

A Comparative Study on the Eco-Innovation Practices between Hotels and Manufacturing Auto Parts Firms in Malaysia

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Abstract

Because of the growing public concern about preserving the natural environment as a result of rapid environmental pollution, there is an immediate requirement for businesses to incorporate eco-innovation practices into their corporate strategy. Many enterprises recognize the value of eco-innovation, but there is little evidence released describing eco-innovation practice in variety of industries. This study aims to distinguish eco-innovation practices in Malaysian hotels and automotive parts manufacturing firms. 500 questionnaire were administered to top-level managers in Malaysia's hotel and manufacturing industries, and 439 data sets were analysed using the Statistical Package for the Social Sciences (SPSS). The findings revealed eco-innovation practices implemented in both hotels and automotive manufacturing firms. According to the findings, the level of implementation of eco-innovation practices in Malaysian manufacturing auto part enterprises is greater than in Malaysian hotel firms. As a result, the findings of this study seem to be important in shedding light on eco-innovation practices in hotels and auto parts manufacturing. Furthermore, these findings echo a new research agenda concerning how small and medium-sized enterprises (SMEs) develop their capabilities to engage in eco-innovation practices.

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Introduction:

Innovation is the creation of a novel idea or specifically transformed element which is product and service, method and the process, a novel advertising or marketing system, or a current hotelier's technique of commercial practice. Innovation takes place within a broader framework that influences mechanisms of design, production of invention, and economic an environmental consequence. Nowadays, the environmental climate change and new market demands had influenced the industries to make some changes, especially in the hotel industry. Hence, hoteliers are increasing their concentration on eco-innovation to generate resource-efficient and cleaner production to sustain their business. Eco-innovation is known as all strategies that relate to innovative activities which aimed at significantly and effective progress to achieve the goals of improving environmental protection and sustainable development efficiently.

As stated by Siti-Nabiha et al., (2017), the tourism sector has contributed a lot to the country especially in economic development, but at the same time it also affects society and the natural environment negatively. This point proof by the

study of Lenzen et al. (2018) who pointed out that the tourism sector is one of the key sources of CO₂ emissions since 8% of global greenhouse gas emissions come from tourism's global carbon footprint accounting. Matter of fact, Kocak et al., (2020) stated that sustainable tourism development should be paid attention to by related parties since the industry has harmed the environment. This point also agreed by Mohamad, Arifin, Samsuri, and Munir (2014) who revealed that the hotel industry has contributed 75% of its environmental impact to the unjustifiable soft consumables usage, energy, and water, while at the same time making a significant attribution to climate change and global warming. Furthermore, the hotel industry is one of the world's leading industries, which uses a huge percentage of natural resources and creates tremendous amounts of pollution towards the environment (Nilashi et al., 2019). Hence, this study will discuss the environmental innovation practices which can increase environmental awareness and support the implementation of government policies.

The automotive industry has significant contribution to the Malaysian employment (more than 550,000 employees before and after market) and economic growth (3%-4% GDP per year) via manufacturing and marketing activities (Rashid *et al.*, 2015). This industry is steadily growing since 1985 in technology transfer and product development while protected by the government because the industry encompasses an increasing number of companies per year (up to 570 manufacturers and 35,000 aftermarket businesses) and is built up from numerous components and suppliers in different industries such as metal, plastic, rubber, Electric and Electronics. Ironically, in recent years, automakers have faced a tremendous challenge since growing attention on sustainability development. Even though the automotive industry is related to economic sustainability, the impact on the environment and society is vice versa.

