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Environmental management practices in the SME hospitality industry: Mediating impact of managers' commitment to institutional pressures and EMS implementation.

Hanafi Hamzah [a*], Muhammad Shahrim Ab. Karim[b], Yuhanis Abdul Aziz[c], Azilah Kasim[d]

[a]*Faculty of Hospitality and Tourism Management, UCSI University, Malaysia*
[b]*Faculty of Food Science and Technology, Universiti Putra Malaysia, Malaysia*
[c]*Faculty of Economics and Management, Universiti Putra Malaysia, Malaysia*
[d]*School of Hospitality, Tourism and Event Management, Universiti Utara Malaysia, Malaysia*

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ABSTRACT

Despite the growing concern for Environmental Management Systems (EMS) in the hospitality industry, the relationship between institutional pressures and environmental management implementation is rarely examined in the small- and medium-scale enterprise hotels (SMEHs) context. Concerning the impact of tourism activities on the environment has been increasing; unfortunately, many hotels are unwilling to develop an EMS, probably due to a lack of resources and knowledge. Little attention has been devoted, especially among the SMEHs in Malaysia. The primary purpose of this study was to investigate the effects of institutional pressures on the SMEH environmental management implementation in addition to determining the manager's commitment as mediating factor. Quantitative research was conducted in this study to establish how managers deal with specific situations using the environmental management system. A total of 313 managers were randomly selected from a total of 1695 registered SMEHs in Malaysia. The results were analyzed using Partial Lease Square-Structural Equation Modeling (PLS-SEM) software version 3.2.8 to validate the proposed model and Bootstrapping test to determine the mediation effects of the manager's perceived benefits and commitment. The initial observation suggested that the majority of the managers implemented the environmental management system were due to regulatory pressures and customer's pressures. Meanwhile, a smaller group of managers were also keen on the EMS implementation due to their attributes in which they are well aware of the benefits of the system. However, the business

* Corresponding author. *E-mail address*: hanzhamzah@gmail.com

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owners were found to have relatively low engagement with the environmental agenda. This research aims to contribute to the management and operation advancement towards developing thinking, practice and research within the SMEH industry in Malaysia. Therefore, the findings of this study could provide a framework for assessing existing SMEH industry perceptions and willingness to implement the EMS for a better and sustainable hospitality practice, especially from the decision makers' point of view.

1. Introduction

Malaysia is one of the most popular tourist destinations in the Asia Region. According to the Malaysia Ministry of Tourism and Culture (2019), the nation's tourism industry recorded positive growth in the first quarter of 2019, with tourist expenditure registering an increase of +16.9% to reach RM21.4 billion compared to RM18.3 billion in 2018. Tourist arrivals to Malaysia recorded a rise of +2.7% in the first quarter of 2019, with a total of 6,696,230 tourists compared to 6,520,218 tourists in the same period of 2018.

Based on the Annual Economic Statistics 2018 for accommodation service published by the Department of Statistics Malaysia (2018), the SME accommodation services comprise hotels (including resort hotels); budget hotels; apartment hotels; chalets and rest houses, guest houses, hostels, bed & breakfast and camping grounds. According to this report, the accommodation services recorded a gross output value of RM15.8 billion in 2017 compared to RM13.9 billion in 2015, with an annual growth rate value of 6.7 per cent. The number of persons engaged in the sector recorded an increase of 3.3 per cent to 139,410 persons compared to 130,675 persons in 2015.

Recording the overall performance in 2018 end, the revenue of the services sector increased by 9.3% to RM423.5 billion as compared to the same quarter of 2017. The highest contribution was recorded by Wholesale and Retails Trade, Food and Beverages and Accommodation segment. (SME Malaysia, 2019). While the significant player in the accommodations sector and market in Malaysia mainly conquered 4- and 5-Star hotels. The international hotel chains have less Malaysia and account for around 35% of the total branded hotels and their chains supply. To expand its footprint, many prominent international hotels and their chain brands are focusing on the region. Malaysia has a dominant hotel construction pipeline targeting an opening of around 20,000 rooms/keys in the next 2-3 years (Mordor Intelligence, 2020). This pipeline is expected to increase the penetration of global chains in the country. For instance, the new brands of Marriott International, Sheraton, and Accor have targeted to open their new hotels in Malaysia before the end of 2020. They are going to add more than 5,000 rooms/keys to the supply. According to Mordor Intelligence (2020), In the fourth quarter of 2019, MyBHA (Malaysia Budget Hotel Association) Kuala Lumpur revealed that the hotels with 3-star ratings and below had recorded a drop of 15% 20% in revenue due to competition from these online platforms. Amidst these challenging times, the country recorded an overall occupancy rate of 74.6%, with an average daily gain of RM 331.98 and revenue per available room at RM247.75 as of the third quarter of 2019 7.4 nights average stay.

Zam carried out a study; Tengku, Azni and Mai (2014) commented that environmental issues had plagued Malaysia for quite some time, addressing water land and air pollution, waste disposal, solid food waste, and climate change, global warming, deforestation and haze alike. In their study, Siti Nabiha and Hasliza (2015) addressed that Malaysia still lacks a tourism strategy at the national level; nonetheless, a few plans and policies have been established in Malaysia National Plans. It is supported by a report verified by Central Intelligence Agency (CIA) in 2015 with similar comments that circled the environmental issues in Malaysia.

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As a continuously growing sector, the tourism and hospitality industry has a social responsibility to contribute to environmental issues and climate change, as natural resources and the physical environment are the most precious assets in that industry (Kasim, 2009), which includes hotels, food services, hospitals, and airlines among its components (Line & Runyan, 2011). Therefore, the Malaysian Government also recognizes the environmental sustainability concerns of the tourism and hospitality industry. Thus, under the Tenth Malaysia Plan (2011-2015), Malaysia's environmental agenda focuses on protecting the environment while harnessing economic value from the process. At the same time, an Eleventh Malaysia Plan (2016-2020) included the agenda for pursuing sustainability and green growth towards the economic growth for greater prosperity.

However, a vital question is what determines hotels' environmental activities and managers' commitment to complying with the mentioned ecological practices? As discussed earlier across various disciplines, many studies have attempted to identify these forces and pressures that motivate and encourage firms to respond to environmental issues. Stakeholders such as customers, local communities, government agencies, public interest groups, and even competitors are considered relevant parties that affect environmental decision-making and actions, which sequentially impact the stakeholders (Banerjee, 2002). Organizational capabilities and the availability of resources to implement a proactive environmental management strategy also largely influence managerial decision-making (Lee & Rhee, 2006; Banerjee, 2001). Adding to these points, some researchers like Lee and Rhee (2006) and Banerjee (2001) have pointed out that managerial perceptions of various environmental issues such as threats and opportunities associated with environmental issues impact corporate environmental responses. These motivations to go green, however, as stated in Hemingway and Maclagan (2004), are inevitably determined by the way the owners and top managers see the environmental issues as well as various internal and external factors that are relevant to their organizations as managers' values can be a motivating factor for environmental management system implementation.

Additionally, (Jones et al., 2014), in their study, commented that the increasing number of environmental laws and pressures from the market also had raised organizations' and managers' awareness of environmental practices as hotel establishments operate around the clock with customers and employees frequently consuming a significant amount of water, energy, and non-durable products (Deng & Burnett, 2002) and producing food, energy and water waste, hotel establishment face increasing pressure to pay more attention to environmental issues.

Most hotel chains adjusted their corporate environmental policies, and they provide individual hotel properties and employees with proper guidelines to develop and implement environmental initiatives. Hence, investigating the attitudes and behaviour of employees towards environmental programmes are essential aspects of influencing hotels' decisions to effectively and efficiently implement such programmes. As reported in Hashim, Satchapappichit and Hussin (2016) that the drivers of environmental behaviour between SMEHs are relatively under-researched and more initiatives need to be done to help owner-managers adopt environmental management practice for SMEHs based on the internal pressures such as employees, managers (decision-maker) awareness, concern and hotel size. Additionally, 'business itself is about the bottom line and Malaysian SMEs can gain a competitive advantage from environmental management practices as recent research has shown that the ratio of positive economic benefits rise as environmental performance improves' (The Malaysian Reserve, 2017). The current antecedents for the adoption of green environment behaviour by Malaysian SMEHs measure the perception and attitude of owners/managers towards the green concept and implementation but not the impact of institutional pressures on the implementation overall (Hashim et al., 2016).

The issue of EMS implementation in the accommodation industry has been a significant issue today. The main reason why this research is carried out is to analyze the success level of SMEHs environmental management practices in a sustainable environment and ascertain the contributions of the factors of implementation in environmental management programs to the SMEHs industry as a whole in the emerging

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market. The intention is to establish the objective for which SMEHs is implementing the environmental management systems, with particular reference to whether they (the owner and manager as decision-makers) aware of the existence of environmental management (institutional) pressures that can have a more significant impact on the establishment and whether they understand the relationship between the environmental management system internal and external pressures and the success level of SMEH industry environmental management systems implementation. Secondly, this study was carried out to examine the mediator effect of manager's environmental commitment on the relationship between the institutional pressures and the EMS implementation in the SMEHs in Malaysia.

2 Literature Review

2.1 Hospitality Industry and Environment Sustainability

Empirical studies on sustainability and green practices begin with referencing the 'Brundtland Report' published in 1987 by the World Commission on Environment and Development, known as 'Our Common Future'. This report is considered the primary driving force behind all sustainability and green practices reinforcement, including understanding economic growth and environment protection. This report revolutionized the business community to adopt sustainable practices. Numerous studies have been conducted ever since in sustainability, green practices, environmental management alike, and business benefits. The common ground of outcome from these studies proposed that 'sustainability is not just good for people and the planet, but sustainable business practice make good economic sense' (Collins, Roper & Lawrence, 2010). Many researchers agreed that the concept of environmental sustainability is still relatively new for some hospitality organisations and has many meanings and connotations.

Conclusively, these researchers (i.e. Chan, 2009; Alonson and Ogle, 2010; Ann et al., 2006; Jaafar et al., 2011; Lee et al.,2013; and N.Mbise and Mlozi, 2019) agreed that the concept of environmental sustainability had become a very serious and profound topic within the SMEs hospitality arena in the past decade. This is primarily due to the accelerated pace at which customer needs and expectations are changing over the years. An escalating number of environmental laws and increasing market and consumer pressures have raised corporate awareness of environmental issues. Environmental programmes such as recycling and composting are now steadily rising throughout the world (i.e. Bowe, 2005; Chen et al., 2005; Dodd et al., 2001). Additionally, Schot and Fischer (1993) added that businesses, including hotels and tourism establishments alike, have become much more aware of the relationships among environmental performance, scarce resources, public legitimacy, and both short and long-term profitability.

