PRACTICING GREEN BUSINESS WITH SPECIAL REFERENCE TO INDIA: PERCEPTION AND COGNIZANCE OF RESEARCHERS

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Abstract
‘Green Business’ has risen in prominence. Green supply chain management is a concept that is gaining popularity in the South East Asian region especially in India. For many organizations in India, it is a way to demonstrate their sincere commitment to sustainability. For this purpose a conceptual model was developed from literature review and data used secondary sources. The analysis identified that Awareness of Green Business in India has been improving very slowly but now people of both countries are feeling that this area is having lot of scope to improve and they started to do work on this area. This paper presents the link between green business management practices and increased competitiveness and improved economic performance amongst a sample of organizations in India. India is fast growing country but slow in developing green business.

Key Words: Business Strategy, Climate Change, Energy Environment, Global Warming, India

JEL classification codes: L1, Q5

I. INTRODUCTION

“Green” means something that is commenced with the environment friendly initiatives.’ Green Business’ has risen in prominence. Green buildings, car manufacturers producing cars that runs on green fuels, entire cities trying to be green. A growing concern at all levels of the impact of the increased consumption on the physical environment. Companies across the world have recognized profitable opportunities in serving green customers’ needs. So, green business can be an initiative as a sign of the green economy, leading to the sustainable growth of a country. Even the concept of green economy might seem to ensure the economic sustainability of a country. India as an emerging economic power is gradually giving emphasis on green business. Green businesses are socially and environmentally helpful. Long term sustainability through Green business with competitive advantage can be achieved. Green businesses care for their workers; their customers and clients and improve their communities.

In recent decades, China, India, Brazil, Russia, and some other rapidly growing developing countries are identified to be major contributors to green business phenomenon. To slow down and possibly to reverse the process of global warming and climate change, countries, civil society organizations, international organizations, and some governments including Indian government have been taking active role in promoting actions to protect the environment by reducing dependence on the use of fossil fuels, improve energy efficiency, resource conservation, foster the concept of sustainable development, among others. There are five types of Green Business Model Innovation (GBMI):

Green Supply Chain Management (GSCM) is an integrated concept of greening activities in the supply chain focusing on upstream flow, cost reductions of and innovation in raw materials, components, products and services.

Take-Back Management (TBM) extends the producers’ responsibility of waste management through take back mechanisms of the down-stream use of the product. This includes manufacturers, retailers, consumers and recyclers.

Cradle to Cradle (C2C) designs innovative and essentially waste free products that can be integrated in fully recyclable loops or biodegradable processes. Cradle-to-Cradle focuses both upstream and down-stream in the value chain.

Industrial Symbiosis (IS) is a system approach to a more sustainable and integrated industrial economy which identifies business opportunities that leverage underutilised resources (materials, energy, water, capacity,
expertise, assets, etc). The aim of Industrial Symbiosis is to reduce costs and environmental impact of participating companies and municipalities.

Functional Sales (FS) are represented by a mix of both products and services, and the provider offers the customers the opportunity to pay for the functionality or performance of the product instead of buying the product itself. Because the payment is done per output unit of the product, there is an incentive, on the one hand, for the consumer to use the product less, and on the other hand, for the producer to improve the product’s lifespan and efficiency.

Research question of this study is whether researchers have done a decent work in terms of studying Green Business system in India?"

II. LITERATURE REVIEW

Porter E. M. and C. Van der Linde (1995)- challenged the prevailing negative business view on this issue and has forcefully argued that “green business strategy” could be a win-win situation for both business and society.

Henriksen, K. , et al. 2012- All use the green agenda as a driver for their green business model innovation – irrespective of the size or sector of the company.

giz(2012) in a survey found that though many businesses in India are affected by a lack of efficient transportation, arguably green and inclusive businesses are affected even more so as their customers often live in remote and inaccessible parts of the country.

Karthik Ganesan, et al.2014 concluded that solar PV and wind-based power generation has a positive impact on human health and the avoided costs associated with premature mortality and morbidity-related health end-points are significant. (Henriksen, k. , et al. 2012) key findings are that: All use the green agenda as a driver for their green business model innovation – irrespective of the size or sector of the company; All see green business model innovation as a way to create positive environmental impacts, more innovation and financial benefit. Many see green business model innovation as a new and long-term strategic investment to secure competitive advantages, more market shares and new revenue streams through production efficiency, a greener company profile and lower supply risks (especially of scarce resources).

Business researchers have examined sustainability for decades from the perspectives of marketing (Belk, Painter, & Semenik, 1981), operations (Corbett & Kirsch,2001), and management (Gladwin, 1993; Shrivastava, 1994). Recently, information systems (IS) literature also began to realize the importance of sustainability, proposed the concept of “Green IS” to better understand the role of IS in dealing with sustainability (Melville, 2010; Watson, Boudreau, & Chen, 2010). For example, the International Conference on Information Systems (ICIS) hosted a submission track for Green-focused papers for the first time in 2009. Yet, there seems to be a lack of direction in term of the specific topics and approach to focus on in term of Green IS.

(Boudreau, Chen, and Huber 2007) summarize the key difference between IT and IS: “An information technology (IT) transmits, processes, or stores information, whereas an information system (IS) is an integrated and cooperating set of software using information technologies to support individual, group, organizational, or societal goals.” This differentiation applies to Green IT and Green IS as well.

To understand and study sustainability comprehensively, we must consider that Green IS involves power consumption and management, manufacturing practices, data center design and operations, recycling and end-of-life concerns for computer equipment, total cost of ownership issues, both micro and macro-economic issues, systems performance and efficient systems use, and environmental, social, and relating to IT acquisition, use, and disposal. Green IS has a greater potential in research and practice than Green IT because it tackles a much larger problem: it can make entire systems more sustainable compared to just reducing the energy required to operate information technologies (Boudreau et al., 2007). Therefore, our objective for this chapter is to offer specific research directions for the topic of Green IS for IS researchers. In order to give more focused directions, we assess the current state of Green IS studies by reviewing the current literature about Green IS. Given the debate in IS about being both rigorous and relevant (Benbasat & Zmud, 1999; Davenport & Markus, 1999; Lee, 1999; Lyytinen, 1999), in this paper we review practitioner as well as academic literature so that we can get a clear picture of the topics discussed in Green IS literature from both sides and give more focused directions in terms of addressing topics valuable to Green IS in a rigorous as well as relevant way.

Vishwa Mohan(2014) argued that five Indian companies have made it to the global list of firms that have shown leadership in adopting measures to cut their climate-damaging emissions. The Indian companies that made it to the list — CDP Climate Performance Leadership Index 2014 — are: Essar Oil, Larsen & Toubro, Tech Mahindra, Tata Consultancy Services and Wipro.

Arun (2015) described that in the summer of 2004, it unveiled the CII-Godrej Green Business Centre (GBC) in Hyderabad-a public-private partnership project between the Andhra Pradesh government, the Pirojsha Godrej Foundation and CII.
This paper intends to make an important contribution in filling a gap in this important and evolving area of knowledge and thereby help in understanding and promoting green business strategies in underprivileged victim countries like India through analyzing secondary sources.

III. RESEARCH METHOD

This paper intends to conduct research to literature review some successful green-strategy based business models in India to examine whether and to what extent such strategies can be replicated in other countries, particularly in poor developing but climate change victim countries like India. Finally, the paper will try to suggest ways on how businesses in these India can learn, develop, and apply green business strategies so as to improve their own bottom lines and at the same time contribute to the control of global warming in this frontline climate change victim countries.

The study was done for the period from December 2015 to March 2016. The study is mainly done through secondary data. Exact sources of secondary sources have been mentioned in references. However, the study is based on qualitative analysis. We also discussed one case study.

IV. CASE STUDY: NOKIA TAKE BACK RECYCLING PROGRAM

The Nokia Take-Back program was launched in India through a pilot on January 2009 across the cities of Bangalore, Delhi, Gurgaon and Ludhiana. As a part of the program, Nokia committed to plant a tree sapling for every handset dropped, irrespective of brand or model, into one of its recycling bins. In India, under the Take-Back program, Nokia has set-up a recycling infrastructure across the country with over 1300 recycling bins installed at Nokia Priority Dealers and Nokia Care Centers nationally. (Source: Internet)

Local Recycling Activation in India
Collection in 2009-11, 12 tons, 27 tons, 60 tons
Over 2,000,000 pieces of phones and accessories Recycled
Over 130 million people reached with recycle message Recycle a phone, adopt a tree. Watch it grow through Ovi Maps Can one phone save the world? Every phone contains significant amounts of copper, aluminium, gold, plastic and

Other non-meta ls that can be salvaged and reused. If each of 4.6 billion phone users recycles just one phone, We can save over 370,000 tonnes of raw materials. That's equivalent to Eliminating CO2 emissions from 6 million cars.

Sustainable Materials Management – Electronics Challenge
Goals:
•Ensure responsible recycling through the use of recognized 3rd party certified recyclers (R2 and E-Stewards)
•Increase collection and recycling rates for used electronics
•Increase transparency and accountability through public posting of electronics collection and recycling data; and Encourage outstanding performance through awards and recognition.

(Source: https://www.epa.gov/sites/production/files/2014-05/documents/nokia.pdf)

V. PRESENT STATUS

The Ashden India Renewable Energy Collective brings together Indian Ashden Award winners to champion renewable energy, promote best practice and end India’s vicious cycle of energy poverty. (source: http://www.ashden.org/india-renewable-energy-collective?gclid=CP7tvMW2z8wCFdCHAod0_AMTQ)

Jocelyn Timperley (2016) described that the US had brought a complaint against the Indian government-funded mission, which aims to rapidly boost solar capacity across the subcontinent, arguing a "domestic content" clause requiring part of the solar panels to be produced in India was in violation of international trade rules. The Solar Mission was the centrepiece of India's INDC national climate action plan submission under the Paris Agreement. But the WTO rejected India's argument the programme helps the country to meet its climate commitments, and said domestic policies that violate WTO rules cannot be justified on the basis they fulfil international climate commitments such as those set out under the Paris deal.

In 2010, the Bureau of Labor Statistics of India received funding to study how many green positions are emerging, where they're based, and who is filling them. They adopted a working definition of a green job as one involved in the production of a green good or service, or a job that observes environmentally friendly production processes and practices. Business leaders and entrepreneurs are no more in agreement on what it is that makes a business green.

As a part of the global climate deal, national governments have shared plans for their countries' action on climate change, and India’s contribution is ambitious -- promising that renewable energy will be 40% of the
country’s expected electricity generation capacity in 2030, along with a 35% reduction in carbon intensity by 2030 from 2005 levels.

India has also set one of the most ambitious renewable energy targets of all ~100GW of solar power by 2022.

The India Innovation Lab for Green Finance builds on the successes of its sister initiative, The Global Innovation lab for Climate Finance, but adapts the global model to India’s unique opportunities and challenges. The Energy Savings Insurance instrument was developed and endorsed by the Global Innovation Lab for Climate Finance, the sister initiative to the India Lab, and is being taken forward in Latin America by the Inter-American Development Bank.

Challenge to combat global warming cannot be met by international agreements and government regulations alone, especially in a situation where these agreements and regulations are quite weak to begin with. Beyond those agreements and regulations, major efforts need to be undertaken by people in general (citizens, consumers, and households), non-governmental civil society organizations, and not the least, by business organizations. Although peoples, governments, and civil society organizations are in general in different countries are much ahead in their awareness of the issue and are willing to participate in any sensible efforts to combat global warming, unfortunately, most business organizations in the U.S. and other countries (with some exceptions) have generally lagged behind and in many cases have taken active roles in opposing such initiatives. Businesses have generally viewed such initiatives not only to infringe on their freedom to do business, but have considered those initiatives as adversely impacting their financial bottom lines as these initiatives increase their cost of doing business.

Fortunately such negative business views have been challenged by some economists, policy makers and even some prominent management gurus in recent years. Well-know management guru Michael Porter of Harvard Business School, in a seminal article, has challenged the prevailing negative business view on this issue and has forcefully argued that “green business strategy” could be a win-win situation for both business and society.

The perspectives of our global sustainability goals, our financial institutions may reform their financial strategies to sustainability based financial products including monitoring services and policies. Here, the sustainability requirements should be the triple bottom line standpoints that monitor the Green Finance of an institution to a broad range of monetary support for innovative projects and technologies leading to sustainable business. We should recognise the value of our nature and people as a capital, while our best efforts to supply human fundamental needs through reducing environmental risk and maintaining economic stability. In this perspective, new finance may broadly replace old machineries to minimise carbon emission, introduce of renewable energy sources as well as to use of surface water. However, in the context of developing country like India, the new financing could be focused particularly on: clean and renewable technologies which both decrease adverse environmental impacts in a continuous improvement and create stable economic assets; uninterrupted agriculture market potential and create new market channel with a good return on investment; ecological building materials; safe water and improved sanitation (we are better than before); creating assets out of both solid and liquid waste; eco-business exploration for micro-entrepreneurs; expanding microfinance clients’ contribution to achieve sustainable development goals, and; to promote regenerative natural resources in all the future projects.

To get the continuous and best benefits, we have to drive green economy through the investment of public-private-foreign partnership. Therefore, good governance and coordination of investment are jointly needed to lead the future projects within the common global interest.

Any product or service we are currently buying can be greener. Here are 15 business ideas we have seen take off firsthand, but of course there are many more to consider. Mostly, we will want to get involved in something that makes us happy, feeds our passion and also generates income.

**Organic gardening coach.** New gardeners as well as old hands that once gardened using conventional chemicals can now seek help making the transition to organic gardening. Rather than get in the business of actually creating the garden ourselves, work with clients who we can coach.

**Neighbourhood compost picker-upper.** This has become a thriving business in our community. A company called ‘The Compost Crew’ got contracts with municipalities to distribute compost buckets, then pick up our compost once a week curb side.

**Bottom of Form Home energy efficiency auditor.** Set up a business to help homeowners figure out how much additional ceiling, floor and wall insulation they need; what light bulbs to change out; what kind of programmable thermostat to get; and what energy-saving appliances to choose if they need to replace their HVAC system or hot water tank. EcoBeco is one company that offers this service in our neighbourhood and could serve as a model for people.

**Electronics recycler.** The way to build a successful business is by meeting a need. In this case, the need is to recycle electronics: mobile devices, old computers, out-of-date televisions and fax machines. The list is long and the pile of ancient electronics could be pretty big for any given customer.
Native landscape designer. With drought spreading across so many parts of the U.S., it’s getting harder and harder for homeowners to maintain a fancy landscape full of exotic plants. Outdoor water conservation specialist. Home owners waste water and money on leaky faucets, hoses and inefficient sprinklers. Can our business do an “outdoor water audit” of a property, then recommend water timers, new water technologies and simple additions like rain barrels to help people save?

Eco-fashion designer. We are amazed at how many businesses are being started by people who are producing new clothes old clothes, plastic bottles, even rubber tires. If someone wears it, we can make it—from eco-friendly, recycled materials. That goes for jewellery and accessories, too. The only restriction is our imagination.

Green app developer. We should prefer to work in the tech world? What app do we wish to make it easier to live green?

Green house cleaner. there are so many good green cleaning products in the market place, we don’t need to make our own in order to start a business that offers the greenest house cleaning services around.

Non-toxic make-up maker or seller. We never would have added this business to the list if we didn’t know so many people who’ve started their own non-toxic make-up lines. Many people go this route because they haven’t found anything in the make-up market that works for them. If we want to sell safe make-up but not make it ourselves, consider working as a sales agent for a company like Beauty Counter.

Non-toxic home cleaning products producer. In addition to cosmetics, many entrepreneurs are now dabbling in making their own non-toxic cleaning products. Learn from Karmalades, one of our faves, which sells via Etsy but also directly to food co-ops and specialty stores in the Washington, D.C. area.

Solar co-op organizer. It can be confusing to figure out whether we should put solar collectors on your roof and if so, how we can finance them. Or what if we want to use solar but our roof is just too shady?

Organic and local food service vendor. Consider the Relay Foods model. This company has established a network of farmers in the Washington DC metro area who grow local and organic food. Relay picks up the food at pre-arranged times, then sends its trucks to sales points around the city. Consumers swing by to pick up the food they’ve ordered in advance.

Organic and local food caterer. Rather than sell good food that’s fresh from the farm, why don’t we prepare it and then sell it? Cater parties, weddings and other special events. Create a meal service for people whose busy schedules prevent them from shopping and cooking for themselves. Set up special meal packages for new parents or people on bed rest.

Wood up cycler. One business we talk about starting ourselves involves “harvesting” wood from urban and suburban trees that either come down in storms or are taken down when development occurs.

VI. SUGGESTED MODEL FOR GREEN BUSINESS

In the Fig:1 we proposes a suggested model for green business plan. It is well coordinated both horizontally and vertically among starting from Environmental decision, Green innovation, Environmental protection, competitive analysis, customer responsiveness, sustainability, value adding activities, water

VII. CONCLUSIONS AND DISCUSSIONS

The analysis identified that awareness of Green Business in India has been improving very slowly but now people of both countries are feeling that this area is having lot of scope to improve and they started to do work on this area. To get the continuous and best benefits, we have to drive Green business still isn’t big business in India. But some of the India’s largest corporations are feeling both internal and external pressures to adopt sustainable practices. Companies like GE are speaking the green language, and while skeptics will argue whether or not it’s all so much green wash. Another group who want to know that in the in the middle of the green business history, they want to become active partner. Green economy through the investment of public-private-foreign partnership may be ensured. When it comes to green business, no one has a clear sense of what exactly makes a business green as opposed to more-or-less yellow, not even the Federal government. In 2010, the Bureau of Labor Statistics of India received funding to study how many green positions are emerging, where they're based, and who is filling them. They adopted a working definition of a green job as one involved in the production of a green good or service, or a job that observes environmentally friendly production processes and practices. Business leaders and entrepreneurs are no more in agreement on what it is that makes a business green.

While green business still isn't always big business, many of the nation's largest corporations are feeling both internal and external pressures to adopt sustainable practices. Companies like GE at India are speaking the green language, and while skeptics will argue whether or not it's all so much green wash, there are others who want you to know that India is in the middle of the green journey.

VIII. REFERENCES


Websites:
