher and advisor were guaranteed the caliber and integrity of the project work. The confidentiality and anonymity of the voluntary respondents were guaranteed, and the respondents were provided their full consent regarding the research's purpose.

CHAPTER FOUR

PRESENTATION, ANALYSIS, DISCUSSION, AND INTERPRETATION OF RESULT

4.1 Introduction

The study's data analysis and a discussion of the results from a semi-structured interview and closed-ended questionnaire that were distributed to 33 Adwa Museum Office staff members who are working on the museum construction project in Addis Ababa, Ethiopia, are presented in this chapter. The data were analysed using descriptive statistics. The research question is addressed by presenting and debating the data analysis findings.

The questionnaire was designed by using five Likert scales, which allow respondents to choose to be neutral or to select response options that fall between two extremes if they so want. Comprehending, reacting, and carrying out the analysis are all straightforward. In terms of the Likert scale, 1 represents a strong disagreement, 2 disagree, 3 neutral, 4 agree, and 5 agree.

4.2 Response Rate

Primary data obtained through questionnaire included 33 closed-ended items. The questionnaire was distributed to 33 respondents who were directly involved in a museum construction project (case study of the Adwa Museum in Addis Ababa, Ethiopia) and worked for their employer in the department involved in project management. General managers, project managers, experts, and architects were interviewed to gain a more detailed understanding of project management practices. All questionnaires were completed and returned by respondents, with a response rate of 100%.

4.3 Respondent's profile

Table 4.1 Gender of Respondents

Gender of Respondents				
	Sex	Frequency	Percent (%)	Valid Percent (%)
Valid	Male	18	54.55	54.55
	Female	15	45.45	45.45
	Total	33	100	100

Source: Own survey, (2024)

The survey of 33 participants revealed a slight difference between genders. More than half of the respondents (54.55%) identified themselves as men, while the majority (45.45%) identified themselves as women. This image represents the entire male-dominated demographic.

Table 4.2 Ages of Respondents

Age of Respondents					
	Age	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	20-30	6	18.18	18.18	18.18
	31-40	14	42.43	42.43	60.61
	41-50	9	27.27	27.27	87.88
	51-60	4	12.12	12.12	100
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.2, most of the respondents (42.43%) are between the ages of 31 and 40. This shows that a large portion of the sample consists of people in this age group. The second most common age group is between the ages of 41-50, with 27.27% of the respondents falling into this category. This means that there are many people in this age group in the sample. The

age group of 20-30 constitutes the third age group, with 18.18% of the respondents belonging to this age group. This shows that there are more young people in the sample. The youngest age group is the 51-60 age group, with only 12.12% of the participants falling into this category. This means there are fewer people in this age group in the sample. Overall, the majority of respondents are middle-aged, with a high frequency in the 31-40 age group. This shows that the sample is skewed towards middle age.

Table 4.3 Educational Background of Respondents

Educational Background of Respondents					
	Educational Level	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	Diploma	1	3.03	3.03	3.03
	Degree	19	57.58	57.58	60.61
	MBA/MSc	12	36.36	36.36	96.97
	PHD	1	3.03	3.03	100
	Total	33	100	100	

Source: Own survey, (2024)

Table 4.3 shows that the educational background of the majority of respondents (57.58%) is a university degree, which indicates that they hold a bachelor's or master's degree in a specific field. This means that respondents have a solid knowledge of the field. The second largest group of respondents (36.36%) had an MBA/MSc degree, indicating they had completed a master's degree in business administration or a specific field of study. This means that the respondent has specialized knowledge and skills in the field. A small but still significant proportion of respondents (3.03%) had a diploma, indicating that they had completed a two-year program in a specific field. This means that the respondents have basic knowledge and skills in the field. Finally, a very small percentage of respondents (3.03%) held a doctoral degree, indicating that they had completed doctoral training in a specific field. This means that the respondents have a high level of knowledge and experience in the field. Overall, 100% of respondents received valid training.

Table 4.4 over All Work Experience

Over all work Experience					
	Years	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	<1	0	0	0	0
	1-4	4	12.12	12.12	12.12
	5-8	8	24.24	24.24	36.36
	9-12	14	42.43	42.43	78.79
	13-16	3	9.09	9.09	87.88
	>16	4	12.12	12.12	100
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.4, the survey results show that the majority of respondents (78.79%) have 9 to 12 years of experience. Next are those with 13 to 16 years of experience (87.88%). Those with less than 1 year of experience accounted for the lowest at 12.12%, while those with 16 years or more accounted for the lowest at 4%. The majority of respondents (42.43%) had between 5 and 8 years of experience in this category, which suggests that many respondents have average experience. This means that respondents have some experience in the field, but have not yet reached 9 to 12 years. The cumulative proportion of respondents with less than 1 year of experience is 12.12%, which shows that the proportion of respondents who are relatively new employees is small but significant. This means that new employees may need training or mentoring programs to help them develop their skills and experience. The survey results show that the majority of respondents have average work experience, with many having between 9 and 12 years of experience. There was also a small but noticeable percentage of respondents with less than one year of experience, indicating the need for support and development programs to help new hires succeed in their careers.

Table 4.5 Work Experience on Project construction

Work Experience on project construction					
	Years	Frequency	Percent (%)	Valid Percent (%)	Cumulative Percent (%)
Valid	<1	1	3.03	3.03	3.03
	1-4	3	9.09	9.09	12.12
	5-8	15	45.46	45.46	57.58
	9-12	7	21.21	21.21	78.79
	13-16	6	18.18	18.18	96.97
	>16	1	3.03	3.03	100
	Total		100	100	

Source: Own survey, (2024)

According to Table 4.5, the survey results showed that the majority of respondents (45.46%) had 5 to 8 years of project construction experience. This means that most respondents have an average level of experience in this field. The proportion with less than 1 year of experience was 3.03%, and the proportion with 9 to 12 years of experience was 21.21%. These results indicate a relatively even distribution of experience among respondents, with a slight bias toward respondents with more experience. Overall, the results provide valuable information about respondents' experiences with construction projects.

Table 4.6 Position of the Work

Position of the Respondent sat work				
	Position	Frequency	Percent (%)	Valid Percent (%)
Valid	Manager	1	3.03	3.03
	Project managers	5	15.15	15.15
	Engineers	13	39.40	39.40
	Expert	6	18.18	18.18
	Administrator	8	24.24	24.24
	Total	33	100	100

Source: Own survey, (2024)

According to Table 4.6, the project positions are: The most common job title among respondents is Senior Engineer with a frequency of 13 and a percentage of 39.40%. This indicates that a significant proportion of respondents occupy this position within the project. The second most common job title is 'Project Manager' with a frequency of 5 and a percentage of 15.15%. This indicates that the number of project managers among the respondents is small but still noticeable. The third most common title is 'Expert' with a frequency of 6 and a percentage of 18.18%. This shows that experts also play an important role in the project. The frequency of leadership positions is 8, a percentage of 24.24%. This means that managers also have a visible presence on the project. The frequency of manager positions is 1 and the percentage is 3.03%. This indicates that very few respondents held the position of project manager. Overall, the survey results show that the most common job titles among respondents were senior engineer and project manager, followed by specialist and manager. Management positions were the least common among respondents.

4.4 Presentation, Analysis, Discussion and Interpretation of Results

4.4.1 Assessment of current project planning practice in museum construction projects:

In this part of the study, the first phase of the assessment of the existing project planning practice in museum construction projects was included. This phase involved gathering responses from participants through a combination of a questionnaire, semi-structured interviews and a review of relevant documents. An analysis of the collected data was performed and the results were presented in detail.

The questionnaire was designed to gather information on current project planning practices used in museum construction projects. It consisted of a series of closed-ended questions that aimed to capture participants' perspectives on various aspects of project planning, such as project scope, timelines, budgeting, resource allocation, communication, risk management, and stakeholder engagement.

Table 4.7 Budget Management:

Were budgets accurately estimated at the project outset?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.97
	Disagree	1	3.03	3.03	
	Neutral	3	9.09	9.09	
	Agree	25	75.76	75.76	
	Strongly Agree	4	12.12	12.12	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.7, the analysis of budget management in museum construction projects indicates that the majority of respondents believe that budgets were accurately estimated at the project outset. The data shows that none of the respondents strongly disagreed with this

statement, reflecting a general consensus that initial budget estimates were at least satisfactory. Only 1 respondent, representing 3.03% of the total, disagreed with the accuracy of the budget estimates. In contrast, 3 respondents, or 9.09%, were neutral, indicating some level of uncertainty or ambivalence about the accuracy of the initial budget estimates. A significant portion of the respondents, 25 individuals (75.76%), agreed that the budgets were accurately estimated, which suggests a strong confidence in the budgeting processes used in these projects. Furthermore, 4 respondents, accounting for 12.12% of the sample, strongly agreed with the statement. The overall mean score of 3.97 supports this positive assessment, showing that the majority of responses lean towards agreement with the statement regarding accurate budget estimations. The high levels of agreement suggest that the existing project planning practices in museum construction projects are effective in producing accurate budget estimates. This likely reflects well on the initial planning processes, the expertise of the personnel involved, and possibly the use of advanced budgeting tools and methodologies. However, the presence of neutral and disagreeing responses, though minimal, indicates that there are areas for potential improvement. These responses may relate to specific instances where budget estimates were less accurate or to varying experiences across projects. The data in Table 4.7 highlight the strengths of budget management in museum construction projects. High agreement rates and favorable mean scores reflect positively on current practice. However, continuous improvement efforts, such as regular review of budgeting practices and professional development of project managers, can address a minority of concerns and further improve the accuracy and reliability of budget estimates on future projects.

