IMPLEMENTATION OF SUSTAINABLE CONSTRUCTION MANAGEMENT FOR CONSTRUCTION PROJECT IN JOHOR BAHRU

LEO YU LING (PB13012)
BACHELOR OF PROJECT MANAGEMENT WITH HONOURS
FACULTY OF INDUSTRIAL MANAGEMENT

ABSTRACT

Sustainable Construction has been introduced to overcome the negative impact which produced by construction industry to our Mother Earth (Abidin, 2009). Efficient use of natural resources, minimizing use of hazardous substances, and reducing pollution and waste were the sustainable practices which can be used to protect our environment (Lim, 2015). However, this practice is not widely used in the industry. Therefore, this research aims to identify the drivers of implementation of sustainable construction management and to determine the challenges faced in the implementation of sustainable construction management. A total of 180 G7 contractors who registered under CIDB located in Johor Bahru were required to answer the questionnaire. All the data was analyzed by using SPSS software. Mean value has been generated to determine the effectiveness of each drivers and challenges. Some recommendations has been proposed to increase the implementation of Sustainable Construction Management.

INTRODUCTION

- Construction Industry enable a country to growth and development. However, activities which perform in construction industry brings adverse effect to the environment.
- So, Sustainable Construction Management being encouraged to apply.
- Malaysia construction industry at infancy stage in applying sustainability matters (Abidin, 2009).
- Most of developer prioritize economic issues rather than environmental and ecological issues (Chan et al. 2014)
- According to CITP (2016), there is not more than 2% of buildings and infrastructure being rated for sustainability.

