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MASTER OF BUSINESS ADMINISTRATION

The Antecedents for Green Purchasing Initiatives: The Case of Malaysian Technology Based Manufacturing Companies

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Abstract

In recent years the natural environment becomes a major global issue. Due to increasing human and industrial impacts on the environment, environmental issues become more intense and widespread. In this regard, businesses need to place equal footing both on the environment and on their business objectives. This paper is an attempt to clarify the path towards that end and examine the factors for Green Purchasing Initiatives and show the steps that have to be taken by business organizations through green supply chain to make sustainable development a reality. This research is established based on two theoretical lenses – Green Purchasing and Critical Success Factors (CSF). Specifically the paper is interested to investigate the factors namely Regulation (RG), Social Responsibility (SR), and Expected Business Benefits (EBB) on Green Purchasing Initiatives (GPI) in the Malaysian technology based manufacturing sector that leads to Green Supply Chain Initiatives. The ISO 14001 Environmental Management System standard has become a widespread administrative tool towards corporate environmental management. It was introduced in 1996, and has been adopted by over 60,000 firms around the world, including Malaysia. Hence the survey data was obtained from ISO 14001 certified technology based manufacturing firms in Malaysia which was obtained from the Federation of Malaysian Manufacturers Directory 2011 43rd edition. The survey was conducted using structured postal questionnaire directed to the Environmental Management Representative (EMR) in each firm. The empirical findings of the study suggest that Green Purchasing Initiatives is affected by the drivers namely Regulation and Expected Business Benefits. The results also suggest that, although Malaysian firms show a high level of Social Responsibility, it does not constitute a genuine driver for these firms to adopt Green Purchasing Initiatives.

(277 words)

Keywords: Environmental management, Green Purchasing Initiatives, Malaysia, Sustainable supply chain management

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Steven Dishan Jeganathan

14th December 2012

Declaration

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been duly acknowledged.

14th December 2012

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CHAPTER ONE: INTRODUCTION

1.0 Introduction

This chapter presents the introduction to the research issue. The chapter begins with a background of the research issues in Section 1.1 thus leading to the problem statement in Section 1.2. This is then followed by the research objectives in Section 1.3 which is then followed by the significance of the study, assumptions, limitations, scope of the study and operational definitions in the following sections from 1.4 to 1.8. Finally this chapter finishes with outline of the research in section 1.9.

1.1 Research Background

Environmental issues have become the primary key concerns for both the governments and organizations throughout the world, largely due to the consequence of deteriorating climatic conditions. Ozone layer depletion, global warming, emission of toxic wastes and increasing pollution levels have created glitches throughout the world, and a common conviction is that most of the glitches are as a result of poorly regulated manufacturing activities (Shukla et al., 2009; King and Lenox, 2001). The advancing global demand and industrialization are producing land, water, and air pollution, and are degrading the natural resources (Huong, 1999).

For companies throughout the world, the capability of the organizations to accomplish their environmental performance is emerging as a strategic concern. This is primarily on account of the environment being regarded as an asset to be valued. As a result, today's managers are not only anticipated to decrease lead times, increase quality, reduce costs and enhance flexibility; they are also anticipated to become more conscious about the environment (Montabon et al., 2000).

Severe consciousness of environmental issues following unceasing environmental degradation has pushed responsible customers to move towards eco-friendly organizations (Min and Galle, 2001; Winsemius and Guntram, 1992). Carter and Narasimhan (2000) predicted that tipping points would arise between 2010 to 2020 which consist of both suppliers' and customers' demands for behavioural responses to environmental matters together with new demands supporting extensive innovations to attain green purchasing standards.

Organizations and supply channel networks hence identify the significance of being environmentally proactive in establishing and realizing green strategies (Gifford, 1997), and in stabilizing economic and environmental performance in response to competitive, regulatory, and community pressures (Shultz and Holbrook, 1999). Specified these growing pressures concerning environmental sustainability, organizations are on the verge of implementing systematically scheduled strategies to decrease their environmental footprints in purchasing, manufacturing, and marketing products and services (Lewis and Gretsakis, 2001; Sarkis, 1995, 2001).

Firm environmental and green activities can drive competitive advantages, boost financial and manufacturing performance, and realize profit and market share objectives (Chen, 2008; Chen, Lai, and Wen, 2006; Hansmann and Claudia, 2001; King and Lenox, 2002; Klassen and McLaughlin, 1996; Klassen and Whybark, 1999b; Rao, 2002; Tien, Chung, and Tsai, 2005). However, a critical issue is inducing firm green activities, particularly purchasing function, since the purchasing function represents a firm's gate-keeper behaviour (Preuss, 2001) which might be a more powerful agent of change than any other corporate function (Green, Morton, and New, 1998).

A similar call is also predominant to Malaysia nowadays. A country of abundant resources and least possible development pressures, Malaysia pays very little consideration toward growing environment protection and conservation. Nevertheless, since the proclamation of the Environmental Quality Act in 1974, and the successive establishment of the Department of Environment (DOE), green purchasing in Malaysia began to be more formalized and structured (Vachon and Klassen, 2007). The idea of Green Purchasing Initiative and the formation of a

system is comparatively new to the Malaysian industries. Even though the other quality standards such as the ISO 9000, ISO 14000 series were launched as early as 1987, the Malaysian industries only realized the benefits when some of the firms were awarded "registered firm" in 1988.