Table 4.8 Timeline Adherence:

Were project milestones met according to the initial schedule?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.30
	Disagree	0	0	0	
	Neutral	2	6.06	6.06	
	Agree	19	57.58	57.58	
	Strongly Agree	12	36.36	36.36	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.8, the analysis of timeline adherence in museum construction projects shows that project milestones were generally met according to the initial schedule. None of the respondents strongly disagreed or disagreed with this statement, indicating no significant negative experiences with keeping to the project schedule. Only 2 respondents, representing 6.06%, were neutral, meaning they were unsure or had mixed feelings about how well the project stayed on schedule. Most respondents, 19 people or 57.58%, agreed that project milestones were met according to the initial schedule. This strong agreement suggests that the planning and execution phases of these projects are well-coordinated and managed effectively. Additionally, 12 respondents, making up 36.36%, strongly agreed with the statement, further emphasizing the success of timeline management in these projects. The mean score of 4.30 supports this positive view, showing that most responses lean towards agreement that the project timelines were followed as planned. The high levels of agreement suggest that the project management practices in museum construction projects are very good at keeping to schedules. This means that the scheduling processes are strong, resources are well allocated, and teams work together efficiently. The fact that no one disagreed implies that any delays were small or well-handled, leading to a generally positive outcome. Results and conclusions show that the museum

construction project is generally on track to meet the original schedule. The overwhelming majority of positive responses indicate strong project management and effective planning practices. However, the low number of neutral responses means there is still room for improvement. Continuously monitoring and improving planning methods, as well as improving communication and coordination among stakeholders, can help eliminate remaining uncertainties and further improve schedule compliance for future projects.

Table 4.9 Stakeholder Communications:

Were stakeholders adequately informed about project progress?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.54
	Disagree	5	15.15	15.15	
	Neutral	8	24.24	24.24	
	Agree	17	51.52	51.52	
	Strongly Agree	3	9.09	9.09	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.9, the analysis of stakeholder communication in museum construction projects shows varied responses regarding whether stakeholders were adequately informed about project progress. None of the respondents strongly disagreed with this statement, indicating no extreme negative views. However, 5 respondents, representing 15.15%, disagreed, suggesting that some stakeholders felt they were not well-informed about the project's progress. A larger portion of respondents, 8 people or 24.24%, were neutral, meaning they were unsure or had mixed feelings about the communication. This indicates that nearly a quarter of the participants found the communication to be neither particularly good nor particularly bad. The majority of respondents (17%, 51.52%) agreed that stakeholders were adequately informed about the progress of the project. This majority suggests that communication methods were generally

effective. Additionally, three respondents representing 9.09% strongly agreed with this statement, further highlighting their positive experience with stakeholders. The average score of 3.54 reflects a generally positive but mixed overall mood. Responses show that most stakeholders are well informed, but there are still a significant number of respondents who disagree or are neutral about the effectiveness of communication. This highlights areas where improvements can be made to ensure better and more consistent communication with all stakeholders. The results and conclusions show that although communication with stakeholders is generally viewed as positive, there are areas where significant improvement is needed. To address the concerns of those who felt under informed, project managers could have implemented more frequent updates, provided transparency, and more actively engaged stakeholders throughout the project. Improving these aspects can lead to more consistent and satisfactory communication, increasing the overall success of your project.

Table 4.10 Risk Management:

Were potential risks identified and addressed during the planning phase?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.64
	Disagree	4	12.12	12.12	
	Neutral	5	15.15	15.15	
	Agree	23	69.70	69.70	
	Strongly Agree	1	3.03	3.03	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.10, the survey on risk management in museum construction projects reveals a generally positive perception of how well potential risks were identified and addressed during the planning phase. None of the respondents strongly disagreed with this statement, indicating no extreme negative views. However, 4 respondents, representing 12.12%, disagreed,

suggesting that some felt that risk management was not adequately handled. A portion of respondents, 5 people or 15.15%, were neutral, meaning they were unsure or had mixed feelings about the effectiveness of risk management. This indicates that some participants found the risk identification and addressing neither particularly effective nor ineffective. The majority of respondents (23%, 69.7%) agreed that potential risks were identified and addressed during the planning phase. This strong consensus suggests that risk management practices on these projects are generally effective. Additionally, one respondent, representing 3.03%, strongly agreed with this statement, further highlighting their positive experience with risk management. The mean score of 3.64 reflects an overall positive mood. Responses showed that while the majority of participants believed that risks were managed effectively during the planning phase, there were still a significant number of respondents who disagreed or were neutral about the effectiveness of risk management. This highlights areas where improvements can be made to better identify and address risks. The results and conclusions show that while risk management is generally viewed positively, there are areas where significant improvement is needed. To address the concerns of those who lack confidence in their risk management practices, project managers can implement more comprehensive risk assessments, provide proactive mitigation strategies, and involve stakeholders in the risk management process. Improving these aspects can lead to more effective risk management and higher overall project success rates.

Table 4.11 Quality Control:

Were quality standards consistently maintained throughout the project?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.18
	Disagree	0	0	0	
	Neutral	2	6.06	6.06	
	Agree	23	69.70	69.70	
	Strongly Agree	8	24.24	24.24	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.11, the survey on quality control in museum construction projects indicates a positive perception of how well quality standards were maintained throughout the project. None of the respondents strongly disagreed or disagreed with this statement, indicating no extreme negative views. Additionally, there were no respondents who strongly disagreed or disagreed with the statement, indicating a unanimous agreement or neutral stance regarding the consistency of quality standards. A small portion of respondents, 2 individuals or 6.06%, were neutral, suggesting some uncertainty or mixed feelings about the consistency of quality standards throughout the project. However, the majority of respondents, 23 people or 69.7% agreed that quality standards were consistently maintained, indicating a high level of confidence in the project's quality control processes. Furthermore, 8 respondents, representing 24.24% of the sample, strongly agreed with the statement, emphasizing a particularly positive perception of quality control practices. The mean score of 4.18 reflects a generally positive overall sentiment, indicating a strong agreement that quality standards were consistently upheld throughout the project. The responses suggest that the project's quality control practices were generally effective, with most participants believing that quality standards were consistently maintained. However, the presence of a small number of neutral responses indicates that there may be some variability in experiences with quality control. This could indicate areas where improvements can be made to ensure more consistent adherence to quality standards. The results and data in Table 4.11 indicate that quality standards were generally maintained throughout the project, as evidenced by the overwhelmingly positive feedback. However, there may still be room for improvement to eliminate differences in experience and provide greater consistency in quality management practices. Improving communication, providing additional training, and implementing more rigorous quality assurance measures can help further improve the overall project quality management process.

Table 4.12 Resource Allocation:

Were resources (e.g., manpower, materials) allocated efficiently throughout the project?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.9
	Disagree	2	6.06	6.06	
	Neutral	2	6.06	6.06	
	Agree	26	78.79	78.79	
	Strongly Agree	3	9.09	9.09	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.12, the survey on resource allocation in museum construction projects indicates a positive perception of how efficiently resources were allocated throughout the project. None of the respondents strongly disagreed with this statement, suggesting no significant negative views regarding resource allocation efficiency. Additionally, there were no respondents who strongly disagreed or disagreed with the statement, indicating a unanimous agreement or neutral stance regarding the efficiency of resource allocation. A small portion of respondents, 2 individuals or 6.06%, were neutral, indicating some uncertainty or mixed feelings about the efficiency of resource allocation. However, the majority of respondents, 26 people or 78.79%, agreed that resources were allocated efficiently throughout the project, indicating a high level of confidence in the project's resource management practices. Furthermore, 3 respondents, representing 9.09% of the sample, strongly agreed with the statement, emphasizing a particularly positive perception of resource allocation practices. The mean score of 3.9 reflects a generally positive overall sentiment, indicating a strong agreement that resources were efficiently allocated throughout the project. The responses suggest that the project's resource allocation practices were generally effective, with most participants believing that resources were allocated efficiently. However, the presence of a small number of neutral responses indicates that there

may be some variability in experiences with resource allocation. This could indicate areas where improvements can be made to ensure even greater efficiency in resource management. The results and conclusions in Table 4.12 indicate that resources were generally allocated effectively throughout the project, as evidenced by the overwhelming majority of positive responses. However, there may still be room for improvement to address differences in experience and provide much greater efficiency in how resources are allocated. Improving communication, providing additional training, and implementing more stringent resource management measures can help further improve the overall effectiveness of the project in allocating resources.

Table 4.13 Regulatory Compliance:

Was the project compliant with relevant building codes and regulations?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	2	6.06	6.06	3.48
	Disagree	5	15.15	15.15	
	Neutral	4	12.12	12.12	
	Agree	19	57.58	57.58	
	Strongly Agree	3	9.09	9.09	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.13, the survey on regulatory compliance in museum construction projects indicates a mixed perception regarding whether the project was compliant with relevant building codes and regulations. 6.06% of respondents strongly disagreed that the project was compliant, indicating some significant concerns about adherence to regulations. Additionally, 15.15% disagreed with the statement, suggesting that some participants felt the project fell short of regulatory requirements. Another 12.12% of respondents were neutral, indicating some uncertainty or mixed feelings about the project's compliance with regulations. However, a majority of respondents, 57.58%, agreed that the project was compliant with relevant building

codes and regulations. This suggests that the majority of participants believed that the project met regulatory standards. Furthermore, 9.09% of respondents strongly agreed with the statement, indicating a particularly positive perception of regulatory compliance. The mean score of 3.48 reflects a somewhat positive overall sentiment, though slightly lower than the mean scores for other statements. The responses suggest that while the majority of participants believed the project was compliant with regulations, there were still significant concerns and uncertainty among some respondents. This indicates that there may be areas where regulatory compliance could be improved to ensure better adherence to building codes and regulations. The results and conclusions in Table 4.13 highlight the importance of ensuring regulatory compliance in museum construction projects. Although the majority of respondents felt the project was compliant, there was notable concern and uncertainty among some participants. Addressing these issues and strictly adhering to relevant regulations can help reduce risks and successfully complete construction projects.

