

CHAPTER 1

INTRODUCTION

This study focuses on creating a framework for sustainable engineering practices in the hospitality sector and was done at Hwange Safari Lodge in Zimbabwe. The study aims at identifying the engineering practices that should be adopted in infrastructure development at Hwange Safari Lodge therefore also moving towards creating a framework that ensures the implementation of sustainable engineering practices and to evaluate the proposed framework using expert opinion. It is important to develop a sustainable engineering practices framework in the hospitality business as it helps to ensure that infrastructure is developed in a never-ending process that also helps to improve standards. Good infrastructure standards help the business to compete in the market hence also achieving sustainability or perpetuity especially international or global level. The study is of great significance to the stakeholders in the businesses in the hospitality sector as it provides factors that can be used as strategies to enhance sustainable engineering on the infrastructure in the process of renovations and revitalization. Revitalization and renovation of hotel infrastructure can be costly if not undertaken in regular intervals hence making it important to adopt sustainable engineering practices. The first chapter of the study therefore introduces the entire study through showing the problems that have triggered the study to be undertaken through the background of the study and the statement of the problem. The introductory chapter shows the study objectives. The study aims at producing a framework that can be adopted in the hospitality sector to adopt sustainable engineering practices. This outcome would help the firms in the entire sector to ensure that there is sustainable development of the infrastructure hence meeting international standards.

Across the globe, all businesses are started mainly to enhance wealth maximization. Sustainability is one of the major objectives and corporate governance principles of a business organization (Law, 2021). Sustainability entails the ability to be in existence for the foreseeable future and serve generations. In the hospitality sector, sustainability is enhanced by various practices which includes sustainable engineering practices, which have been identified as being key in fuelling the rebuilding and reshaping of the hospitality sector through maintaining and refurbishing hotel infrastructure in a continuous manner thereby ensuring quality of services (Chambers, 2021).

In developed countries such as the United States of America and China where there is greater competition and demand for hotel accommodation, sustainable engineering practices such as regular maintenance of hotel infrastructure, have been pointed out as a key factor that helps to enhance competitive advantage of firms in the sector (Paulsen, 2020; Lee, 2022). Failure to continuously maintain and develop hotel infrastructure leads to challenges such as deterioration of the infrastructure and damages therefore leading to poor performance of the hotels as customers' needs and expectations are not met (Gordon, 2020).

Post the COVID-19 pandemic, the hospitality sector in Nigeria experienced a fall in the overall performance due to neglect of the infrastructure therefore the services delivery became poor (Nwanko, 2022). Poor engineering practices in Ghana, for example at Peekay Guesthouse have been identified as a major factor that led to the temporary closure of the hospitality firm resulting from severe leakages in guests' rooms as well as electrical faults thereby threatening the sustainability of the company. Sustainable engineering practices such as continuous maintenance of infrastructure on regular intervals has been regarded as key in ensuring that the revitalization of hotel infrastructure costs effectively (Gordon, 2021).

According to Mahlangu and Coetzee (2022), it is of great importance for companies in the hospitality sector specifically those that provide accommodation such as hotels and lodges to implement sustainable engineering practices to ensure good performance. Hotels in South Africa such as Plattenberg Bay Hotel and Cape Winelands have implemented a sustainable engineering practices policy which ensures that the firms in short regular intervals carry out checks and maintenance of infrastructure to avoid repairs and further in-depth damage that threatens their viability (Mahlangu, 2022). According to Hughes (2021), it is of great importance and cost effective for businesses to enhance sustainable engineering practices such as continuous maintenance of buildings and rooms unlike waiting for serious or visible damage that may injure or cause harm to customers or staff members. In Zimbabwe, amidst and post the Covid-19 pandemic, Hwange Safari Lodge, a subsidiary of the African Sun has been facing various challenges including poor service delivery as a result of deteriorating infrastructure thereby losing significant market share to Baobab Hotel in Hwange. Recently in the year 2023, African Sun completed the first phase facelift and refurbishment of Hwange Safari Lodge, which cost the firm approximately US\$4.3 million which is 45% higher than the budgeted cost (Dube, 2023). The budgeted and the actual budget for the refurbishment is shown below in Figure 1.1 below.

