CHANGING PARADIGMS IN MANAGEMENT

ABSTRACT

October 31, 1571 individualism was born. Martin Luther nailed his Ninety Five theses to the door of the Wittenberg Palace All Saint’s Church. The event marks the beginning of the Protestant Reformation which became the base of capitalism. Now the Church was not the interpreter of the Bible, Luther gave this right to single human beings. He initiated the process of reinventing Christianity. ¹ We look at this as a paradigm shift. Management thought is in a state of flux and we are experiencing paradigm shift in management too. Today organizations have reinvented themselves by being “learning organizations”. Wealth of an organization/economy/nation is the knowledge base that they posses. This thought has become prominent due to the IT and media explosion and the fading business boundaries. We experience transition from an era of competitive advantage gained through information to the one gained from knowledge creation. Investment in Information technology may yield information but the interpretation of the information and a value addition done to it by the human mind is knowledge. Knowledge is the prerogative of the human mind and not the machines. We discuss how Knowledge Management initiatives at India’s most revered company, Tata Steel, British Petroleum and IBM that gave them a competitive edge.

The other area of paradigm shift in management has been Corporate Social Responsibility (CSR). Corporate interacts in various ways with society thus it makes them indebted to society and environment. Corporate are expected to expand their area of attention beyond stakeholders, customers, employees to include community and environment. We also look at the Corporate Social Responsibility initiatives taken up by Tata Steel and Ballarpur Industries.

Rashmi Malapur

Research Associate
Mumbai
Management thought is in a state of flux. In an ever changing business environment and the Information Technology and media boom resulting in fading boundaries we experience a shift from competitive advantage gained through information to competitive advantage gained through knowledge. We discuss 2 aspects of the shift; first, the shift to knowledge management and second, the increasing awareness of corporate about their indebtedness to the society resulting in Corporate Social Responsibility initiatives.

Human race has always progressed due to its use of knowledge and technology through organizations. For example economic progress has been achieved by commerce and business organization. The bureaucratic organization proposed by Max Weber in 1800s linked knowledge to power. He believed “Every bureaucracy seeks to increase the superiority of the professionally informed by keeping their knowledge and intentions secret”. (Gerth & Mirus 1946) He spoke of hierarchical structure, impersonal administration, and clear division of labor. Management and applicability of knowledge has changed the face of organization today. With the proliferation of large corporation in early 20th Century lead to the interest in research in the fields of leadership, organizational theory and management. The workforce became more aware, affluent, and their expectations rose supplemented by boom in information technology, communication and media. Organizations realized the importance of knowledge and they experienced restructure or collapse. Such is the environment in which organizations need to not only survive but prosper. Creativity and innovation are the front runners in the factors that result in the success of an organization. Organizations strive to develop these qualities among its workforce. Employee participation and involvement in the organization has been accepted by all world class organizations. Organizations have moved away from bureaucratic decision making, vertical structure and hierarchies towards team based organization and horizontal structures. For employees to be able to contribute to decision making visions need to be shared, values need to clearly understood, there needs to be strong organizational direction and purpose complemented by open communication. An atmosphere needs to be created where employee knowledge and creativity is use at the maximal.

Conception of knowledge management in the early 1990s occurred from the symbiosis of difficulty of dealing with complex situations and increasing competition and sophisticated demand of customers spurred by technology. Peter Drucker quotes “The basic economic resource- the means of production is no longer capital, nor natural resources, nor labor. It is and will be knowledge.” Objective of Knowledge Management and Information Technology is improved innovation, efficient and effective utilization of knowledge already present in the organization.

Management guru Peter Drucker 30 years ago said “To make knowledge work productive will be the great management task of this century, just as to make manual work productive was the great management task of the last century.” This truly depicts the paradigm shift that we experience today.
The industry environment is experiencing changes. This reduces the period for which organizations hold competitive advantage. Every sector is experiencing and getting affected by change. The focus is on adapting to the changing environment through organizational learning and innovation, for which knowledge is the base. For any company to be successful it’s not sufficient to react to changes but anticipate the changes and adapt to them before anyone else does. This would lead to competitive advantage for an organization. Knowledge is increasingly become the source of competitive advantage in a globalized economy. Focus on knowledge is due to the following reasons:

1) Economic and market driven requirements created by customer demand and international competition 2) Consumer becoming more specific and focused in their demand 3) Loss of knowledge to organizations due to high employee turnover. 4) Knowledge management initiatives helps organizations to avoid repeating mistakes of past projects thus reducing the time required to complete present project.

IT is often seen as a community colonizing Knowledge Management. But KM initiatives should not be reduced to implementation of company intranet and should not be seen as a technical process. There is a shift away from technically inclined KM to less technically inclined KM with more emphasis on knowledge.

Knowledge Management

Knowledge of a company includes information and learning that employees acquire in the course of their work. It also includes unique skills and capabilities present in the workforce that lets a company acquire competitive advantage. Knowledge management is a process by one can figure out what information a company has that could benefit others in the company and contrive (devise) methods to make them easily accessible. There are certain steps to applying the process:

1) Creating store house of information of the best practices.
2) Create a network for transferring information among employees who create the product and interact with customers.
3) Creating procedures to ensure that knowledge gained during the course of the work is passed on to others doing similar tasks.

Knowledge workers: Knowledge workers are difficult to define and count but they are undisputable the major component of an organization. We can define them as people with high degree of expertise and education and they involve in creation, distribution and application of knowledge.

Purpose of application of Knowledge Management is maximum customer satisfaction and progress in business. Companies must: reduce their cycle times, operate with minimum fixed assets and overhead (people, inventory and facilities), shorten product development time, improve customer service, empower employees, innovate and deliver high quality products, enhance flexibility and adaption, capture information, create knowledge, share and learn. None of this is possible without a continual focus on the creation, updating, availability, quality and use of knowledge by all employees and teams, at work and in the marketplace.
Nonaka and Takeuchi emphasize on human perspective of knowledge management. Communication and interaction between the employees of the organization is stressed upon. Their contribution is important as they consider each employee working in an organization is a knowledge house. They divided knowledge into tactic and explicit knowledge.

Tactic knowledge consists of cognitive dimension of knowledge. It is the technical know-how, crafts and skills of human beings. It is not easy to always interpret or express tactic knowledge in its entirety but part of it can be acquired through observation, practice and imitation.

Explicit knowledge is codified knowledge, a set of rules or manuals etc and are readily accessible. Anyone with sufficient knowledge of the subject can make use of this knowledge with some effort.

Interaction between tactic and explicit knowledge give rise to new knowledge. When an individual expresses his ideas and beliefs, he actually shares his experience and expertise. In group meetings exchange of view points lead to knowledge creation and enriches individuals. Thus knowledge creation starts at individual level but it will increase organizational performance only when it is shared with others.

Knowledge management movement was furthered by Svieby. He discussed knowledge management and intellectual capital. He stressed the importance of measuring human capital. He divided knowledge capital into three categories- customer capital, individual capital and structural capital. Furthering this study intellectual capital was divided into three elements: human capital which is the tactic knowledge of the employees, structural capital is the explicit knowledge prevalent in the work processes of the firm, and social capital is the ability of groups to work together.

**KM Initiatives at Tata Steel**

KM program was initiated at Tata Steel in May 1999. The objective was to explore the abundant knowledge base, both explicit and implicit, that remained unused and to make them available to all in the company. The KM process was initiated by bringing together a group of people from various fields but completely new in implementing KM. Tata Steel was well aware that KM was more of a cultural transformation thus it would be beneficial to involve top management from the company rather than hire outsiders. Tata Steel established a knowledge repository, where all employees would participate actively. The repository was placed on the corporate intranet and all the employees shared their successes and failures while implementing projects. Every employee was encouraged to participate in KM program through Knowledge Piece (KP) or query on the KM site through the intranet. When the experts verifies their contribution was posted on the site. Knowledge repositories were integrated with the main KM repositories.

The next step was creating knowledge communities; they were formed one year after knowledge repositories were established. It gave a platform for like minded people to interact and share their experience. But they were not knowledge solving platforms. In May 2000, Tata steel adopted a refined strategy for KM. It organized seminars on KM and it recognized the contribution of employees in the KM initiatives. The company also hired Mc Kinsey consultants for advice on communities of practice. Communities of practice were established to work towards capturing the tactic knowledge of experts, improving the quality of knowledge repository and encouraging its usage. The
communities focused on 21 areas, including steel making, rolling, maintenance, waste management, mining, cost engineering and energy management. Employees were open to all communities. Inspite of these changes the involvement was less as only 240 users felt the information to be useful.

The need of the hour was to improve the quality of knowledge available and to stimulate the employees to participate in KM. With this objective in mind, in January 2001, Tata Steel introduced an index called “KM Index” to measure the performance of the system and reward successful KM initiatives taken up by the employees. Each officer was expected to score a minimum of 130 points on the KM Index.