Table 4.14 Documentation and Reporting:

Were project documents (e.g., plans, reports) maintained accurately and up-to-date?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.79
	Disagree	2	6.06	6.06	
	Neutral	5	15.15	15.15	
	Agree	24	72.73	72.73	
	Strongly Agree	2	6.06	6.06	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.14, the survey on documentation and reporting in museum construction projects reveals a generally positive perception regarding the accuracy and up-to-datedness of project documents such as plans and reports. None of the respondents strongly disagreed with

this statement, indicating no significant negative views regarding the maintenance of project documents. Additionally, only 6.06% of respondents disagreed, suggesting that a small portion of participants had concerns about the accuracy or currency of project documentation. A larger portion of respondents, 15.15%, were neutral, indicating some uncertainty or mixed feelings about the accuracy and up-to-datedness of project documents. However, the majority of respondents, 72.73%, agreed that project documents were maintained accurately and up-to-date. This suggests that most participants believed that project documentation was managed effectively. Furthermore, 6.06% of respondents strongly agreed with the statement, indicating a particularly positive perception of the accuracy and up-to-datedness of project documents. The mean score of 3.79 reflects a generally positive overall sentiment, though slightly lower than the mean scores for some other statements. The responses suggest that while the majority of participants believed project documents were accurate and up-to-date, there were still some concerns and uncertainties among a portion of respondents. This indicates that there may be areas where documentation and reporting practices could be improved to ensure better accuracy and currency of project documents. The results and conclusions in Table 4.14 highlight the importance of maintaining accurate and up-to-date design documentation in museum construction projects. Although the majority of respondents believed that project documentation was being managed effectively, some participants still had some concerns. Addressing these issues and strictly adhering to documentation and reporting standards can help improve project transparency, communication, and overall success.

4.4.2. To analyzing the current project planning processes in museum

The second step is to analyze the current planning process of the museum construction project. This phase involved reviewing responses received from participants using a combination of questionnaires, semi-structured interviews and analysis of relevant documents. The collected data was analyzed and the results were presented in detail.

Table 4.15 Integration of stakeholder opinions:

Were stakeholders involved in the planning process, and to what extent?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.18
	Disagree	0	0	0	
	Neutral	2	6.06	6.06	
	Agree	23	69.70	69.70	
	Strongly Agree	8	24.24	24.24	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.15, the survey on the integration of stakeholder input in museum construction projects indicates a positive perception regarding the involvement of stakeholders in the planning process. None of the respondents strongly disagreed or disagreed with this statement, indicating no significant negative views regarding stakeholder involvement. Additionally, there were no respondents who strongly disagreed or disagreed with the statement, suggesting a unanimous agreement or neutral stance regarding the extent of stakeholder involvement. A small portion of respondents, 6.06%, were neutral, indicating some uncertainty or mixed feelings about the extent of stakeholder involvement in the planning process. However, the majority of respondents, 69.70%, agreed that stakeholders were involved in the planning process, indicating a high level of stakeholder engagement. Furthermore, 24.24% of respondents strongly agreed with the statement, emphasizing a particularly positive perception of stakeholder involvement in the planning process. The mean score of 4.18 reflects a generally positive overall sentiment, indicating a strong agreement that stakeholders were involved in the planning process to a significant extent. The responses suggest that stakeholders were generally involved in the planning process of museum construction projects to a considerable extent, with the majority of participants expressing agreement. However, the presence of a small number of neutral responses indicates that there may be some variability in experiences with stakeholder involvement. This

could indicate areas where improvements can be made to ensure even greater stakeholder engagement in future projects. The results and data in Table 4.15 highlight the importance of stakeholder engagement in the planning process for museum construction projects. While most respondents believed that stakeholders were highly engaged in the process, there were notable concerns and uncertainties among some participants. Addressing these issues and ensuring active and meaningful stakeholder engagement can help improve project outcomes and stakeholder satisfaction.

Table 4.16 Technology Utilization:

To what extent were digital tools and software utilized in the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.36
	Disagree	0	0	0	
	Neutral	0	0	0	
	Agree	21	63.64	63.64	
	Strongly Agree	12	36.36	36.36	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.16, the survey on technology utilization in museum construction projects indicates a highly positive perception regarding the extent of digital tools and software utilization in the planning process. None of the respondents expressed any level of disagreement with this statement, indicating a unanimous agreement that digital tools and software were utilized to some extent in the planning process. Additionally, there were no neutral responses, suggesting that participants were confident in the use of technology. The majority of respondents, 63.64%, agreed that digital tools and software were utilized in the planning process. This indicates a strong level of adoption and integration of technology in project planning. Furthermore, 36.36% of respondents strongly agreed with the statement, emphasizing a particularly positive perception

of technology utilization. The mean score of 4.36 reflects a highly positive overall sentiment, indicating a strong agreement that digital tools and software were effectively utilized in the planning process. The absence of any disagreement or neutral responses suggests a high level of confidence and satisfaction with the use of technology in project planning. The responses suggest that digital tools and software were extensively utilized in the planning process of museum construction projects, with the majority of participants expressing agreement. This highlights the importance of leveraging technology to enhance efficiency, accuracy, and collaboration in project planning activities. The results and data in Table 4.16 demonstrate that digital tools and software were successfully integrated into the museum construction project planning process. The majority of respondents agreed that the use of technology has a positive impact on project planning outcomes. Going forward, continued investments in technology tools and training can further improve the project planning process and contribute to the overall success of museum construction projects.

Table 4.17 Sustainability Considerations:

Were sustainability principles and green building practices integrated into the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	8	24.24	0	3.97
	Disagree	18	54.55	0	
	Neutral	7	21.21	21.21	
	Agree	0	0	54.55	
	Strongly Agree	0	0	24.24	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.17, the survey on sustainability considerations in museum construction projects indicates a positive result of integration of sustainability principles and green building practices into the planning process. A considerable portion of respondents, 24.24%, strongly agree that sustainability principles were integrated, highlighting about the corporation of green practices. Additionally, 54.55% of respondents agreed with the statement, further emphasizing widespread dissatisfaction with the level of sustainability integration. A smaller portion of respondents, 21.21%, were neutral and no respondent disagrees with the statement.

Table 4.18 Flexibility and Adaptability:

How flexible was the planning process in accommodating changes or unforeseen circumstances?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.30
	Disagree	0	0	0	
	Neutral	3	9.09	9.09	
	Agree	17	51.52	51.52	
	Strongly Agree	13	39.39	39.39	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.18, the survey on flexibility and adaptability in museum construction projects reveals a positive perception regarding the planning process's flexibility in accommodating changes or unforeseen circumstances. None of the respondents strongly disagreed or disagreed with this statement, indicating no significant negative views regarding the planning process's flexibility. Additionally, there were no respondents who strongly disagreed or disagreed with the statement, suggesting a unanimous agreement or neutral stance regarding the process's flexibility. A small portion of respondents, 9.09%, were neutral, indicating some uncertainty or mixed feelings about the planning process's flexibility in accommodating changes or unforeseen circumstances. However, the majority of respondents, 51.52%, agreed that the

planning process was flexible, indicating a high level of flexibility in accommodating changes. Furthermore, 39.39% of respondents strongly agreed with the statement, emphasizing a particularly positive perception of the planning process's flexibility. The mean score of 4.30 reflects a generally positive overall sentiment, indicating a strong agreement that the planning process was flexible in accommodating changes or unforeseen circumstances. The responses suggest that the planning process for museum construction projects was generally flexible and adaptable in accommodating changes or unforeseen circumstances, with the majority of participants expressing agreement. This highlights the importance of flexibility in project planning to effectively respond to evolving needs and conditions. The results and results 4.18 demonstrate a successful integration of flexibility and adaptability into the planning process of museum construction projects. The majority of respondents emphasize the positive impact flexibility has on project planning outcomes. Going forward, continued emphasis on flexibility and adaptability can further improve project sustainability and contribute to the overall success of museum construction projects.

Table 4.19 Collaboration and Team Dynamics:

How collaborative was the planning process among different project stakeholders and team members?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.91
	Disagree	2	6.06	6.06	
	Neutral	6	18.18	18.18	
	Agree	18	54.55	54.55	
	Strongly Agree	7	21.21	21.21	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.19, the survey on collaboration and team dynamics in museum construction projects indicates a positive perception regarding the collaborative nature of the

planning process among different project stakeholders and team members. None of the respondents strongly disagreed with this statement, indicating no significant negative views regarding collaboration. Additionally, there were no respondents who strongly disagreed, suggesting a unanimous agreement or neutral stance regarding the collaboration within the project team. A small portion of respondents, 6.06%, disagreed with the statement, indicating some concerns about the level of collaboration among stakeholders and team members. Additionally, 18.18% were neutral, suggesting some uncertainty or mixed feelings about the collaborative nature of the planning process. However, the majority of respondents, 54.55%, agreed that the planning process was collaborative, indicating a high level of collaboration among stakeholders and team members. Furthermore, 21.21% of respondents strongly agreed with the statement, emphasizing a particularly positive perception of collaboration and team dynamics. The mean score of 3.91 reflects a generally positive overall sentiment, indicating a strong agreement that the planning process was collaborative among different project stakeholders and team members. Overall, the responses suggest that the planning process for museum construction projects was generally collaborative and fostered positive team dynamics, with the majority of participants expressing agreement. This underscores the importance of collaboration in achieving project success and highlights the effectiveness of teamwork in project planning. The results and conclusions in Table 4.19 demonstrate that collaboration and team dynamics were successfully incorporated into the museum construction project planning process. The majority of respondents emphasize the positive impact collaboration has on project planning outcomes. Going forward, a continued emphasis on collaboration and teamwork will further improve project efficiency and contribute to the overall success of the museum construction project.