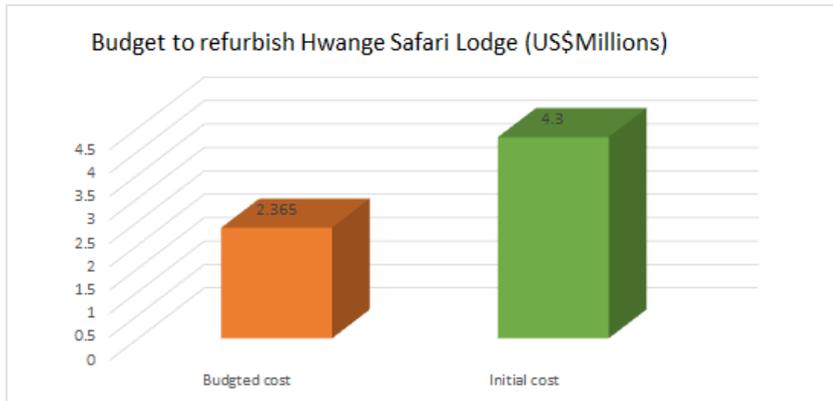


Figure 1.1: Budget to refurbish Hwange Safari Lodge (Africa Sun, 2023).

Regardless of a successful refurbishment, the inadequacy of the budget shown in figure 1.1 above was because of new problems that were discovered. These problems were because of lack of sustainable engineering practices at the lodge which eroded the profits made by the company in the year 2022 post the COVID-19 pandemic (Mandaza, 2023).

Reports have pointed out that phase one of the refurbishment of Hwange Safari Lodge took longer than expected to complete (3 months) because of new problems that were discovered thereby taking a toll on the overall plans of the firm (Africa Sun, 2023). Thus, the longer it took to complete the facelift of the hotel, the more opportunity the competitors such as Baobab Hotel had to gain market share which threatened the competitiveness of Hwange Safari Lodge. The hotel is scheduled for phase 2 of refurbishment focusing on revitalising the public area and the phase 3 which **focuses on**.

The major question being asked is how best can the sector adopt sustainable engineering practices in revitalising infrastructure? This study therefore seeks to come up with a framework that will be key to enhancing the adoption of sustainable engineering practices. The framework will be developed in line with Hwange Safari Lodge which is one of the largest in Zimbabwe.

The lack of sustainable engineering practices in the construction projects at Hwange Safari Lodge led to a budget of unexpected costs and expenses during the refurbishment of the infrastructure and the process also took 3 months more to be complete than expected, hence, negatively affecting the performance of the business. Due to the unexpected costs and delays, the hotel lost business to

competitors such as the Baobab Hotel in Hwange thereby losing expected revenue in the process which threatened wealth maximisation and growth of the business. The management at the Safari Lodge played a key role in requesting more funds to complete the refurbishment of the infrastructure as well as keeping afloat during the process but this took a toll on the financial position of Africa Sun and a backlash from the shareholders was also felt. It is against this background that this study will be conducted focusing on developing a framework to enhance sustainable engineering practices in revitalising infrastructure in the hospitality sector.

The study aims to develop a framework for the adoption of sustainable engineering practices in revitalising hotel infrastructure.

Study Objectives:

1. The major objective of the study is to develop a framework to enhance sustainable engineering practices in revitalising infrastructure in the hospitality sector in Zimbabwe.
2. To identify engineering practices that can be adopted in infrastructure development in the hospitality sector.
3. To develop a framework for sustainable engineering practices in the refurbishment of infrastructure in the hospitality sector.
4. To evaluate the proposed framework with expert validation in the engineering sector.

Research questions:

1. What are the engineering practices that can be adopted in infrastructure development?
2. Which framework can be developed to enhance sustainable engineering practices in infrastructure development?
3. How effective is the developed sustainable engineering practices framework as per the view of experts in the engineering field?

First and foremost, this study will play a key role in coming up with theories that will help to explain the phenomenon of sustainable engineering practices and the revitalization of the hospitality sector in Zimbabwe. This will be done through the study findings and recommendations in the Zimbabwean context that will provide facts and statements that help to explain the phenomenon for future use by other scholars or key stakeholders of the sector. Further, the study will also be important in coming up with key recommendations that can be used by relevant authorities in the hospitality industry to enhance effective planning and development of infrastructure hence also focusing on improving the overall

performance of the business and the sector at large. More so, the researcher will also benefit at large from the study because, through the research, information on sustainable engineering practices and replenishing of hotels will be acquired and will be useful now and in the future regarding decision making as the researcher is a key stakeholder in the hospitality sector of Zimbabwe.

