



International Journal of Engineering Researches and Management Studies

AN OVERVIEW OF GREEN PRACTICES IN SERVICE SECTOR

Dr. Namrata Maheshwari

Assistant Professor, J.D.Birla Institute, Kolkata

ABSTRACT

'Green' is the marketing buzzword of new millennium. During past decade, there has been a growing awareness of widespread environmental degradation. The concerns about the environment and consumer's inclination towards green products & services have forced organizations to adopt green practices. Service sector which represents 57% of Indian economy, is also embracing green marketing. This sector is responsible for huge resource consumption and has a big responsibility in ensuring that business models adopted are sustainable in long run. Hence the paper attempts to examine the reasons behind adoption of green practices in service sector. The purpose of this paper is to highlight the environment friendly initiatives taken by service organizations. Some service providers like Tata, ITC, Reliance, IBM, Wipro, Idea, and Infosys are following this concept and have painted themselves green. The study seeks to explore the green practices of those service industries like banking, information technology, education, transportation, health care, hotel industries, telecommunication and professional services etc. Greening of services is the need of an hour, especially for Indian economy. The government should also appreciate and support these efforts to establish the importance and efficacy of greening of service sector. The conceptual model presented in this research paper will emphasize the green practices as internal efforts to implement environmentally friendly practices towards the goal of becoming a green facility and will give a solution to global warming dilemma.

Keywords:- *Green practices, Green marketing, Services sector, Corporate Social Responsibility, Environment.*

I. INTRODUCTION

Global climate change and natural disasters issues have created an alarming situation for the whole world. The awareness towards environmental protection is an issue of high topicality and relevance. A growing concern towards environmental degradation has made 'Green Marketing' the most popular marketing term. Now-a-days, people are more conscious about environment and are showing their concern in adopting green products and services. This changing trend and consumer's inclination towards green products and services have forced organizations to adopt green practices. According to the American Marketing Association, green marketing is the marketing of products and services that are presumed to be environmentally safe. (Peattie,1999). Thus green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising. "Green Marketing" refers to holistic marketing concept wherein production, marketing consumption and disposal of products and services happen in a manner that is less detrimental to the environment. The current era is of recyclable, non-toxic and environment-friendly goods. This has become the new mantra for marketers to satisfy the needs of consumers and earn better profits. Companies all over the world are striving to reduce the impact of products and services on the climate and other environmental parameters. Marketers are taking the cue and are going green.

India has the second fastest growing services sector (www.ibef.org/industry/services.aspx) in the world. In India, the services sector represents an enormous size of the economy. It is contributing more than 50% to the GDP of Indian economy. The Service sector forms a backbone of social and economic development of a region. It has emerged as the largest and fastest growing sectors in the world economy, making higher contributions to the global output and employment. It covers a wide range of activities like *healthcare, hospitality, education, transportation, communication, entertainment, financial trading, leasing and professional services*. The era of economic liberalization has ushered in a rapid change in the service industry. As a result, over the years, India is witnessing a transition from agriculture-based economy to a knowledge-based economy. The services hold immense potential to accelerate the growth of an economy and promote general well-being of the people. They offer innumerable business opportunities to the investors. They have the capacity to generate substantial employment opportunities in the economy as well as increase its per capita income. Without this, Indian economy would not have acquired a strong and dominating place on the world platform. A very little attention has been accorded to the service sector in



International Journal of Engineering Researches and Management Studies

terms of green practices. (Shrum, McCarty, & Lowrey, 1995). One of the important aspects that should be understood about green practices is that the range of the term “green” is broad and varying based on perspective. From an economic management point of view, (Gupta, 1995) “greening” as corporate environmental performance in meeting stakeholders’ expectations. According to Shrivastava (1995), “Environmental management is a tool to fit into a social and ecological system”. He viewed green practices as internal efforts or activities to implement environmentally friendly practices towards the goal of becoming a green facility.

II. REASONS FOR GOING GREEN IN SERVICE SECTOR AND THEIR IMPACT

The changing life style and high standard of living has increased the dependency over services. These services are not just providing comfort to us but are responsible for huge resource consumption, carbon emission, spreading heavy wastage and harming the environment in several ways. It is not obvious to casual viewer how service organizations which offer products such as transportation, healthcare, hotels can have a negative impact on environment. Services are essentially processes (Gronroos, 1982; Shostak, 1987) and as such are consumed as they produced; they are intangible, can’t be stored (perishable) and are heterogeneous. These characteristics seemingly render services products as little threats to the environment. Worldwide the service sector has become aware about these effects on environment and has taken steps by adopting green initiatives. Consider the impact if a hotel chain like ITC, Taj and Hyatt or Marriot have adopted energy conservation policy that involved setting thermostats in the back office and public areas at a mere two- degree difference.

Such a difference is unlikely to be noticed by a common man yet could result in a significant reduction in energy consumption. Obviously, if the entire hospitality sector adopted such a measure, the effects would be tremendous. The following reasons are causing a service organization to adopt green practices:

The first driving force involves current pressures or regulations of government towards green practices (Chan & Wong, 2006; Kirk, 1995; 1998; Mensah, 2004; Tzschentke et al., 2004).

The second driver involves monetary benefits or financial gains that can be realized from green practices (Iwanowski & Rushmore, 1994; Mensah, 2004; Tzschentke et al., 2004).

The third motivation for service organizations adopting green practices is fostering positive public relations and marketing (Kirk, 1995; Claver- Cortés et al., 2007; Tzschentke et al., 2004).

The other motivations for organization include Corporate Social Responsibility (CSR), Corporate Ethics and Sustainability development.

Impact of Greening of Services:-

- **Corporate Social Responsibility**
- **Sustainable Development**
- **Brand Building**
- **Competitive Advantage**
- **Cost Benefits**
- **Government Support**

These practices are going to impact the organization in long run. It is helping the organization in gaining competitive advantage, sustainability and survival for long run, cost benefits, publicity in the tag of corporate social responsibility and for establishing their brand building. The major leaders of each and every sub sectors like ITC, Reliance, Tata, Idea, Wipro, Infosys etc are adopting green initiatives so that they can create a benchmark for the followers and small organizations.

III. FACTORS AFFECTING GREEN ADOPTION IN SERVICES

The green adoption from the traditional practice is not an easy decision. There is always a risk in accepting a new concept in daily practice as well as building the brand image among consumers mindset. The consumer’s awareness



International Journal of Engineering Researches and Management Studies

and their participation can make it a successful concept. While the shift to "green" may appear to be expensive in the short term, it will definitely prove to be indispensable and advantageous in the long run as it is going to give sustainability in long run.. As resources are limited and human wants are unlimited, it is important for the marketers to utilize the resources efficiently without waste as well as to achieve the organization's objective. So green marketing is inevitable. As a result, green marketing has emerged, which aims at marketing sustainable and socially-responsible products and services. It's not affordable for taking risk by small organizations unless and until it is compulsory. The major factors that are affecting the service organizations are *Technological Factors, Organizational Factors and Environmental factors* like technological up gradations, organization's size and ethics, competitor's green practices, employee's intention towards greening, environmental degradation are affecting service organizations to paint themselves green. In India major organizations are not embracing these concepts for environment only, other factors also play important role.

IV. GREEN SERVICE PACKAGE

The first **P** of a service organization is *Service Product* or *Service Package*. In Green Service marketing, a service package concept describes what organization offer to the market is a bundle of different products and services (tangible or intangible). The service package includes the factors that make this service concept a success and that are the consumer awareness and participation, social responsibility, competitive pressure and brand building and Government support and regulations. The outer layer of green service package shows the parameters which are most essential in terms of popularity and communication of services. These factors are marketing communication, affordable price, word-of-mouth marketing and easy availability. Suppose for example, if a hotel is accepting green practices in its daily practice then, it needs customers as well as government support and participation. It is going to achieve competitive advantage and can fulfill its CSR responsibility too. The green service of hotel will be successful if there is proper marketing promotion & communication of green services, positive word of mouth marketing for hotel's services, prices/tariffs are affordable and the green services in hotel are easily acceptable by customers. Thus, Green service Package is the overall picture of any service organization which clarifies the elements for the success of green service concept.

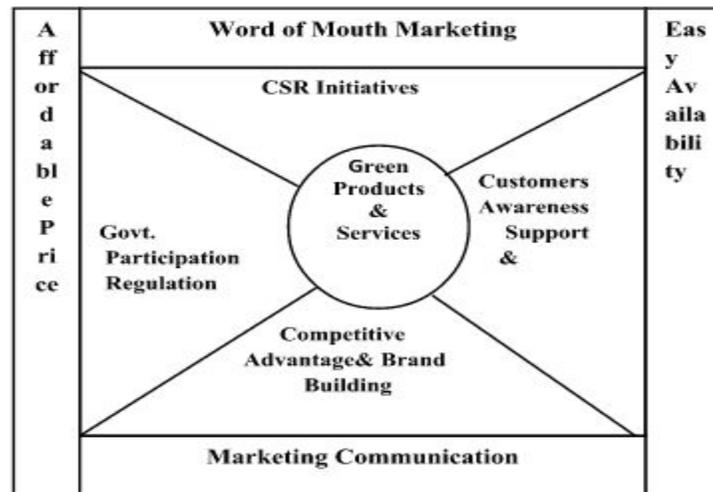


Figure 2: Green Service Package



International Journal of Engineering Researches and Management Studies

V. GREEN SERVICE PRACTICES

Worldwide the service sector is adopting green initiatives which are based upon 3R's policy i.e. Reduce, Reuse and Recycle. Few of the initiatives are following:

Service Sector	Their Green Initiatives and Practices
Information Technology Sector	Green computing refers to the practice of using computing resources more efficiently while maintaining or increasing overall performance. Sustainable IT services require the integration of green computing practices such as power management, virtualization, improving cooling technology, recycling, electronic waste disposal, and optimization of the IT infrastructure to meet sustainability requirements. Green products like 'Greenputers' and green techniques as well as the eco friendly ways to handle the information technology and maintenance services are available in India. Companies like IBM, Infosys, Wipro and TCS are taking Green initiatives. (Baldwin, E. and Curley M.,2007)
Hospitality Sector	Greening of Hospitality sector includes Auto Thermostat, Water management programme, Recycle the wastage and reduce the energy usage by CFL bulbs, by using sensors in lifts and elevators, Low flow of water in toilets and taps, re-usage of linens and towels for guests, paperless check in and checkout, green vehicles usage, organic foods usage and using solar and hydra energy for use. Using treads mill for energy generation, Air conditioning system for hot water and most important that a green team is appointed in the hotel which looks after all the departments. They insure the consumption is maintained and no wastage is reported in the department. ITC, Taj, Lemon Tree, Hyatt, Swissotel are practicing green in hotel industry. (Iwanowski, K., & Rushmore, C.,1994)
Healthcare Sector	Greening of Healthcare industry needs proper energy, water and waste management programme. The healthcare industry is using disposable dishes and eating utensils, recycling of wastages, using eco friendly cleaning materials, toxicity reduction, proper water use in laundry service, reduce fresh water conservation, Re-use of steam condensate into the steam boiler, Improve the solar heating system, collect bio degradable organic wastage for recycling, proper leakage repairing system, reusable utensils in cafeteria and energy saving bulbs etc. Recently Reliance is coming with a Green Hospital in India. (https://practicegreenhealth.org/pubs/toolkit/reports/BusinessCaseForGreening.pdf)
Transportation Sector	Transportation sector includes logistics and automobile services and this sector is also going green. Now various Eco friendly vehicles are available in the markets for commercial as well as personal use. Transporters are using LPG, CNG and battery operated vehicles to save the environment. The Green cars as well as trucks are also available. Now green auto repairing services are also available. Papers are not used for Bills rather than E- bills are sent. Green auto pants are available. Tata, Nissan, Honda, Mahindra and many companies are emphasizing on green transportation. (King , 2013; http://www.google.com/green cars/)
Financial Sector	Financial Sector includes Banking, Insurance and Financial Securities services. Now Financial sector is also providing online facility to their customers for saving their time, money and environment. Banks are facilitating their services through ATM and SSTs. Financial Securities are also providing online buying and selling facility of shares, Online payment facility and online shares statement and Pass book checking can be done. SBI,



International Journal of Engineering Researches and Management Studies

Tele communication Sector	<p>IndusInd Bank, ICICI, Allahabad Bank, UCO Bank are setting benchmarks in financial sector in India. (Jeucken, M and Bouma, J.J.,1999)</p> <p>Telecommunication companies are adopting green practices by providing online solutions and query handling techniques. They are emphasizing on paperless work so bills are sent through mails and online payment facility is provided to the customers. Customer service in also online. In offices strictly following less print out options. Green towers are used and green policy has been followed by the industry. Airtel, Reliance and Idea are taking green initiatives in telecom sector. (http://www.ccao.in/UI/links/fwresearch/conceltation%20paper%203.pdf)</p>
Education Sector	<p>Education sector is also adopting green practices by using less paper. Now E- Books, E-newspapers, Notes in CDs are provided to students to save paper. The Education industry is using recycle practice of wastages and reducing the use of papers in receipts as well as salary slips too. The industry is properly using electricity by using sensors in classes and lifts. They are forcing to take less printout by online feedback system and online tests and assignments submission. This sector is saving water by auto start taps and by using reusable small soap dispensers and emphasizing on green communication& awareness programme and plantation by students. In India, IIMs, IITs are converting themselves in Green Campus. (Banerjee,1998; http://www.google.com/greeningofeducation sector)</p>
Professional Sector	<p>Like other sectors, professionals are also adopting green practices. They are providing online services; online solutions and scanned proofs are sent through mails and CDs. Now e signature is also valid so that paper can be saved. Dentists are also using eco friendly materials and reusable items in the surgeries. Professionals like consultancy services are using Skype, phone and E-services for providing solutions to their clients. Dry cleaners are using eco friendly materials for cleaning. (http://www.mnn.com/sustainable-business-practices/)</p>

VI. GOVERNMENT REGULATIONS & CERTIFICATIONS

Going Green of service sector is in nascent stage, but it has created a buzz in the market. The reason behind this is Governmental pressure and regulations. In developed countries, Government is having strict rules and regulations so each and every service organizations have to follow the green steps as well as customers give preference to green service organizations and participate in the initiatives but In India, greening of service is just an alternative. The measures and regulations that create a difference between green and non-green organization are:-

ISO 14001: The ISO 14001 is a voluntary international standard created in 1996 by the International Organization for Standardization (ISO) and forms part of the ISO14000 series of environmental standards. (Zhang et al,2008)

ISO 14020 -14025: ISO 14020 to 14025 series deals with environmental labels and declarations. Consumer desires for sustainable consumption is driving the global marketplace to regulate product production. (Sebhatu et al,2007)



International Journal of Engineering Researches and Management Studies

Planet Positive is an international mark of environmental certification signifying that has committed to reduce emissions associated with any business. Planet Positive enables businesses to experience the cost-saving benefits of sustainability by reducing environmental impacts and provides an annual certification of reductions made. (Palmer, Karen, Oates, and Portney,1995)

EPEAT uses comprehensive criteria for design, production, energy use and recycling. EPEAT currently covers computers and displays; imaging equipment and television standards. Products can earn the Energy Star label by meeting the energy efficiency requirements set forth in Energy Star product specifications. (Gupta, M., & Sharma, K.,1996)

Eco Labeling- The Design for the Environment label means that EPA scientists have evaluated every ingredient in the product to ensure it meets stringent criteria. Ecolabeling is important way to market a product to green consumers. (Zhang et al,2008)

EMAS-The Eco-Management and Audit Scheme (EMAS) is the EU's voluntary environmental resources management instrument. Environmental Management Systems in accordance with EMAS are used worldwide by companies and organizations of all sizes and types. EMAS registered organizations commit themselves to evaluate manage and improve their environmental performance. (Morris, 2004)

LEED- LEED stands for Leadership in Energy and Environmental Design is a third party verification of green buildings. Developed by the U.S. Green Building Council (USGBC), it consists of a suite of rating systems for the design, construction and operation of green buildings that are intended to use resources more efficiently when compared to conventional buildings. LEED certified buildings often provide healthier work and living environments, which contributes to higher productivity and improved employee health and comfort. (Claver-Cortés et al, 2007)

Ecotel was initiated by HVS, a global consulting giant in hospitality sector, is the "Hallmark of Environmentally Sensitive Hotels." Ecotel certified hotels are those which have incorporated Ecotel principles like using environmentally-friendly materials and can demonstrate considerable proof in reducing, reusing and recycling in its daily practices.

VII. THE CONCEPTUAL FRAMEWORK FOR GREEN SERVICES

Figure 3 reflects how the various service sectors are having hazardous impact on environment in terms of excess resource usage and wastage of resources, carbon emission, creating pollution etc. The framework shows how by adoption of green services, a service organization can achieve its motives and can be helpful in environment protection as well as sustainable development. It highlights the trajectory path for helping environment and saving the earth.



International Journal of Engineering Researches and Management Studies

<i>Service Organization</i>	<i>Hazardous Impact</i>	<i>Green Practices</i>	<i>Outcome</i>
<ul style="list-style-type: none"> • Hotel • Banking • Healthcare • Telecommunication • Education • Logistics • Information Technology • Logistics • Professionals • Retail Outlets 	<ul style="list-style-type: none"> • Water Wastage • Energy Wastage • Carbon Emission • Hazardous for health • Deforestation • Global Warming • Climate change & Pollution • Greenhouse effect • Excess use of plastic & unhealthy products 	<ul style="list-style-type: none"> • Proper Water Management • Wastage Management • Energy Efficiency Programme • 7 “R” Policy <ul style="list-style-type: none"> ✓ Reduce ✓ Reuse ✓ Recycle ✓ Renew ✓ Replace ✓ Refurbish ✓ Resource consumption 	<ul style="list-style-type: none"> • Sustainable development • Safe Environment • More Profits • Customer’s attraction • Corporate social responsibility • Competitive advantage • Saving of resources

Figure 3: An overview of conceptual framework for greening of services

VIII. CONCLUSION

In alignment with the global trends, Indian service sector has witnessed a major boom and is one of the major contributors to both employment and national income in recent times. The study is highlighting how bad impact of services on the environment can be reduced by adopting the eco-friendly practices. The framework as well as green service package offered in this article is but one of a conceptual framework to understand how service are going green. Still the greening of services is in the infancy stage in India. Here consumers are price conscious so being aware about the scenario still they are not eagerly choosing green services and are not ready to lose their comfort level for saving the resources and environment. Without customer participation and support it is not easy for the service organization to paint them complete green. This research paper provides a platform for further researches where each and every service sector can be researched in detail about their adoption of green practices and customer’s attitude and behavior towards those practices. The greening of services has become a need of the hour and is not limited to some sectors or not just a marketing strategy but it should be a compulsion to embrace these kinds of practices to survive. Like developed countries, in India also strict rules and regulations should be framed by the government for all the service organizations. It is the high time for service sector to accept green practices so that we can provide a safe and healthy environment for upcoming generations and make a clean and green India.

REFERENCES

1. Baldwin, E. and Curley M. (2007), *Managing IT Innovation for Business Value*, Intel Press.
2. Banerjee, S.B. (1998). *Corporate environmentalism: perspectives from organizational learning*, *Management Learning*, 29(2), 147-64.
3. Claver-Cortés, E., Molina-Azorín, J.F., Pereira-Moliner, J., & López-Gamero, M.D. (2007). *Environmental strategies and their impact on hotel performance*. *Journal of Sustainable Tourism*, 15(6), 663-679.
4. Gupta, M., & Sharma, K. (1996). *Environmental operations management: an opportunity for improvement*. *Production and Inventory Management Journal*, 37(3), 40-47.
5. Iwanowski, K., & Rushmore, C.(1994). *Introducing the eco-friendly hotel*. *Cornell Hotel and Restaurant Administrant Quarterly*, 35(1), 34-38.
6. Jeucken, M and Bouma, J.J.(1999) *The Changing Environment of Banks GMI Theme Issue, GMI-27, Autumn, 1999.*



International Journal of Engineering Researches and Management Studies

7. King D. (2013), "2013 Green cars sales: Signs of a maturity market", Article published on <http://green.autoblog.com/2014/01/09/2013-green-car-sales-signs-of-a-maturing-market/>
8. Kirk, D. (1998). Attitudes to environmental management held by a group of hotel managers in Edinburgh. *Hospitality Management*, 17(1), 33-47.
9. Mensah, I. (2004). Environmental management practices in US hotels special report (Whitepaper, electronic version). Retrieved March 12, 2013, from hotel online website://http://hotelonline.com/news/PR2004_2nd/May04_environmentalpractice.html
10. Morris N. (2004), Sustainability: What is it? *Power Engineer, Academic Search Premier Database*, vol. 18(5), pp. 11-11.
11. Nagata, S. and Shoji O. (2005), Green Process Aiming at Reduction of Environmental Burden, *Fujitsu Science and Technology Journal*, 41(2), pp. 251-258.
12. Ottman, J. (1993). *Green Marketing: Challenges and opportunities for the new marketing age*. Chicago (IL): NTC Publishing Group.
13. Palmer, Karen, Oates, and Portney (1995). Tightening Environmental Standards: The Benefit-Cost or the No-Cost Paradigm? *Journal of Economic Perspectives* 9:4 :119-132.
14. Peattie K. (1999), Shifting to a Greener Paradigm, *Greener marketing, A Global Perspective on Greening Marketing practice*. Edited by Charter M and Polonsky M, Green leaf Publishing Limited.
15. Rutherford, Michael (1994). At what Point can pollution be said to cause damage to the Environment, *The Banker*, January, 1994.
16. Schmidheiny, S and Federico J L Zorraquin, (1996). *Financing Change: The Financial Community, Eco-Efficiency and Sustainable development*, Cambridge, MIT Press.
17. Sheehan, P. (2007). *Seeing Green: Lodging Hospitality*, 63 (10), 22-24.
18. Tzschentke, N., Kirk, D., and Lynch, P. (2004). Reasons for Going Green in Serviced Accommodation Establishments. *International Journal of Contemporary Hospitality Management*, 16 (2), 116-124.
19. Wilson, S. (1996). Green practices starting to pay off. *Asian Business Review*, p.62.
20. Zhang et al.(2008), Asian energy and environmental policy: Promoting growth while preserving the environment, *Journal of Energy Policy*, Vol. 36, pp. 3905-3924.
21. <http://www.ccao.in/UI/links/fwresearch/conceltation%20paper%203.pdf><http://practicegreenhealth.org/pubs/toolkit/reports/BusinessCaseForGreening.pdf>
22. <http://www.travelandleisure.com/articles/how-hotel-chains-are-going-green>
23. <http://www.mnn.com/money/sustainable-business-practices/photos/10-everyday-services-gone-green/every-step-counts#ixzz397Yk4Dj2>
24. <http://www.google.com>