

العنوان باللغة العربية

أثر دمج التنمية البيئية المستدامة في ممارسات إدارة المشاريع لشركات التصنيع بالمنطقة الشرقية من المملكة العربية السعودية على الأثر البيئي

العنوان باللغة الانجليزية

The impact of integrating sustainable environmental development into project management practices of manufacturing companies in the Eastern region of the Kingdom of Saudi Arabia on environmental impact

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Research Title

The impact of integrating sustainable environmental development into project management practices of manufacturing companies in the Eastern region of the Kingdom of Saudi Arabia on environmental impact

Introduction

The Eastern region is home to a number of manufacturing companies that are committed to sustainability. However, there is still a need for more research on the impact of integrating sustainable environmental development into project management practices. This study will examine the impact of integrating sustainable environmental development into project management practices on the environmental impact of manufacturing companies in the Eastern region.

Research problem

There is a lack of understanding of manufacturing companies in the Kingdom about how to incorporate sustainable environmental development into their project management practices.

Main research question:

- What is the impact of integrating sustainable environmental development into project management practices of manufacturing companies in the Eastern region of the Kingdom of Saudi Arabia on environmental impact?

Sub-questions: -How do manufacturing companies in the Eastern region of Saudi Arabia incorporate sustainable environmental development into their project management practices? -What are the environmental impacts of manufacturing companies in the Eastern region of Saudi Arabia? -How do the environmental impacts of manufacturing companies in the Eastern region of Saudi Arabia change when they integrate sustainable environmental development into their project management practices? What are the challenges and opportunities for manufacturing

companies in the Eastern region of Saudi Arabia to integrate sustainable environmental development into their project management practices?

The importance of the research

The importance of research into the impact of integrating sustainable environmental development into project management practices of manufacturing companies in the Eastern region of the Kingdom of Saudi Arabia on environmental impact is twofold.

First, it is essential for protecting the environment and ensuring a sustainable future for the region. Manufacturing is a major source of pollution in the Eastern region, and the sector is responsible for a significant portion of the region's carbon emissions, water consumption, and waste generation. By incorporating sustainable practices into their project management, manufacturing companies can reduce their environmental impact and help to protect the environment.

Second, the research can help to identify the best practices for integrating sustainable environmental development into project management. This information can then be used by other manufacturing companies in the region to reduce their environmental impact and improve their sustainability performance.

Research Hypotheses

- Manufacturing companies in the Eastern Province of Saudi Arabia that incorporate sustainable environmental development into their project management practices will have lower environmental impacts than those that do not.
- The environmental impact of manufacturing companies in the Eastern Province of Saudi Arabia will decrease as they increase the level of integration of sustainable environmental development into their project management practices.
- The environmental impact of manufacturing companies in the Eastern Province of Saudi Arabia will vary depending on what type of sustainable environmental development practices are incorporated into their project management practices.

Literature Review

Many recent studies focused on the impact of manufacturing companies on environmental sustainability. Only 39.5% of the companies studied had a pollution control plan for their projects. It was also found that only 13.6% of C&D waste is recycled and reused every year, whereas the remaining 86.4% C&D waste eventually goes to the landfills.

Research Methodology

The quantitative method will involve a survey some of manufacturing companies in the Eastern region. The survey will collect data on the use of sustainable environmental development practices in their project management practices. The qualitative methods will involve interviews with project managers. The interviews will be used to gain insights into the challenges and opportunities of integrating sustainable environmental development into project management. The research will be conducted in three phases:

Phase 1: The literature review will be conducted to identify the key sustainable environmental development practices that can be incorporated into project management.

Phase 2: The survey will be conducted to collect data on use of sustainable environmental development practices, and project management practices of manufacturing companies in the Eastern region.

Phase 3: The in-depth interviews will be conducted with projects managers.

Research Structure

A- Introduction

- Background and context of the study
- Significance of the study

B- Research problem

- Research questions and objectives

C- The importance of the research

- The potential impact of environmental sustainability in project management practices on the environmental impact.
- it is essential for protecting the environment and ensuring a sustainable future for the region

D- Research Hypotheses

- Manufacturing companies in the eastern province

E- Literature Review

- Quantitative statistic of data

F- Research Methodology

- Research design and approach
- Data collection methods (literature review, survey and interviews)
- Data analysis method (Quantitative)

Research limits

One limitation of studying the impact of environmental sustainability in project management for manufacturing companies in the eastern region of Saudi Arabia could be the difficulty of measuring the environmental impacts of different manufacturing processes. For example, it may be difficult to accurately measure the carbon emissions associated with different manufacturing processes or to compare the environmental impacts of different supply chains.

Another limitation could be the lack of standardized metrics or guidelines for measuring environmental impacts. Without standardized metrics or guidelines, it may be difficult to compare the environmental impacts of different manufacturing processes or to accurately measure progress towards environmental sustainability goals.

Finally, a limitation could be the lack of awareness or buy-in from key stakeholders. Without the support of senior management or other key stakeholders, it may be difficult to implement environmental sustainability initiatives or to make significant progress towards environmental sustainability goals.

Initial reference list

- 1- Muhammad Zaheer Hashim, Liu Chao, Chao Wang (2021) The role of project managers' attributes in project sustainability management and project performance under China-Pakistan economic corridor.
- 2- Wanjiru Gachie(2019) Project sustainability management: risks, problems and perspective.Problems and Perspectives in Management, 17(1), 313-325.
- 3- Muhammad Irfan, Mazlan Hassan(2019) The Effect of Project Governance and Sustainability on Project Success of the Public Sector Organizations in Pakistan. SOCIAL SCIENCES & HUMANITIES. 27, 177-198
- 4- A.J. Gilbert Silvius, Ron Schipper (2015) A Conceptual Model for Exploring the Relationship Between Sustainability and Project Success.Procedia Computer Science, 64, 334- 342
- 5- Silvius, A.J. Gilbert; Schipper, Ron P.J. (2014) Sustainability in project management: A literature review and impact analysis.Social Business, 4, (1), 63-96.
- 6- Miao Yu, Miao Yu, Xiaotian Yang, Linzhuo Wang, Linzhuo Wang(2018) Integrating Sustainability into Construction Engineering Projects: Perspective of Sustainable Project Planning. Project Management and Sustainable Development, sustainability, 10 (3), 784.

7- Mauro L. Martens, Marly M. Carvalho (2017) Key factors of sustainability in project management context: A survey exploring the project managers' perspective. *International Journal of Project Management*, 35 (6), 1084-1102

8- Assa Amiril, Abdul Hadi Nawawi, Roshana Takim, Siti Nur Farhana Ab. Latif (2014) Transportation Infrastructure Project Sustainability Factors and Performance. *Procedia - Social and Behavioral Sciences*, 153, 90-98.

9- Ouda, O. K. M., Peterson, H. P., Rehan, M., Sadeh, Y., Alghazo, J. M., & Nizami, A. S. (2018). A case study of sustainable construction waste management in Saudi Arabia. *Waste and biomass valorization*, 9, 2541-2555.

10- Jian Liu a, Jian Zuo, Zhiyu Sun c, George Zillante d, Xianming Chen e, Sustainability in hydropower development—A case study (2019). *Renewable and Sustainable Energy Reviews*, 19, 230-237.