In Malaysia, statistics have indicated that a large portion of the country's environmental problems is associated with the activities of the small and medium-sized industries or SMIs. SMIs attribute their difficulties in compliance to their numerous constraints such as the lack of access to new technologies, lack of skills, low capital investment, low profit margins, small and variable scale of operation, and low productivity. Business organizations are considered to be the source of most of the environmental problems. It is observed that sourcing, manufacturing, logistics, and marketing activities of these organizations have a negative impact on the environment (Petroni, 2001). Recently, the environment has emerged as a hot issue for governments, societies, as well as business organizations. Its importance emanates from increasing environmental problems such as global warming, ozone depletion, solid wastes, and air pollution.

However, with environmental standards and enforcement becoming more stringent, activities related to pollution prevention, control and waste minimization are steadily gaining momentum and attracting interest in Malaysia. Several programs that are relatively new in terms of concept and practice have been introduced and implemented on an ad hoc and piece meal basis. Some of the environmental green purchasing programs that have been launched in Malaysia are cleaner technology, cleaner production, pollution prevention, adoption of the Environmental Management System (EMS), and the ISO 14000 certification (Steger, 2000).

In spite of the significance of Green Purchasing Initiatives in combating environmental problems, available proof shows that Green Purchasing Initiatives is still not widely adopted in Malaysia (GPNM, 2003). In Malaysia, there is a lack of empirical studies that investigate the existence of Green Purchasing Initiatives. However, Rao's study investigates the existence of Green Purchasing Initiatives based on a sample of 52 companies taken from five different countries (Philippines,

Indonesia, Malaysia, Thailand, and Singapore) and it is difficult to draw valid and reliable conclusions from it for Malaysia.

1.2 Problem Statement

Despite the importance of Green Purchasing initiatives in battling environmental issues and producing economic benefits in act in accordance with organizations, existing evidence shows that Green Purchasing is yet not extensively implemented in Malaysia (EMAS, 2011). The very little published evidence available reveals that there is an inadequate research to probe why the adoption of Green Purchasing initiative (GPI) is low or the low motivation for firms to adopt Green Purchasing activities (Chien and Shih, 2007; Hsu and Hu, 2008; Routroy, 2009; Srivastava, 2007; Zhu et al., 2007a, b). Rao (2002) has pin point that the insufficient research regarding supply chain environmental management even in developed countries where it first initiated, might prove to be an important solution to the green industry in the South East-Asian region.

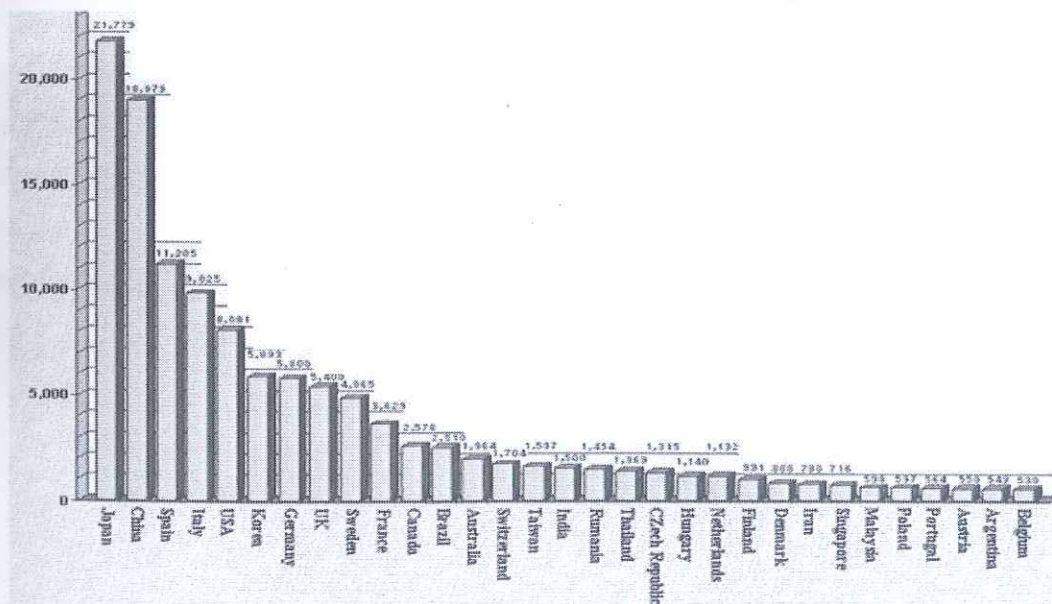


Figure 1.1: Green Purchasing Statistics

Source: ISO World, 2011

In Malaysia, there is a lack of empirical studies that investigate the existence of Green Purchasing Initiatives. The few empirical studies that were carried out to