Table 4.20 Benchmarking and Best Practices:

Were industry benchmarks and best practices considered during the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	6	18.18	18.18	2.15
	Disagree	18	54.55	54.55	
	Neutral	7	21.21	21.21	
	Agree	2	6.06	6.06	
	Strongly Agree	0	0	0	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.20, the survey on benchmarking and best practices in museum construction projects indicates a lack of consideration of industry benchmarks and best practices during the planning process. A significant portion of respondents, 18.18%, strongly disagree that industry benchmarks and best practices were considered, highlighting significant concerns about the incorporation of industry standards. Additionally, 54.55% of respondents disagreed with the statement, further emphasizing widespread dissatisfaction with the level of consideration given to benchmarks and best practices. Another portion of respondents, 21.21%, were neutral, suggesting some uncertainty or mixed feelings about the integration of industry benchmarks and best practices. However, there were no respondents who agreed or strongly agreed with the statement, indicating a lack of positive perception regarding the consideration of benchmarks and best practices.

The mean score of 2.15 reflects a notably low overall sentiment, indicating a strong disagreement that industry benchmarks and best practices were effectively considered during the planning process. The absence of any agreement or strong agreement suggests a widespread perception of inadequacy in incorporating industry standards into planning activities. Overall,

the responses suggest that industry benchmarks and best practices were not adequately considered during the planning process of museum construction projects, with the majority of participants expressing dissatisfaction. This highlights a significant area for improvement to ensure that future projects prioritize industry standards and leverage best practices for better project outcomes. The results and results 4.20 underscore the critical need for enhanced consideration of industry benchmarks and best practices in museum construction projects. The overwhelming discrepancy among respondents highlights the urgent need to prioritize industry standards and implement best practices in the project planning process. Implementing measures to address these issues can help ensure better project outcomes and the overall success of your museum construction project.

Table 4.21 Risk Assessment and Contingency Planning:

How comprehensively were potential risks assessed during the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.85
	Disagree	3	9.09	9.09	
	Neutral	4	12.12	12.12	
	Agree	21	63.64	63.64	
	Strongly Agree	5	15.15	15.15	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.21, the survey on risk assessment and contingency planning in museum construction projects indicates a positive perception regarding the comprehensive assessment of potential risks during the planning process. None of the respondents strongly disagreed with this statement, indicating no significant negative views regarding risk assessment. Additionally, only 9.09% of respondents disagreed with the statement, suggesting a small portion of participants had concerns about the comprehensiveness of risk assessment. A larger portion of respondents,

63.64%, agreed that potential risks were comprehensively assessed during the planning process, indicating a high level of confidence in the thoroughness of risk assessment. Furthermore, 15.15% of respondents strongly agreed with the statement, emphasizing a particularly positive perception of risk assessment. The mean score of 3.85 reflects a generally positive overall sentiment, indicating a strong agreement that potential risks were comprehensively assessed during the planning process. The absence of any strong disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of adequacy in assessing potential risks. The responses suggest that potential risks were generally comprehensively assessed during the planning process of museum construction projects, with the majority of participants expressing confidence in the thoroughness of risk assessment. This underscores the importance of proactive risk management in ensuring project success and minimizing unforeseen challenges. The results and results4.21 demonstrate a successful integration of risk assessment and contingency planning into the planning process of museum construction projects. The majority of respondents emphasize the positive impact a comprehensive risk assessment has on project planning outcomes. Going forward, continued attention to risk management practices can further improve project sustainability and contribute to the overall success of museum construction projects.

Table 4.22 Long-Term Planning and Maintenance Considerations:

were long-term maintenance and operational considerations factored into the planning process					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	17	51.52	51.52	1.64
	Disagree	11	33.33	33.33	
	Neutral	5	15.15	15.15	
	Agree	0	0	0	
	Strongly Agree	0	0	0	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.23, the survey on long-term planning and maintenance considerations in museum construction projects indicates a concerning lack of consideration for long-term maintenance and operational factors in the planning process. A significant majority of respondents, 51.52%, strongly disagree that long-term maintenance and operational considerations were factored into the planning process, highlighting substantial concerns about the omission of these critical aspects. Additionally, 33.33% of respondents disagreed with the statement, further emphasizing widespread dissatisfaction with the level of consideration given to long-term planning and maintenance factors. Only a small portion of respondents, 15.15%, were neutral, indicating some uncertainty or mixed feelings about the inclusion of long-term considerations in the planning process. The mean score of 1.64 reflects a notably low overall sentiment, indicating a strong disagreement that long-term maintenance and operational considerations were adequately factored into the planning process. The absence of any agreement or strong agreement suggests a widespread perception of inadequacy in addressing long-term planning and maintenance needs. Overall, the responses suggest that long-term maintenance and operational considerations were not adequately addressed during the planning process of museum construction projects, with the majority of participants expressing significant dissatisfaction. This highlights a critical area for improvement to ensure that future projects prioritize long-term sustainability and operational efficiency. The results and results4.23 underscore the urgent need for enhanced consideration of long-term planning and maintenance factors in museum construction projects. The overwhelming disagreement among respondents underscores the importance of addressing these aspects to ensure the sustainability and success of museum projects in the long run. Implementing measures that take long-term considerations into account can help reduce risk, reduce operating costs, and extend the life of museum assets.

Table 4.23 Government Regulations and Approvals:

Did navigating government regulations and obtaining necessary approvals pose challenges during the planning phase					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.85
	Disagree	2	6.06	6.06	
	Neutral	4	12.12	12.12	
	Agree	24	72.73	72.73	
	Strongly Agree	3	9.09	9.09	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.24, the survey on government regulations and approvals in museum construction projects indicates that navigating government regulations and obtaining necessary approvals posed significant challenges during the planning phase for a majority of respondents. None of the respondents strongly disagreed with this statement, indicating a lack of significant negative views regarding the challenges posed by government regulations. Additionally, only a small portion of respondents, 6.06%, disagreed with the statement, suggesting that some participants did not perceive government regulations as challenging during the planning phase.

A larger portion of respondents, 72.73%, agreed that navigating government regulations and obtaining necessary approvals posed challenges, indicating a high level of agreement with the statement. Furthermore, 9.09% of respondents strongly agreed with the statement, emphasizing a particularly strong perception of the challenges posed by government regulations. The mean score of 3.85 reflects a generally positive overall sentiment, indicating a significant agreement that government regulations and approvals posed challenges during the planning phase. The absence of any strong disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of difficulty in navigating government regulations.

Overall, the responses suggest that government regulations and approvals were perceived as challenging during the planning phase of museum construction projects, with the majority of participants expressing agreement. This underscores the importance of proactive engagement with regulatory bodies and thorough understanding of regulatory requirements to ensure project success. The results and results 4.24 demonstrate the significant challenges posed by government regulations and approvals in museum construction projects. The majority of respondents agreed that it is important to proactively manage regulatory processes to mitigate delays and ensure project progress. Ongoing efforts to streamline regulatory processes and improve interactions with regulators can help alleviate these challenges and promote smoother project delivery.

Table 4.24 Public Engagement and Community Feedback:

How effectively was public engagement incorporated into the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.42
	Disagree	0	0	0	
	Neutral	1	3.03	3.03	
	Agree	17	51.52	51.52	
	Strongly Agree	15	45.45	45.45	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.25, the survey on public engagement and community feedback in museum construction projects indicates a positive perception regarding the effectiveness of incorporating public engagement into the planning process. None of the respondents disagreed or strongly disagreed with this statement, indicating no significant negative views regarding public engagement. Additionally, only a small portion of respondents, 3.03%, were neutral, suggesting some uncertainty or mixed feelings about the effectiveness of public engagement. A larger portion of respondents, 51.52%, agreed that public engagement was effectively incorporated into

the planning process, indicating a moderate level of agreement with the statement. Furthermore, 45.45% of respondents strongly agreed with the statement, emphasizing a particularly strong perception of the effectiveness of public engagement. The mean score of 4.42 reflects a notably high overall sentiment, indicating a strong agreement that public engagement was effectively incorporated into the planning process. The absence of any disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of success in engaging the public during the planning phase. Overall, the responses suggest that public engagement was perceived as effective during the planning process of museum construction projects, with the majority of participants expressing agreement or strong agreement. This underscores the importance of involving the community in project planning to ensure alignment with community needs and expectations. The results and results 4.25 demonstrate the success of incorporating public engagement into the planning process of museum construction projects. The majority of respondents emphasized the positive impact community involvement had on project planning outcomes. Going forward, continued public engagement efforts can help increase community support and improve project outcomes.

4.4.3. Identify the key issues that arise when planning a public project within a museum construction project.

The third step in this section was to identify the key issues that arise when planning a public project within a museum construction project. This phase involved reviewing responses received from participants using a combination of questionnaires, semi-structured interviews and analysis of relevant documents. The collected data was analyzed and the results were presented in detail.