Currently, hospitality establishments represent a significant threat to the natural environment due to the great quantity of waste generated and their elevated consumption of supplies. However, they are also viewed as key players in environmental protection (Fraj, Matute & Melero, 2015). Additionally, incorporating social and ecological measures as part of company policy has been common among large hotel corporations (Bohdanowicz, 2006; Kasim, 2004; Khatter et al.,2019); however, SMEHs nowadays have also taken action towards environmental responsibility. Given the importance of the SMEHs in the hospitality industry, the literature review examines the issues on its commitment by the top management on the implementation of EMS and its effects on the hotel's performance (Iraldo et al., 2017).

2.2 The Concept of Sustainability

Sustainability has been broadly used in different industries and become pervasive when discussing environmental and business issues. According to Goodman (2000), as identified in his study, sustainability is an operating framework that applies to reducing the environmental impact of manufacturing companies that produce visibly unclean emissions of food waste products and other industrial waste due to their

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processes. He also added that although the concept of sustainability was initially applied to the manufacturing industry, its applicability to the service industries like hotel accommodations quickly became apparent. This supported by Hamzah et al.,2015 that the concept of sustainability in the organization would challenge establishing EMS, especially in tourism and hospitality organisations.

Goodman (2000) also indicates that sustainability can be used as a critical building block in the service sector to move in new directions and achieve future growth and market success by integrating sustainability concepts into a company's strategic plan. For example, applying the concept of sustainability to the tourism industry means that we would find ways to regulate or manage the use of tourism resources so that they are not depleted or polluted and are available for future generations of tourists (Mensah, 2006). Additionally, Hobson and Essex (2001) state that it is the responsibility of the tour operators to safeguard the resources base for tourism. Because the hotel industry is an integral part of tourism, sustainability concepts apply to the hotel sector.

Issues related to energy, food waste, water management and their connectivity with environmental management and its relationship with the sustainability of the hospitality industry have always been discussed and debated. Among the most commonly argued is the sustainability of environmental management practices in the hotel industry participations (Boronat-Navarro & Garcia-Joerger, 2019). Agamuthu supports, and Nagendran (2007) that applying the EMS practices in the industry is more complicated in Asia due to rapid industrialization and urbanization and changing fragmented social and environmental sustainability initiatives are implemented o an ad hoc basis (Sajjad et al., 2018).

The growth and performance of the Malaysian hospitality industry depend heavily on the development and execution of the other Malaysian economic sectors such as industrial, manufacturing and services. The recent five years saw the Malaysian hotel industry going through drastic changes, concerning its external environment, primarily due to the greater extent of volatility in the environment and the increasing level of uncertainties in the world's economy (Khairil et al., 2008), external factors (Hashim et al., 2016) and customers participation (Abd Aziz et al., 2018). According to Tinsley and Pillai (2006), they point out that growing environmental pressure has resulted in an increase in concern on the part of organizations in addressing the issue of environmental risk minimization.

2.3 Organization and Institutional Theory

The tourism industry is often viewed as the availability of a clean natural environment without pollution. Still, the hospitality industry, due to its particular function, operating characteristics, and services, consumes substantial quantities of energy, water, and non-durable products. Seiffert (2008), in his study, states that SMEs are responsible for a significant share of the total environmental burden. Still, its environmental impact is not known at the regional or national levels. Environmental concerns are increasingly becoming important. A lodging firm needs to look at long-term benefits emanating from the conservative use of resources (Manaktola & Jauhari 2007). Consequently, EMS across the world has recently been more recognized in the hotel industry, and it paved the way for the management to deal with aspects that impact the environment (Chan, 2008).

EMS may be well recognized in the hotel industry across the world; unfortunately, many hoteliers are unable or unwilling to implement the system due to resources constraints (Chan & Ho, 2006) and lack of environmental awareness and interest in sustainable protection measures, showing little concern about environmental issues (Erdogan & Baris, 2007). Additionally, in his study, Meng (2011) suggests that hoteliers need to conquer some significant predicaments, for instance, lack of statistic studies of green market demand, hard to convince top management and personal beliefs of staff. In comparison, Yim and Penny (2007) stated that hoteliers focus more on meeting the needs of their existing regular customers rather than improving their environmental performance.

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According to Pirani and Arafat (2016), the sustainability of the hospitality sector depends upon the managers of the various establishments, which make up this sector. Managers should recognize that many of the benefits resulting from EMS adoption are long-term in nature and thus should be viewed as a long rather than a short-term investment (Zutshi & Sohal, 2004). In the hotel industry, even if the senior management is committed to implementing a systematic EMS, they still need to persuade the hotel owner or corporate office to invest the significant amounts of money required (Chan & Hawkins, 2011). There must be a fundamental change in attitude to ensure better environmental performance (Ann et al., 2006). Regarding independent hotels, it is believed that environmental concerns and willingness to act strongly depend on the hotel managers' attitude and knowledge (Bohdanowicz, 2006).

In recent years there was a shift in attitude backed up by research conducted by the Environment Agency, which states that a growing number of SMEs are concerned about the environment and are taking action to curb their environmental impact (Zorpas, 2010). Owners developed strategies for managing the conflicts associated with practising social responsibility by positioning themselves in social responsibility focus and commitment (Fenwick, 2010). Responsibility practices are becoming more and more critical for small and medium enterprises, including SMEHs, but studies outlined by Garay and Font (2011) suggest that they have a long way. Most practices, especially the environmental ones, remain in the early operational stages and are driven by cost savings.

Institutional Theory also influences firms' environmental management practices concerning internal and external stakeholders, including government, regulators, customers, competitors, and many others (Delmas & Toffel, 2004). This theory also emphasizes influences due to social and cultural pressure imposed on the organizations characteristic, which later influences their environmental management practices.

Institutional theory is also used to assess how institutional pressure influences EMS for the firm. This theory deliberates how the stakeholders impose coercive and mimetic pressures on firms. It emphasizes the importance of regulatory, customer, and competitors, resulting in the firm's practice beyond their standard technical efficiency. In response to these driving pressures and how a firm manager perceives and reacts, the outcome reflects the EMS. An institutional theory emphasizes legitimating processes and the tendency for institutionalized organizational structures and procedures to be taken for granted, regardless of their efficiency implications (Delmas & Toffel, 2004). It is defined as a cognitive, normative, and regulative structure and activities that provide stability and meaning of social behaviour (Herremans et al., 2009). Looking from this perspective, the adoption of EMS may vary between locations and size even though they come from the same organization. Although the pressure from and stakeholders are the same as the organization, the stress perceived by the manager may not be the same (Delmas & Toffel, 2004). This theory is viewing from another way of how it relates to EMS implementation and how the certified standard comes into implementation. However, it is also coming from a stakeholder perspective.

This study will attempt to extend the research into institutional theory within a hospitality management context, which focuses on the hotel industry. Numerous studies have been undertaken on the interplay between institutional pressure and institutional theory, which related to the manager's attitude towards the environmental practices in the hotel industry. Institutional pressures play a significant role in shaping firms' environmental practices. Delmas and Toffel (2004) describe how coercive and normative pressures can affect the adoption of environmental management practices and note that the pressure exerted at both the corporate and plant level is positively related to the size of the business. By extension, they note that SMEs operating in supply chains of highly concentrated industries are subject to selective pressures because larger firms within industries tend to transmit the pressure they receive from customers, regulators and communities down the value chain. Companies that have limited resources, which SMEs are a prime example of, institutional pressure often leads to environmental activities of compliance, which in turn have been found to have a lesser impact on a firm's business performance, compared to when environmental efforts are directed internally and based on resources and capabilities (Darnall et al., 2008). Besides, activist organizations and non-governmental organizations (NGOs) may be less concerned with their actions and

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instead devote their efforts to the activities of larger businesses that, as a single unit, have a more significant impact on the environment (Vives, 2006).

As environmental issues have attracted more attention from the public, governments, industries, and other interest groups, there has been much research on how individuals or organizations respond to these critical issues and what causes different responses and behaviours. Many psychologists have focused on some psychological factors that guide and determine environmental behaviours and commitments (i.e. Nordlund & Garvill, 2002; Steel, 1996; Schultz et al., 1995; N.Mbise & Mlozi, 2019; Novacka et al., 2018; Iraldo, 2017; Chan et al., 2017). Those psychological factors can be broadly categorized into two concepts: personal values and attitudes. Even though the distinction of such concepts as environmental values, concerns, attitudes, and worldview is not apparent, and indeed, these terms are often used interchangeably in much literature (Verma & Chandra, 2018), the term "environmental attitude", which is broadly used in much literature is reviewed along with personal values in this research.

The Malaysian government's commitment is to ensure that a balanced approach in promoting socio-economic development and the management of natural resources and environmental quality. The environmental sustainability practices and systems in fostering socio-economic development should be part of processes and the operations within the organization (Abd Aziz et al., 2018). The Malaysian government has shown its interest in promoting green technology and eco-products in all economic sectors. The commitment is reflected in the policies, strategies, and institutions initiated to green the economy. One of the most important initiatives is by implementing green purchasing (Buniamin et al.,2015), environmental friendly mechanisms (Novacka et al., 2018), greening competitiveness among competitors (Iraldo et al., 2017) and innovations (Mu'azu, Rashid & Zainol, 2017).

Zutshi and Sohal (2004) stated that a commitment to quality and environmental issues requires that managers consider several aspects to successful implementation: obtaining a commitment from top management, having adequate resources to integrate the systems, and communication training and having integrated audits. In early 2010, indicated in Budhiarta, Siwar and Basri (2012) stated that the government participated in the waste campaign program; however, it has not yet brought a significant and positive impact to the communities, especially those who lived in Kuala Lumpur areas. Additionally, Yoon, Jang and Lee (2015) suggest that local participation in conservation activities will not result in environmental benefits if the activities do not reflect the needs of local communities and the environment. Policies must favour and encourage local involvement in decision-making under a collaborative approach to management activities mentioned by Weng, Chen and Chen (2015) in their study.

2.4 Manager's Environmental Attitudes and Commitment

Environmental attitudes and commitment have been defined as collecting beliefs, affect, and behavioural intentions regarding environmentally related activities or issues (Schultz et al., 2004). As this definition of environmental attitude and commitment indicates, two types of environmental attitudes and commitment have been used in previous literature: "(1) attitudes toward the environment, and (2) attitudes toward ecological behaviour" (Kaiser et al.,1999; Hashim et al., 2016; Hall et al.,2016). Research on attitude toward ecological behaviour was derived from the framework of the theory of reasoned action (Ajzen & Fishbein, 1980) and its developed version, the theory of planned behaviour by Ajzen (1991). Only a minority of research on this topic is related to attitudes toward ecological behaviour (Kaiser et al., 1999). On the other hand, attitude and commitment toward the environment are used interchangeably with environmental concern, representing the predispositions of human beings that influence behaviour in a specific manner (Milfont & Duckitt, 2004). The object of most environmental, behavioural research has been the environment. The particular topics have been on attitudes and behaviour consistency, environmental attitude, commitment and the relationship with other variables, including demographic variables, experience, and beliefs about control, efficacy, responsibility, and personal values. Personal

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values, in particular, have frequently been examined as a predictor of environmental behaviour or mediator of the relationship between environmental attitudes and behaviours (Schultz et al., 2004).