The primary focus of this study will be on the concepts of sustainable engineering practices and revitalisation of infrastructure.

The study focuses only on Safari Lodge in Hwange, Zimbabwe and on its refurbishment of the hotel that started in the year 2022 to 2023 thereby using secondary data that is between the years 2018 and 2023. This study started in 2023 and was completed 2024.

The researcher may face challenges in attaining permission from the relevant authorities from Africa Sun and the Hwange Safari Lodge to undertake a study on their firm due to various factors such as fear of the unknown. Nonetheless, the researcher will use the letter from the university to show the purpose of the study which should help to attain permission.

The respondents in this study may not be willing to participate due to fear of being victimized but the researcher will read them the ethical considerations to show how they will be protected.

More so, the researcher may have time constraints in conducting the study which may affect its quality however proper planning and time management will be important in making sure that the research is done in a timely manner and that accurate data will be gathered and analysed.

The study will assume that all the factors that affect sustainable engineering practices and hospitality sector rebuilding and reshaping do not change during the research.

It will also be assumed that the data that will be collected from the respondents is accurate and not force or lies were used to ensure that respondents participate in the study.

Chapter One is the general introductory phase of the study and it focuses on showing the research problem and gaps through components such as the background of the study and the statement of the problem. It goes on to show

the study's objectives and questions together with the significance of the study, its scope, limitations and also assumptions.

Chapter Two is the literature review, and it highlights theoretical and empirical underpinning that explains the phenomenon under study.

Chapter Three is the research methodology showing the strategies and methods that will be used in the study to gather and analyse data. This chapter initially discusses the research philosophy and the research design as well as including the selected research approach and data collection methods. This study employed multimethod data collection approaches including literature review, semi-structured interviews, and a Delphi study. The justifications for each selected research approach are then appropriately explained. Furthermore, this chapter also describes the data analysis process to analyze the results of each research approach. Data triangulation method was also adopted to gain richer insight as well as provide the rigour and reliable outcome. Accordingly, the ethical considerations of this research are then clarified.

Chapter four of the study is the data analysis and presentation. The chapter also describes the design of the semi-structured interviews employed in this research that involved twenty selected participants from industrial practitioners. The interviews validate the preliminary conceptual framework that has been developed from the literature studies. This chapter also provides a holistic view of local industry's perceptions and understanding of sustainable engineering practices application and infrastructure revitalization.

The Fifth Chapter of the study will be the results of the Delphi study. This chapter therefore describes the process of data collection and data analysis of the Delphi study. The data and results from the two-round Delphi survey are presented. It verifies the preliminary findings from interviews and literature. This chapter also addresses the relevant and critical items relating to the consideration factors for sustainable engineering practices application, the drivers and challenges of its implementation, the attributes that contribute to infrastructure sustainability, and its potential to facilitate future redevelopment. The reliability, stability, and accuracy of the Delphi results are also appropriately explained.

The Sixth chapter of the study presents the discussion of the results and the findings and findings from semi-structured interviews and two-round of Delphi study. The key consideration factors and the sustainability contributions of sustainable engineering practices application to revitalize infrastructure is also

discussed. The significance of sustainable engineering practices in revitalizing infrastructure in the sector will be explained.

The sustainable engineering practices application strategies for facilitating future revitalization of the infrastructure are also consolidated. Correspondingly, the overall results are represented as the “Framework for enhancing sustainable engineering practices in revitalizing infrastructure in the hospitality sector” with the aim of assisting future engineers with their decision making.

This first chapter presented the general introduction to a study on sustainable engineering practices perception study in the hospitality sector in Zimbabwe. The chapter thus showed the background of the study and the statement of the problems which shows the problem that triggered the research and also the study gaps. The chapter also presented the objectives and research questions as well as the significance of the study, its scope, limitations and assumptions. The structure of the entire study was also shown as the chapter concludes and the next chapter presents the literature review showing theoretical underpinnings and empirical review that explains the phenomenon under study.