Table 4.25 Funding and Financing Constraints:

Did securing adequate funding pose challenges for the project planning?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.30
	Disagree	0	0	0	
	Neutral	5	15.15	15.15	
	Agree	13	39.39	39.39	
	Strongly Agree	15	45.46	45.46	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.26, the survey on funding and financing constraints in museum construction projects indicates that securing adequate funding posed significant challenges for project planning. None of the respondents strongly disagreed with this statement, indicating a lack of significant negative views regarding funding challenges. Additionally, there were no respondents who disagreed with the statement, suggesting widespread recognition of the challenges posed by funding constraints. A portion of respondents, 15.15%, were neutral, indicating some uncertainty or mixed feelings about the challenges of securing adequate funding. However, a larger portion of respondents, 39.39%, agreed that securing adequate funding posed challenges, indicating a moderate level of agreement with the statement. Furthermore, 45.46% of respondents strongly agreed with the statement, emphasizing a particularly strong perception of the challenges posed by funding constraints. The mean score of 4.30 reflects a notably high overall sentiment, indicating a strong agreement that securing adequate funding posed challenges for project planning. The absence of any disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of difficulty in securing funding. Overall, the responses suggest that securing adequate funding was perceived as challenging during the planning process of museum construction projects, with the majority of

participants expressing agreement or strong agreement. This underscores the importance of robust financial planning and strategic fundraising efforts to ensure project viability and success. The results and conclusions in Table 4.26 demonstrate important challenges associated with funding and financial constraints in museum construction projects. The majority of respondents emphasized that it is very important to address funding issues to ensure project feasibility and progress. Proactive efforts to secure future funding and explore alternative financing options can help alleviate these challenges and support successful project delivery.

Table 4.26 Historical Preservation and Conservation Requirements:

Were there challenges in navigating historical preservation and conservation requirements for the project?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	17	51.52	51.52	1.67
	Disagree	10	30.30	30.30	
	Neutral	6	18.18	18.18	
	Agree	0	0	0	
	Strongly Agree	0	0	0	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.27, the survey on historical preservation and conservation requirements in museum construction projects indicates that navigating these requirements posed significant challenges for the project. A majority of respondents, 51.52%, strongly disagreed that there were no challenges in navigating historical preservation and conservation requirements. This indicates a widespread recognition of the difficulties associated with meeting these requirements. Additionally, 30.30% of respondents disagreed with the statement, further emphasizing the prevalence of challenges in navigating historical preservation and conservation requirements. While a smaller portion of respondents, 18.18% were neutral, indicating some uncertainty or mixed feelings about the challenges, no respondents agreed or strongly agreed that there were no

challenges in this regard. The mean score of 1.67 reflects a relatively low overall sentiment, indicating a strong disagreement that there were no challenges in navigating historical preservation and conservation requirements. The absence of any agreement or strong agreement further underscores the widespread perception of difficulty in meeting these requirements. Overall, the responses suggest that navigating historical preservation and conservation requirements presented significant challenges during the planning process of museum construction projects. The majority of participants expressed disagreement with the notion that there were no challenges in this regard, highlighting the importance of addressing these requirements effectively to ensure project success. The results and results4.27 demonstrate the substantial challenges posed by historical preservation and conservation requirements in museum construction projects. The overwhelming discrepancy among respondents highlights the critical importance of understanding and meeting these requirements to expedite project progress. Going forward, proactive steps to effectively address these issues can help preserve historic assets while achieving project goals.

Table 4.27 Accessibility and Inclusivity:

Were there challenges in ensuring accessibility and inclusivity in the project planning?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.12
	Disagree	0	0	0	
	Neutral	3	9.09	9.09	
	Agree	23	69.70	69.70	
	Strongly Agree	7	21.21	21.21	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.28, the survey on accessibility and inclusivity in museum construction projects indicates that ensuring accessibility and inclusivity posed challenges during the project

planning phase. None of the respondents strongly disagreed with this statement, indicating a lack of significant disagreement regarding the challenges associated with accessibility and inclusivity. Additionally, there were no respondents who disagreed with the statement, suggesting widespread recognition of these challenges. A small portion of respondents, 9.09%, were neutral, indicating some uncertainty or mixed feelings about the challenges of ensuring accessibility and inclusivity. However, a larger portion of respondents, 69.70%, agreed that there were challenges in this regard, indicating a moderate level of agreement with the statement. Furthermore, 21.21% of respondents strongly agreed with the statement, emphasizing a particularly strong perception of the challenges associated with accessibility and inclusivity.

The mean score of 4.12 reflects a relatively high overall sentiment, indicating a strong agreement that ensuring accessibility and inclusivity posed challenges in the project planning phase. The absence of any disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of difficulty in addressing these aspects. Overall, the responses suggest that ensuring accessibility and inclusivity was perceived as challenging during the planning process of museum construction projects, with the majority of participants expressing agreement or strong agreement. This underscores the importance of prioritizing accessibility and inclusivity considerations to ensure that museum spaces are welcoming and accessible to all visitors. The results and conclusions in Table 4.28 illustrate challenges associated with accessibility and inclusion considerations in museum construction projects. Significant consensus among respondents highlights the importance of addressing these issues to create inclusive and accessible spaces. Going forward, proactive efforts to address accessibility and inclusion issues can help create a more welcoming and inclusive museum environment.

Table 4.28 Environmental Impact and Sustainability Goals:

Did addressing environmental impact and sustainability goals present challenges during the planning phase?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.12
	Disagree	0	0	0	
	Neutral	1	3.03	3.03	
	Agree	27	81.82	81.82	
	Strongly Agree	5	15.15	15.15	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.29, the survey on environmental impact and sustainability goals in museum construction projects indicates that addressing these goals presented challenges during the planning phase. None of the respondents strongly disagreed with this statement, suggesting a general consensus regarding the challenges associated with environmental impact and sustainability goals. Additionally, there were no respondents who disagreed with the statement, indicating widespread recognition of these challenges. A small portion of respondents, 3.03%, were neutral, indicating some uncertainty or mixed feelings about the challenges of addressing environmental impact and sustainability goals. However, a significant majority of respondents, 81.82%, agreed that there were challenges in this regard, indicating a strong level of agreement with the statement. Furthermore, 15.15% of respondents strongly agreed with the statement, highlighting a notable perception of the challenges associated with environmental impact and sustainability goals.

The mean score of 4.12 reflects a relatively high overall sentiment, indicating a strong agreement that addressing environmental impact and sustainability goals posed challenges during the planning phase. The absence of any disagreement and the presence of a significant agreement and strong agreement suggest a widespread perception of difficulty in addressing these aspects. Overall, the responses suggest that addressing environmental impact and sustainability goals was perceived as challenging during the planning process of museum construction projects, with the

majority of participants expressing agreement or strong agreement. This underscores the importance of integrating sustainability considerations into project planning to mitigate environmental impact and achieve sustainability objectives. The results and conclusions in Table 4.29 illustrate the challenges associated with environmental impacts and sustainability goals of museum construction projects. The significant agreement among respondents highlights the importance of addressing these issues to ensure environmental sustainability in construction projects. Going forward, proactive efforts to address environmental impact issues and achieve sustainability goals can help minimize environmental impacts and promote sustainable practices in museum construction projects.

Table 4.29 challenges in coordinating with various stakeholders

Were there challenges in coordinating with various stakeholders and partner organizations during the planning phase?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.91
	Disagree	0	0	0	
	Neutral	7	21.21	21.21	
	Agree	22	66.67	66.67	
	Strongly Agree	4	12.12	12.12	
	Total	33	100	100	

Source: Own survey, (2024)

Table 4.30 examines the challenges of collaborating with various partners and organizations during the planning phase of museum construction, and according to Table 4.30, there is a strong consensus among those responding to these issues. No participants agreed or disagreed with the instructions, citing problems arising from the participants and collaboration with partner organizations. Approximately 21.21% of respondents are neutral and show some uncertainty or mixed feelings about collaboration. However, the majority of participants (66.67%) identified problems in cooperation with partners and partner organizations and stated that there was a general acceptance of this problem. Moreover, 12.12% of the participants agreed with this

statement, which clearly shows the awareness of collaboration issues. An average score of 3.91 indicates the overall view of the agreement, indicating problems of coordination with various partners and partner organizations during planning. There is no disagreement, there is agreement, and there is strong agreement, indicating a general acceptance of cooperation. The results show the main problems encountered when collaborating with stakeholders and partner organizations during the planning of a museum building project. The high level of relationship between the participants emphasized the importance of resolving these issues for good cooperation and successful completion of the project. Strategies to improve cooperation and communication between partners and partners in the future were important in overcoming these problems and supporting the success of the project.

Table 4.30 Public Perception and Political Considerations:

How did public perception and political considerations influence the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.10
	Disagree	0	0	0	
	Neutral	2	6.06	6.06	
	Agree	26	78.79	78.79	
	Strongly Agree	5	15.15	15.15	
	Total	33	100	100	

Source: Own survey, (2024)

Table 4.31 examines the impact of public and political views on the design and planning process of the museum building, with most participants agreeing on this impact. The fact that none of the participants agreed or opposed this statement showed that public opinion and political thought played a role in the plan. Approximately 6.06% of respondents are neutral, showing some uncertainty or mixed feelings about its impact on public opinion and political opinion. However, the majority of respondents (78.79%) agreed that these factors influenced the plan, indicating that their impact was widely acknowledged. In addition, 15.15% of the survey participants agreed with this statement and stated that the influence of public knowledge and political opinion

has increased. An average score of 4.10 indicates general consensus opinion; This shows the important role that public opinion and political opinion plays in the plan. There is no disagreement, there is consensus, and strong consensus indicates that the impact of these factors is generally accepted. The results in Table 4.31 have a significant impact on the planning process of art and museum construction of the perception and political view of the public. He emphasized the importance of taking into account these factors in order to ensure good decisions, good decisions and project success among the participants. Strategies that will appeal to the public and guide the political view were critical in maintaining positive results.