In addition to research mentioned above, concerning the ability of environmental attitudes to predict pro-environmental behaviours, there is plentiful empirical evidence that an individual's attitude and commitment about the environment is a valid indicator of environmentally conscious behaviours, including recycling in hotel accommodations (Wall 1995), general pro-environmental behaviours (Lee & Holden, 1999; Kaiser et al., 1999), motivations of undertaking environmental initiatives by independent hotels (Abaeian et al.,2018), purchasing behaviours (Wall, 1995) and concern for employees to adopt green practices in SME hotels (Hashim et al., 2016). The author, Wall (1995), conducted a study to identify variables that affect specific environmentally conscious behaviours, recycling and purchasing organic food. Along with solid predictability of contextual factors such as access to a recycling program for recycling behaviour and safety concerns for environmental purchasing behaviours, general environmental concerns were significantly correlated with recycling and environmental purchasing behaviours. Chan (1996) also conducted a cross-cultural study to identify consumers' environmental concerns and purchase behaviours in Canada and Hong Kong and found that consumers with more concern about environmental problems tend to purchase more environmentally friendly products. According to Hines and his colleagues' (1986) meta-analysis, verbal commitment was the strongest predictor of environmental behaviour, and attitudes were the third most crucial variable predicting environmental behaviour.

Although many researchers have pointed out that the relationship between environmental attitude, behaviour and commitment (Chan et al., 2017; Novacka et al., 2018; Hashim et al., 2016) is somewhat weak or modest at most, and suggested other variables that mediate the relationship, environmental attitude and commitment are still one of the most influential constructs to predict environmental behaviours. Compared to demographic and other psychological variables, attitude and commitment are considered a more appropriate measure to capture individuals' emotional effect, intention, beliefs, and concerns, thereby predicting various environmental behaviours among different groups of people.

The relationship between attitudes, commitment and performance, has involved researchers for a long time. Much focus has been put on the relation between job commitment and task performance; however, this paper is not the primary focus. Researchers have come to different results depending on the definitions of commitment and performance (Somers & Birnbaum, 1998). For instance, Benkhoff (1997) studied organizational performance in meeting sales targets and profit change. She found that employee commitment was positively correlated with the financial success of divisions in her sample bank branches. Similarly, as Hashim et al. (2016) and Abaeian et al. (2018) studied, employee commitment positively affected the SMEHs green practices adoption decision.

On top of that, as we noted, several scholars like Bianchi and Noci (1998) have suggested that 'environmental management in SMEHs stems from one of two channels; either the attitudes of managers–owners or stakeholder pressure and interaction'. Nevertheless, often SMEHs experience limited stakeholder pressure, which means that such practices are entirely contingent on managers-owners attitudes and values despite owners and managers' concerns with short-term profitability and the need to meet budgets and deadlines. Consequently, several hotel managers who believe the introduction of environmental practices and policies can often be a deterrent for guests as they associated environmentally friendly hotels as lacking in luxury products and services, and therefore, it is clear that the price-sensitive guest does not want to pay for green initiatives and guests searching for a luxury break do not want to sacrifice their levels of comfort for the sake of the environment.

Hence, there is resistance by managers to undertake formal environmental management programmes. It is probably due to a lack of knowledge and training and the investment in time, money, and resources required to comply with standards and procedures, leading to additional barriers to implementation. It is supported by Lauring and Thomsen (2009) that setting an environmental or policy requires top management involvement to create a general strategy to lead the organization's effort to attain the vision. In comparison,

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Jayashree, Malarvizhi, Mayel and Rasti (2015) added that top management support was an essential factor for successfully integrating a standard and considered crucial in improving the effectiveness of environmental management processes. It is one of the critical success factors. These scholars (i.e. Anu Singh & Shikha, 2015; Boiral & Henry, 2012; Jang & Lin, 2008; Abd Aziz et al., 2018) highlighted that lack of top management engagement and commitment would fail quality and environmental efforts. Commitment and support from management are a necessary factor of adoption and implementation of innovations in a company, particularly "environmental systems and top management support can affect new system initiatives success by promoting employee empowerment, by facilitating employee involvement by promoting a cultural shift and increased commitment by the organization's staff (ISO 14001:2015, 2015).

2.5 Environmental Management Implementation

An EMS provides an organization with a framework for managing its environmental responsibilities efficiently concerning reporting and performance improvement. Implementation of an effective EMS should lead to continuous improvement in management actions, informed by monitoring key performance indicators related to those actions.

One of the critical elements of becoming an environmentally friendly hotel is adopting an EMS that meets ISO 14001 standards, extending throughout the hotel organization and between the hotel and its guests, local community, and even its suppliers (Meade & Del Monaco, 2001). With due respect to this, Ouyang, Wei and Chi (2018), in their study, commented that limited theoretical attention had been paid to understand the underlying drivers of a hotel's engagement in environmental management. They use institutional theory to provide a positive integration model that captures various social drivers of hotels' engagement in EMS.

However, many hotels, especially SMEs, have "not adopted an EMS, although annual bills for electricity, gas and diesel fuel for a typical medium-sized hotel contribute significantly to its total operating cost" (Deng & Burnett, 2002). Pryce (2001) noted that the results of a survey of SMEs in the United Kingdom revealed that none of the hotels in the study had implemented an EMS. Conversely, Dewhurst and Thomas (2003) and Hashim et al. (2016) found that the environmental actions taken by smaller firms tend to be implemented ad hoc rather than within a coherent environmental management strategy and that these firms usually do not have a formal environmental policy in place. The environmental actions taken in such firms involve mainly simple, low-cost measures, and established priorities and practices do not involve owners in active and innovative environmental work (Hobson & Essex, 2001).

It is clear that SMEs generally do not clearly define organizational structure and have a shallow integration of environmental aspects into their core business values (Schaper, 2002). Additionally, among long-established SMEs in which production and operational practices are entrenched, switching to ecologically sound policies can be costly and time-consuming. Because limited resources are a common problem for SMEs, training and off-work activities are less concerned to management (Emeksiz et al., 2006). Consequently, implementing environmental policies in these hotels is usually constrained and does not receive sufficient support from owners or senior management.

It was evident that further research should concentrate on smaller sized hotels, as these types of hotels may experience more challenges and barriers to the adoption of an EMS, the implementation of which, together with different green practices, could potentially result in benefits such as operating cost savings (Chan, 2011). Hence, in this research, the researcher attempted to investigate the effect of manager's commitment and their perceived benefits to EMS implementation by SMEHs and assess whether significant differences exist among hotel EMS implementation related to the identified institutional pressures.

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2.6 Conceptual Framework of the Study

Based on the discussed theories of organizational and institutional, a conceptual framework was developed to test the hypothetical relationships of the components that are integrated into the model as proposed in this research. The conceptual framework of this research consists of the following elements: institutional pressures or isomorphism (as measured by five components, which are regulatory, customers, competitors, employees and manager's attributes pressures) and EMS implementation. The mediator's variables proposed in this research are the manager's environmental commitment to the EMS implementation.

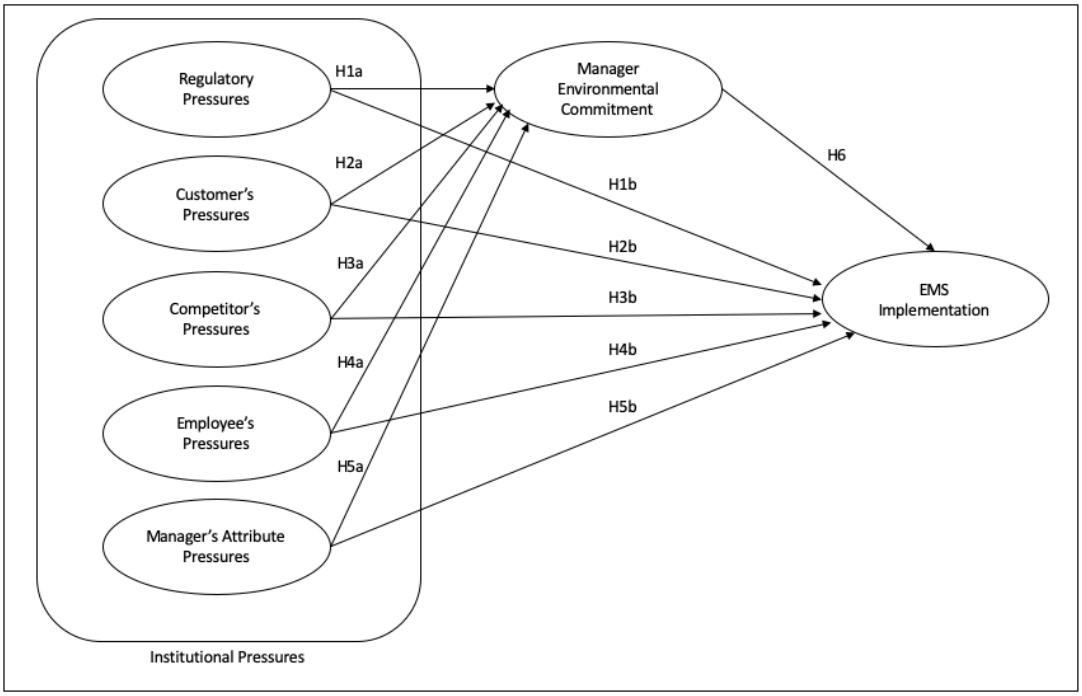

Fig. 1. The researcher illustrates the study's conceptual framework of the manager's behaviour model.

2.7 Basic Constructs and Hypothesis Development

Based on the study objectives and the literature review, six main hypotheses were developed to evaluate the relationships among SMEHs' institutional pressures, environmental commitment and hotels' environmental management implementation (Figure 1.0). This study suggests the following hypotheses:

- H1a: Environmental commitment is positively influenced by regulatory pressure.
- H2a: Environmental commitment is positively influenced by customer's pressure.
- H3a: Environmental commitment is positively influenced by competitor's pressure.
- H4a: Environmental commitment is positively influenced by employee's pressure.
- H5a: Environmental commitment is positively influenced by the manager's attributes pressure.
- H1b: EMS implementation is positively influenced by regulatory pressure.
- H2b: EMS implementation is positively influenced by customer's pressure.
- H3b: EMS implementation is positively influenced by competitor's pressure.

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- H4b: EMS implementation is positively influenced by employee's pressure.
- H5b: EMS implementation is positively influenced by the manager's attributes pressure.
- H6: EMS implementation is positively influenced by environmental commitment.

Additionally, five mediation hypotheses were developed to investigate the mediation effect of environmental commitment between institutional pressures and EMS implementation.

- H7: Environmental commitment mediates the relationship between regulatory pressures and EMS implementation.
- H8: Environmental commitment mediates the relationship between customer's pressures and EMS implementation.
- H9: Environmental commitment mediates the relationship between competitors' pressures and EMS implementation.
- H10: Environmental commitment mediates the relationship between employees' pressures and EMS implementation.
- H11: Environmental commitment mediates the relationship between managers' attribute pressures and EMS implementation.

2.8 Literature Gap

The institutional theory provides a comprehensive model that considers the expectations of multiple stakeholders to justify how different institutional pressures influence the implementation of EMS in SMEHs establishment. Nonetheless, the complexity of these institutional pressures and the ambiguous definitions of some of the key concepts within the institutional theory have inhibited hospitality EMS implementation studies from adopting the institutional perspectives. Previous institutional studies of EMS in the hospitality industry have emphasized tendencies towards a homogenous process by which companies assumedly conform to changes in the institutional environment (Campbell, 2007; Delmas & Toffels, 2004).

However, scholars argue that organizations may respond differently to institutional pressures due to specific characteristics of the company (Clemens & Douglas, 2005; Greenwood & Hinings, 1996). Therefore, as Ouyang et a., (2018) supported, more effort should be made by examining hotels' characteristics expected to affect a hotel's strategic response to institutional pressures for EMS. In supporting this, Brigitte Prud'homme and Louis Raymond (2016), in their study, demonstrates that in the hospitality industry, implementing an EMS orientation is a strategy that can be enabled through the provision of required knowledge and expertise as well as appropriate tools and techniques to hotel managers.

Conclusively, it is clear from the discussions that recognizing the manager's environmental commitment between institutional pressures and EMS implementation as additional factors affecting this relationship may lead to more effective and well-performing SME establishments in the tourism and hospitality industry. The emerging issues of manager's environmental commitment to be position through educational or knowledge-based awareness and adequate tools and strategies that emphasize how the institutional pressures such as regulatory, customers, competitors, employees and manager's attributes pressures could aid to benefit the EMS implementation in SME hospitality establishments. Furthermore, according to Ali and Hamzah (2021) and Ouyang et al. (2018), studies used hotel managers' perceptions to assess hotels' EMS engagement, while no explicit measures on the environmental performance were applied. Hence, according to them, it is wise that future studies may incorporate both perceived and objective criteria for hotels' EMS performance and examine the effects of institutional environments on EMS implementation and performance. Therefore, it is suggested to consider the interactions between all institutional pressures and the EMS implementation. On top of that, the current study on the EMS implementation has only

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recently been more widely applied to the service sector and hotels like SMEHs establishment, which to Buffa, Franch and Rizio (2018) are understudied; even until to-date hardly to find examine these businesses in Malaysia context, notwithstanding their predominance and importance for tourism and hospitality development.

3. Methodology

According to Malaysia Ministry of Tourism, Arts and Culture statistics (2019), 1695 qualified and registered SMEHs throughout Malaysia. The area covers Malaysia, including Sabah, Sarawak, and Federal Territories of Kuala Lumpur, Putrajaya and Labuan. The statistics of the total number of hotels in Malaysia concluded simultaneously with the definition of SMEHs based on SME Corporation Malaysia. Thus, to expedite data collection, questionnaires distributed using post/email and an online survey. In addition to cost and efficiency considerations, email surveys also preferable to increase the response rate in some instances compared with a telephone survey.

Data for this research was collected through an administered online-based survey. The questionnaire was created and accessed through Google Forms, an online survey tool. The questionnaire was designed to solicit departmental managers' and owners' evaluation of the motives, facilitators, and constraints they experienced with environmental management in their hotels, as well as the outcomes that have resulted from its implementation.

Cluster sampling is more time- and cost-efficient and reduces the variability. It offers the advantages of random sampling (Hair et al., 2018; Sharma, 2017) than other probability sampling methods, particularly when it comes to large samples spread across a wide geographical area. However, it provides less statistical certainty than other methods because it is challenging to ensure that your clusters properly represent the population as a whole. To fill in the gap of existing research, the probability sampling method has been adopted for this research as it helps the study be free of bias. It enables the analysis conducted voluntarily based on Burn (1990), whereas each sample item carries equal weight in the selection and evaluation process (Singleton Jr. & Straits, 1988).

The problem with random sampling methods when we have to sample a population that's disbursed across a broad geographic region is that we will have to cover a lot of ground geographically to get to each unit you tested. Only then we will wind up with respondents who come from all over the state. It is precisely this problem that cluster or area random sampling was invented. Conversely, Cluster sampling is a probability sampling technique where researchers divide the population into multiple groups (clusters) for research. Researchers then select random groups with a simple random or systematic random sampling technique for data collection and data analysis.

On the other hand, we don't have to worry about using this approach if we conduct a mail or telephone survey because it doesn't matter as much (or cost more or raise inefficiency) where we call or send letters to. For this study, the researcher decided to do a cluster sampling of all 13 states in Malaysia. Table 1.0 showed how the cluster sampling method carried.

In this technique, the population members are divided into unique, non-overlapping groups before sampling. The groups are referred to as clusters. The clusters are then randomly selected, and each member of the cluster is included in the sample. In this case, we clustered the SMEHs based on ranking 1 to 3-star hotels only. In this study, based on cluster sampling methods, the SMEHs have been clustered based on regions (states in Malaysia) and then randomly selected using SPSS version 27.0 software for cluster frames.

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Table 1. Cluster Sampling Method Steps in this study

Step	Sampling Methods	Steps Taken
Step 1	Population	Divide the population into clusters. In this case, the researcher has identified the population of this research is all identified 1695 SME hotels in Malaysia.
Step 2	Groups (Clusters) (Sampling Frame)	Then the population divided into the group clusters or sampling frames, which are all SME hotels in 13 states and three federal territories in Peninsular Malaysia and Borneo, which equal 16 groups.
Step 3	Obtain a Simple Random Sample Clusters	Simple random sampling performed on all clusters in Malaysia and SME hotels in 8 states and federal territories from the possible 13 states and three federal territories were identified and selected as identified earlier in Step 2.
Step 4	Sample	Finally, the last step is to measure all units within sampled clusters. In this research, every manager in identified SME hotels in selected states and federal territories identified in Step 3. The distributed questionnaires totalled 350 hotel managers throughout Malaysia, and the minimum sample size required for data analysis was 313, according to Krejcie and Morgan (1970) and Hair et al. (2013). However, the collected sample was 252, about 80% of the 313 sample sizes required.

(Source: Adopted from Hill, 1998)

The questionnaire consisted of four main sections that measured variables about institutional pressures, managers' commitment and perceived benefits, environmental management implementation, and demographics. Property characteristics such as location, type, ownership, and size were also determined. According to Altinay and Paraskevas (2008), the development of a good questionnaire is considered a crucial aspect of the entire research project. Thus the questions for this research study were developed based on the research objectives and with criteria applied in Ustad (2010). The first section of the questionnaire addressed the managers' understanding of humans and the environment. The second part of the questionnaire addressed whether the hotel currently extending its activities and operations with the involvement in each environmental activity stated. The third part of the questionnaire further concentrated on whether hotel managers were familiar with the concept and advantages of adopting the EMS.

The later part of the questionnaire will be seeking information about the characteristics of the hotel (including the number of employees, hotel ownership etc.), the current status of the hotel when environmental policy concerned, the level of implementation of the policy, if any, practices of environmental policy and also the reasons of implementing the policy. The significant constructs in this research were institutional pressures, environmental commitment and organizational involvement in environmental management practices in the hotel industry.

Section A comprised statements that determine respondents towards the institutional pressures, while Section B was designed to measure current managers' environmental commitment. In comparison, Section C measures the currently adopted environmental management practices and organizational involvement in each practice. The organization's characteristics and respondents' demographic information was collected in Section D.

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The findings of this study were analyzed using one primary analytical technique, which is the SmartPLS-SEM analysis version 3.2.8. Generally, SmartPLS-SEM requires a small sample size to produce stable solutions that are generalizable. SmartPLS-SEM is advantageous when used with small sample sizes regarding the robustness of estimations and statistical power (Reinartz, Haenlein & Henseler, 2009). However, some researchers abuse these advantages by relying on microscopic samples relative to the underlying population. All else being equal, the more heterogeneous the population in a structure is, the more observations are needed to reach an acceptable sampling error level. The fundamental of sampling theory yields meaningless results no matter which method is applied. SmartPLS-SEM has an erroneous reputation for offering special sampling capabilities that no other multivariate analysis tool has. Like any other statistical technique, interference statistics based on SmartPLS-SEM require representative samples. Hair et al. (2018) are therefore advised all researchers to use sampling techniques carefully and carefully consider the statistical power of their analysis and considering the selection of the sample size should take into consideration the desired power levels, effect sizes and significance (Cohen, 1992).

Although PLS is well known for handling small sample sizes, it does not mean that the goal should fulfil the minimum sample size requirement. Previous research suggests that a sample size of 100 to 200 is usually a good starting point in carrying out path modelling (Hoyle, 1995). Hoyle (1995) suggested that the required sample size will need to be increased if the research objective is to explore low-value factor inter-correlations with poor quality indicators. Generally, however, larger sample sizes will tend to produce more reliable results. Considering the range of sample sizes estimated through the different techniques, the minimum required sample size to be selected for this research was 313 for entire Malaysia to meet the requirement. This is based on the Sample Size Recommendation in SmartPLS-SEM for a Statistical Power of 95% by Cohen (1992). For this purpose, the SmartPLS-SEM software 3.2.8 version is used for this paper.

The constructs were developed based on various related empirical studies (Table 1.1) was tested, and the Cronbach's Alpha stated all constructs achieved above 0.7, which indicate the internal consistency or reliability is acceptable except for the construct customer's pressures which were 0.680 close to 0.7 and are acceptable (Hair et al., 2018). According to Field (2009), the Corrected Item-Total Correlation for each construct above 0.3 is good. Hence, this indicates that all items are positively contributing to the overall reliability.