Further in early 2002, Tata Steel introduced a stringent monitoring system for KM activity. The change was evident as employees started browsing the knowledge management pages more frequently. Employees attitude transformed from one of “I am an expert, I do not need new knowledge” towards a quest of knowledge from “I need help” to “I can also help”. Two drastic changes were

1) Performance evaluation of employees was linked to KM.
2) Tata Steel launched a reward and recognition system for KM. Like the CEO rewarded the best performing employee.

Knowledge Management at British Petroleum Plc (BP)

In December 1994, BP a leading oil exploration company in the world launched the “Virtual Teamwork Project” (VTP), its first major KM initiative. VTP was designed to enable employees to share task-specific information and develop a cordial working relationship with the employees of other units. Its aim was to encourage the sharing of knowledge and to motivate the business units to utilize IT tools to improve their business. The overall management of the VTP was handed over to a ‘core team’, which consisted of five members, drawn from different divisions of BPX (BP Exploration and Production). Each member of the team had experience in more than one discipline since it felt that the projects should not be entrusted only to IT experts.

Benefits from VTP: Apart from financial gains, there were significant changes in the behavior of the employees. Productivity levels improved. They learnt to obtain information for problem solving. They attached more importance to the goals agreed upon through virtual meetings with clients rather than those agreed through phone or mail. VTP saved time for the employees. The number of meetings between employees and the contracted located at sites reduced due to interaction through videoconferencing. VTP encouraged inter group interactions. There were regular meetings every week known as ‘virtual coffee breaks to exchange their experiences and knowledge gain during the week.

KM at IBM:

In 2004, IBM was the world’s largest information technology and Services Company. IBM Global Services, the largest unit of IBM, had played a active role in starting the KM initiative within the organization to capture the valuable experiences and insight of employees.

Intellectual Capital Management Asset Web:

Intellectual Capital consisted of tactic knowledge like know how, experiences, wisdom, ideas and explicit knowledge like objects, code, models and technical architecture. ICM
Asset Web provided the infrastructure and captured the intellectual capital for IBM. The objective of ICM AssetWeb was to capture information about customers from internal (team handling the customer) and external sources too. IC was evaluated and stored in a structured form. Business processes and workflow were defined in this framework. The framework supported community of practice for teamwork.

Communities of Practice:
In IBM, communities were defined as groups of individuals who met on a regular basis to discuss different areas of expertise and interests. It dealt with people aspects of the organization. ICM AssetWeb was a collaborative and communication tool used by people of communities of practice. It enabled to capture the skills of employees throughout the world and store it in data repository. These communities’ helped to reduce the time and expense that was spent on training the new as well as old employees.

While studying the paradigm shift in management we study the shift in Corporate Social Responsibility (CSR). There have always existed 2 conflicting views on CSR that get depicted in the following 2 quotes.

“Few trends could so thoroughly undermine the very foundations of our free society as the acceptance by corporate officials of a social responsibility other than to make as much money for their stockholders as possible.”
-Milton Friedman, 1962

“I think many people assume, wrongly, that a company exists simply to make money. While this is an important result of a company’s existence, we have to go deeper and find the real reasons for our being. As we investigate this, we inevitably come to the conclusion that a group of people get together and exist as an institution that we call a company so that they are able to accomplish something collectively that they could not accomplish separately- they make a contribution to society, a phrase which sounds trite but is fundamental.”
-Dave Packard, Co founder of Hewlett Packard Company, 1939

CSR is the obligation and responsibility of an organization/company towards the society for the inputs and cooperation that it receives from the society. No corporate can function in isolation of the society. The purpose for the existence of any business is indisputably profit. But all sections of society should strive to add value and make life better and business cant function independent of society. As man is social animal we look at corporate as a ‘social entity’ as it operates and thrives within the society. A corporate needs employees and customers to survive. It needs the infrastructure built by the society. CSR is an appreciation and recognition of the contribution by the society towards the corporate. One can fathom further the purpose of the existence of a corporate is making profits to enable to add value to the community. Profit should be the means to achieve the larger end that is the betterment of the society. Today, business realizes that there is a two way relationship between society and business. There is a paradigm shift today towards the triple bottom line: People, Planet and Profit which stresses:
1) The stakeholders in a business are not just limited to the company’s shareholders
2) Sustainable economic development is a responsibility of the corporate.
3) Corporate profits are analyzed in conjunction with social prosperity not only on net profits.\textsuperscript{13}

