BUILDING SUSTAINABILITY THROUGH PEOPLE CAPABILITY: A CASE STUDY OF WIPRO LTD

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Sustainability has become a key focus for many organizations as climate change, regulatory pressures and societal demands for greater environmental and social responsibility have emerged. The notion of triple bottom line -- profit, planet and people has resulted in companies investing heavily in managing the environment. During the last decade, management scholars have shown increasing interest in promoting business practices that are compatible with achieving environmental sustainability (Jackson and Seo 2010). The necessity of the green path is stronger in third world countries than in the developed world given the rapid growth that many of these economies are experiencing in the last decade (Khandwalla, 2008:137). Yet most of the work in this area has been in developed economies (Huffman et al., 2009; Renwick et al. 2008). In the Indian context, it is interesting to note that there has been significant accomplishment in the field of environmental sustainability in the last decade. In November 2011, SEBI mandated

that the 100 largest listed companies must submit business responsibility reports along with their annual reports. In a recent report published by GIZ on Sustainable reporting: Practice and trends in India (2012), it was found that 80 companies from different sectors were already doing sustainability reporting; out of this, about 60 followed the GRI guidelines. This augurs well for a country that has been a recent entrant in to the sustainability discourse. Very few organizations, in the emerging markets have followed the path of building strategic organizational capability and integrating it with the business strategy in the field of Sustainability. It seems that the greening of strategic human resource management (hereafter referred to as strategic HRM) scholarship represents a "blue ocean" research topic for the future (Jackson and Seo 2010). The current paper addresses the gap by attempting to develop a case study of an organization's attempt to build its green capability.

The paper is divided into three sections - in the first section, we provide a conceptual framework and argue that Green and sustainability demand organizational capabilities embedded in people. In the second section, we present a case of Wipro Ltd using archival analysis to support the argument for organizational capability building; in the final section, we discuss the implications of such an understanding of HRM for both HR professionals and line managers in organizations.

Conceptual Framework

The Resource-Based view of the firm highlights the influence that the (internal) organizational processes exert on competitiveness (Wernerfelt, 1984). A number of academics and consultants have supported the "pays to be green" debate that the certification of Environmental Management Systems would generate competitive advantage (Orsato, 2006:128). Successful companies leverage opportunities to become an influential or dominant force in the green-standards battle by understanding the standards that exist in one's own industry and also the firm level green capabilities. Once the firm has obtained this understanding, it has four strategies to follow: (1) adopt the existing standards; (2) co-opt and modify them to suit the organizational capabilities and processes; (3) define standards for the industry; or (4) break away from existing ones and craft own strategy. Unless the organization is engaged in the debate and in shaping the rules, the risk being assessed against sustainability standards cannot be met (Unroh and Ettenson, 2010:113).

It has been argued that "Responsible management approaches can potentially provide for a solid basis of competitive advantage, especially for early movers" (Waddock and Bodwell, 2004). Environmentally conscious employees also happen to be the best workers as they tend to think on the lines of sustainability, which is in keeping the organization's well-being. This thought underpins the green work life balance concept (Muster and Schrader, 2010). Since reciprocal interactions between working life and private life occur, a "green work-life balance concept" is suggested to facilitate environmentally friendly behaviour in both life domains. The concept offers chances not only for the environment, but also for the company and its employees by increasing, for example, work motivation and job retention (Muster and Schrader, 2010). The key question that is being investigated is how does an organization in an emerging economy like India create conditions through organizational level drivers to build green HRM capability which contributes to the sustainability discourse within an organization?

We will investigate the phenomena using the case study of a single organization.

The case study design has been widely accepted for the interpretive research approach (Yin, 2009) when the research question emphasizes understanding of process events, i.e. involves the "how"? and why? The research questions which help to understand the development process of a phenomenon are studied using process models (Van de Ven, 2007). We collected data from secondary sources and published reports and interviews with key respondents.

Wipro Ltd: a case study

The focus of the case study is on understanding the manner in which a large multi business Indian conglomerate built its capability in the field of Sustainability and in particular the creation of its new business unit Wipro Eco Energy. Wipro Limited is a conglomerate headquartered in Bangalore, India. Its businesses include consumer products, infrastructure engineering, lighting and IT services.

Around the year 2006, Wipro began to articulate its view of good Corporate Citizenship. Even earlier, doing business with integrity was a part of the culture of the organization. The organization accepted the definition of sustainability as "forms of progress that meet the needs of the present without compromising the ability of future generations to meet their needs." (http://www.benefits-of-recycling.com/ definitionforsustainability.html). Wipro articulated its sustainability agenda around three key themes - "Wipro cares" which focuses on community initiatives, relief and rehabilitation around natural disasters; "Applying Thought in Schools" with its focus on improving the quality of education and "Eco Eye", with its focus on ecology and environment. All these initiatives were seen to provide leadership in thought and action on Wipro's commitment to sustainability. In 2011, Wipro was ranked 2nd in the world in the IT Services sector on multiple

dimensions of corporate sustainability by Oekom Research AG (Mehta, 2011), was one of the three companies from India on the Dow Jones Sustainability Index (DJSI) for 2010, has been ranked 1st in the Carbon Disclosure Leadership Index (India) and has been listed on the Nasdaq-100 Global Sustainability Index amongst the companies that have taken a leadership role in disclosing their carbon footprint, energy usage, water consumption, hazardous and non-hazardous waste, employee safety, workforce diversity, management composition and community investing (Wipro Sustainability Reports, 2010). The creation of a new business unit Wipro Eco Energy was based on the capability acquired by the organization through these various initiatives that it launched through the Eco Eye.

The journey of transformation on Sustainability at Wipro began with an internal discussion process across the senior leaders in the organization. Around January 2007, Wipro narrowed down on ecology as the key strategic area that the company would invest in. In the words of the Chairman Mr. AzimPremji, "Our focus on water and eco-energy does not only make ecological sense, but underlines business sense, as well." (Premji, 2010). The choice of ecology has a double benefit since it has huge commercial opportunities across the world and ecological factors will also leverage infrastructure growth which was a key need in an emerging economy like India.

In June 2008, Wipro announced Eco Eye, as a comprehensive charter for ecological sustainability. Its goals were to enable the company to become a carbon-neutral and water-positive organization, achieve defined levels of biodiversity footprint, set new standards in recycling waste, and help employees achieve a smaller ecological footprint in their personal lives. "Eco Eye is the "eye" through which we attempt to see

everything and act for ecological sustainability. We firmly believe business cannot be built at the cost of ecology. It is not sustainable. Ecological sustainability will increasingly be the defining force for society and business globally. Wipro believes ecological sustainability is the right thing to do—in fact is the only way forward. Wipro will work on the dimensions of carbon neutrality, water balance, waste management and bio-diversity." (Azim Premji, Chairman, Wipro, c.f., Bose, 2009). One of the key elements of the eco eye was that it would contribute to building a portfolio of businesses for Wipro in the field of energy and water which would create value in future.

Eco Eye had seven objectives against which Wipro had deployed the basic framework [see Exhibit 3 (Bose, 2009). It had a governing council, which was interdisciplinary and consisted of senior managers. The initiatives it supervised, including Green IT, had the direct support of top management. The "green" initiatives undertaken by Wipro fell under four major categories encompassing: strategy (alignment of 'Green' with company's designated road-map for growth); people (reducing the carbon foot-prints in personal lives of individuals); facilities and operations (physical infrastructure at company's and clients' sites) and; IT specific improvements (focused on IT environment of the company as well its customers) [see Exhibit 6 (Bose, 2009).

As an upshot, all of the company businesses have their own green offerings. The aspect of green has been integrated in to the company's IT business. In addressing its own energy requirements first, Wipro was able to sharpen its learnings which it subsequently used to create a value proposition for its customers. The company had turned its 50-acre campus at Electronic City in Bangalore into a test bed, as Forbes India magazine called it (Jayashankar, 2009).

While its software engineers, numbering 25,000 at the location, wrote codes for Fortune 500 corporations, waste food from the cafeteria was being turned into methane for lighting burners, rainwater was being harvested to be used to cool air-conditioning towers, waste paper was being converted and recycled into writing pads at a paper pulping plant; and bulbs along the perimeter of the campus were being lit by a micro windmill. In the lighting business, Wipro had the entire range of LED lighting solutions. Already, 70% of LEED-certified buildings in India are lit by Wipro Lighting. The company's campus in Bangalore had the largest LED installations in the country. All compact fluorescent lamps had been replaced with LED lights, saving 75 per cent in electricity consumption. (Bose, 2009)

The energy efficiency of Wipro's operations has shown a cumulated improvement of about 20 % over a six year period from 2004 to 2010. It has been the result of company's early investments in green building design (LEED), continued improvements in cooling infrastructure and the adoption of best practices in its internal IT infrastructure like virtualization and energy saving computers. Extensive water treatment in combination with rainwater harvesting ensures that 32% of Wipro's total water requirements are met through recycling and harvesting. These visible ecological achievements gave the team an opportunity to build a value proposition for the client.

The success at going green internally gave the team the confidence to market its solutions to its external customers.

In 2008, Wipro decided to bring all its Eco Eye initiatives around sustainability under one roof. This led to the incubation of Wipro Eco Energy under Wipro Infrastructure Engineering. Wipro EcoEnergy, the clean technology business

of Wipro ltd that provides intelligent, sustainable alternatives for energy generation, distribution and consumption was started in 2010 and in 2011, it became a distinct business unit of Wipro Ltd. The idea of starting up an Eco Energy business came from Mr. Anurag Behar. "I talked to five friends of mine, then the idea went to AHP (Mr. Premji) and he said it will never work. We kept fighting. Just because Premji didn't like it at first, it didn't mean I would give up. It went on and on and the more the dialogue continued, he started getting in to it. He started doing his own research and spoke to several experts around the world and after each trip he would come and tell us what he found. It took six to nine months for the idea to finally form and it developed only because of this collaborative dissent style of working" (Behar as quoted in Forbes India 2009). Mr. Anurag Behar went on to become the first CEO of Wipro Eco Energy. Many of the members of the core team of Wipro Eco Energy were members of the eco eye initiatives and sustainability initiatives within the organizations. Most of them had served for long years within the Wipro group of companies in various functional capacities. Being incubated at Wipro Infrastructure allowed them to leverage the organizational resources effectively without too much of an investment. This also allowed them to operate synergistically with other parts of the organization. In the early stages of Wipro Eco Energy, the organization decided to do an Internal Job posting to attract talent. Over 75-80% of the core team members came in from other parts of the Wipro Group. The Eco Energy business currently employs about 250 employees. While specialists have been brought in from other organizations through lateral entry, its umbilical cord with Wipro still continues. The strategic thinking regarding the organization's entry in to the energy business is articulated by its

Chairman AzimPremji as follows: "Ecology and economy are becoming inextricably entwined and the world is becoming more conscious of this fact. Despite widely differing perspectives and agendas, there seems to be a remarkable global consensus that has built up over a fairly short period of time that climate change and ecology is one of the truly defining issues for humanity. This is not a 'few quarters trend'; this is something that will build over the next few decades and will become the defining force for all of us. We think that if the past few decades can be characterized as the "Information Age", the next few will be the "Ecological Age"." (AzimPremji, Chairman, Wipro Ltd as quoted in Knowledge@wharton)

Discussion and Interpretation:

The case study presented above shows very clearly "how change unfolds" through a temporal sequence of events that unfold in institutional arrangement in an organization. In the first phase, the strategic focus arose out of an employee engagement and a commitment to the green intervention. The second phase saw environmental issues moving into business issues, especially when Wipro started offering the green solution to its clients, and moving beyond good corporate citizenship. If strategy is about "doing better by being different," as Magretta (2003) put it," then an environmental strategy requires more than doing well. Managers will need to identify the areas in which firms can focus their environmental efforts in the pursuit of competitive advantage". Fundamentally, they have to ask: Who is valuing my environmental investments? What managers need is a basis from which they can prioritize environmental investments. More broadly, they need to align these investments with the generic strategy of the company.

The framework presented below in Figure 1, by Orsato (2006:140) offers a perspective to view Wipro's journey in sustainability.

Figure 1: Generic Competitive **Environmental Strategies**

Differentiation Lower costs Competitive Focus

Strategy 1:	Strategy 4:
Eco-Efficiency	Environmental
	Cost
	Leadership
Strategy 2:	Strategy 3:
Beyond	Eco-Branding
Compliance	_
Leadership	

Organization Processes Products and Services

(Source: Orsato, 2006:131)

The framework presented helps managers to define and prioritize areas of organizational action, optimize the overall economic return on environmental investments, and transform these investments into sources of competitive advantage. A differentiation strategy of attempting to distinguish organizational products or services from other competitors, or creating the perception of a difference is present (Mello, 2006). We see Wipro following the Strategy 1 and 2 as presented by Orsato (2006). In fact this is supported by the ideology of Unruh and Ettenson (2010), wherein Wipro breaks way from the industry standards and establishes its own unique capabilities with the industry. The first mover advantage is present, intertwined simultaneously with a strategic HRM approach. To support the business strategy, Eco eye was seen as a critical intervention and this also created a talent pool within the organization to manage sustainability more systematically. HR strategy focuses on external hiring of unique individuals and on retaining employees who were a part of the organizational initiatives earlier and who understand the culture and ethos of the organization. Strategic HRM involves matching HRM practices to

the strategies pursued by the organization (Lundy and Cowling, 1996). Arthur (1994) found that commitment-focused HRM practices produced more value for firms that pursued a differentiation strategy. By choosing to staff the new business unit, with a large number of employees through the Internal Job postings, the company has pursued a philosophy of identifying the appropriate talent which has demonstrated its commitment to the organization and will be willing to acquire and build a learning orientation in the new organization. These employees carry the experience and values from their old organizations and bring their learning orientation and a passion for sustainability into their new roles.

When we examine the case, the distinct concept of employee engagement to influence the strategic intent of the firm is present. A distinct Inside out (Mello, 2006) Strategic HRM approach is visible where the firm has developed its organizational capability in Green sustainable development. The agility of innovative response and time to market and provide solution within a three year frame is yet another distinct competitive advantage of Wipro. The ability to develop an organizational capability within the firm and offer that capability to the market requires people agility and change agility. It also speaks of the need for a transparent, client focused and business focused strategic intent of the organization.

Another lens to view the case would be the framework of 5 Ps of Strategic HRM (Schuler, 1992; Mello, 2005). The first P is Philosophy, which is a statement of how the organization values and treats employees; essentially the culture of the organization. This is present at Wipro in the manner in which Mr. Anurag Beher, CEO, WIE, influenced Mr. Premji on the need for ecology as a business strategy. Once the idea made business sense, he

followed it up with research and the organization support that is needed to translate it into action.

This is followed by the next two P's: policies and programs, which were initiated to take the ecological agenda forward. Policies are expressions of shared values and guidelines for action on employee-related business issues, while programs are coordinated and strategic approaches to initiate, disseminate, and sustain strategic organizational change efforts necessitated by strategic business needs. The policy dimension is evident in how the company turned its 50-acre campus at Electronic City in Bangalore into a test bed. Wipro began its sustainability reporting in 2007-08 and its reports clearly show gains and impacts across all dimensions of sustainability. Wipro eco energy, Wipro water, Wipro Green IT are the programs and strategic interventions that have resulted in the creation of a distinct competitive advantage. By offering the services to its clients as business solutions, Wipro was able to strengthen its implementation capability at all levels in the organization. The next set of P's is the practices and processes. HR practices that motivate behaviors that allows individuals to assume roles consistent with the organization's strategic objectives. This dimension has been consistently resonating through the case. Self-motivation and engagement, leading to change and transformation of the key stakeholder is of particular significance. We see the replication of this sense of engagement within more teams and programs and intervention, so as to involve the entire organization. Narayan P.S., G.M. and Head, Corporate sustainability, Wipro Technologies Ltd. states how employee chapters across the world are engaged in more than 50 projects and activities since inception three years ago, and activities range from conservation, treks, events,

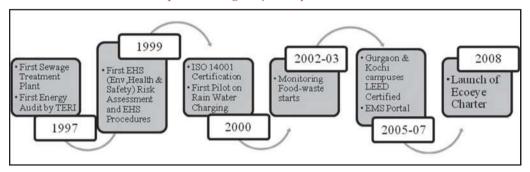
tree planting and waste management. (Bhambahani, 2011). The waste food from the cafeteria was being turned into methane for lighting burners, rainwater was being harvested to be used to cool air-conditioning towers, waste paper was being converted and recycled into writing pads at a paper pulping plant; and bulbs along the perimeter of the campus were being lit by a micro windmill. The last P is the process. Processes are the continuum of participation by all employees in the specific activities of the organization to facilitate the formulation and implementation of other activities. It provides green solutions to its existing customers and also builds new team members. In the early stages of Wipro Eco Energy, the organization decided to do an Internal Job posting to attract talent. Over 75-80% of the core team members came in from other parts of the Wipro Group. The Eco Energy business currently employs about 250 employees. Veena Padmanbhan, G.M. Talent engagement and development, Wipro technologies shares, "Employees are our ambassadorsto our customers and to the community at large. Our Eco-Energy business (IT solutions for greening Business), our green ware and PC businesses are increasingly solutions to customers across domains require eco-aware employees. We are educating employees on sustainability thinking, design, practices and processes - all contributing to the company's employees themselves and the cause at large" (Bhambahani, 2011).

Conclusion

The case study has to be viewed as a lens to understand how organizations go about creating new modes of capability to serve their strategic intent. There is a need for deeper reflection on a more meaningful discourse on HRM and environment in the Indian context. More research is needed in the field to further, investigate other successful models of interventions in the field of Green HRM. Business and sustainability linkage supported by intense people processes leading to green engagement at the individual, team and organizational level is an area which future studies in India may focus on. In a highly competitive context for talent, where several young people have

a heightened appreciate of environment and sustainability, HR professionals in organizations may need to find ways to reconcile the professional and personal value systems of employees to retain them. It appears that HR as a profession requires a deeper exploration and understanding of its own roles and competencies in engaging with Green HRM.

Exhibit 1: Milestones of Wipro's ecological journey over the last decade



Source: Data from Wipro's Sustainability Report 2007-08

Exhibit 2: Wipro- turning into an ecologically sustainable company (capability built up over the last three years)

SUSTAINABILITY	KEY PERFORMANCE HIGHLIGHTS			
AREA: THE 'GREEN' DIMENSION	2007-08	2008-09	2009-10	
Resource Efficiency (Energy, Water)	i) Cumulative reduction of 18.6% power consumption per employee from 01-02 to 07-08 ii) 36% of total water needs met through recycling in India	i) Robust process defined and implemented for GHG (green house gases) measurement across dimensions: electricity, business travel, waste, fuel etc ii) Extensive water treatment in combination with rain water harvesting iii) Restoring of Manikonda community lake in Hyderabad	i) Both energy efficiency and GHG emissions showed an improvement over the previous year ii) GHG intensity per employee reduced from 4.33 to 3.72 iii) Consumption intensity of water per employee reduced from 19.2 KL to 14.7KL compared to the previous year	

SUSTAINABILITY	KEY PERFORMANCE HIGHLIGHTS			
AREA: THE 'GREEN' DIMENSION	2007-08	2008-09	2009-10	
Climate Change , Pollution Mitigation and Waste Recycling	i) Carbon foot- print base-lined for the first time ii) Zero discharge of untreated waste to surroundings iii) Segregation of waste safe disposal to hazardous waste	i) First successful implementation of kitchen waste-to- bear conversion biogas plant at Electronic city facility in Bangalore ii) First successful implementation of paper recycling plant at Electronic city facility in Bangalore iii) Significant increase in quantum of e-waste disposed safely	 i) 76% of total generated waste is recycled ii) 100 tons of GHG emissions avoided through conversion of food-waste to a source of cooking fuel iii) Paper recycling plant in Bangalore recycled 20 tons of waste paper thereby saving 50 tons of dry timber and 0.5 million gallons water 	
Ecological Stewardship of Customers and Products	i) Wipro Infotech launches the 'Green PC' range	i) Wipro's PCs and laptops reached a level of 99%+ compliance with RoHS (restriction on hazardous substances) standards ii) Take-back program showed evidence of increased customer interest	i) All models of Wipro laptops and desktops achieved 100% compliance with RoHS standards ii) Significant progress was made on the Energy Star journey iii) Wipro's e-waste program nearly doubled the collection of e-waste from 4000 kg/month to 7700 kg/ month	

Source: Data from Wipro's Sustainability Reports 2007-08; 2008-09; 2009-10

References

Aberdeen Research May 2009 The ROI on sustainability, making the business case: Jhana Senxian, Cindy Jutras, www.aafm.org/download.php?id=398

Abbott, A. (1988, Transcending general linear reality, Sociological Theory, 6:169-186,

Arthur, J.B. (1994). Effects of human resource systems on manufacturing performance and turnover, Academy of Management Journal, 37(3): 670-687.

Bhambahani, A.(2011). Environmentally engaging, Economic Times, June 3rd 2011.

Bose, Indranil (2009) Green Matters at Wipro Ltd. Asia Case Research Centre, University of Hong Kong.

Eisenhardt, K. M. (1989). Building Theories from case study research. Academy of Management Review, 14 (4), 532-550.

Eisenhardt, K. M., & Bourgeois III, L. J. (1988). Politics of strategic decision making in high-velocity environments: Toward a midrange theory. Academy of Management Journal, 31 (4), 737-770.

http://www.wipro.com last accessed on July 30, 2011

http://www.benefits-of-recycling.com/definitionforsustainability.html. last accessed on July 30, 2011

http://news.in.msn.com/technology/article.aspx?cp-documentid=5198668, last accessed on July 30, 2011

Jackson, Susan E and Seo, Janghoon (2010) The greening of strategic HRM scholarship, Organization Management Journal 7, 278–290

Jayashankar M. (2009). The Inside Story of Azim Premiji's next billion dollar plan. Forbes India, June 30, 2009

Khandwalla, P. N. (2008). Management of Corporate Greatness: Blending Goodness with Greed. South Asia: Dorling Kindersley (India) Pvt, Ltd,

Lundy, O. & Cowling, A. (1996). Strategic Human Resource Management, New York: Basic Books.

Magretta, J. (2003) What Management Is: How It Works and Why It's Everyone's Business (London: Profile Books).

Mangal S.S. (2011) Green Branding: Are You Ready? Wipro Document

Mehta R. (2011). Wipro on the Nasdag-100 Global Index

Mello J (2006) Strategic Human Resource Management, Thomson, South Western Publications,

Muster, V. and Schrader, Ulf (2010), Green Work-Life Balance: A New Perspective for Green HRM. German Journal of Research in Human Resource Management, 25(2)

Orsato, R.J. (2006) Competitive Environmental strategies: When does it pay to be Green? California Management Review, vol 48. No.2

Pentland, B. T. (1999). Building process theory with narrative: From description to explanation. Academy of Management Review, 24: 711-724.

Poole, M. S., Van de Ven, A. H., Dooley, K., & Holmes, M. E. (2000). Organizational change and innovation processes. Oxford: Oxford University Press.6: 375-392.

Premji A., (2010) 'Ecology Is One of Our Big Bets for the Future', India knowledge@Wharton http://knowledge.wharton.upenn.edu/ india/article.cfm?articleid=4486) last accessed on July 30, 2011

Schuler, R.S.(1992). Strategic Human Resource Management: Linking the People with the Strategic Needs of the Business," Organizational Dynamics (Summer): 18-32.

Unruh, G. and Ettenson R., (2010). Winning in the green frenzy. Harvard Business Review (November): 110-115.

Van de Ven, A. H. (2007). Engaged Scholarship: A guide for organizational and social research. New York: Oxford University Press.

Van de Ven, A. H., & Garud, R. (1994). The coevolution of technical and institutional events in the development of an innovation. In J. A. C. Baum & J. V. Singh (Eds.), Evolutionary dynamics of organizations: 425–443. New York: Oxford University Press.

Waddock, Sandra A. and Bodwell, Charles (2004): "Managing Responsibility: What Can Be Learned from the Quality Movement?" California Management Review, 47/1 25-37

Wernerfelt, B., (1984) "A Resource-Based View of the Firm," Strategic Management Journal, 5:171-180

Wipro's Sustainability Reports 2007-08; 2008-09; 2009-10. www.wipro.com.

Woodside, A. G., & Wilson, E. J. (2003). Case study research methods for theory building. Journal of Business & Industrial Marketing, 18 (6/7), 493-508.

Yin, R. K. (2009). Case Study Research. Thousand Oaks: Sage Publications Inc.