Table 1.1. Summary of Constructs and Items Source with Cronbach's Alpha

Construct	Items	Source	Cronbach 's Alpha
Regulatory Pressures	➢ Regulation by government agencies has dramatically influenced our hotel's environmental strategy. ➢ Stricter environmental legislation is required so that only environmentally responsible hotels will survive and grow. ➢ Our hotel's environmental efforts can help shape future environmental legislation in our industry.	➢ Phan & Baird (2015) ➢ Brammer, Hoejmose & Marchant (2012) ➢ Findik & Beduk (2014)	**0.762**
Customer's Pressures	➢ Our customers feel that environmental protection is a critically important issue facing the world ➢ Our customers are increasingly demanding environmentally friendly products and services. ➢ Our customers expect our hotel to be environmentally friendly.	➢ Manaktola & Jauhari (2012) ➢ Phan & Baird (2015) ➢ Brammer, Hoejmose & Marchant (2012) ➢ Findik & Beduk (2014)	**0.680**
Competitor's Pressures	➢ There are many 'promotion wars' in our industry.	➢ Phan & Baird (2015)	**0.812**

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	➢ Anything that one competitor offers, others can match readily. ➢ One hears of a new competitive move almost every day.	➢ Brammer, Hoejmose & Marchant (2012) ➢ Findik & Beduk (2014)	
Employee's Pressures	➢ Our employees are well understood and communicated the benefits of environmental management. ➢ Our employees are encouraged to contribute innovative suggestions and solutions to environmental management practice. ➢ Our employees are provided with training and/or instruction in the areas of environmental considerations and awareness.	➢ Findik & Beduk (2014) ➢ Chou (2014)	**0.860**
Manager's Attribute Pressures	➢ I am pleased if I know that my work has contributed to the environmental performance of the company's products/services/operations. ➢ I feel I share a responsibility for the environmental performance of my company's products. ➢ I am prepared to put in extra effort to meet organizational environmental performance vision, missions and goals. ➢ I believe my credentials and experiences affecting my decision in implementing environmental practices in this company.	➢ Brammer, Hoejmose & Marchant (2012) ➢ Findik & Beduk (2014)	**0.802**
Manager's Commitment	➢ Our corporate decision-makers are supportive of environmental initiatives implemented. ➢ Our organization will implement environmental programs and initiatives only if our competitors have done so or intend to do so. ➢ Our organization needs my full support in implementing environmental programs and initiatives.	➢ Findik & Beduk (2014) ➢ Kirk (1998) ➢ Banerjee et al. (2003)	**0.828**
EMS Implementation	➢ Our hotel has an in-house paper recycling program ➢ Our hotel invests in research and development for cleaner products and technologies. ➢ Our hotel advertises our environmental efforts.	➢ Bohdanowicz (2006) ➢ Mensah (2006) ➢ Brammer, Hoejmose & Marchant (2012)	**0.822**

A mediating effect occurs when a third variable mediates or interferes with the relationship between two other variables (Hair et al., 2014). In addition to testing the causal relationship of variables, PLS-SEM also enables the mediation effect to be tested. There are several ways for testing hypotheses about intervening variable effect such as the causal steps approach (Baron & Kenny, 1986), Sobel test (Sobel, 1982), empirical M-test (Holbert & Stephenson, 2003) and bootstrapping (Hayes, 2013). Hayes (2013) explained bootstrapping as a method that "generates an empirical representation of the sampling distribution of the indirect effect by treating the obtained sample of size n as a representation of the population in miniature, one that is repeatedly resampled during analysis as a means of mimicking the original sampling process". Among the four methods available for testing mediation effect in a model, the bootstrapping method is more robust to non-normal data, has higher power, and can better control Type I error than other methods that assume normal data distribution.

In this study, the mediator role of the manager's commitment in the manager's behaviour on the EMS implementation model was assessed using the bootstrapping method. Bootstrapping is a resampling technique that enables multiple subsamples to be created from the original dataset and the mediation effect to be evaluated (Byrne, 2010). Conversely, testing for the type of mediation in a model requires running a series of analyses that can be done based on Hair et al. (2018) works. In this study, mediation analysis was carried out to estimate the magnitude of the indirect effect of mediating variables (manager's commitment) on the relationship between exogenous variables (institutional pressures – regulatory pressures, customer's pressures, competitor's pressures, employee's pressures and manager's attribute pressures) and endogenous variable (EMS implementation).

4. Results Discussion

4.1 Profile of the Respondents

The study focused on all identified 1695 SME hotels in Malaysia. A total of 313 departmental managers in SME hotels in Malaysia participated in the survey, and a total of 252 questionnaires were returned and usable. The respondents' demographic backgrounds, which include their length of service, the department they attached to, age, education, marital status, gender, and length of service in the industry, are summarized in Table 1.2. The details of respondents' characteristic descriptive analysis recorded in Table 1.2 below, while the SME hotels' Demographic Characteristics recorded in Table 1.3 below.

Table 1.2: Respondents' Characteristic Descriptive Analysis

Features	Category	Frequency	Percent (%)
Age	Between 31-40	84	33.3%
	Between 41-45	90	35.7%
	Between 46-50	78	31.0%
	Total	252	100%
Gender	Male	168	66.7%
	Female	84	33.3%
	Total	252	100%
Educational Level	Diploma graduate	24	9.5%
	Bachelor graduate	114	45.2%
	Master's degree	114	45.2%
	Total	252	100%
Marital Status	Single	48	19.0%
	Married	180	71.4%
	Widowed	6	2.4%
	Divorced	18	7.1%
	Total	252	100%
Current position in hotel	Department Manager / Head	90	35.7%
	Operation Manager	90	35.7%
	Administrative Manager	24	9.5%
	Financial Manager	24	9.5%
	F&B Manager	6	2.4%
	Owner	18	7.1%
	Total	252	100%
Length of service in hotel	Less than 1 year	24	9.5%
	Between 1 to 2 years	24	9.5%
	Between 2 to 3 years	78	31.0%
	Between 3 to 4 years	78	31.0%
	More than 4 years	48	19.0%
	Total	252	100%
Length of Service in industry	Less than 1 year	12	4.8%
	Between 1 to 5 years	66	26.2%
	Between 5 to 10 years	126	50%

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	Between 10 to 15 years	48	19.0%
	Total	252	100%
Department which longest experience	Sales and Marketing	18	7.1%
	Food and Beverage	114	45.2%
	Front Desk	18	7.1%
	Housekeeping	12	4.8%
	Human Resource	60	23.8
	Finance	24	9.5%
	Engineering	6	2.4%
	Total	252	100%

Table 1.3: SME hotels' Demographic Characteristics

Features	Category	Frequency	Per cent (%)
Types of hotel	Mid-price hotel	150	59.5%
	Budget/Economy Hotel	102	40.5%
	Total	252	100%
Types of hotel ownership	Independently owned, self-managed	180	71.4%
	Independently owned, managed by a franchise agreement	6	2.4%
	Independently owned, managed by a management contract	42	16.7%
	Chain owned, managed by the chain	24	9.5%
	Total	252	100%
Number of guestrooms	Less than 50	102	40.5%
	51 to 99	60	23.8%
	100 or more	90	35.7%
	Total	252	100%
Occupancy Rate	Between 51 – 60%	6	2.4%
	Between 61 – 70%	90	35.7%
	Between 71 – 80%	102	40.5%
	Between 81 – 90%	54	21.4%
	Total	252	100%
Length of environmental initiatives started	A few months ago	42	16.7%
	Between 5 months to 1 year	36	14.3%
	1 year to 2 years ago	66	26.2%
	Above than 3 years ago	108	42.9%
	Total	252	100%

The institutional pressures that cause managers and hotels to implement EMS practices were categorized into three main groups; coercive pressures, mimetic pressures and normative pressures, which then extracted into five sub-groups; regulatory pressures, customer's pressures, competitor's pressures, employee's pressures and manager's attributes pressures. These pressures were treated as a separate indicator for the latent variable, institutional pressures, in systematic analysis. Before this analysis, each of these sources of pressure was analyzed for reliability and construct validity.

4.2 PLS-SEM Result for Measurement Model

The first objective of this research was to establish the direct relationship between institutional pressures and EMS implementation. To pursue this objective, PLS-SEM analysis using SmartPLS was used. Since the two constructs, institutional pressures and EMS implementation are both reflective, they were first thoroughly checked for reliability and validity before the final results were interpreted. The following subsections discuss the reliability and validity of the model.

The first criterion to be evaluated is typically internal consistency reliability. The traditional criterion for internal consistency is Cronbach's Alpha, which provides an estimate of the reliability based on the

intercorrelations of the observed indicator variable. Internal consistency reliability was assessed from composite reliability values. From Table 1.4, the composite reliability values for all variables are all larger than 0.6 and below 1 (Bagozzi & Yi, 1988). Table 1.4 also shows the CR values of all the latent variables used in this research. These values were >0.70 (Hair, Black, Babin, Anderson & Tatham, 2006), establishing internal consistency.

Table 1.4: Composite Reliability (>0.70), Cronbach's Alpha (>0.70) and AVE of Latent Constructs (>0.50)

Latent Variable	Cronbach's Alpha	Rho_A	Composite Reliability (CR)	Average Variance Extracted (AVE)
LEGAL_P	0.762	0.850	0.865	0.690
CUSTO_P	0.680	0.708	0.824	0.612
COMPE_P	0.812	0.860	0.887	0.724
STAFF_P	0.860	0.880	0.915	0.783
MANAG_P	0.802	0.870	0.873	0.639
COMMIT_P	0.828	0.848	0.897	0.744
IMPLE_P	0.822	0.828	0.894	0.738

Traditionally, researchers relied on two discriminant validity measures to distinguish the constructs from other constructs by empirical standards, which are the Fornel-Larcker Criterion and Cross-Loadings. Discriminant validity verified using the Fornell-Larcker Criterion, observing factor loadings. To verify convergent validity, each latent variable's Average Variance Extracted (AVE) was evaluated. As shown in Table 1.4 above, it is established that the AVE values for all constructs are more significant than the acceptable threshold of 0.5, and therefore convergent validity is confirmed (Hair et al., 2018). Discriminant validity was verified using the Fornell-Larcker Criterion, observing factor loadings (see details in Appendix A attached). Table 1.5 shows the Fornell-Larcker Criterion analysis results. This is the extent to which a variable is genuinely distinct from other variables, how much it correlates with different variables and how many of the indicators represent only a single variable (Hair, Babin, Money & Samouel, 2013).

Table 1.5. Fornell-Larcker Criterion Analysis for Checking Discriminant Validity with the square root of AVE

Latent Variables	Commit_P	Compe_P	Custo_P	Imple_P	Legal_P	Manag_P	Staff_P
COMMIT_P	0.863						
COMPE_P	0.390	0.851					
CUSTO_P	0.661	0.264	0.782				
IMPLE_P	0.819	0.251	0.517	0.859			
LEGAL_P	0.619	0.770	0.532	0.421	0.831		
MANAG_P	0.538	0.370	0.517	0.442	0.403	0.799	
STAFF_P	0.831	0.205	0.547	0.824	0.390	0.536	0.885

4.3 PLS-SEM Results for Structural Model - Institutional Pressures and EMS Implementation

The first objective sought to evaluate the relationship among SMEHs' institutional pressures, environmental commitment and EMS implementation. After establishing the reliability and validity of the latent variables in the measurement model, we assess the structural model or the inner model to test the relationship between endogenous and exogenous variables. In PLS-SEM, the structural model assessment includes path coefficient to evaluate the significance and relevance of structural model relationships, R^2 value to evaluate the model's predictive accuracy, Q^2 to evaluate the model's predictive relevance and f^2 to evaluate the substantial impact of the exogenous variable on an endogenous variable (Hair et al., 2013).