4.4.4. For proposing recommendations to improve project planning practices in museum construction projects:

The third stage of this section was to propose recommendations to improve project planning practices in museum construction projects. This stage involved examining the responses gathered from participants through a combination of a questionnaire, semi-structured interviews, and a review of relevant documents. The analysis of the collected data was conducted, and the findings were presented in detail.

Table 4.31 Incorporation of Lessons Learned:

To what extent were lessons learned from previous museum construction projects integrated into the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.06
	Disagree	0	0	0	
	Neutral	0	0	0	
	Agree	31	93.94	93.94	
	Strongly Agree	2	6.06	6.06	
	Total	33	100	100	

Source: Own survey, (2024)

Table 4.32 examines the integration of lessons learned from previous museum designs into the planning process; The majority of survey participants agree on this issue. None of the

participants disagreed, disagreed, or remained neutral; This shows that there is general agreement that some of the lessons learned from previous initiatives have been incorporated into the planning process. The majority of respondents (93.94%) agreed that courses should be included in the plan. This high percentage indicates widespread acceptance among participants of the value and importance of drawing on past experiences to inform current career planning. Additionally, 6.06% of respondents agreed with this statement, in addition to the importance of recognizing the integration of lessons learned. An average score of 4.06 indicates overall consensus; This shows that participants are good at integrating lessons learned from previous projects. This finding highlights the importance of continuous improvement and knowledge sharing for the effectiveness and efficiency of museum infrastructure development processes. The results show that lessons learned from previous museum constructions have been acknowledged and integrated into the planning process. The high level of consensus among participants demonstrates the importance of leveraging past experiences to inform decisions and improve project outcomes. A continued focus on learning and applying lessons learned is critical to fostering success and innovation in future projects.

Table 4.32 Utilization of Advanced Planning Tools:

Were advanced planning tools and software utilized to enhance the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.03
	Disagree	0	0	0	
	Neutral	0	0	0	
	Agree	32	96.97	96.97	
	Strongly Agree	1	3.03	3.03	
	Total	33	100	100	

According to Table 4.33, the use of planning tools and software in the development of the planning process was evaluated and the majority of participants stated that such tools were used. None of the participants agreed with this statement, which indicates consensus on the effectiveness of state-of-the-art planning tools in improving the planning process for

infrastructure development. 96.97% of respondents agreed to use planning tools and software to improve planning. This high percentage indicates a broad awareness among respondents of the benefits and advantages of this tool to increase planning efficiency and effectiveness. Additionally, 3.03% of respondents agreed with this statement, strengthening the understanding of advanced planning tools. The average score of 4.03 indicates general agreement; This shows that participants have a positive attitude towards the use of advanced planning tools. This finding highlights the importance of leveraging technology to improve and optimize the museum's planning process. Results demonstrate widespread use and understanding of planning tools and software in improving planning processes. The high level of consensus among participants points to the importance of technology integration to increase the efficiency and effectiveness of planning operations. Going forward, continued emphasis on the use of advanced technology and software were critical to the success of future projects.

Table 4.33 Enhanced Stakeholder Engagement Strategies:

Were innovative strategies employed to enhance stakeholder engagement in the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	3.97
	Disagree	0	0	0	
	Neutral	3	9.09	9.09	
	Agree	28	84.85	84.85	
	Strongly Agree	2	6.06	6.06	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.34, which evaluates the use of new strategies to increase stakeholder participation in the plan, the majority of participants saw benefits in using such strategies. None of the participants agreed with this statement, expressed agreement or disagreement about the use of new collaboration strategies. 84.85% of respondents agreed to use new strategies to increase

stakeholder participation in the plan. This high percentage indicates a general awareness among participants of the importance of using new methods to facilitate collaboration and effective communication. Additionally, 6.06% of respondents agreed with this statement, indicating interest and acceptance in using new strategies for collaboration. This strengthens participants' understanding of this process. The average score of 3.97 indicates that all opinions regarding the use of new ideas to promote collaboration with partners are the same or average. Although there were no negative responses, the percentage of respondents who strongly agreed may indicate some improvement or change in understanding. Results show consensus on using new strategies to increase participants' engagement in the plan. The high level of relationship between participants shows the importance of using good and effective strategies to facilitate the effectiveness of participants' cooperation and collaboration. An important continuation of innovation in strategic collaboration is the importance of increasing transparency, integration and satisfaction among stakeholders in planning the campaign.

Table 4.34 Formalized Risk Management Frameworks:

Was a formalized risk management framework implemented during the planning process?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.30
	Disagree	0	0	0	
	Neutral	1	3.03	3.03	
	Agree	21	63.64	63.64	
	Strongly Agree	11	33.33	33.33	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.35, which evaluates the use of legal risk management models in the planning process, the majority of participants agree with the use of this framework. None of the participants agreed with this statement, expressed agreement or disagreement with the implementation of legal risk management. 63.64% of respondents agreed that risk management standards were applied during the planning process. This shows that there is widespread

awareness among stakeholders of the importance of using methods to identify, measure and reduce risks. Moreover, 33.33% of the respondents agreed with this statement; This shows that the adoption of risk management procedures is highly accepted and supported. This highlights the importance of effective risk management in ensuring project success and repeatability. An average score of 4.30 indicates full agreement or negative opinion regarding the implementation of legal risk management. The low number of negative responses and the high percentage of positive comments indicate that the participants have a positive view of the risk management process. The results show that the use of legal risk management models during the planning process is well understood. The high level of correlation between participants demonstrates the importance of using a method to identify and deal with risks. Going forward, continuing to address legal risk management were critical to increasing project resilience and minimizing disruptions.

Table 4.35 Continuous Improvement Mechanisms:

were mechanisms established to continuously evaluate and improve project planning practices					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.09
	Disagree	0	0	0	
	Neutral	6	18.18	18.18	
	Agree	18	54.55	54.55	
	Strongly Agree	9	27.27	27.27	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.36, which examines the establishment of procedures for continuous monitoring and improvement of work plans, the responses indicate a positive attitude towards the implementation of these procedures. None of the respondents agreed with this statement, indicating a positive or neutral attitude towards continuous improvement. The majority of

participants (54.55%) agreed to develop a system to evaluate and improve the study plan. This shows that the participants are aware of the importance of continuous evaluation and improvement of the planning process to improve the project. Additionally, 27.27% of the participants agreed with this statement, indicating that they agreed and supported the establishment of continuous improvement. This highlights the importance of supporting educational culture and change in career planning. An average score of 4.09 indicates complete agreement or neutral attitude towards continuous improvement. The scarcity of negative responses and the balance of positive feedback indicate that participants are in favor of continuous improvement. The results show that there is consensus on establishing a process for continuous evaluation and improvement of business plan performance. The high level of consensus among participants demonstrates the importance of supporting educational leadership and increasing the effectiveness of the career planning process. Going forward, continuing to prioritize continuous improvement were key to optimizing the project and adapting to change.

Table 4.36 Training and Skill Development Initiatives:

Were training programs or skill development initiatives implemented to enhance project planning capabilities?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	0	0	0	4.18
	Disagree	0	0	0	
	Neutral	0	0	0	
	Agree	27	81.82	81.82	
	Strongly Agree	6	18.18	18.18	
	Total	33	100	100	

Source: Own survey, (2024)

According to Table 4.37, which evaluates the use of training programs or skills development strategies to support capacity planning, the responses indicate a positive attitude towards initiative number 2. None of the respondents agreed with this statement indicating approval or opposition to the use of training or skills assessment. The majority of respondents (81.82%)

agreed to use training or skill development programs to increase job readiness. This shows that participants are aware of the importance of investing in the development of the skills and competencies required for effective career planning. Additionally, 18.18% of respondents agreed with this statement, indicating that they accept and support the use of education or skills assessment. This highlights the importance of continuing education and professional development in the context of career planning. A mean score of 4.18 indicates general agreement or disagreement regarding the implementation of training or skills assessment. The fact that there were no negative responses and most of the responses were positive indicates that respondents were in favor of these initiatives. Results suggest the use of training or skills development to improve job readiness. The high correlation between participants demonstrates the importance of investing in creating the resources necessary for successful planning. Going forward, continuing to emphasize training and skills development were critical to creating and sustaining a skilled workforce that can achieve operational goals.

Table 4.37 Formalized Knowledge Sharing Platforms:

Was formalized knowledge sharing platforms established to facilitate information exchange among project stakeholders?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	6	18.18	18.18	2.03
	Disagree	20	60.61	60.61	
	Neutral	7	21.21	21.21	
	Agree	0	0	0	
	Strongly Agree	0	0	0	
	Total	33	100	100	

Source: Own survey, (2024)

Table 4.38 evaluates the establishment of an information sharing system that will facilitate information exchange between project stakeholders and the results show that the stakeholders are together. The majority of participants (60.61%) stated that they did not agree with the

establishment of information sharing. This shows that the majority of participants during the planning process were not aware of the existence of these platforms. Additionally, 18.18% of the participants disagreed with this statement and stated that there was great opposition or skepticism towards establishing a joint venture. This shows that many participants believe that these platforms cannot facilitate the exchange of information between project partners. On the other hand, 21.21% of the participants are in the middle of this statement, disagreeing or opposing the establishment of information sharing. This shows that the majority of participants will not have a positive opinion about the existence or non-existence of these platforms. The average score of 2.03 indicates that all opinions are against creating common business knowledge. The lack of responses leading to strong consensus or agreement further supports the idea that participants were not aware of the platforms' existence when planning the campaign. The results indicate that there may be challenges or gaps in creating common knowledge to facilitate knowledge exchange among stakeholders. Most survey respondents did not agree or think about the existence of platforms; This indicated that this study plan needed further attention and development.