Literature review:

Definition of eco-innovation

The term eco-innovation is a combination of eco (as in ecological) and innovation. Eco is derived from the Greek word eikos, which means home. Previously, environmental innovation, green technology, and green innovation have all been used to characterise the eco-innovation approach (Bossle et al., 2016; Santos et al., 2017). As mentioned by Schiederig et al. (2012), despite the phrase "environmental" innovation being the current dominant term, the concepts "green" and "eco-innovation" have been increasingly prevalent in scientific papers since 2005. Thus, many researchers defined eco-innovation from many aspects. First, the term eco-innovation was introduced by Fussler and James (1996) as "the process of developing innovative and business-value products, processes, or services that significantly minimize the negative impact on the environment." Meanwhile, Kemp and Pearson (2007) also defined eco-innovation as all forms of activities that involve an invention process that attempt to significantly improve environmental protection by reducing pollution, negative effects, and other environmental concerns. Furthermore, Escuela (2015) stated that eco-innovation is defined as the introduction of a new or improved product or service, process, organisational transformation, or marketing solution that conserves natural resources such as energy, water, and land while reducing toxic substances throughout its life. Table 2.1 summarises several definitions of eco-innovation that have been used in significant studies.

Table 2.1: Definitions of Eco-innovation.

Author	Description
Fussler and James (1996)	The development process of new products, processes and services that deliver customer and business value while dramatically reduce the environmental effect.
Hemmerlskamp (2000)	An innovation is put in place to prevent or lessen humanistic strain on natural resources, clean up the harm that has already been done, or to screen out issues that might arise in the future.
Rennigs (2000)	Innovation process towards sustainable development
Kemp and Pearson (2007)	To develop or adopt a new product, production process, service or management or business strategy that reduces environmental risk, pollution, and other negative resource usage impacts (including energy use) compared to equivalent alternatives.
Carillo and Hermosilla (2010)	Innovation that improves environmental performance

Eco-innovation observatory (2013)	New or better product (item or service), method, organisational shift or marketing solution that conserves natural resources (including materials, energy, water, and land) and reduces dangerous substance emission.
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García-Granero et. al (2020) stated that eco-innovation is characterized as the implementation of novel products or a substantial increase in product/service benefits, enhancement of procedures and process efficiency, and new marketing strategies that can reduce the use of natural resources (such as products, energy, water, and soil) and reduce the release of hazardous pollutants over the life cycle of the product. According to Yurdakul (2020), eco-innovation leads to environmental responsibility and development objectives through the introduction of innovations, behaviours, products, and processes. García-Granero et. al (2020) explained that this principle plays a crucial role in the transition to more sustainable development economies. Hence, eco-innovation is also distinct from conventional innovation activities because of the environmental viewpoint (Yurdakul, 2020). Yurdakul (2020) acknowledged that the development or use of cleaner production technology enables companies to have the potential for eco-innovation.

The Organization for Economic Cooperation and Development (OECD) report in the field of eco-innovation proposes that eco-innovation typology is built up from target (product and process) and non-target (marketing, organizational, and institutional) modes of change, as well as several forms of environmental impact such as long term and short term. To sum up, eco-innovation is a type of innovation that aim to develop, implement, or modify services, processes, products, organizational systems, or marketing techniques to reduce the negative effects toward the environment. Eco-innovation is recognised as part of innovation activities to reduce environmental burden, better economic exchange, and targeting on sustainability. OECD (2009) and Rennings (2000) discovered that eco-innovation executes in both technology (product and process) and non-technology (organisations, social, and institutions). The growing attention of global concern on sustainable development and green practices acquire attention by both scholars and managers to discover the factors of successful eco-innovation implementation and its outcomes. Table 2.2 show research under eco/green innovation in selected areas.

