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**Green Innovative Strategies Construction
Business Leaders Implement to Increase
Organizational Performance**

**POSTER
PRESENTATION**

OCTOBER 1, 2020

**WALDEN
UNIVERSITY**

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Abstract

Construction business leaders are hesitant to implement innovative green strategies as it is perceived to have high costs implementation. This qualitative multiple case study explored the innovative green strategies implemented by construction business leaders to increase organizational performance. The key themes were innovative research and design, collaboration, leader involvement, education, and marketing to increasing organizational performance.

Doctoral Capstone

Acknowledgements

Lisa Cave, Chairperson

Janie Mayo, Member

Patsy Kasen, URR Member

Problem

The construction industry contributes to the dynamic growth of the economy yet exploits approximately 40% of the world's resources (Ali, Jainudin, Tawie & Jugah, 2016). The Eastern Caribbean Central Bank (2017) estimates that the construction sector in Antigua and Barbuda expanded by 16% in 2017.

- The **general business problem** was that some construction business leaders do not understand how insufficient strategic planning and green innovation may hinder efficiency and productivity.
- The **specific business problem** was that some construction business leaders lack green innovative strategies to increase organizational performance.

Purpose

The purpose of this qualitative multiple case study was to explore the green innovative strategies implemented by some construction business leaders to increase organizational performance.

Significance

The construction industry contributes to economic growth in today's societies (Okere, 2017).

Organizational leaders who implement innovation can increase efficiency, competitiveness, and the effectiveness of cost management for increasing long-term performance (Schneider, 2015).

Construction business leaders can create efficient value chains by identifying and implementing successful green innovation strategies (Chan, Darko, & Ameyaw, 2017).

The information from the study aims to create greater awareness and understanding of successful green innovation strategies in construction.

Theory or Framework

The **contingency theory** or CT (Fiedler 1964; 2006) can be used to understand how to adapt external-oriented strategies to environmental changes in the organization (Yuen & Thai, 2017).

The CT model was used to analyze leaders' effectiveness in managing, gaining competitive advantage, and increasing profits and organizational performance (McAdam, Miller, & McSorley, 2019; Wadongo & Abdel-Kader, 2014).

Relevant Scholarship

The evolution of sustainability has influenced organizational leaders to examine the extent of green innovation practices and its effects on sustainable organizational performance (El-Kassar & Singh, 2017).

An organization's performance is not only considered based on the quality of its product but also on its environmental characteristics as well as on society (Pipatprapa, Huang, & Huang, 2017).

Innovation is essential to improving organizational productivity in the construction sector (Gajendran, Vaughan & Owi, 2016).

Green innovation in construction can improve efficiency, operational costs, maintenance, quality of life and conservation of natural resources (Ofek, Akron, & Portnov, 2018).

The implementation of new technologies and innovative strategies require the collaboration and coordination of resources within the organization (Meng & Brown, 2018).

Research has shown that green technologies have significant benefits such as reduced costs, minimization of waste and increased efficiency that can increase the organization's competitiveness and performance (Albort-Morant, Leal-Millan, & Capeda-Carrion, 2016).

Research Question

What green innovative strategies do construction business leaders implement to increase organizational performance?

Participants

Using a non-random purposive approach, the sample was comprised of 5 construction business leaders in construction businesses in Antigua who have successfully implemented green innovative strategies to increase organizational performance. The researcher contacted leaders of construction organizations who identified individuals in the organization who met the participant criteria for the study.

Procedures

The research designed and conducted a semi structured interview protocol. One-hour interviews were conducted this study. The interviews were conducted face to face. A member checking process was conducted with participants after interviews were transcribed. The interviews were schedule over a 2 week period.

Analysis

The interview transcripts and company documentation were analyzed to identify themes and related to the implementation of green innovation strategies.

Leaders' knowledge of green innovation was essential in the implementation of green strategies. Construction leaders engaged in management strategies and new technologies when implementing green innovative strategies into construction process and building of structures. The application of green innovation strategies impacted financial and non-financial aspects of organizational performance.

Findings

The five themes were:

- **Innovative research design** implemented green innovation in the form of materials and green technologies to design structures.
- **Collaboration** of leaders having ongoing relationships with employees and stakeholders.
- **Leader involvement** in managing and training employees contributed to achievement of goals.
- Public **Education** of green innovation in construction was limited.
- **Green marketing** is important to create public awareness of green construction products and services.

Interpretation

The results of this study suggest that **implementation of green innovation strategies can increase organizational performance.**

This study may provide valuable information to construction business leaders.

A gap still exists as there is a small amount of conflicting evidence regarding the implications of capital and costs on green innovation within construction (Rehm & Ade, 2013).

Limitations

Limitations of the study included five construction businesses in Antigua. The study did not reflect what happened in other geographical locations.

Recommendations

Construction business leaders can

- Promote green innovation strategies in construction by educating employees and citizens of green innovation in construction.
- Provide training seminars on environmental sustainability in construction.
- Integrate green innovative strategies into organizational processes.
- Promote green marketing in construction.

Future research:

- Broader study with more participants and wider geographical areas
- Assess cost implications on the implementation of green innovation strategies

Social Change Implications

Increased knowledge on the implementation of green innovative strategies, conservation practices and its implications can lead to positive social change by citizens. Citizens can engage in sustainable construction practices to conserve natural resources and enhance social and economic development.

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