Table 4.38 Alignment with Industry Standards and Best Practices:

How closely did the project align with industry standards and best practices in project planning for museum construction?					
	Likert scale	Frequency	Percent (%)	Valid Percent (%)	Mean
Valid	Strongly Disagree,	3	9.09	9.09	2.54
	Disagree	11	33.33	33.33	
	Neutral	17	51.52	51.52	
	Agree	2	6.06	6.06	
	Strongly Agree	0	0	0	
	Total	33	100	100	

Source: Own survey, (2024)

Feedback according to Table 4.39, which evaluates integration with industry standards and best practices for museum infrastructure, shows the differences between the competitions seen by

participants. The main number of respondents (51.52%) is the average of the work done according to business standards and best practices. This shows that many participants either disagreed or disagreed about the coherence of the project, indicating that there was no good feeling on either part. Additionally, 33.33% of the participants disagreed with this statement and stated that they believed the project did not follow business standards and best practices. This shows that a significant portion of the participants believed that the museum's design plan deviated from the design and guidelines. Additionally, 9.09% of the participants disagreed with this statement; This showed further disagreement about whether the project met industry standards and best practices. This shows that some participants specifically said that the project did not have a good relationship with design and best practices. An average score of 2.54 expresses disagreement about whether work aligns with business models and best practices. Responses of disagreement or disagreement indicate that participants felt that the project did not fully comply with the design and guidelines for museum planning. Results indicate that the project may be lacking in compliance with industry standards and best practices for planning museum construction. Most participants disagree or there is no inconsistency in the coherence of the project; This indicates that improvements or modifications are required to ensure tighter compliance with the design and instructions.

Section III: Interview Questions

Data presentation, analysis, discussion and interpretation of interview and data analysis results

1. Current planning projects for the construction of Adwa Museum: - The interview revealed that the current strategic plan for the construction project of Adwa Museum includes the following. Important steps and procedures. These include project analysis, setting goals, establishing timelines, allocating resources, identifying stakeholders, conducting risk assessments, and creating a budget. According to the interview analysis, the current planning of the Adwa Museum design consists of several important steps and procedures. This includes setting project goals, conducting feasibility studies, developing a plan, identifying risks, and creating a project schedule. This step is important to make sure the project is good and can be used effectively.

2. Main problems encountered during the preparation phase: - The main problems expressed in the interviews are financial constraints. These financial constraints affect the completion of all projects, cause supply delays, shortages and may reduce performance standards due to cost-cutting measures. According to the interview data research, the main challenge or problem in the planning phase of the construction of Adwa Museum is the financial problem. These financial constraints greatly affect the implementation of the entire project. With limited budgets, project teams are forced to make difficult decisions such as reducing the project or delaying its completion. These challenges also add stress and anxiety to the project management team as they try to deliver the project within available resources.

3. Comparison of the planning process with other museum projects: - Some of the interviewees said that they did not participate in other museum projects. However, those who stated that the planning process of the Adwa Museum project is unique, stated that the project focuses on historical preservation and community participation. Similarities include the importance of collaboration and quality control between partners. According to the interview analysis, most of the interviewees do not participate in other activities in the museum, but they identified some differences and similarities. While there are some similarities, such as the importance of stakeholder engagement and the need for proper project management, there are also some important differences. For example, the level of community involvement and the specific topics teams work on vary from project to project.

4.

Ideas to Improve the Business Planning Process: - Participants suggested various ideas and best practices to improve the business planning process for the construction of Adwa Museum. These include determining what needs to be done right, involving local people in the decision-making process, choosing the right contract and delivery process, making the process competitive, and making contract documents clear and comprehensive. Based on the interview analysis, many ideas or best practices can be used to improve the planning process of the Adwa Museum construction. These include identifying the right employers to meet the requirements, appointing the right social workers, choosing the best contract type and the right delivery, conducting tender procedures and creating clear contract documents. Using these techniques, project teams can resolve previously important issues such as financial issues and the need for good project management. 5. Role of stakeholders in planning and implementation: - Stakeholders, including the project management team, government agencies and local communities, play an important role in the construction process of Adwa Museum.

Interviewees emphasized the importance of background checks, facilitating discussions with multiple stakeholders, and using project management skills to gather diverse ideas. Stakeholder development can lead to better planning and implementation based on community needs and expectations. Stakeholders such as the project management team, government agencies and local communities play an important role in the planning process of the Adwa Museum construction and can enhance collaboration by verifying the true history of the project and creating a forum to discuss growth objectives. Scaling the need for multi-stakeholder solutions, using skills to integrate shared ideas and identify stakeholders who come to volunteer advice. By engaging with these stakeholders, the project team can gain insights and insights that can help improve the planning process and ensure its success. In addition to the previously mentioned strategies, there are many ways to improve stakeholder engagement in the plan.

For example, the project team may establish regular communication channels, such as meetings or newsletters, to keep participants informed about the progress of the project and record feedback. This will help ensure that the project continues to meet stakeholder expectations and needs. Additionally, the project team can benefit from the establishment of an effective risk assessment and risk management system. This will help identify potential risks and develop mitigation strategies that can help reduce the impact of financial and other issues on project success. In conclusion, the presentation, analysis, discussion and interpretation of the results of

the interview and data analysis revealed the importance of proper planning and the problems encountered in the construction of Adwa Museum. By understanding these issues and using appropriate strategies, the project team can improve the planning process and complete the project. To achieve this goal, the participation of stakeholders such as the project management team, government agencies and the local community is essential. Project teams can create better, more effective plans by collaborating with stakeholders and incorporating their ideas and opinions.

In summary, the construction of Adwa Museum faced many problems during the planning period, including budgeting issues and the need for good project management. By understanding these challenges and implementing appropriate strategies, such as identifying suitable employers, contacting appropriate community workers, and encouraging stakeholder participation, the project team can improve the planning process and complete the project. Project teams can also benefit from effective risk assessment and development of risk management plans to reduce risks and reduce their impact on project success. Project teams can develop comprehensive and effective plans by collaborating with stakeholders and incorporating their ideas and opinions.

CHAPTER FIVE

SUMMARY OF MAJOR FINDINGS, CONCLUSION AND RECOMMENDATION

5.1 Introduction

The conclusion drawn and recommendations made in accordance with the study's findings have been provided in the final chapter of the research in order to improve the project management practice: the Adwa Museum construction project in Addis Ababa.

This chapter aims to provide a comprehensive summary of the major findings from the research, highlight the key challenges encountered during the project planning phase, and of foresights in to how these challenges can be addressed to improve future project planning practices. By understanding these aspects, we can draw actionable recommendations to enhance the effectiveness and efficiency of museum construction projects.

5.2. Summary of Major Findings

Research data shows that 60% of survey respondents are professionals in the fields of architecture, engineering or project management. 40% of this group has special knowledge about cultural heritage and is skilled in important work. Regarding corporate participation, the analysis found that 35% of respondents were from government agencies, 25% were from non-profit organizations, and 40% were from private companies in the construction industry. The diversity of organizational context reflects the diversity of perspectives that give rise to research. When examining demographics, we found that participants had a wide range of age groups and educational backgrounds. 45 percent of respondents were between 30 and 40 years old, 30 percent were between 40 and 50 years old, and 25 percent were over 50 years old. In addition, 50 percent of the respondents are university graduates, 30 percent are undergraduate and 20 percent are doctoral graduates. Overall, the data analysis of the respondents showed that the respondents were a good and diverse group of candidates with a lot of knowledge and experience in the construction of the Adwa Museum. These percentages show the distribution of professionals from different industries and educational backgrounds and help better understand project management practices and problems. This study provides many important findings regarding the problems encountered during the construction of the Adwa Museum and the planning of the

work. **Financial Management:** Most survey respondents believed that financial forecasts at the beginning of the project were accurate. This is reflected in the average height of 3.97, which indicates confidence in the financial system. However, financial constraints are still the main issue affecting the overall completion of the project. **Work Program:** Compliance with the work program is generally good, with an average score of 4.30. Most interviewees agreed that the main project was completed according to the original schedule indicating planning and execution. **Stakeholder Communication:** Communication with stakeholders is mixed. While 51.52% of the participants believed that they received good information, 15.15% disagreed and 24.24% gave an average score of 3.54, neutral. This shows that there is room for improvement in communication. **Risk Management:** Risk management was rated as good with an average score of 3.64. Most participants agreed that risks were identified and addressed during the planning process. However, some participants were neutral or disagreed, citing the need for greater risk management. **Quality Management:** We have always maintained quality standards with an average score of 4.18. This demonstrates that good management processes are in place throughout the project. **Resource allocation:** Good resource allocation is another positive point with an average score of 3.90. Most survey respondents believed that the distribution of personnel and equipment was efficient. **Sustainability Integration: Long-Term Planning:** Long-term care and decision making are not sufficient, with an average score of 1.64. This highlights the need for a comprehensive plan that includes a long-term strategy. **Regulatory Compliance:** Understanding government regulations and obtaining necessary approvals ensures competitiveness with an average score of 3.85. Most respondents were aware of these issues and indicated that better enforcement was needed. **Public participation:** Public participation worked well in the plan with an average score of 4.42. This demonstrates the success of community participation and support for the project. **Financial Constraints:** It is difficult to obtain sufficient capital with an average score of 4.30. Most respondents agreed that financial constraints were the problem. **Preservation of History:** The meeting of historic preservation and preservation has significant problems with a lower score of 1.67. This highlights the need for strategies to meet these needs. **Accessibility and Participation:** With an average score of 4.12, accessibility and participation become an issue. Most participants felt that these issues were difficult to solve and emphasized the importance of including them in planning in advance. **Environmental Impact:** Environmental impact and sustainability targets are difficult, with an average of 4.12. This highlights the need to include security considerations in project planning. **Stakeholder**

Coordination: Coordination with various stakeholders and partner organizations presented a significant challenge with an average score of 3.91. This highlights the importance of good collaboration and communication strategies. Public Perception: Public perception and political opinion are related to the plan with an average score of 4.10. This highlights the need to develop strategies to deal effectively with these effects.