Table 2.2: Summary of eco-innovation in the selected sectors

Sectors	Authors
Manufacturing	(OECD, 2009a), (Salim, Ab Rahman And Abd Wahab, 2019)(Cheng, Yang And Sheu, 2014), (Wang, 2019), (OECD, 2009b), (Roper And Tapinos, 2016), (Singh <i>Et Al.</i> , 2020), (Xavier <i>et al.</i> , 2020), (Rashid <i>et al.</i> , 2015), (Weng and Lin, 2011), (Bossle <i>et al.</i> , 2016), (Huang and Li, 2017), (Bossle, De Barcellos and Vieira, 2016), (Hernandez, 2018), (Shazia Kousar <i>et al.</i> , 2017), (Karimi Takalo, Sayyadi Tooranloo and Shahabaldini parizi, 2021), (Nekmahmud and Fekete-Farkas, 2020), (Star, 2017), (Jun <i>et al.</i> , 2021), (Rabadán, González-Moreno and Sáez-Martínez, 2019), (Bossle, 2013), (Cámara, 2018), (Achmad Fauzi, 2019), (Pacheco <i>et al.</i> , 2017), (Pacheco <i>et al.</i> , 2018), (Al-Shami, S., & Rashid, 2021), (Rashid <i>et al.</i> , 2015)
Hotel	(Wang, Font And Liu, 2020), (María Del Rosario, Patricia S. And René, 2017), (Leonidou <i>Et Al.</i> , 2015), (Alonso-Almeida, Rocafort And Borrajo, 2016)(Fusun Istanbul Dincer, Orhan Akova, Suna Mugan ErtugraL, 2017)(Aboelmaged, 2018), (Asadi <i>et al.</i> , 2020), (Reyes-Santiago, Sánchez-Medina and Díaz-Pichardo, 2019)
Construction	(Hazarika and Zhang, 2019), (Peiró-Signes, A. and Cervelló-Royo, 2015),(Halicioglu, 2020), (Romanian, Journal and Paraschiv, 2011), (Isa, Abidin and Yahaya, 2019), (Ma <i>et al.</i> , 2019), (Ben Slimane, Glaser and Auplat, 2015)
Hospital	(Magadán-Díaz, Sotiriadis and Rivas-García, 2019), (Sotiriadis, Marios and Magadán-Díaz, Marta and Rivas-García, 2020), (Auer and Jarmai, 2017)
Banking	(Razaq, 2019)

The importance of eco-innovation to the hotel industry

The tourism sector in Malaysia plays an important role in promoting the country economic development and has a significant impact on Malaysia's GDP (Mohammed and Rashid, 2018). Hence, the government of Malaysia has put a great effort to push the tourism sectors for moving towards the long-term economic development of Malaysia in 2020 (Yadegaridehkordi et al., 2019). Malaysia has dedicated itself to environmental protection but has sadly struggled in terms of efficient policies and implementation. Malaysia has pledged environmental sustainability efforts, but unfortunately, it has fallen short in the areas of effective policy and enforcement. The policies including the sustainable tourism industry which foster sustainable economic growth had proposed in the New Economic Model since 2010. Over the past two decades, the hotel industry had gone through rapid and mass change because of uncertain customers demand and economic downturn. Even though with all the challenges and threats, the hotel industry is acknowledged as a valuable industry and play an important role in country development. Malaysia is one of the countries in Southeast Asia that successfully develop their economy based on the tourism industry because of the magnificent scenery as well as a cheaper exchange rate. The hotel sector is important in economic development since it is a major contributor to the economy in Malaysia. Most hoteliers are now primarily focused on eco-innovation, as they lead to environmental degradation by building construction, disposal of waste and water consumption (Mensah, 2006). According to a report by UNWTO, UNEP, and WMO (2007), the hotel sector accounts for nearly 21 per cent of all tourism carbon dioxide (CO₂) emissions.

Given that the awareness towards environmental issues of society is increasing day by day and caused travellers are more likely to choose an eco-friendly hotel as their destination. As a result, an increasing number of hotels have adopted eco-innovation practices within the organization to fulfil the market demands and solve environmental issues at the same time. According to Lita et al. (2014), in developed countries, attention to environmental issues and business practices is more common compared to developing countries, especially as regards community awareness and government policy and regulation. Meanwhile, Malaysian hotels are more targeted to facilities and infrastructure than to environmental practices and policies (Abdul Samad et al., 2008). Since environmental awareness has been increasing around the globe, green practices are seen as a significant factor to be addressed in the hotel industry in the present day.

Based on the perspectives of eco-innovation, it is necessary to recognize the existing condition. With the occurrence of global warming, natural resources depleting, pollution control, and increasing demand for environmentally friendly items nowadays, firms are now experienced numerous environmental difficulties. Thus, the concept of "eco-innovation" spreads widely in many countries as people believed that eco-innovation could protect the environment while increasing business performance at the same time (Doran and Ryan, 2012). This point was supported by Rocafort and Borrajo (2016) who stated that eco-innovation directly increases the growth of the economy and society in a country through protection for the environment, create job opportunities, the acquisition of new skills and new businesses, all of which affect the economy positively. Molina-Azorín et al. (2009) and Perramon et al. (2014) proposed that sustainability can positively affect the economy in three ways through energy savings, increase the competitive advantage by creating an eco-friendly image, and gains a greater benefit of being a green company.

The benefits of eco-innovation practice to the manufacturing industry

Eco-innovation provides several advantages such as reducing the difficulty and cost of compliance with environmental legislation. There are also secondary advantages that can improve competition between businesses and countries by developing new opportunities for environmentally sustainable goods and processes representing the impact of employment and more. Fernando and Wah (2017) have discussed the benefits of eco-innovation adoption that will help a business achieve the environmental targets required for survival. Other than that, Kalpande and Toke (2020) mentioned green supply chain has become an essential management method and ideology for proactive and leading production organizations. The application of this kind of scope activity ranges from Green Product to the interconnected supply chain of life cycle management, from producer to manufacturer to customer, to reverse logistics to close the loop.

García-Granero et. al (2020) stated that eco-innovation is defined as the establishment of new products or a significant increase in benefit of product/service, process improvement and operational improvements and new marketing solutions that can minimise the use of natural resources (including products, electricity, water, and soil) as well as reduce the release of hazardous substances during the product life cycle. There are many previous studies proven that eco-innovation can give a positive impact on environmental sustainability, employee performance and competitive advantages.

Besides, eco-innovation is particularly important where modern, cleaner manufacturing processes need to be implemented and more effective goods and improvements in business models need to be produced in coping with environmental harm (García-Granero et. al, 2020). García-Granero et. al (2020) also stated that identifying the key practices of diverse industries' eco-innovation will allow public and private decision-makers to build support mechanisms for eco-innovation. Buhl et. al (2016) explained that target market demands for non-green items can also increase and, as a result, increase its market share and sales revenues due to spill over impacts. It is obvious that businesses that are pioneering eco-innovations will get an advantage from the "first-mover advantage" which allows them to buy a price premium (Buhl et. al, 2016). Malaysia Food SMEs industry will get the demand in the future if they implement eco-innovation in their product, process, organizational and marketing. With these eco-innovation practices, customer demands increase, and the company is become more well known in the market.

Methodology:

500 surveys questionnaire distributed in Malaysia and 439 returned questionnaires were analyzed. 210 survey data was obtained from the top-level managers of three to five stars hotels which had registered in Ministry of Tourism and Culture Malaysia (MOTAC). Meanwhile, 229 sample data were collected from respondents comprised of Small and Medium (SME) auto part in Malaysia. The questionnaires were distributed thru online platform such as Google Form and link provided and distribute via social media such as Facebook, WhatsApp, Telegram, and Instagram. The data was collected using 5-point Likert scale questionnaire adopted from (Wang, 2019) and then data were analysed the validity and reliability as well as mean value.

Result:

Descriptive analysis:

The background of the organizations is being viewed from a few questions such as the rate of the hotel, length of operation, and the certificate of the hotels. The results are being considered in several forms, such as a table, pie chart, and histogram chart. The data profile is collected from 3-star hotels to 5-star hotels in Malaysia Southern areas, with 210 respondents. Table 4.3 revealed the different rates of hotels, a 3-star hotel, 4-star hotel, and 5-star hotel collected through the survey. Based on the table, there are 94 respondents among 210 respondents working in 3-star hotels, equal to 44.76% of the respondents. Next, 73 of the total respondents worked in the 5-star hotel, which contributed to 34.76% of the respondents. The smallest group of respondents was 43 out of 210 respondents working in the 3-star hotel and contributed to 20.78%. 93 hotels were operated less than five years, and only 21 hotels were operated more than ten years among the total respondents. On the other hand, there are 96 hotels among the 210 hotels that were operated at least five to ten years, and this contributed the highest percentage, which is 45.71%, compared to the other categories. Both represented the percentage of the second-highest group (44.29%) and the smallest group (10%) in this survey.

Table 2.3: Cross-tabulation of Rate and Operation Length of Hotel

Rate of Hotel	Length of Operation			Total
	Less than 5 years	5 to 10 years	More than 10 years	
3-star hotel	25	16	2	43
4-star hotel	43	45	6	94
5-star hotel	25	35	13	73
Total	93	96	21	210

The frequency of sample distribution as well as types of organizations is presented in Table 2.4. Higher frequency of respondents is reported from the metal part industry (N = 69) and other industries (N = 48). There are various types of ownership status among the Malaysian manufacturers, especially for the automotive industry. The respondents for this survey distributed from metal part, engine/transmission, electric/electronic part, rubber part and others. Most of the respondents were from established companies by more than 10 years (80.9%) and by either Malaysian fully owned or Joint Venture Corporation. As approved by Graham (2010), the Malaysian automotive industry is steadily growing and

has stimulated foreign direct investment from the United States of America, Europe, Japan, and others such as Taiwan and Singapore.

Table 2.4: Cross-tabulation type of product and Operation Length of firms

Type of Product	Length of Operation			Total
	Less than 5 years	5 to 10 years	More than 10 years	
Metal part	4	61	4	69
Engine/transmission parts	1	22	7	30
Plastic parts	7	28	0	35
Electric/electronics	6	14	6	26
Rubber parts	0	11	10	21
Others	6	34	8	48
Total	24	170	35	229

Reliability and validity analysis

Cronbach Alpha test was applied in this study to ensure the variable's internal consistency, which indicates how well they connected to each other, and then assesses whether the scale is valid (Bland and Altman, 1977). Table 2.5 showed the Cronbach's Alpha Coefficient Range and its strength of association. The Cronbach's Alpha that more than 0.7 is considered acceptable, exceeding 0.8 is good and those which 0.9 and above is considered excellent. In this study, Cronbach alpha for hotel industry between 0.70 to 0.75 and manufacturing sector is from 0.81 to 0.85 respectively.

Table 2.5: Cronbach Alpha for hotel and manufacturing industry

No	Items	Hotel	Auto parts firms
EP 1	Uses less or non-polluting/toxic materials.	0.75	0.85
EP 2	Improves environmentally friendly packaging for existing and new products.	0.72	0.82
EP 3	Uses eco-labelling.	0.71	0.81
EP 4	Uses low energy consumption such as water, electricity, gas, and petrol during production/use/disposal.	0.73	0.83
EP 5	Uses recycled, reused, or remanufactured materials.	0.73	0.83
EP 6	Uses cleaner technology to make savings and prevent pollution (such as energy, water, and waste).	0.70	0.85

Eco-Innovation practices

Six constructs were designed to evaluate eco-innovation practices, ranging from strongly disagree to agree on a five-point scale strongly. Table 2.6 revealed the mean scores for the six constructs are distributed from 4.39 to 4.57 for the hotel industry. Meanwhile, the means score for the six constructs is ranged from 4.25 to 4.81. The highest mean score for the hotel industry belongs to "Improves environmentally friendly packaging for existing and new products" with (Mean=4.57, Standard Deviation=0.722), followed by "Uses recycled, reused, or remanufactured materials" with (Mean=4.53, Standard Deviation= 0.738). Besides, the mean score for "Uses low energy consumption such as water, electricity, gas, and petrol during production/use/disposal" and "Uses cleaner technology to make savings and prevent pollution such as energy, water, and waste) were same with the 4.51 as the mean scores and 0.745 and 0.699 as the standard deviation. Next, "Uses eco-labelling" with (Mean=4.50, Standard Deviation =0.738), followed by the "Uses less or non-

polluting/toxic materials” with (Mean=4.38, Standard Deviation= 0.730) have the lowest mean score. Meanwhile, for the manufacturing industry, use cleaner technology highly implement in the manufacturing facilities by a mean score of 4.81.

Table 2.6: Mean Score analysis of Eco-innovation Practices

No	Items	Mean Hotel	Mean Auto part firms
EP 1	Uses less or non-polluting/toxic materials.	4.39	4.25
EP 2	Improves environmentally friendly packaging for existing and new products.	4.57	4.32
EP 3	Uses eco-labelling.	4.50	4.62
EP 4	Uses low energy consumption such as water, electricity, gas, and petrol during production/use/disposal.	4.51	4.80
EP 5	Uses recycled, reused, or remanufactured materials.	4.53	4.63
EP 6	Uses cleaner technology to make savings and prevent pollution (such as energy, water, and waste).	4.51	4.81

Note: Scale 1-5

Discussion:

In the hotel industry, the implementation of eco-innovation practices is very crucial. While the use of non-renewable resources is not inherent to this sector, it still has a global impact especially in Malaysia, where the tourism sector was one of the main economic contributors. The operation of hotels results in a substantial amount of water or environmentally harmful materials being used, like disposable plastic containers, non-recyclable packaging, and detergents, as well as other activities that necessitate those items being used (Gila, Jiménez and Lorentec, 2001). With every increase in the number of operations, the pollution of the environment increases as well. Additionally, hotels employ amenities such as towels, bedsheets, and linens, and they are reused by customers (Huang et al., 2014). Reducing the amount of water, energy, and detergent used by hotels is a smart business practice since overuse of electricity, water, and detergents has a negative influence on the environment as mentioned by Patwary, Omar and Tahir (2020).

As mentioned by Martínez-Perez et al. (2015), to develop in the business market, organisations tend to implement eco-innovation techniques that leverage innovation in the operations of hotels and aim to increase the demand for high-quality and sustainable products and services. Additionally, scientific data prove that when hotels implement environmental management systems and eco-labels, their performance improves and they are viewed more positively (Bonilla-Priego, Najera and Font, 2011). In contrast, (Ayuso, 2007) also highlighted that, when a hotel implements eco-innovation systems or practices, and eco-labels, the business performance improved, and a positive public image built up more easily.

There are many facilities in hotels that might overuse the resources. As mentioned, by Alexander (2002), many hotels offer daily laundry service for sheets, towels, and other linens and this led to the use of more energy, chemical detergents, which ultimately caused environmental degradation. However, some of the hotels implemented eco ideas or practices which will result in a lower overall cost of conservation of energy and water such as fluorescent lighting, one of the possible alternatives for energy conservation, not the usage of incandescent bulbs as well as low-flow showerheads and faucet aerators to save water (Alexander, 2002). Yusof *et al.* (2017) also proposed that solid waste management is vital in decreasing garbage (food, metals, plastics, aluminium, and glass) carrying prices while creating a greener world. Thus, hotels worldwide need to employ recycling programmes to cut waste and buy recycled materials.

Eco-innovation could result from any of the following: modification of services, processes, or organisational or marketing approaches; or the ability to create them (Cheng et al., 2014; Rennings, 2000). On the one hand, hotels are reducing energy consumption (Chan and Lam, 2003), increasing water efficiency (Styles et al. 2015) and decreasing waste (Cummings, 1997; Chan et al. 2013, Chan et al. 2013). As mentioned by Smerecnik and Andersen, 2010, eco-innovation entails changing an organization's strategies for employee participation in producing sustainable ideas and actions. Furthermore, previous research also highlighted that innovation in hotel marketing comprises devising tactics to attract green. (Wong, 2013; Reyes-Santiago et al., 2019).

From the perspective of manufacturing industry, the practices of environmental economics have influenced environmental regulations and standards and policies as an important driver in eco-innovation in manufacturing companies. Many businesses today see regulation not as a factor in increased manufacturing costs, but as a stimulus to the creativity of companies that can make them competitive in the eco-innovation market. However, the value of innovative business capacity and their respective plans for eco-innovation have been highlighted based on regulatory regulations on eco-innovation. Low-innovation companies, for example, can accept eco-innovation as a method of manufacturing cost selection and meet the minimum environmental requirements, while high-innovation firms can use eco-innovation as a tool to access new markets. This fact has many regulatory consequences for the effectiveness of legislation on the willingness of organizations to engage in eco-innovation

One of the benefits of eco-innovation can improve companies' performance which is eco-innovation can make reduction cost in the company (Rabadán et. al, 2019). According to Rabadán et. al (2019), eco-innovation increases the potential for businesses to cut costs in a variety of ways. According to Buhl et. al (2016), companies engaged in eco-innovation activities are most likely to experience beneficial impacts on their environmental results such as reduction of waste and emissions. Eco-innovations will increase the production efficiency of businesses, reduce their energy and raw materials consumption (Rabadán et. al, 2019). Malaysia Food SMEs industry can use eco-innovation which can give benefit for cost reduction and thus the actual funds for their company can contribute to the other things such as Research & Development.

Having a strong support from top management in terms of encouraging employees to express concern on organisation's environmental decisions and policies is vital, especially for the Malaysian automotive industry in order to increase operation effectiveness and reduction on the consumption of hazardous materials. Further, discussion of the previous mistakes is crucial so that the employees will not repeat similar mistakes in the future and it is important for them to learn from the past as reported by Nonaka (1991), so that more innovative activities can be performed through TQM, lean management, 5 S and other quality improvement activities to support economical, ecological, and social performance. Apart from improving the process and product performance, as concluded by Ramus (2002), inputs from all parts of the organisation are meaningful in order to achieve the sustainability development especially for upstream and downstream supply chain (Eltayeb and Zailani 2009) as increasing suppliers commitment towards environmental certification.

Conclusion:

In a nutshell, this study provides knowledge and insight about the core principles of eco-innovation and organisational sustainability in the Malaysian hotel industry and manufacturing industry, and how this knowledge could aid both industries. Based on this study, insights could help lead more research on how to minimise the problems faced by both suppliers and customers when assuring customer service quality and sustain their business performances as well as create a good reputation of firms. From the view of managerial aspect, the findings of present study provide empirical data for the hotel industry and manufacturing industry, to indicate the importance of eco-innovation practices organizational sustainability. In this way, several guidelines of managerial level are providing in this study to encourage the hotel managers to adopt eco-innovation practices by utilizing the resource (human capital, leadership, external knowledge, internal technologies, stakeholders) in an organization which can help both industries to sustain their performance.

The sectors of tourism and manufacturing require attention from policymakers since there are important contributors to the economy in Malaysia. These industries will not only significantly reduce the number of emissions produced, but they will also significantly contribute to eco growth and sustainable development. Thus, the policymakers must devote more time and effort towards the eco-innovation practices in both industries. To exploit the resources available to these industries, the government should take advantage of the existing technologies such industries have produced. These firms have the necessary technology infrastructure and strategy, which might be further fortified through eco-innovation legislation to help expand the prevalence of eco-innovation. The government involvement in existing technical and managerial frameworks in both industries can increase the implementation of eco-innovation practices and the organization tends to sustain itself among the competitors. The organization sustainability is important to propel Malaysia from a middle-income to a high-income economy in terms of innovation, creativity, and high-value development sources when improvements could be made.

Eco-innovation is approved as part of a parcel of innovation that helps to reduce environmental effects. Therefore, an organization needs certain capabilities to implement eco-innovation as it is playing an important role to sustain the business. One of the predominant research areas that can be performed in future is measuring the relationship between firm dynamic capabilities and eco-innovation practices for the dedicated industry. Dynamic capabilities offer a sustainability advantage because the term dynamic capabilities in return is described as a "firm's ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments" to win the market competition. Dynamic capabilities approach answers how firms generate new "value creation activities" through efficient resource management by having a specific strategy and organizational process. Thus, dynamic capabilities play an important role to support a firm initiative to perform eco-innovation enroute to sustainable development. An urgent call for new research on how small organization manage to adopt eco innovation practices since small organization have low resources as well as limited finance. Therefore, new research imperative is needed on explaining how small firm develop their own capabilities to practice eco innovation mainly in the developing countries.

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