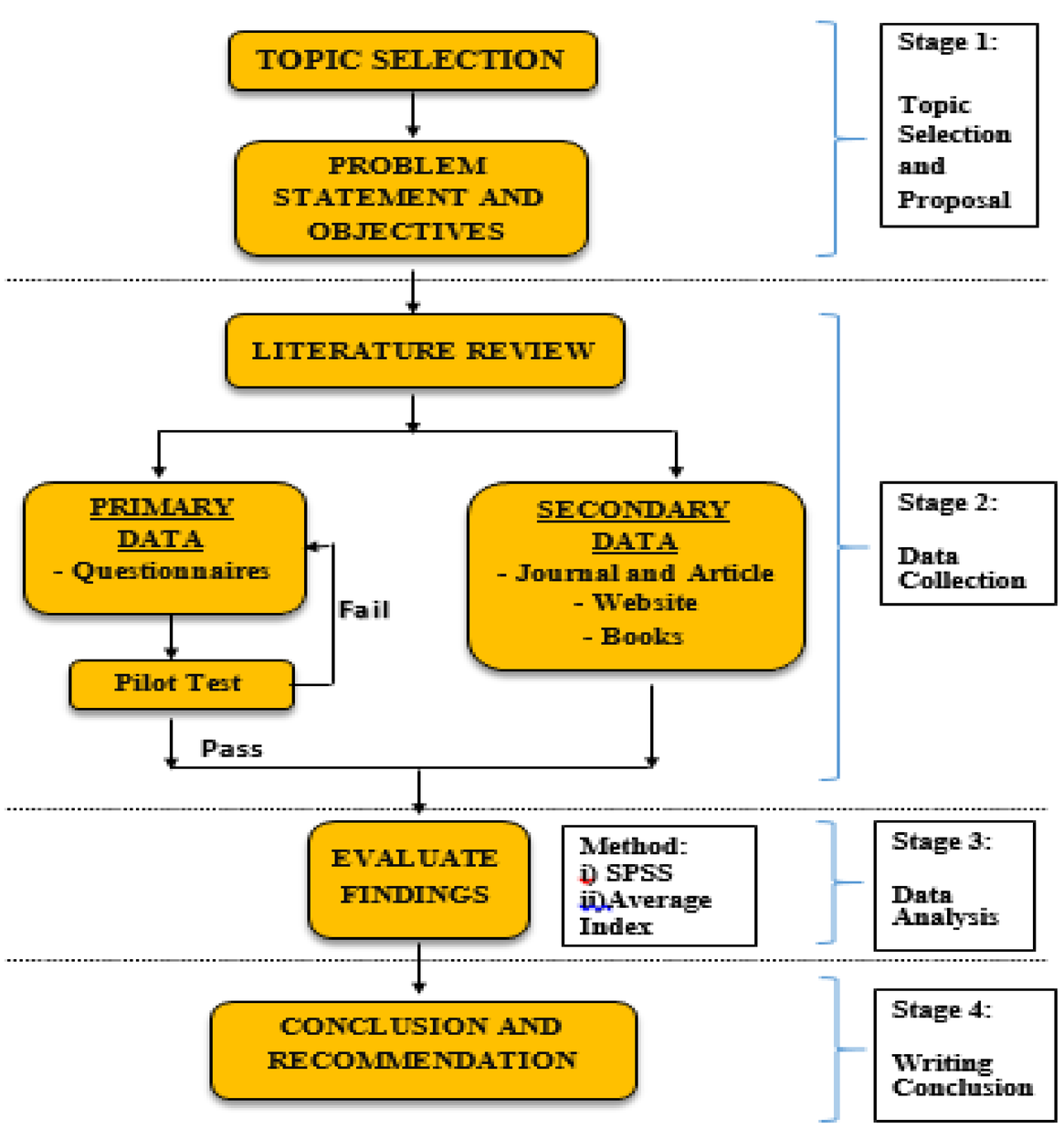
OBJECTIVES

- To identify the drivers in the implementation of Sustainable Construction Management
- To determine the challenges faced in the implementation of Sustainable Construction Management

SIGNIFICANCE OF STUDY

- Provide better understanding for Construction key players
- Government able to figure out solutions to overcome the challenges
- Society aware about current environment problems
- Increase awareness and knowledge of Academic area such as University

METHODS



RESULTS

Response Rate

Total distributed = 339
Return = 180
Unreturned = 159

Reliability Analysis: Evaluate the consistency and stability of result from the pilot test

Section B: α = 0.804
Section C: α = 0.880

Objective 1: Drivers in implementation of Sustainable Construction Management	Mean	Rank
Introduction series of tax incentives	4.5889	1
Launch of National Green Technology Policy	4.2772	2
Awareness to global warming and pollution	3.8889	3
Boost up companies image and achieve competitive advantage	3.7167	4
High availability of information	3.6778	5
Green Technology Finance Scheme (Loans)	3.6167	6
Industry rating system such as GBI	3.5056	7
Lower life cycle cost	3.4778	8
Increasing in energy price	2.3278	9

Objective 2: Challenges in implementation of Sustainable Construction Management	Mean	Rank
High cost of green materials and technology	4.5333	1
Lack of government intervention	4.5056	2
Lack of interest and demand from the clients	4.2278	3
Lack of public awareness	4.0111	4
Additional cost incur for training workers and hiring expertise	3.9389	5
Project team members resist to implement sustainable practice	3.7056	6
Top management does not cultivate lower management with sustainable practice	3.5889	7
High risk due to unfamiliar with sustainable practice	3.5167	8

CONCLUSIONS AND RECOMMENDATION

- The critical success factor of implementation of sustainable construction management is introduction series of tax incentive.
- The biggest challenges faced in implementation of sustainable construction management is high cost of green materials and technology.
- Therefore, financial elements can affect the decision making in pursing this practice.

Future Research:

✓ Expand the scope of study to Peninsular Malaysia
✓ Strengthen the questionnaire by identify level of implementation
✓ Do case study basis

Increasing the Implementation:

✓ Financial support from government
✓ Sustainable Construction Seminar
✓ Exhibition related to sustainable or green construction
✓ Included Sustainable Construction subject in Education