

Sustainability through Going Green: An Empirical Study of Service Firms

* Sonika Nagpal

** Garima Gupta

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Rukmini Devi Institute of Advanced Studies

E-mail : effulgence@rdias.ac.in, Website : www.rdias.ac.in

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Abstract

Increased deterioration of the ecosystem has raised concern for environmental protection around the world. Increasing thrust on environmental issues and consumers' awareness in this regard has created a pressure on the corporate sector to adopt green marketing practices. Realizing the importance and strategic implications of pursuing green marketing practices in terms of favourable economic, social and environmental outcomes, firms have started taking initiatives in this regard with a greater rigour. In comparison to the manufacturing sector, service organizations consider the demonstration of green commitment a difficult endeavour and hence adopt green strategies in their operations and processes. It is in this context that the present paper examines green marketing activities followed by service firms and the subsequent impact of implementing these practices on firms' overall sustainability. Using Confirmatory Factor Analysis (CFA), the study generates three dimensions of green marketing practices for services namely, 'Green Service Policy', 'Green Service Support', and 'Green Service Delivery'. The results of Structural Equation Modeling (SEM) provide a good fit for the relationship between green marketing practices and sustainability of service firms. The paper ends with suggestions and implications for marketers, firms and policy makers and outlines future scope of research in this area.

Key Words: *Green Service Policy, Green Service Support, Green Service Delivery, Financial Sustainability.*

INTRODUCTION

The world has witnessed tremendous change and growth in the service sector over the past few years. Indian economy too has witnessed a significant development, with services sector contributing around 52 percent to the GDP in 2014-15 (India Brand Equity Foundation) and having a compound growth rate at 9 percent (Economic Survey). However, the development process has taken a toll on the environment leading to its deterioration, reduction in bio-diversity, ecological imbalances and global warming. Many business organizations have started paying attention to the natural environment and environmental concerns have increasingly spread throughout the body of

environmental literature over the past few years. As environment is no longer considered a cost of doing business; rather serves as a catalyst for constant innovation, new market opportunity and wealth creation (Denton, 1996), a paradigm shift from 'conventional management' to 'environmental management' has also been witnessed in recent times owing to its contribution to both economic and environmental sustainability (e.g. Hoque and Clarke, 2013).

Drivers for Green Adoption

Studies conducted in the past attribute the increasing environmental concern to multiple factors. Some of the prominent drivers identified in this regard (see Table 1)

* Assistant Professor, P.G.D.A.V. College (Eve), University of Delhi

** Associate Professor, Faculty of Management Studies, University of Delhi

include moral obligation, recognition of social responsibility concept, government and regulatory pressure, competitors' and stakeholders' pressure, marketing factors, public and ecological concerns, and cost factors (e.g. Polonsky, 1994; Stead and Stead, 1995; Anderson, 1998; Berry and Rondinelli, 1998; Charter and Polonsky, 1999; Banerjee et al., 2003; Hahn and Scheermesser, 2005; Belz and Schmidt-Riediger, 2009; Tiwari et al., 2011; Mohajan, 2012; Afande, 2012). In addition to the pressure felt by the firm from its stakeholders, there is a pressure for ecological sustainability which requires firms to operate in a manner causing minimum harm to the environment and incorporate environmental issues in the corporate culture (Smith and Perks, 2010).

A study by Anderson (1998) classified the reasons for the adoption of green practices into three categories. The first category comprise of tactical reasons such as avoiding fines for breach of environmental legislation, heavy taxes and bad publicity. The second reason includes marketing reasons such as exploitation of new market niches. The third motivating force comprise of strategic reasons which include gaining the trust of the environmentally aware and influential stakeholders, reduction of operational costs and risks. The last category comprise of altruistic or moral reasons which leads to the adoption of environmental practices by the companies voluntarily.

In another study conducted by Lyon and Maxwell (2008), the authors identified some demand and supply side forces as powerful drivers for the adoption of green marketing practices. While factors such as growth, increase in quality, and level of competition, green investors, employees and international markets constitute the demand side forces; factors such as resources use efficiency, pollution reduction and cost reduction have been identified as supply side forces.

Law (2010) investigated the factors leading to the adoption and implementation of sustainability development strategies among high-tech manufacturing firms in Taiwan. The study also aimed at identifying the relationships between the motivating factors and the

readiness of implementation at two levels in the organization i.e. the strategic level (management willingness) and the tactical level (resource allocation and attitudes). The researcher categorized these factors under three broad heads i.e. management factors, internal factors and external factors. *Management factors* incorporate strategies/policies and mindset of the management. *Internal factors* include systems, measures, need to advance and performance enhancement. The third type of factors i.e. *External factors* include- laws and regulations, social pressure, market trends and competition. So, the above three factors affect the adoption of sustainability strategy and consequently the sustainable development performance.

A study conducted in Jordan by Abu-Elsamen and AL Dmour (2011) examined the factors affecting the adoption of green marketing practices by industrial manufacturers in Jordan. The main antecedents for green marketing adoption have been identified as social responsibility, environmental responsibility, advanced and innovative management and managerial attitude towards green marketing. The results of the study indicate that though social and environmental responsibility has a positive relationship with green marketing adoption, there is lack of significant relationship between managerial attitude, innovative management and green marketing adoption.

In a recent study, Khurana et al. (2014) suggested categorization of major motives into two: internal motives and external motives. Internal motives include strategic motives (profitability), moral motives (moral duty towards society), personal values and beliefs of the managers. On the other hand, external motives include legislations (national and international), availability of natural resources, climate change, pollution, pressure from the local authorities, agreements made between the company and the authorities and change in the lifestyle of the people.

Besides this, green marketing practice adoption is also influenced by the keenness of management in embracing innovation in the organisation. The firms adopting innovative green marketing practices generally exhibit

the following characteristics: growth orientation, vigilant and aware management, commitment to investment in technology, acceptance of risk, cross-functional operations, and receptivity to new externally developed technology, adaptability to change, active involvement of employees and diverse range of knowledge and skills and top management involvement (Heinonen and Tuominen, 2011).

Besides this, a host of benefits such as reduced costs, increased competitiveness, increased profitability, protection from risk, enhanced productivity and efficiency, improved corporate image, higher employee morale, and long-term success of the firm attached with green practices act as motive for green adoption by companies at large (Savitz and Weber, 2007). An overview of the major driving forces, as identified from the literature, is provided in Table 1.

Table 1 : Major Drivers for Adoption of Green Marketing Practices

Study	Major Drivers
Polonsky (1994)	Moral obligation, Regulatory and Governmental pressure, Cost factors and Viewing Green Marketing as an Opportunity
Stead and Stead (1995)	Ecological concerns, Economic incentives and Green Stakeholders pressure
Berry and Rondinelli (1998)	Regulatory Demands, Cost Factors, Stakeholder Forces and Competitive Requirements
Anderson (1998)	Tactical reasons, Marketing reasons, Strategic reasons and Altruistic or Moral reasons.
Charter and Polonsky (1999)	Moral obligation, Government pressure, Opportunity, Competitors' pressure and Cost factors
Henriques and Sadosky (1999)	Regulatory Stakeholders, Organizational Stakeholders, Community Stakeholders and the Media
Banerjee, Iyer and Kashyap (2003)	Public Concern, Regulatory Forces, Competitive Advantage, and Top Management Commitment
Hahn and Scheermesser (2005)	Ecological concerns, Economic incentives, Green Stakeholders pressure and Ethical reasons
Savitz and Weber (2007)	Increased profitability, Protection from risk, Increased productivity and efficiency, Improved corporate image, Higher employee morale and Increased customer goodwill and Long-term Success
Lyon and Maxwell (2008)	Demand side forces, Supply side forces, Public politics, Private politics, Welfare
Belz and Schmidt-Riediger (2009)	Consumers, Retailers, Competitors, Legislators, Top management/owners, Public exposure and Industry membership
Law (2009)	Management, Internal factors, External factors
Dief and Font (2010)	Altruism, Competitiveness and Legitimization
ElTayeb, Zailani and Jayaraman (2010)	Regulations, Customer pressures, Social responsibility and Expected business benefits
Amjad-Elsamen and AL Dmour (2011)	Social responsibility, Environmental responsibility, Advanced and innovative management and Managerial attitude towards green marketing
Biswas (2011)	Greater profits, New business opportunities, Reduced costs, Minimization of risk, Enhancement of reputation and Contribute to the common good
Tiwari, Tripathi, Srivastava and Yadav (2011)	Recognition of social responsibility concept, Governmental pressure, Competitive pressure and Cost or profit issues
Reutlinger (2012)	Cost-Savings, Leadership, Trust, Competitive Advantage, Retention of Employees and Company's image
Mohajan (2012)	Cost advantage, Competitive advantage and Governmental pressure
Afande (2012)	Regulations, Expected business benefits, Customer pressure and Corporate social responsibility
Tan and Yeap (2012)	Competitive advantages, Improving ecological performance, Reducing operational costs, and Enhancing corporate image
Mohanasundaram (2012)	Opportunity, Social responsibility, Governmental pressure, Competitive pressure and Cost reduction
Siddique, Hayat, Irfan and Rehman (2013)	Legislation, Competitiveness and Ethical reasoning
Khurana, Yadav and Rai (2014)	Internal motives and External motives

(Source: Literature review)

Green Marketing Practices for Services

Though the major environmental abuses and the efforts to be environmentally friendly are more prominent among the manufacturing sectors of the economy (Grove et al., 1996), environmental ramifications of less obvious and intangible processes of service organisations cannot be ignored. In order to mitigate the hazardous impact of waste and pollutants generated in service delivery and processes, adoption of environmental friendly practices by service firms is indispensable. Realizing the importance of ecological service practices and their linkages with sustainable performance, firms in service sector, in both developed as well as developing economies, have started adopting green marketing practices with a greater rigour. However, the extent of adoption of such practices may vary with the nature of service being provided. For instance, the impact of the activities of banks, financial institutions, telecom service providers etc. may not be so rigorous than that of hotels, restaurants or hospitals.

Researchers have suggested various classifications of the diverse nature of green marketing practices for services that tend to vary from firm to firm. For instance, the classification by Harter and Sova (2008) emphasizes on four broad areas of green service practices namely, '*supply chain*', '*internal operations and governance*', '*green offerings*', and '*marketing and communications*' that include a wide range of activities such as use of renewable energy, investment in new green technologies, minimal material support (e.g. paper, plastic), minimal travel (e.g. teleconferences), introduction of e-billing, waste-reduction and recycling programs, carbon offset, green application packages, life-cycle assessments, green shop concept, green partner brands, green campaigns, e-billing and environmental reporting. In another study conducted by Ritu (2014), green marketing practices have been categorized under three heads- *supply chain management* which includes adopting techniques and plans to minimize inventory wastage and adopt carbon footprint design, *customer relationship management* which includes the use of electronic means to maintain contact and correspond with customers, and *enterprise resource management* comprising of activities and techniques for paperless transactions and

workforce optimization. Biswas (2011) conducted a study particularly in the context of banking sector and identified two components of green strategies. These include: managing environmental risks and identifying opportunities for developing innovative environmentally oriented products. Another significant categorisation of green practices adopted by services has been provided by Wong et al. (2013). The two broad categories suggested in the study include the aspects of '*green service delivery*' and '*green service support*'. While *green service delivery* represents all the green practices which the firms adopt in delivering its services in an environmentally responsible manner, *green service support* is a peripheral service that supplements core service delivery and adds value to the core services by providing information and benefits, such as online inquiry, product collection for maintenance, and product end-of-life management, in an environmentally friendly manner. In addition to these, service companies have been adopting various other green practices such as assessment of carbon credits earned, funding green projects, paperless transactions, use of renewable energy sources in operations, planting trees, construction of green buildings and environmental awareness generation programs.

Going Green: Way towards Organisational Sustainability

The term sustainability has become a popular notion in recent literature. As a system concept, it recognizes the relationship of an entity with the system in which it exists the firm within society and the ecology of the planet (Obermiller et al., 2008). Sustainability has now become a holistic approach integrated in the routine activities of the companies and for some it has become a part of their core values (Reutlinger, 2012).

There is sufficient evidence to support that the adoption of green practices by a company ultimately leads to its sustainable development (Coddington, 1993; Fuller, 1999; Polonsky and Rosenberger, 2001; Sheth and Paravtiyar, 1999; Saxena and Khandelwal, 2010; Abu-Elsamen and AL Dmour, 2011). Though green practices entail increase in the initial cost but have a positive

impact on long term sales growth and profitability (Stead and Stead, 1995; Hahn and Scheermesser, 2005; Savitz and Weber, 2007; Cronin et al., 2011; Mohajan, 2012; Reutlinger, 2012), competitive advantage, cost savings, market opportunities and financial returns (Charter and Polonsky, 1999; Klassen and Whybark, 1999; Christmann, 2000; Zulkifli and Amran, 2006). However, the impact of company's financial performance on its sustainable development has been found to be situational and contingent on the industry-specific factors (Law, 2010).

Financial benefits in terms of increased sales, profitability and decreased cost have been identified as key outcomes of the adoption of green measures by majority of firms, both in the service as well as the manufacturing sector (Baverstam and Larsson, 2009). Studies conducted in the past indicate that a positive relationship exists between the adoption of environmental management practices and financial performance of the companies (Kassinis and Soteriou, 2003; Lucas and Wilson 2008). The findings of an empirical study conducted by Saxena and Khandelwal (2010) for three sectors- consumer durable, non-durable and services indicate that industries have high concern for environmental protection and have a strong belief that green marketing is a tool for competitive advantage and sustainable growth. Another study conducted by Reutlinger (2012) highlighted the importance of sustainable marketing in three different countries- Sweden, Finland and Germany. Companies in all three countries were found to exhibit a strong willingness to implement sustainable marketing practices owing to the several resultant benefits in terms of cost-savings, leadership, trust, competitive advantage, retention of employees and good corporate image.

A study conducted by Gonzalez-Benito and Gonzalez-Benito (2005) highlighted the multi-dimensional relationship which exists between environmental pro-activity and business performance. The findings reveal that environmental pro-activity has a positive impact on certain operational performance objectives, marketing performance and competitiveness of the companies. However, due to high initial investments, short term

profitability does not tend to rise. Another recent study conducted by Leonidou et al. (2012) reveal that the adoption of green marketing practices positively influence firm's performance, particularly the firm's product market performance which is positively impacted by green product and distribution programs, while firm's return on assets is positively impacted by green pricing and promotion practices. Moreover, industry-level environmental reputation moderates the links between green marketing program components and firms' product-market and financial performance while the slack resources and top management risk aversion are conducive to the adoption of green practice adoption , though operating as substitutes.

Arbogast and Thornton (2010) investigated to determine a list of variables that could help to explain why some companies are more successful than others in improving their sustainability ranking. A regression model was developed comprising of 6 independent variables. These include- Leadership diversity, Industry Group Percentile based on waste productivity, Industry Group Percentile based on water productivity, Sustainability leadership, Industry Group Percentile based on energy productivity; and Percent tax paid in cash. The study concluded that to thrive in this global business environment and attain competitiveness, embracing sustainability measures and leadership diversity is indispensable. Further, the companies can utilize green strategies as a tool to enhance corporate reputation and attract new customers by responding to and encouraging increasing environmental concerns and green consumer sentiments. Such practices can also be used as a tool to differentiate the brand of the company which further may entail greater brand equity as compared to non-green competitors in the market.

Another study conducted by Awan (2011) highlights the importance of environmental marketing strategies in the context of firms operating in Sweden. The key findings suggest that the firms cannot afford to stay away from green marketing trends and they need to participate in social programs.

The studies also point out to the fact that the impact of green measures may vary with the context i.e. in the context of low-growth industries, particularly service industries, a positive marginal effect of green practices has been found, whereas, in high-growth industries, this effect is reversed, causing a non-monotonic effect on the firm's financial performance over the range of industry growth rates (Russo and Fouts, 1997; Lucas and Noordewier, 2010). There thus exists ample literature to support the fact that adoption of green marketing practices positively impacts the overall sustainability of service companies in the context of both developing as well as developed nations.

OBJECTIVES OF THE STUDY

The present study attempts to make a useful contribution by providing an understanding of the green marketing practices adopted by the service firms under study. The study further aims at examining the impact of green marketing practices on financial sustainability of the firms. More specifically, the study aims to:

1. Identify and confirm the drivers of green adoption by service firms.
2. Explore and confirm the dimensions of green marketing practices for firms in the service sector.
3. Assess the performance of service firms on dimensions of green marketing practices and,
4. Examine the relationship between green marketing practices and sustainability of service firms.

RESEARCH METHODOLOGY

The primary responses for the study have been obtained by using a structured questionnaire, administered personally to a sample of 50 service firms comprising of banks, financing companies, IT firms, telecommunication companies and hospitals. The population has been accessed through Economic Times-Top 500 companies' database. The respondents comprised of the top official of the companies including Marketing Managers, General Managers and other concerned official who had access to the privileged information on environmental initiatives and policies of the companies. The data was collected through personal

interviews and visits but in case where personal visit was infeasible, the questionnaires were sent through e-mails or through couriers. The questionnaire was pre-tested using a pilot study with some prominent academicians, researchers and chief managers of some companies for their feedback. In the light of the suggestions, modifications were made and an attempt was made to generate additional items that had not been suggested in the literature along with deleting items not much relevant in the current scenario. The final questionnaire so developed was then used for the purpose of data collection.

The questionnaire was divided into three sections that sought information on respondents' background as well as their response to various parameters under study such as green marketing practices adopted and their impact on sustainable business performance of the firms. Previously developed measures were adopted to obtain companies' responses to various statements on a five-point Likert scale, with a set of forty one items representing drivers for adoption of green practices, nineteen items representing response to green marketing practices, and a set of six items representing sustainability indicators (see Table 2).

Table 2 : Measures used in the Study

Construct	No. of Items	Item Description	Source
Green Marketing Practices	19	Systems for measuring environmental performance, Environment training programs, environmental policy, environmental plans and projects, E-payment system , Web conferencing, environmental commitment in communications, reuse and recycling activities, handling e-waste	Gonzalez, 2005; Harter and Sova, 2008; RBI's Guidelines, 2007; Wong et al., 2013
Drivers for adoption of green marketing practices	41	Environmental concern, Ethical concern, Competitive advantage, Stakeholders' pressure and Management attitude	Abu-Elsamen and AL Dmour, 2011; Banerjee et al., 2003; Baverstam and Larsson, 2009; Chen and Chai, 2010; Cronin et al., 2010; Henriques and Sadorsky, 1996
Financial Sustainability Indicators	6	Increased profitability, Increased sales, Decreased cost, Carbon credits earned, Return on equity and Return on assets	Fiskel et al., 1999; Leonidou et al., 2012

Analysis and Discussion

1. Drivers for Adoption of Green Marketing Practices by Service Firms

In order to identify the latent drivers for adoption of green marketing practices by service firms, exploratory factor analysis was applied on the set of forty one items generated through extensive literature review. Kaiser-Meyer-Olkin measure (0.605) indicated adequacy of sample for factor analysis. The five factors so obtained explained 76.087 percent of the total variance and were named as '*Environmental concern*,' '*Ethical concern*,' '*Stakeholders' pressure*,' '*Management attitude*' and '*Competitive advantage*'. The

results of reliability analysis (see Table 3) reveal good internal consistency of the items measuring the underlying constructs, as indicated by the Cronbach alpha (α) values which exceed 0.70. Further, all the values of Composite Reliability are greater than 0.70 and range between 0.90-0.95 which confirms the existence of internal consistency. The values of Average Variance Extracted, Maximum Shared Variance and Average Shared Variance confirmed the validity of measures used in the study. Subsequent Confirmatory Factor Analysis (CFA) suggested deletion of some items, with the final model with twenty four items yielding a good fit (CMIN/df= 1.376, RMSEA = .088, GFI = .692, AGFI = .618, CFI = .916, NFI = .754 and TLI = .904).

Table 3 : Reliability Estimates of Drivers for Green Adoption

Driver	Sample Items	Composite Reliability	AVE	Cronbach Alpha (a)
Environmental Concern (10 items)	Environmental- friendly technologies, techniques to improve energy or water efficiency, deterioration of environment is a serious problem, pollution prevention programs, urging neighbours not to use products polluting environment	0.926	0.779	0.956
Stakeholders' Pressure (10 items)	Government influences the adoption of green marketing practices, competitors have a role to play in our green marketing initiatives, consumers influence the adoption of green marketing practices	0.937	0.750	0.948
Management Attitude (8 items)	Adoption of green marketing is a managerial burden, company constantly modifies existing products, improve production processes management to follow green marketing practices	0.935	0.742	0.952
Competitive Advantage (7 items)	Green marketing strategies can be used as a differentiating factor, easy for our competitors to imitate our green marketing practices, adoption of green marketing practices provides competitive advantage, firm can enter new markets by adopting environmental strategies	0.946	0.779	0.955
Ethical Concern (6 items)	The policies of our company are based on ethical values, company follows a set of principles of personal and professional conduct, company inspired by ethical conduct does a profitable business	0.923	0.750	0.934

2. Green Marketing Dimensions for Service Firms

In the next stage of analysis, exploratory factor analysis was applied on the set of 19 items representing various aspects of green marketing practices. The three factors - 'Green Service Policy', 'Green Service Support', and 'Green Service Delivery' explained 75.77 percent of the total variance and were tested for reliability and validity. As presented in Table 4, the Cronbach alpha (α) values exceed 0.70, thereby indicating reliability of scale items. Further, all the values of Composite Reliability are greater than 0.70 and range between 0.90-0.95 which confirms the existence of internal consistency. All the values of Average Variance Extracted are greater than 0.5, which

clearly indicates existence of convergent validity. Similarly, the values of Maximum Shared Variance and Average Shared Variance were found to be less than Average Variance Extracted, thus confirming the existence of discriminant validity.

Confirmatory Factor Analysis (CFA) suggested deletion of few items and provided a good fit for the final model comprising of eleven item (CMIN/df= 1.232, RMSEA=.069, GFI= .838, AGFI= .739, CFI=.975, NFI=.885 and TLI=.967). This factor structure was retained for subsequent analysis in the present work.

Table 4 : Factor Loadings and Reliability Estimates

Dimension	Item Description	Mean	S.D.	Factor Loadings	Composite Reliability	AVE	Cronbach Alpha (α)
Green Service Policy (6 items)	Measuring environmental performance	4.120	.939	.891	0.929	0.658	0.927
	Environmental training programs	4.080	.876	.831			
	Employees for environmental management	4.140	.756	.761			
	Definition of environmental policy	4.100	.909	.796			
	Clear objectives and environmental plans	3.960	1.009	.833			
	Well-defined environmental responsibilities	3.880	.895	.703			
Green Service Support (7 items)	Electronic payment system	3.940	1.018	.869	0.947	0.742	0.945
	Concessional loans for environment-friendly projects	3.860	.947	.886			
	Has Chief Green Officer	4.080	.876	.725			
	Web conferencing	3.760	1.079	.843			
	Information about environmental management	3.840	1.131	.833			
	Sponsors environmental events	4.020	1.097	.707			
Green Service Delivery (6 items)	Eliminates post-dated cheques	4.220	.887	.859	0.929	0.771	0.927
	Power-down CPU and peripherals during inactivity	4.140	.903	.905			
	Reduce paper consumption	4.240	.959	.807			
	Re-use paper	4.060	1.038	.868			
	Use emails for sending office documents	4.120	.848	.830			
	Disposal of e-waste	4.040	.988	.816			

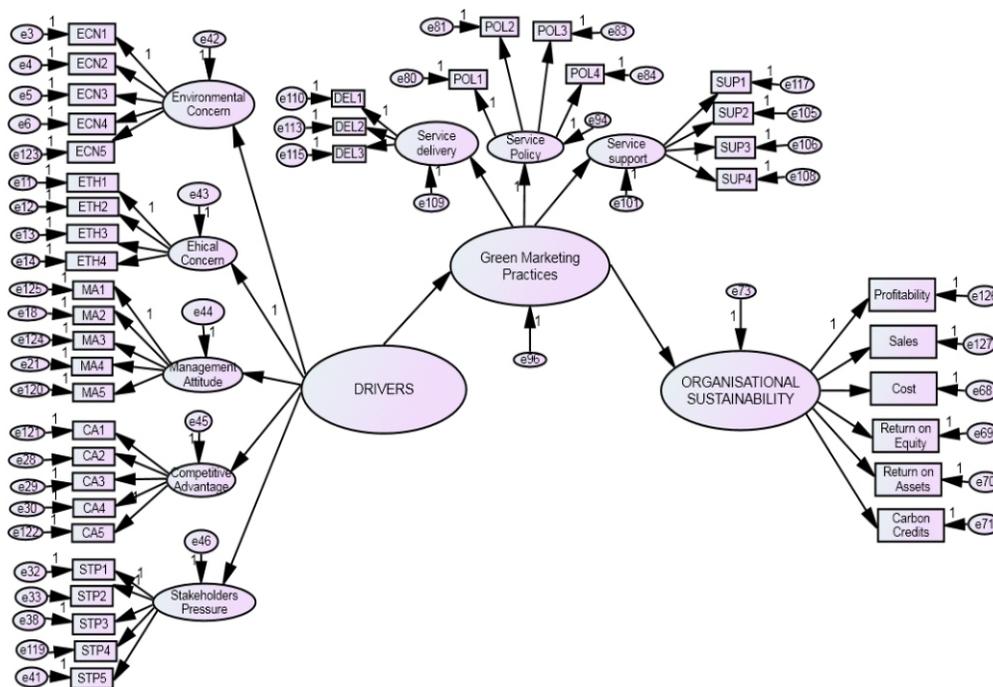
An analysis of the performance of service firms on three dimensions of green marketing practices provides interesting results. With respect to 'Green Service Policy', the findings indicate that the service firms not only employ people for environmental management but also measure their environmental performance in terms of carbon emissions, carbon credits earned, reduction in pollution etc. The mean score for '*well-defined environmental responsibilities*' is the lowest indicating that there is a lack of clarity amongst the employees regarding the activities to be performed in order to improve environmental performance. Hence, the companies need to work in this direction to make environmental management system more efficient. When examined for the dimension of "Green Service Delivery", the findings reveal that the main component of green marketing practices of the service firms under study is the reduction of paper consumption and wastage during the service delivery process. For instance, companies may prefer giving service receipts through mail rather than on paper. On the other hand, companies are not much conscious about disposal of e-waste, as indicated by the mean score of this item. The results are encouraging for the third dimension of 'Green Service Support' and show that the majority of companies appoint chief green officer to manage their green marketing practices and also sponsor

environmental events as part of their green initiatives. However, a face-to-face meeting with clients is still preferred over web conferencing.

3. Relationship between Green Marketing Practices and Sustainability of Service Firms

The relationship between the green marketing practices and sustainability of service firms and is examined through Structural Equation Modeling (SEM) (see Figure 1). The overall fit measures suggest a good fit for the relationship between green marketing practices and sustainability of service firms (CFI = 0.981, GFI = 0.975, AGFI = 0.874, NFI = 0.943, CMIN/DF = 1.403, RMSEA = 0.091). At an aggregate level, the SEM results show a positive and significant impact of green marketing practices on firms' sustainability ($\beta = .474$, $p = .008$). A dimension-wise assessment further reveal a positive and significant influence of 'green service policy' and 'green service delivery' on financial performance ($\beta = .517$, $p = .000$ and $\beta = .281517$, $p = .053$ respectively). The impact of 'green service support' however, is found to be insignificant ($\beta = .200$, $p = .166$).

Figure 1 : The Structural Model



CONCLUSION

The role of companies for achieving sustainable development has been discussed vividly over the last few decades. Increased pressure from competitors, government, community and other stakeholders have made the firms consider the environmental implications of their activities. Consumers too have started exhibiting a favourable response for companies with high sustainability and greater commitment to environment. However, in comparison to the manufacturing sector, adoption of green marketing practices in services is a difficult endeavour and is often more dominant in terms of service operations and processes. Through an empirical research, the present study provides useful insights into the green marketing practices adopted by service firms in the context of a developing economy like India where environmental concern is on a rise. Using confirmatory factor analysis approach, the study confirms five drivers (*'Environmental concern'*, *'Ethical concern'*, *'Stakeholders' pressure'*, *'Management attitude'* and *'Competitive advantage'*) of the adoption of green marketing practices by firms. The paper confirms three dimensions of green marketing practices for services namely, *'Green Service Policy'*, *'Green Service Support'*, and *'Green Service Delivery'* and establishes the structural relationship between the implementation of such practices on the overall sustainability of service firms. In view of the optimistic response of service sector firms towards adoption of green practices, the study suggests implications for the marketers and policy makers for effective implementation of green programs in future. The first and foremost requirement is the active participation and commitment of the top management and the owners. They should be convinced of the benefits of green marketing practices and should exhibit their enthusiasm and support for successful implementation of such programs. Besides chief green officers and General Managers-Environment, green champions may be deputed to effectively administer the implementation of green programs. Secondly, the management should take decisions regarding the major aspects to be covered under such programs. The companies should understand that modification of one

aspect shall require a change in all the related activities, thus necessitating a complete overhaul in all major strategies of the company. Thirdly, the top management should adopt a holistic approach and try to involve all the departments instead of just involving the marketing department. All the executives and functional managers should be consulted and actively involved in formulation of green policies and implementation of green programs. Suggestions should be taken for successful implementation and feedback should be invited so as to make necessary changes to improvise such programs. Green policies and programs should be posted and regularly updated on the company's website so as to communicate such policies to the whole organization. Adequate training programs should be conducted by experts so as to familiarise the management and employees with the benefits and technicalities involved in implementation of green strategies. Lastly, green marketing programs should be continuously reviewed and updated so as to incorporate changes in technologies and other developments in both internal as well as external environment.

The limitations of the present work may be addressed by future studies in this area. The study is based on a small sample of service firms drawn from the survey database of Economic Times, the ratings for which may vary every year with the performance of these companies. Studies in future can make use of a larger and more diversified sample to have greater representativeness of research findings. Further, the survey included the participation of only one person from each service organization who had the knowledge and information about green marketing practices and policies of the firm. However, his/her perception and knowledge about such policies may or may not reflect all about the green marketing practices of the companies. The study also could not undertake all the relevant issues related to green marketing in the context of Indian industry. It would be worthwhile to have a deeper understanding of these aspects and their resultant impact on overall sustainability of service firms.

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