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Table 1.6. Collinearity Statistics of Exogenous Variables

Latent Variables	Commit_P	Compe_P	Custo_P	Imple_P	Legal_P	Manag_P	Staff_P
COMMIT_P				1			
COMPE_P				1.738			
CUSTO_P				3.358			
IMPLE_P							
LEGAL_P				2.833			
MANAG_P				1.949			
STAFF_P				2.147			

VIF ≤ 5.0 – Free of Common Method Bias

From Table 1.6, it can be seen that VIF values for all the exogenous latent variables are lower than the threshold of 5 (or tolerance levels are higher than 0.2). This suggests that collinearity is not a problem in the inner model.

After running the PLS-SEM algorithm, estimates are obtained for the structural model relationship through the path coefficients, representing the hypothesized relationships among the constructs. Table 1.7 present a summary of the path coefficient result. As can be seen, the path between Regulatory Pressures (LEGAL_P) and the manager's environmental commitment (COMMIT_P) to implement EMS is significant (t=6.978, p=0.000), accepting Hypothesis 1a. Next, the path between customer's pressures (CUSTO_P) and the manager's environmental commitment (COMMIT_P) to implement EMS is significant too (t=3.710, p=0.000), accepting the Hypothesis 2a. Next, the path between competitor's pressures (COMPE_P) and the manager's environmental commitment (COMMIT_P) to implement EMS is insignificant (t=0.373, p=0.709), rejecting Hypothesis 3a. Next, the path between employee's pressures (STAFF_P) and the manager's environmental commitment (COMMIT_P) to implement EMS is significant (t=22.734, p=0.000), accepting Hypothesis 4a.

Next, the path between the manager's attributes pressures (MANAG_P) and the manager's environmental commitment (COMMIT_P) to implement EMS is insignificant (t=0.165, p=0.869), rejecting Hypothesis 5a. Next, the path between regulator's pressures (LEGAL_P) and the implementation of EMS (IMPLE_P) is insignificant (t=1.116, p=0.265), rejecting Hypothesis 1b. Next, the path between customer's pressures (CUSTO_P) and the implementation of EMS (IMPLE_P) is insignificant too (t=0.997, p=0.319), rejecting Hypothesis 2b. Next, the path between competitor's pressures (COMPE_P) and the implementation of EMS (IMPLE_P) is insignificant (t=1.630, p=0.104), rejecting Hypothesis 3b. Next, the path between employee's pressures (STAFF_P) and the implementation of EMS (IMPLE_P) is significant (t=21.824, p=0.000), accepting Hypothesis 4b. Lastly, the path between manager's attributes pressures (MANAG_P) and the implementation of EMS (IMPLE_P) to implement EMS is significant (t=2.186, p=0.0.094), that suggesting the Hypothesis 5b is accepted.

Table 1.7. Coefficient of Determination (R^2), T-statistics and P-value

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
LEGAL_P → COMMIT_P	0.309	0.311	0.044	6.978	0.000
CUSTO_P → COMMIT_P	0.169	0.167	0.046	3.710	0.000
COMPE_P → COMMIT_P	-0.016	-0.014	0.043	0.373	0.709
STAFF_P → COMMIT_P	0.620	0.621	0.027	22.734	0.000
MANAG_P → COMMIT_P	0.007	0.002	0.039	0.165	0.869
LEGAL_P → IMPLE_P	0.084	0.091	0.075	1.116	0.265

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CUSTO_P → IMPLE_P	0.059	0.055	0.059	0.997	0.319
COMPE_P → IMPLE_P	0.098	0.099	0.060	1.630	0.104
STAFF_P → IMPLE_P	0.790	0.791	0.036	21.824	0.000
MANAG_P → IMPLE_P	-0.085	-.0089	0.039	2.186	0.029
COMMIT_P → IMPLE_P	0.915	0.913	0.062	14.839	0.000

After evaluating the validity and reliability of both the outer and inner models, the next step was to interpret the coefficient of determination (R^2) and path coefficient. From Table 1.8, it is noted that the coefficient of determination R^2 is 0.742 for the EMS Implementation endogenous latent variable. This means that the institutional pressures only account for 82% of the variance in EMS Implementation. Thus, from the results, it can be concluded that the proportion of variance in EMS implementation that is accounted for by institutional pressures is substantial. The inner model suggests that the path coefficient for the hypothesized path relationship between institutional pressures and EMS implementation is 0.742. The inner model also indicates that the path coefficient for the hypothesized path relationship between institutional pressures and manager's commitment is 0.824. Therefore, these relationships were strong.

Table 1.8. The Level of R^2

	R Square (R^2)	R Square Adjusted	Relationship
COMMIT_P	0.824	0.820	Strong
IMPLE_P	0.742	0.735	Strong

Table 1.7 above shows the t-statistic and p-value of the R^2. As explained earlier, the total value of R^2 was considered strong, however the P-value of the exogenous constructs varied in term of significances. In Table 1.7 suggests the path relationships between LEGAL_P → IMPLE_P (t value = 1.116, p-value = 0.265), CUSTO_P → IMPLE_P (t value = 0.997, p-value = 0.319), COMPE_P → COMMIT_P (t value = 0.373, p-value = 0.709), COMPE_P → IMPLE_P(t value = 1.630, p-value = 0.104) AND MANAG_P → COMMIT_P (t value = 0.165, p-value = 0.869) were not significant.

In this study, the f^2 size effect varies from small to large for all exogenous variables explaining the environmental commitments and EMS implementation. According to Cohen (1988), the guidelines for assessing f^2 are that values of 0.02, 0.15 and 0.35, respectively, represent small, medium and large effects (Table 1.9).

Table 1.9 The Effect Size of F Square (F^2)

	COMMIT_P	Effect Size	PERCEI_P	Effect Size	IMPLE_P	Effect Size
LEGAL_P	0.156	Medium	0.798	Large	0.084	Small
COMPE_P	0.001	Small	0.124	Medium	0.098	Small
CUSTO_P	0.082	Small	0.055	Small	0.059	Small
STAFF_P	1.266	Large	0.211	Medium	0.790	Large
MANAG_P	0.000	Small	0.011	Small	-0.085	Small
COMMIT_P	Not applicable		Not applicable		0.915	Large

Small: 0.0< f^2 effect size < 0.15; Medium: 0.15< f^2 effect size <0.35; Large: f^2 effect size > 0.35
Source: Hair et al., 2017

In addition to evaluating the magnitude of the R^2 values as a criterion of predictive accuracy, blindfolding was used to cross-validate the model's predictive relevance for each of the individual endogenous variables, the Stone-Geisser Q^2 value (Geisser, 1974; Stone, 1974). In this research (Table 1.10), environmental commitments have a Q^2 value of 0.576, and EMS implementation has a Q^2 of 0.520. This shows medium and large effect sizes. Because all the Q^2 values are > 0, it establishes the fact that the PLS_SEM structural

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model has predictive relevance. According to Hair et al. (2018), Q^2 values that are larger than zero for a specific reflective endogenous latent variable show the path model's predictive relevance for a particular construct, whereas Q^2 values of zero or below show that there is a lack of predictive relevance. Hence, this suggests that Q^2 values are significant > 0.00. Thus, the reputation model's predictive relevance for the constructs is supported (COMMIT_P).

Table 1.10. Construct Cross-validated redundancy Q^2 for all LV

	SSO	SSE	Q^2 (=1-SSE/SSO)
LEGAL_P	756.000	756.000	
CUSTO_P	756.000	756.000	
COMPE_P	756.000	756.000	
STAFF_P	756.000	756.000	
MANAG_P	1,008.000	1,008.000	
COMMIT_P	756.000	320.702	0.576
IMPLE_P	756.000	362.925	0.520

Assessment of the q^2 effect size is the final step in measuring the structural model to measure the relative impact of predictive relevance. Table 1.11 presents the summary result for path coefficients f^2 and q^2. As can be seen, the effect size of the q^2 value for all predictive relevance towards IMPLE_P is large at 0.576 (COMMIT_P). Hence, it is understandable that the predictive of implementation of EMS on the institutional pressures affected by the manager's commitment has a strong effect.

Table 1.11. Summary of results – Path Coefficient, f^2 and q^2

	IMPLE_P		
	Path Coefficient	f^2 effect size	q^2 effect size
COMMIT_P	0.473	0.918	0.576
IMPLE_P			

The last objective of this research was to investigate the mediation effect of a manager's environmental commitment on the relationship between institutional pressures and EMS implementation. Three decades ago, Baron and Kenny (1986) presented an approach to mediation analysis, which many researchers still routinely draw upon. More recent research, however, points to conceptual and methodological problems with Baron and Kenny (1986) approach (e.g., Hayes, 2013) and against this background, our description builds on Zhao, Lynch and Chen (2010). They offer a synthesis of prior research on mediation analysis and corresponding guidelines for future research, as Hair et al. (2018) suggested.

This objective was pursued by conducting PLS-SEM analysis using Smart-PLS bootstrapping process. The results of our simple mediation suggest that manager environmental commitment mediates the relationship between institutional pressures and EMS implementation. The analysis is based on Hair et al., (2018) mediation effects testing, which illustrates and addresses the significance of the direct and indirect effect of the construct manager environmental commitment on the relationship between institutional pressures and EMS implementation.

Table 1.12: Mediation Analysis: Manager's environmental commitment as Mediator between Institutional Pressures and EMS implementation

Exogenous Variables	Direct Effect (P3)	Indirect Effect (P1*P2)	Total Effect (P3+P1*P2)	VAF Range (P1*P2)/(P3+P1*P2)	Mediation Type
LEGAL_P	0.784	6.800	7.584	0.896	Full mediation

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CUSTO_P	0.188	20.051	20.239	0.991	Full mediation
COMPE_P	0.633	6.070	6.703	0.905	Full mediation
STAFF_P	6.700	70.603	77.303	0.913	Full mediation
MANAG_P	1.201	3.083	4.284	0.719	Partial mediation

Exogenous variables: regulatory pressures, customer's pressures, competitor's pressures, employee's pressures and manager's attribute pressures); Endogenous variable: EMS implementation.

As per Table 1.12, our findings provide empirical support for the mediating role of a manager's environmental commitment in the reputation model. More specifically, the manager's environmental commitment represents a mechanism that underlies the relationship between institutional pressures and EMS implementation in SMEHs establishment. Institutional pressures (LEGAL_P, CUSTO_P, COMPE_P, and STAFF_P) lead to the manager's environmental commitment, and the manager's environmental commitment, in turn, leads to EMS implementation. However, for the relationship between managers attribute pressures (MANAG_P), and EMS implementation, the manager's environmental commitment was found to serve as a complimentary mediator. Hence, some of the manager's attributes pressures that might affect the EMS implementation are explained by the manager's environmental commitment. They conveyed that the relationship between institutional pressures and EMS implementation can be intervened by the manager's environmental commitment of EMS where practices and implementation of EMS in SMEHs establishment were identified. As a result, Hypothesis H7, H8, H9, H10 and H11 were validated. Thus, our findings provide support for the mediating role of the manager's commitment in the model.

5. Discussion

The findings of the SmartPLS-SEM analysis revealed that the model achieved satisfactory constructs' validity and reliability. The study found no significant relationship between regulatory pressures, customer pressures, competitor's pressures and EMS implementation in hotels. It was also found that there is no significant relationship between competitor's pressures and manager's attributes and manager's environmental commitments. However, the rest of the determinants were found highly significant to all exogenous determinants. This correlated with some of the current studies such as in Shairullizan et al. (2013), Darnall (2006) and Deraman, et al. (2017) that regulatory pressures, customer demands, level of competition and attitudes in SME hotels establishment were believed to be essential factors for EMS implementation. The result of the study also correlated with the survey by Qinghua Zhu et al. (2013) that domestic and international institutional pressures lead to the successful implementation of ISO9000 and can lead to the successful implementation of environmental management as ISO14001 environmental certification systems.

Customer's pressures and competitor's pressures which are not significant in this research also parrellal with the current study which found that these factors are no significant in AME hotels EMS implementation (Brammer, et al., 2012; Bianchi & Noci, 1998). On the contrary, larger-scale businesses may perceive that EMS influences economic and operational performance for more significant benefits (Banerjee et al., 2003). Additionally, the manager's attributes pressures could not quickly identify the benefits of EMS because of the entrepreneur's values and attitudes rather than strategic imperative (McKeiver & Gadenne, 2005). However, the overall findings are consistent with Simpson et al. (2004) and Brammer et al. (2012).

To conclude, the study confirmed that regulatory pressures contribute EMS implementation, customer's pressures, competitor's pressures, employee's pressures, manager's attributes pressures and environmental commitment at certain levels of establishments from the Malaysian SMEHs perspective.

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The bootstrapping analysis in this research revealed and provided empirical support for the mediating role of a manager's environmental commitment in the structural model. More specifically, the manager's environmental commitment represents a mechanism that mediates the relationship between institutional pressures and EMS implementation in SMEHs establishment. Institutional pressures lead to the manager's environmental commitment, and the manager's environmental commitment, in turn, leads to EMS implementation.

However, for the relationship between managers attribute pressures and EMS implementation, the manager's environmental commitment was found to serve as a complimentary mediator. Hence, some of the manager's attributes pressures that might affect the EMS implementation are explained by the manager's environmental commitment. This correlated with the findings in some of the authors' studies, which is consistent with the notion theorized such as Yoon et al., (2016) that EMS implementation is affected by organizational trust and commitment, ultimately influencing organizational behaviour and intention. They conveyed that the relationship between institutional pressures and EMS implementation can be intervened by the manager's environmental commitment of EMS where practices and implementation of EMS in SMEHs establishment were identified.

To conclude, the study confirmed that the manager's environmental commitment is contributed to the relationships between regulatory pressures, customer's pressures, competitor's pressures, employee's pressures, manager's attributes pressures, and EMS implementation at certain levels of establishments from the Malaysian SMEHs perspective.

6. Conclusion

To conclude, the study confirmed that the manager's environmental commitment is contributed to the relationships between regulatory pressures, customer's pressures, competitor's pressures, employee's pressures, manager's attributes pressures, and EMS implementation at certain levels of establishments from the Malaysian SMEHs perspective.

The findings from this research demonstrate the need for an improved current strategy in managing the institutional pressures factors, particularly in Malaysia, which can also benefit other countries in this region. The similarity of food waste, energy and water management issues among SMEHs establishment and larger-scale hotels alike indicates that the development of environmental management implementation among SMEHs establishment started with the proper decision-making process among the top-level managers at these establishments to implement EMS in their premises. Even at a small scale, the appropriate decision-making process for EMS implementation could benefit the establishments in the long run. This needs to be strategized accordingly at the regulatory, customers, competitors, employees, and managers.

This research aims to examine the mediating effects of manager's environmental commitment on the relationship between the organization's internal and external pressures and the EMS implementation in the SMEHs establishment in Malaysia. The study's findings indicate that a gap exists between manager's commitment towards the EMS implementation at a certain level depending on types of independent variables studies: regulatory pressures, customer pressures, competitor pressures, employee pressures and their attributes pressures on EMS implementation.

Conclusively, it implying a need for a different types of strategies such as training, certifications, understanding the Standards Malaysia and regulations set by the government, and even understanding the current needs and wants of consumers and competitors. Despite the consistent level of EMS practices in these SMEHs establishments, which doubtfully worried but needs to be positioned as major front-line strategy of industry, community, environment, and country benefits. Other than that, changes towards these institutional pressures need to be consistently checked and promoted for sustainable awareness that later be converted into routine behaviour in their decision-making process. It is high time for the SMEHs establishment not to depend on the direction of the ruling government but looking at the bright side of

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competitive competitors in the fair market, customers and consumers need, and the employees' opinion for the betterment of this only planet.

6.1 Theoretical Implications

The results of the study are well-suited for the current development of the hospitality and tourism industry. When choosing the topic of the study, one of the most influential deciding factors was to develop something that is both closely connected to international research trends and can be regarded as a currently relevant problem from a professional point of view. The chosen topic set out to fill a void in the literature and industry practitioners by examining the hospitality experience from the supplier's side, SMEHs establishment. Consequently, the study has the potential to gain international significance.

The study's academic significance lies in the empirical examination of the dimensions of the experience, scheming up the conceptual boundaries through the experience-centric approach, which aims to manage experiences, not products. The experience can be treated as content, formable and developable and not only a part of a product or simply as a context. Furthermore, the empirical research produced explorative results, a prime example being the various manifestations of the concepts of the experience-centric approach, which, if supplemented with relevant researches – thus increasing their reliability, can contribute to the field's ever-growing basis of knowledge. The hypotheses originating from the theory empirically tested the coherence, and the majority of them were proven to be true – further increasing their academic significance. The coherencies were proven false by the research and led to valuable conclusions, although their thorough rejection requires further investigation.

The structural model schemed up in the research was deemed partially acceptable. The research results, hand in hand with research questioning the theory, can give life to new conversations within academic circles. Moreover, the various factors that surfaced while scheming up the structural model might inspire further research and tests introduced in the chapter discussing future research options. This research has added to the dissemination of institutional theory in several ways. The study examined the dissemination of various external and internal pressures in SMEHs establishment within a wide geopolitical range. It considered the dissemination of five variations of external and internal pressures: regulatory pressures, consumer pressures, competitor pressures, employee pressures and manager attribute pressures.

The geographic spread of adoption of these pressures for EMS implementation was seen throughout the study regions exhibited a higher proportion of adopters than others. This dissemination may result in the fact that despite geographic boundaries, accommodation sub-sectors within the area have several factors in common such as small size, limited resources, and in defining SME hotels establishment in Malaysia. This research sought to understand why some hotels did not fully adopt environmental management and assessed the differences between adopters and non-adopters regarding characteristics, attitudes to the natural environment, understanding of implementation benefits and forces among factors influencing factors the implementation.

It was found that there were very few differences between factors in influencing the implementation based on the point of view and top managers' perspective. However, given that adoption of EMS within the industry is still in the growth segment of the diffusion curve, the number of non-adopters may decrease over time. This is supported by the fact that some non-adopters have indicated that they were relatively new properties and/or intended to implement EMS in the future. This also supported that those influential factors could be benefited by the organization based on the level of importance for them to fully-adopting the EMS in their organization.

An important theoretical aspect of this research is that an open, dynamic system was studied. There is an ongoing change in hotel understanding of factors influencing the accommodations intention to implement EMS. This research analyzed the respondents' basic familiarity with the institutional pressures that influenced their decision. Furthermore, the study analyzed outcomes from the institutional pressures,

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which is limited among SMEHs accommodation. It was found that outcomes accrued due to implementing even the most basic form of coercion. More outcomes accrued if an advanced level of understanding was implemented among the managers.

6.2 Practical Implications

a) Accommodation's Decision Makers

The result from the present study is also significant to position the importance of understanding the new variables of the institutional pressures as overall in affecting the EMS implementation improvised the theory highlighted by DiMaggio and Powell framework back in 1983. At the same time, the present study found that at a different level, these institutional pressures responded differently towards the intention of decision-makers mediated by other factors, which are manager's environmental commitment and their perceived benefits. Thus, the result derived from the study could contribute to integration between customers, competitors, and employees, the decision-makers with government support to identify the feasible and effective way to increase the positive strategies for SMEHs establishment to implement EMS. Conversely, the adoption of EMS in SMEHs establishment will improve the customer's loyalty and the public image of the business. This will yield an immediate and visible improvement in the organisation's efficiency (Fernandez-Vine et al., 2010).

The study's finding confirmed that the manager's environmental commitment is contributed to the relationships between regulatory pressures, customer's pressures, competitor's pressures, employee's pressures, manager's attributes pressures, and EMS implementation at certain levels of establishments from the Malaysian SMEHs perspective.

Given the results of this research, the following suggestions are recommended for hotel decision-makers; Firstly, SMEHs establishment's decision-makers could start environmental management at the most comfortable level comfortable. SMEHs establishment does not need to follow the initiatives initiated by bigger hotels but could start small with whatever environmental management practices are most comfortable to them first.

Secondly, they could collectively access 'expert' training or work with hotel associations to do such. Lack of top management commitment to the EMS implementation was one of the barriers in this research. Hence, the leading management forum should be well communicated among all SMEHs establishment's top management to communicate the sample costs vs benefits of different initiatives at each SME hotels level through experts with the study area by presenting the result of the research.

The third suggestion is to think outside the box and tap resources that may be often overlooked. Apart from that, each of the SMEHs should not only tapping the significant issues in EMS implementation but should consider even some tiny initiatives such as grow own organic vegetables at the back of the hotels, sending the employee to attend forums, involved and be part of the environmental research at the small scale, recycling activities, etc.

However, this research also raises another question that can be the subject of future research, especially for all SMEHs establishments that implement EMS and consider how much the fact that environmental certifications can be a distinguishing factor in achieving better results. Fernandez-Vine et al. (2010) suggested that these SMEHs establishments look after these significant differences as comparative analysis between large and small hotels could be different.

Finally, the findings in this research indicate that a gap exists between the manager's commitment to the EMS implementation that implying a need for training and increased awareness of green management practices. Training could enhance their understanding of appropriate environmentally-friendly practices for SMEHs establishment, and the decision to attend training could be extended to other employees.

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b) Managerial and Policy-Makers

The survival of Malaysia's hotel establishments sector depends mainly on the quality of the natural environment. Therefore, the accommodations sector has an essential role in protecting natural resources. One way to enhance protection is for all properties to implement environmental management practices, and implementation needed slowly but surely. Additionally, the sector's survival depends on its economic sustainability. The outcomes of EMS implementation and its influenced factors proposed by this research accentuate that adopting this policy makes sound business sense.

Adopters of environmental management systems practices in Malaysia's SMEHs establishment industry unveiled a variety of characteristics. This should encourage those establishments' decision-maker or owner that may think their respective characteristics prohibit them from implementing environmental management practices. They can also choose how they want to begin environmental management by implementing basic environmental best procedures or through more advanced environmental management from the onset. Benefits accumulate to the environment and the property irrespective of the level of EMS implemented.

The findings concluded that regulatory pressures contribute EMS implementation, customer's pressures, competitor's pressures, employee's pressures, manager's attributes pressures and environmental commitment at certain levels of establishments from the Malaysian SMEHs perspective. Hence, adopters that are considering adopting EMS in their establishment should be encouraged to look no further on these pressures to be considered such as the regulations implications, consumers and competitors' pressures, as well as other internal pressures such as employees and manager's attributes towards the willingness to implement EMS.

6.3 Limitations and Recommendations for Future Research

The research method for this research was an online survey. This research method was preferred because it helped capture a large sample size and increased the overall response rate of the survey. However, an online survey approach does have some limitations. It is time-consuming and not appropriate for research with a limited time frame. This method could have been further enhanced by using an Email-based survey, which would have speeded up the process for feedback for research with a limited time frame. The responses from several hoteliers at the introductory level of the pilot study indicated that there was some reluctance to respond to the survey because of the method. Hotel managers were invited to participate by email, and instead of having email addresses confirmed for each hotel, many of the contacts did not reach the intended recipient.

Additionally, emails may have ended up in junk mail despite attempts to prevent this occurrence. A pre-notice was sent to each hotel manager in the database. However, if this pre-notice went to junk mail, the subsequent invitation and reminders likely followed the same route. Furthermore, the nature of emails is that they can be read and quickly forgotten if the subject is not a priority. The best way to ensure this issue pre-highlighted is to send more frequent soft reminders from time to time. Another limitation of the study that we identified during the survey process was rechecking the time frame in which the data was collected to ensure the response rate is favourable. The survey also was sent out during the non-peak seasons to confirm the speed of response is higher than we could expect.

The response rate to the survey, though acceptable, was somewhat lower than anticipated. While the timing of the study did contribute to this limitation, it was also felt that fewer non-adopters might have responded to the survey because of the misperception that it was aimed at hotels that had implemented environmental management. It is possible that the low response rate and the type of respondents influenced the study results. The study was also limited because much of the focus was on properties that had adopted some level of environmental management. Therefore, there was a low level of variation between the responses to the questionnaire. Also, the characteristics of responding hotels were very similar. This relative

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homogeneity may have been the underlying reason why characteristics were not found to be predictors of adopting the innovation under study. However, given the predicted response rate despite preliminary levels of survey submission where the researcher had a quick check with the identified SMEHs to identify if they are implementing EMS in the establishments.

Another limitation would be selecting the appropriate population, as much of the focus was on SME properties that had adopted some level of environmental management systems. Therefore, there was a low level of variation between the responses to the questionnaire. This relative consistency may have been the underlying reason why characteristics were not predictors of adoption and implementation of EMS by all Malaysian SMEHs.

On the other hand, instead of using a quantitative approach only, similar research can be duplicated using a qualitative approach such as semi-structured interviews as a data collection method with general managers from selected Malaysian hotels. This would give the researcher a chance to collect first-hand information and capture individual views, bringing in unknown and more insightful information. The qualitative studies may be better able to investigate the distinctions that this research has missed.

Lastly, this research mainly focused on external and internal variables as antecedents of environmental management implementations such as government, customer, competitors, employees and manager's attributes; less attention has been paid to internal variables that may act as enablers of appropriate implementation of environmental management. Certain internal variables such as resource availability, organizational structures, and managerial motivations and attitudes could be emphasized in future research to enhance and influence the implementation of environmental management for the organisations' benefit. Hence the prospective study on organizational design, structures and quality management is proposed.

Aside from the limitations discussed above and given the findings of this research, the following action tasks are recommended for future study for consideration. Firstly, the policymakers in Malaysia, such as Malaysian Standards for ISO14001 and Ministry of Energy, Green Technology and Water of Malaysia, should continue to encourage and, where possible, facilitate hotels' environmental management. For instance, the policy-makers could consider identifying and prioritising the pressures (regulatory, customers, competitors, employees or managers attributes) that the SMEHs establishment could pay attention to based on their needs and capacity. In fact, as a body of regulator-organization, engagement can be extended through setup forums where they can regularly meet and share information with organizations. Such forums should be used as a medium to address barriers and challenges to organizations' display of various pro-environmental behaviours.

Secondly, to partner with other sectors to conserve resources by setting up a knowledge management support network. A network of organizations such as SMEHs establishment in Malaysia, which have consistently and successfully demonstrated pro-environmental behaviour such as EMS implementation by setting up documentation and share their experiences with other organizations through mediums such as Ministry of Water, Land and Natural Resources, Ministry of Energy, Science, Technology, Environment & Climate Change and Institut Alam Sekitar Malaysia (EIMAS). Such initiatives probably should be set up on a state-by-state basis so that each of the SMEHs in each state is well presented. If feasible, the perspective can be extended to other industries in the development of such support documentation. Such similar initiatives have been undertaken in Germany and Hong Kong, where a case study of successful EMS implementation has been documented and shared by the involved institutions and organizations (Babakri et al., 2004).

Thirdly, they could work with the other industry players to implement infrastructural changes (e.g. recycling), benefiting residents. Aside from implementing the EMS at different levels, the SMEHs establishment and the management could collaborate with other industry players such as local municipal departments, NGOs, public and private organizations to plan, invest and recheck on the implementation of

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infrastructural changes that can take place, which will also beneficial to the local communities (Kiper, 2013).

According to Accelerating Low Carbon Growth50 report in 2011, 59% of emissions reduction activities reported by Global 500 respondents (the Global 500 are the largest companies by market capitalization included in the FTSE Global Equity Index Series) have a payback period of three years or less and 41% of initiatives have paybacks of over three years. This willingness to invest in activities with a medium to long term payback suggests that some companies regard energy and emissions reduction as an important strategic priority. However, smaller organizations like SMEHs establishment are less likely to be willing to accept this cost as they have numerous other business critical demands on their resources. Finally, it is suggested that they consider creating incentives (e.g. tax credits, duty-free concessions) for properties to adopt environmental best practices. According to Abdul Aziz et al. (2017), the incentive mechanism has a moderating effect on the relationship between desire intention and managers' behavioural intention to implement EMS. The policymakers also could incorporate a tiered incentive approach to encourage high performance among SMEHs establishment. Tiered incentives provide options and flexibility, enabling applications for various technologies while still rewarding the highest performance with more significant incentives.

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Appendix A: Cross-Loadings with items load stronger in their own construct in the model

VARIABLES / ITEMS	COMMIT_P	COMPE_P	CUSTO_P	IMPLE_P	LEGAL_P	MANAG_P	STAFF_P
Managers Environmental Commitment (COMMIT_P)							
Commit_3: Our organization decision-makers are supportive of environmental initiatives implemented.	0.921	0.403	0.632	0.840	0.579	0.456	0.813
Commit_6: Our organization will implement environmental programs and initiatives only if our competitors have done so or intend to do so.	0.846	0.244	0.532	0.678	0.437	0.372	0.691
Commit_9: Our organization needs my full support in implementing environmental programs and initiatives.	0.819	0.353	0.540	0.576	0.588	0.581	0.630
Competitors Pressures (COMPE_P)							
Compe_12: There are many 'promotion wars' in our industry.	0.468	0.907	0.363	0.394	0.679	0.440	0.284
Compe_13: Anything that one competitor offers, others can match readily.	0.266	0.830	0.251	0.071	0.690	0.288	0.087
Compe_14: One hears of a new competitive move almost every day.	0.206	0.813	-0.008	0.103	0.601	0.163	0.109
Customers Pressures (CUSTO_P)							
Custo_11: Our customers expect our hotel to be environmentally friendly.	0.496	0.043	0.741	0.461	0.130	0.383	0.425
Custo_7: Our customers feel that environmental protection is a critically important issue facing the world.	0.497	0.247	0.724	0.272	0.444	0.352	0.308
Custo_9: Our customers are increasingly demanding environmentally friendly products and services.	0.559	0.310	0.873	0.464	0.632	0.469	0.526
EMS Implementation (IMPLE_P)							
Imple_CF13: Our hotel invests in research and development for cleaner products and technologies.	0.632	-0.025	0.336	0.817	0.057	0.325	0.633
Imple_EF1: Our hotel has an in-house paper recycling program.	0.721	0.186	0.499	0.879	0.399	0.474	0.776
Imple_MK25: Our hotel advertises our environmental efforts.	0.753	0.460	0.486	0.879	0.595	0.334	0.709
Regulatory Pressures (LEGAL_P)							
Legal_1: Regulation by government agencies has greatly influenced our hotel's environmental strategy.	0.541	0.645	0.527	0.399	0.917	0.357	0.406
Legal_4: Tougher environmental legislation is required so that only	0.588	0.781	0.469	0.347	0.943	0.367	0.405

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environmentally responsible hotels will survive and grow. Legal_5: Our hotel's environmental efforts can help shape future environmental legislation in our industry.	0.402	0.460	0.301	0.313	0.584	0.280	0.074
Manager Attributes Pressures (MANAG_P)							
Manag_21: I am pleased if I know that my work has contributed to the environmental performance of the company's products/services/operations.	0.318	0.326	0.538	0.267	0.339	0.794	0.412
Manag_26: I feel I share a responsibility for the environmental performance of my company's products.	0.586	0.352	0.474	0.468	0.434	0.923	0.521
Manag_27: I am prepared to put in extra effort to meet organizational environmental performance vision, missions and goals.	0.401	0.346	0.357	0.361	0.318	0.853	0.404
Manag_29: I believe my credentials and experiences affecting my decision in implementing environmental practices in this company.	0.343	0.133	0.288	0.259	0.142	0.588	0.348
Employees Pressures (STAFF_P)							
Staff_16: Our employees are well understood and communicated the benefits of environmental management.	0.644	0.212	0.229	0.542	0.389	0.342	0.807
Staff_17: Our employees are encouraged to contribute innovative suggestions and solutions to environmental management practice.	0.812	0.207	0.570	0.792	0.389	0.601	0.946
Staff_20: Our employees are provided with training and/or instruction in the areas of environmental considerations and awareness.	0.738	0.132	0.607	0.826	0.269	0.455	0.897

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