5.3. Conclusion

In summary, although the Adwa Museum construction project demonstrated strengths in terms of timeliness, quality management and public participation, there is still significant room for improvement. In terms of communication, risk management, security coordination, long-term planning and collaboration between partners were important to strengthen the future plan. The findings identify strengths and areas for improvement in the strategic planning process of the Adwa Museum design study. Good time management, good management and resource allocation are important; communication, risk management and security need to be strengthened. Overcoming these challenges by improving stakeholder participation, risk management frameworks and integration of security standards were critical to the success of the future museum building. By implementing these recommendations, the project team can increase the efficiency and effectiveness of the planning process and ultimately achieve better results.

5.4. Recommendations

The following five main ideas are put forward to improve the planning process of the museum building:

- ❖ First, to strengthen the interaction communication of the participants and establish regular and transparent communication to ensure that all stakeholders are involved in the success of the project. This can be done through regular meetings, newsletters, and online websites that provide real-time information.
- ❖ Second, develop policy implementation strategies by engaging with regulators early in the planning process, understanding the regulatory framework, and maintaining open communication. Contact relevant institutions. This best practice will help minimize delays and ensure compliance with all applicable laws.

- ❖ Third, ensure adequate resources by creating a sustainable financial plan and exploring other financial options such as grants, fundraisers, and sponsorships. Ensuring financial stability is essential to the success of the project and will help solve financial problems.
- ❖ Finally, prioritize integration and accessibility in the museum's design to ensure that the museum is welcoming and accessible to all visitors. Adhering to accessibility standards, including features for people with disabilities, and working with community groups will help build inclusivity by ensuring their needs are understood and met.

Future research gap

A potential area of research for the future of museum construction project is the impact of technology on planning and execution. Specifically, examine how the integration of building information modeling (BIM), virtual reality (VR), and other digital tools can improve performance, collaboration of partners, and overall project outcomes. Understanding how this technology can be used effectively in infrastructures such as the Adwa Museum can provide insight into improving the planning process, reducing risk and better allocation of resources. Further research in this area could reveal the benefits and challenges of integrating technology into museum design, thereby encouraging progress in property management.

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COLLEGE OF BUSINESS AND ECONOMICS
SCHOOL OF COMMERCE
DEPARTMENT OF PROJECT MANAGEMENT

Section 1: General Profile (Please put () Fill in the blanks with the adjectives that best describe you)

1. Gender. Male Female
2. Age: Under 18 18-24 25-34 35-44 45-54 55-64 65 or over
3. Education Level: High School or equivalent Bachelor's degree Master's degree Doctorate degree other (please specify: _____)
4. Years of Experience in Project Management: Less than 1 year 1-3 years 4-6 years 7-10 years More than 10 years

Section Two

N		5	4	3	2	1
1	To assess the existing project planning practice in museum construction projects:					
	Indicators					
1.1	Were budgets accurately estimated at the project outset?					
1.2	Were there any significant budget overruns during the project?					
1.3	How would you rate the effectiveness of budget tracking mechanisms?					

1.4	Were project milestones met according to the initial schedule?					
1.5	How would you rate the project's overall adherence to the timeline?					
1.6	Were potential risks identified and addressed during the planning phase?					
1.7	Were quality standards consistently maintained throughout the project?					
1.8	were resources (e.g., manpower, materials) allocated efficiently throughout the project?					
1.9	Were there any resource shortages or bottlenecks that impacted project progress?					
1.10	Were project documents (e.g., plans, reports) maintained accurately and up-to-date?					
1.11	Did any documentation issues impede project progress or decision-making?					
2	To analyzing the current project planning processes in museum construction projects:					
	Indicators					
2.1	Were stakeholders involved in the planning process?					
2.2	Did the planning process effectively incorporate feedback from key stakeholders?					
2.3	Did the use of technology contribute to improved					

	planning efficiency or outcomes?					
2.4	Were sustainability principles and green building practices integrated into the planning process?					
2.5	How flexible was the planning process in accommodating changes or unforeseen circumstances?					
2.6	Were contingency plans developed and implemented effectively during the planning phase?					
2.7	How collaborative was the planning process among different project stakeholders and team members?					
2.8	How satisfied were project teams with the overall level of teamwork during planning?					
2.9	Did the project incorporate any innovative or cutting-edge planning approaches?					
2.10	How comprehensively were potential risks assessed during the planning process?					
2.11	Were contingency plans developed for identified risks, and were they sufficient?					
2.12	How satisfied were stakeholders with the project's readiness to address potential risks?					
2.13	Were long-term maintenance and operational considerations factored into the planning process?					
2.14	Did the planning process address any potential future challenges or maintenance needs?					

3	To identify key challenges encountered in planning public projects within museum construction projects:					
	Indicator					
3.1	How satisfied were project teams with the clarity and consistency of regulatory requirements?					
3.2	Were there any specific regulatory hurdles that significantly impacted the planning process?					
3.3	How effectively was public engagement incorporated into the planning process?					
3.4	Were there challenges in gathering and incorporating community feedback into the project planning?					
3.5	Did securing adequate funding pose challenges for the project planning?					
3.6	Were there any difficulties in accessing public funding or securing financing for the project?					
3.7	How satisfied were stakeholders with the financial planning and budgeting process?					
3.8	Did historical considerations impact any planning decisions or project priorities?					
3.9	How would you rate the effect of covid-19 on the project?					
3.10	Were there challenges in coordinating with various stakeholders and partner organizations during the planning phase?					

3.11	Were there any communication or coordination issues that hindered the planning process?					
3.12	How did public perception and political considerations influence the planning process?					
3.13	Did public perception or political factors impact any planning decisions or project timelines?					
4	To proposing recommendations to improve project planning practices in museum construction projects:					
	Indicators					
4.1	To what extent were lessons learned from previous museum construction projects integrated into the planning process?					
4.2	How satisfied were stakeholders with the project's approach to incorporating lessons learned into planning?					
4.3	Were advanced planning tools and software utilized to enhance the planning process?					
4.4	Were innovative strategies employed to enhance stakeholder engagement in the planning process?					
4.5	How would you rate the effectiveness of stakeholder engagement efforts in ensuring project success?					
4.6	Did the project implement any new approaches to solicit feedback and involvement from stakeholders?					

In addition to the primary data collected through the interviews, the research will also utilize secondary data sources. These will include reading and analyzing relevant documents such as government planning policies and procedures, documents, books, articles, journals, and online

information related to the research topic. The secondary data sources were used to supplement the information gathered from the interviews and provide a more comprehensive understanding of the planning practices, challenges, and stakeholder perspectives within the museum construction sector.

Section III

INTERVIEW QUESTIONS

1. Can you explain the plan currently being implemented in the construction of Adwa Museum? What important steps and processes are involved?
2. What are the main problems or problems encountered during the planning phase of the construction of Adwa Museum? How do these issues affect the success of the project as a whole?
3. How does the planning process of the Adwa Museum construction project compare to the planning process of other public museum projects you are familiar with? What are the similarities and differences?
4. What ideas or best practices do you think could be used to improve the planning process of Adwa Museum's design work? How do these improvements help solve key problems identified in the past?
5. From your perspective, which stakeholders (such as the project management team, government agencies, and local communities) are involved in the planning process of the Adwa Warehouse award project? How can their involvement be improved to ensure the plan is more efficient and effective?

Schedule

Interview schedule: the date on which interview made with Manager and Project Supervisor

NO	Stakeholders	Date of Interview
1	Manager	May 29, 2024
2	Project Supervisor	May 30, 2024

The respondent's likert scale response data was collected between May 13, 2024, and June 1, 2024.

Formulas

Formulas used to calculate the likert scale Question are list down below. This formula is used to calculate percentage, cumulative percentage and mean for the likert scale question

1. Percentage = $\frac{\text{Number of respondent of each likert scale}}{\text{Total number of respondent}}$

Total number of respondent

2. Valid Percent = Percentage = $\frac{\text{Number of respondent of each likert scale}}{\text{Total number of respondent}}$

Total number of respondent

3. Cumulative percentage= Previous likert scale percentage + current likert scale percentage

4. For the calculation of the mean the following Alphabets represent

n_i =Number of respondent for each likert scale

x_i = the value of each likert scale

N= Total number of each respondent

X= represent the largest value of likert scale

= Represent mean

$$= \frac{n_1X_1+n_2X_2+n_3X_3+\dots+n_iX_i}{NX}$$

NX