examine the drivers for Green Purchasing Initiatives have produced diverse solutions. Some studies found important positive coherence between Regulation (RG) and Green Purchasing Initiatives (GPI) (Min and Galle, 2001; Preuss, 2001), Social Responsibility (SR) and Green Purchasing Initiatives (GPI) (Carter and Carter, 1998), while other studies showed insignificant coherence between Regulations (RG) and Green Purchasing Initiatives (GPI) (Bowen et al., 2001; Zhu et al., 2007a, b) and Customer Pressure (CP) and Green Purchasing Initiatives (GPI) (Zhu et al., 2007a, b). Hence, the precise drivers that boost firms to adopt Green Purchasing Initiatives (GPI) continued as an unsettled subject. In the light of the conflicting results in the existing literature, the present categorical study will examine the drivers that motivate technology based Malaysian manufacturing firms to adopt Green Purchasing Initiatives.

Based on the studies done by (Chien and Shih, 2007; Hsu and Hu, 2008; Routroy, 2009; Srivastava, 2007; Zhu et al., 2007a, b) some of the important factors that affect Green Purchasing Initiatives (GPI) were identified to be Regulation (RG), Social Responsibility (SR) and Expected Business Benefits (EBB). Hence this research will examine the importance of these drivers on how they affect Green Purchasing Initiatives in technology based manufacturing firms in Malaysia. Technology based manufacturing industry was selected because it is the first largest manufacturing sector in Malaysia at the same time; it is the fastest growing manufacturing industry currently (FMM Directory, 2011).

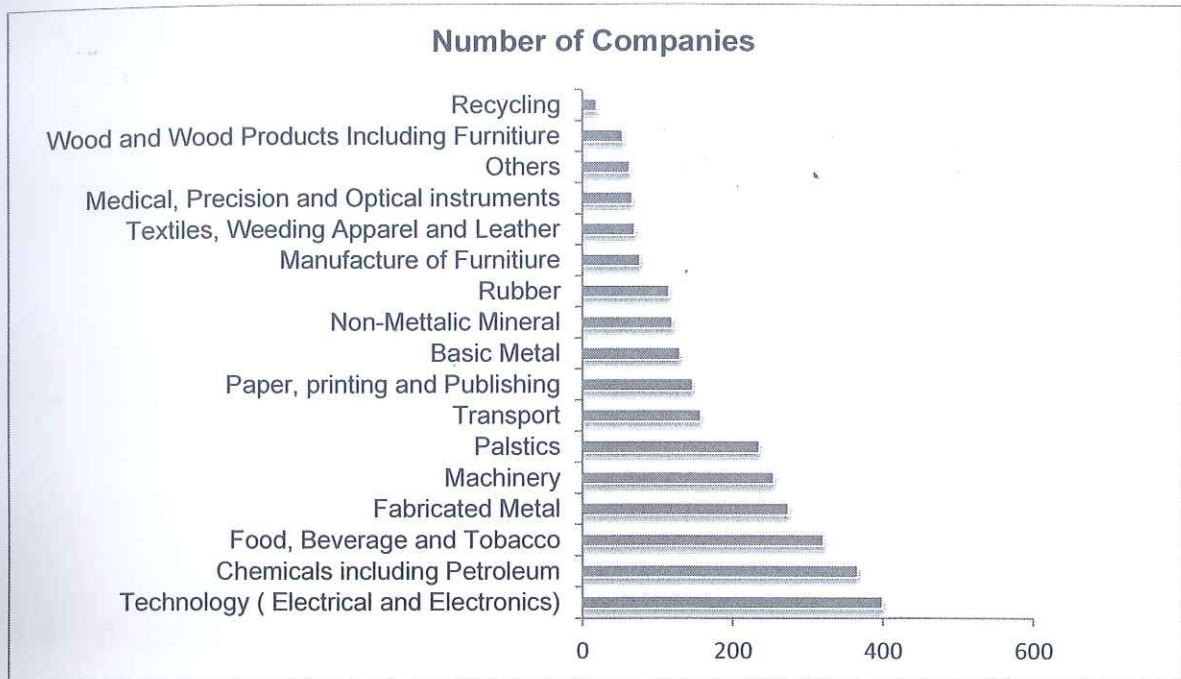


Figure 1.2: Number of Manufacturing Firms Registered under FMM

Source: Federation of Malaysian Manufacturers Directory, 2011

This study was conceptualized based on the environmental sustainability concept. Identifying the factors that affect Green Purchasing Initiatives (GPI) will give the technology based manufacturing firms a positive edge over other firms and this will help them to enter into the European market much easily, since the European markets are very particular about the regulations and social responsibilities. By doing so the companies can expand their business markets into other territories which will be a benefit for the company as well as for the country as it will bring new business opportunities.

1.3 Research Objectives

The overarching objective of this research is to understand the scope of Green Purchasing Initiatives adoption and business benefits among technology based manufacturing firms in Malaysia and to promote awareness of Green Purchasing among participants from the government, business, and consumers sectors, to promote among the business the need to comply with environmental standards imposed by major export markets. The specific objectives are: