

Restaurant Sector's Approach to Sustainable Tourism : Moving Beyond Compliance

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Abstract

The tourism industry includes hotels, resorts, other forms of accommodations, restaurants, tour and travel agencies, transport operators and handicraft shops. The threat of environmental damage goes with its growth. Focusing on the small and medium-sized restaurants, this study looks into the efforts exerted by the restaurant sector to reduce the environmental impact of its processes. Two hundred forty (240) small and medium sized restaurants were surveyed to determine their level of implementation of environmental activities. Results show that the level of implementation is high. Their average responses were also subjected to a cluster analysis using Ward's method, a hierarchical clustering procedure. A four cluster solution was derived, identifying four different groups of small and medium sized restaurants on the basis of environmental strategies. The lowest levels of environmental strategies are to be found in the "active" group followed by the "constructive" group, the "leading edge" and the highest levels are the "environmentally excellent" group. These groups are proactive types. They are proactive, largely because of voluntary environmental responsibility and not because of government regulation. It is evident from the study that the restaurant sector has gone beyond compliance in its approach to sustainability.

Keywords: restaurants, sustainable tourism, cluster analysis, t-test, SMEs, environmental strategy

I. Introduction

Sustainability is a concept and attitude in development that refers to being able to meet the needs of the present without compromising the ability of the future generations to meet their own needs (World Commission on Environment and Development, 1987). One of its important aspects is the responsible care of the natural environment. The natural environment is a basic resource from which humanity reaps economic benefits. Economic development is closely linked with the environment. In the conduct of business activities, which spur economic growth, the environment is either depleted or degraded in varying degrees. While businesses contribute to the degradation of the environment, they also depend on it to thrive and grow.

Businesses certainly have a role to play in ensuring that the natural environment is protected so as not to erode the resources upon which future economic growth is based (Welford, 1995). The response of businesses to the environmental challenge is what constitutes environmental strategy. Environmental strategy refers to a "firm's strategy to manage the interface between its business and the natural environment" (Aragon-Correa & Sharma, 2003, p.71). Researchers have chronicled how businesses have reduced the environmental impact of their business processes through the implementation of environmental strategies. Much on the literature on typologies of environmental strategy, however, refer to big firms (Hunt and Auster 1990; Winsemius and Guntram, 1992; Post and Altman, 1994; Shrivastava, 1995; Newman and Hanna, 1996; Rondinelli and Vastag, 1996; Berry and Rondinelli, 1998; Aragon-Correa, 1998; Brockhoff, et al, 1999; Henriques and Sadorsky, 1999; Winn and Angell, 2000).

Among studies on environmental strategies of small firms, Tilley (1999) made a four-group classification of small-firm environmental behavior. The first classification is the strategic environmental behavior or proactive strategy. Firms under this classification have a managed approach to improving environmental performance. Firms that address environmental issues as they arise are said to exhibit piecemeal environmental behavior or reactive strategy.

Those that have a resistant strategy either have accidental environmental behavior or omitted environmental behavior. Accidental environmental behavior consists of making environmental improvements accidentally or unintentionally. Firms with an omitted environmental behavior do not consider the environment in any of their decision-making processes. Tourism refers to all activities related to travel undertaken by a resident to another place for purposes other than work and permanent residence. It is composed of the following sectors: hotels, resorts, other forms of accommodations, restaurants, tour and travel agencies, transport operators, and handicraft shops. In recent decades, it has been an industry of great economic importance. Its total turnover is around USD3.4 billion, which represents 5.5% of the world's gross national product. In fact, tourism is one of the largest and steadily growing industries in the world (Perez-Salom, 2001).

Along with the growth of the tourism industry is the threat of environmental damage (Goodall, 1995). For example, hotels, are not the world's major polluters but they consume a lot of energy and water. They also generate a lot of waste and chemical hazards. If tourism is to be made sustainable, it has to be developed likewise in such a way so as to meet the needs of the present without compromising the ability of the future generations to meet their own needs (Weaver & Oppermann, 2000). Like other industrial activities, tourism has an environmental impact in terms of consumption of scarce resources and waste generation (Welford, Ytterhus, & Eligh, 1999; Bramwell & Alletorp, 2001).

Studies on the environmental strategies of tourism firms available in the literature are only few. Dewhurst and Thomas (2003) came up with three categories of tourism firms, namely, the unconvinced minor participants, anti-green pragmatists, and committed actors, depending on their attitudes and behaviors toward the environment. Among those active in addressing sustainability, only six different actions can be identified. Tourism firms were found to do environmental actions only when needed. This is because of resource constraints as well as operational considerations and the way they look at and value environmental resources.

Forsyth (1997), in his study on the self-regulatory practices of tourism firms, identified four main types of practice. These are cost-cutting, value-adding, long-term investment, and legislation. His results indicate that companies implement a wide-range of practices.

Likewise, a study on the environmental initiatives of hotels in London revealed a wide range of initiatives. However, the practice of these initiatives is not widespread. There is no single action being practiced by the majority of the sample. Thus, whether the practice of these initiatives is beneficial remains in doubt (Knowles, et al, 1999).

Bramwell and Alletorp (2001), in their survey of practices of sustainable tourism currently adopted among tourism firms, found out that most practices are geared towards cost-cutting. A little over 50% of the firms surveyed cited high investment costs as an obstacle in implementing environmental practices.

On the other hand, focus group discussions (FGDs) done among tourism microbusinesses in Southeast Cornwall revealed that most of the firms implement sustainable practices in the traditional areas of waste management, energy conservation, and water conservation (Vernon, Essex, Pinder, & Curry, 2003). Moreover, a survey done by Hobson and Essex (2001) of the accommodation establishments, majority of which are SMEs, in Plymouth, UK, revealed a relatively modest level of adoption of sustainable practices.

The restaurant sector as a strong support to a country's tourism industry (Jabson, 2000) has the following direct environmental impacts, as identified by Davies and Konisky (2000):

1. Energy Consumption. Energy is used for cooking, lighting and refrigeration.
2. Solid Waste Generation. They generate solid waste, consisting mainly of food waste and packaging materials, which constitute a significant portion of the municipal solid waste stream.
3. Air Emissions. Vent hood systems of food service equipment generate emissions.
4. Water Emissions. Grease and food wastes are discharged directly into the municipal sanitary sewer systems.
5. Food Safety – Foodborne Illnesses. Foodborne pathogens are transmitted at the level of food service and food retail operations
6. Refrigerants. Being the largest commercial users of refrigeration and significant commercial users of cooling, restaurants make use of Chlorofluorocarbons that can deplete the ozone layer.

Government also has a role to play in the adoption of environmental strategies by business. The environment is an important issue for both business and the government. By being innovative and responsive, businesses have drawn competitive strength from environmental improvements. These environmental improvements, however, are not being made by companies without the pressure exerted by governmental regulation. If companies were to improve their practices, more stringent regulation is therefore needed. (Newton & Harte, 1997; Porter & van der Linde, 1995, in Buyse & Verbeke, 2003). Environmental regulation clearly sets what is prohibited and what are required, with the law supporting compliance (Bramwell & Alletorp, 2001). For instance, corporations exert serious efforts to prevent pollution to avoid increasing legal liabilities and rising costs of pollution control and waste disposal (Berry & Rondinelli, 1998).

In the city of Manila, there are only four local ordinances passed that affect restaurant operations, specifically waste management. Passed on March 1, 1989, Ordinance No.7965 prohibits the disposal of garbage, trash, and rubbish and refuse in open, uncovered, or unsealed container. Passed on September 22, 1994, Ordinance No.7866 penalizes the disposal of garbage, debris, and other waste materials in rivers, creeks, canals, and waterways. Passed on December 14, 1994, Ordinance No. 7876 requires all residents of and business establishments within the City of Manila to provide their homes and establishments with containers with which to segregate biodegradable and non-biodegradable for composting and recycling for the purpose of achieving and complying with the objectives and methods of “zero-waste technology. Passed on June 11, 1997, Ordinance No. 7924 prohibits the dumping and discharging of garbage, refuse, sewer waste, debris, toxic waste, and other pollutants from vessels, factories, commercial and industrial establishments, residential houses, and other structure into the Manila Bay, the Pasig River, and other waterways and bodies of water within the territorial jurisdiction of the City of Manila.

It would be interesting to find out the extent of implementation of environmental strategies among the SMEs in the restaurant sector in the Philippines. The restaurant sector is a good area of study because it is the tourism sector that has the most number of SMEs and it has an association promoting the adoption of environmental strategies. Moreover, many of its environmental impacts, though specific to the industry, such as energy consumption and solid waste generation, can also be found in other industries (Davies & Konisky, 2000).

II. Methodology

A sample of 240 small and medium-sized restaurants in Manila was used. The firms were investigated using measures validated by academicians and practitioners and those used in previous works. Primary data were collected through a survey and were encoded and processed with the aid of t-test and cluster analysis as statistical tools.

The level of implementation of environmental strategies was determined by the use of average scores. The small and medium-sized restaurants were grouped in terms of the number of years of implementation of environmental activities. The enforcement of certain city ordinances may have influenced the level of implementation of environmental strategies of restaurants grouped according to years of implementation and to see whether this is so, a t-test was conducted. The t-test was used to compare the level of the implementation of environmental activities of those which implemented before and after all the city ordinances have been enforced.

Cluster analysis was carried out to determine whether different groups of similar restaurants could be grouped on the basis of their environmental strategies. The respondents were grouped according to their implementation level of Pollution Prevention, Product Stewardship and Sustainable Development using means per respondent. The goal of cluster analysis is to group individuals or objects with similar characteristics and differentiate them from other clusters on the basis of these characteristics (Hair, et al, 1998). The grouping was done through a hierarchical clustering procedure, specifically, Ward’s method.

III. Results & Discussion

The level of implementation of environmental strategies is generally high because out of thirty two (32) environmental practices, twenty one (21) have averages of 4 (corresponding to “much” in the Likert scale) and above, nine (9) practices have averages of above 3 (moderate) but below 4 (much) and only two (2) have averages of above 2 (little) but below 3 (moderate).

Unlike Tilley's (1999) study reporting a minor overall level of environmental activity in small firms this study found the overall level of environmental activity of small and medium-sized restaurants in Manila to be high. Results show that small and medium-sized restaurants are strategic or proactive, that is, having a managed approach to improving environmental performance. Small and medium-sized restaurants in Manila do not implement environmental strategies because of regulation. The groups were divided into groups of "veterans" and neophytes," according to whether they implemented before or after all the relevant ordinances were passed. The groups were subjected to a t-test. The results show that there is no significant difference between the two groups in terms of environmental activities. Regulation is not a major factor. Despite the fact that only 2 among the 32 environmental activities were covered by ordinances, small and medium-sized restaurants still implement the whole range of environmental activities at modest levels. The top scoring environmental activities are not even covered by the regulation. The assumption that pressures from a regulation is needed to force small firms to make environmental improvements (Newton and Harte, 1997; Porter and van der Linde, 1995: in Buyse and Verbeke, 2003) does not hold. Self-regulation is more effective in this case.

Contrary to previous studies that usually characterize small and medium sized firms as reactive, this study found them to be proactive in their approach to environmental management. Regulation does not exert pressure on them to be proactive. It is largely a result of an exercise of voluntary environmental responsibility

The average responses of the small and medium sized restaurants surveyed on variables of Pollution Prevention, Product Stewardship and Sustainable Development were subjected to a cluster analysis using Ward's method, a hierarchical clustering procedure. Square Euclidean distance was used for the similarity measure. To find out the optimal number of clusters, the dendrogram and agglomeration schedule were used. Distance levels were considered as significant increases in cluster homogeneity because they provide an indication for a possibly optimal number of clusters. Table 1 contains the calculations made. The dendrogram and agglomeration schedule indicate a possible 2 to 4 cluster solution. Two, three and four cluster solutions were computed but the four cluster solution was deemed the best alternative after evaluation. The four cluster solution identified four different groups of small and medium sized restaurants on the basis of their environmental strategies.

Group 1, the "active" group, comprises 13.75% of the respondents. This group employs pollution prevention and product stewardship strategies moderately and practices sustainable development less moderately. Group 2, the "leading edge" group, containing 17.5% of the respondents, practice pollution prevention and product stewardship at a high degree and sustainable development at a moderate level. The second highest number of respondents fell into Group 3, the "environmentally excellent" group characterized by high degrees of practice among the three environmental strategies, most especially pollution prevention and sustainable development. Majority or 39.58% of the respondents are classified under Group 4, the "constructive" group with moderate levels but close to high levels of practice especially with regard to pollution prevention and sustainable development.

IV. Conclusion

The level of implementation of environmental strategies among small and medium-sized restaurants in Manila is high. In the implementation of environmental strategies, small and medium-sized restaurants were found not to be driven by government regulations. The exercise of their environmental responsibility is largely voluntary and is beyond merely compliance.

Table 1: Analysis of Agglomeration Coefficient for Hierarchical Cluster Analysis

Number of Clusters	Agglomeration Coefficient	Percentage Change in Coefficient to Next Level
10	87.763	8%
9	94.911	8%
8	102.267	13%
7	115.443	12%
6	129.412	13%
5	146.795	17%
4	171.747	27%
3	217.846	28%
2	277.979	49%
1	413.424	-

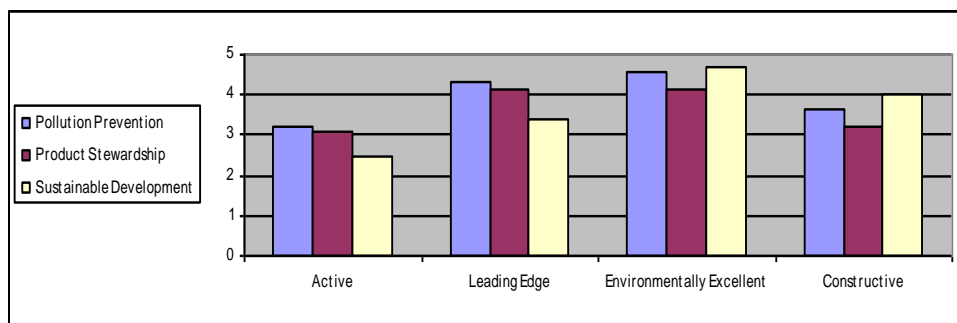


Figure 1. Typology of Small and Medium-Sized Restaurants (According to Environmental Strategies)

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