But of what importance is CSR in a Capitalist world? What one might say CSR activities cost a company and it means taking out money from the pockets of corporate. Economic aspect of CSR is that it adds to the brand value. When the customer relates and identifies with a brand which involves in CSR activities it adds value to the brand. In a brand crowded market the consumer will associate a brand as one which engages in selling the product or service but is actively involved in bettering lives. Consumer buys products that they trust and what better way to instill trust in the consumer than involving in CSR activities. Relevance of CSR is increasing today due to globalization and IT and media explosion. Media brings transparency and brings to the forefront the activities of the corporate. Media and IT creates a network of people. Community becomes more aware of the corporate actions. Media is instrumental in bringing unfavorable actions by the corporate to the notice of the community. Through media and IT people coordinate and collective action is possible. Corporate do not serve humanity when they endanger the environment, harm public health, violate human rights, don’t safeguard their employees. Initiatives taken by organizations like ILO have introduced core labor standards to uphold the rights of the workers worldwide. UN Global Compact, calls for business leaders to “embrace and enact” nine principles covering topics of human rights.

The concept of CSR was restricted to philanthropy and charity. Welfare programs were taken up not as a duty or responsibility but as charity that make the organization virtuous. But the philanthropy of industrialists did little to pacify the rising discontent towards the inequalities of the early industrialized societies. From this branched out new ideologies of communism and socialism and further idea of social state taking responsibility of welfare of community and infrastructure. During this period CSR largely discussed about employee rights and internal governance issues. Till the 2\textsuperscript{nd} world war, business paid taxes and state took care of the welfare issues. In the Western Europe and Japan there was a rise of the consumer power in 1950s and 70s saw awareness in environmental issues. Rise of libertarian values in Western politics and fall of communism brought CSR in the forefront. Role of the state was redefined with shrinking of the role of the state and increasing responsibility of individuals and businesses.

In India in the post liberalization era CSR saw a paradigm shift. CSR moved away from philanthropy to stake holder based model. In this model the community in which the company exists has a stake in the company as the community participates and supports the functioning of the company, without which the company will fail to exist. Thus the company has an obligation towards the community. Functioning of the companies is not restricted to financial areas today but non financial areas too like human rights, environment protection, community health, etc. These activities of the company create a positive picture of the company in the minds of the people, and increases brand value and retains employees. Liberalization and globalization brought with it companies like IBM which actively involved in CSR activities. Indian companies compete in developed markets so have to comply with some norms like certification norms of UN Global Compact. We see how Tata has involved itself in CSR activities.

**Corporate Social Responsibility at Tata Group of Companies**
In a free enterprise, the community is not just another stakeholder in business but is in fact the very purpose of its existence.1
– Jamsetji N Tata, Founder, Tata Group

India has an old religious tradition of philanthropy, starting from the kings, noblemen and rich merchants. Jamsetji Tata, the founder of the Tata Group, gave new dimension to this term. In his words: "There is one kind of charity common enough among us… It is that patchwork philanthropy which clothes the ragged, feeds the poor, and heals the sick. I am far from decrying the noble spirit which seeks to help a poor or suffering fellow being. [However] what advances a nation or a community is not so much to prop up its weakest and most helpless members, but to lift up the best and the most gifted, so as to make them of the greatest service to the country."

This was the spirit that led Jamsetji Tata to establish the JN Tata Endowment Scheme for higher education in 1892. The scheme helped bright Indian students of moderate means to become administrators, scientists, doctors, lawyers and engineers, funding their education through loans and grants. The Endowment has supported 3,500 scholars and awarded nearly Rs 7 crore to promising students.14

The legacy of Jamsetji Tata's idea of philanthropy was taken forward by his sons, Sir Dorab Tata and Sir Ratan Tata, both of whom donated the major chunk of their personal wealth for the public good. Sir Ratan gave a grant to support Mahatma Gandhi's work in South Africa and another for Gopal Krishna Gokhale's nationalist activities in India. He donated resources that enabled the London School of Economics (LSE) to research the causes of poverty and how to alleviate it, leading to the establishment in 1912 of LSE's Sir Ratan Tata Department, subsequently called the Department of Social Sciences.

The Sir Dorabji Tata Trust is best known for promoting six pioneering institutions of national importance. Four of these were established in Mumbai: the Tata Institute of Social Sciences, in 1936; the Tata Memorial Centre for Cancer Research and Treatment, in 1941; the Tata Institute of Fundamental Research, in 1945; and the National Centre for the Performing Arts, in 1966. The National Institute of Advanced Studies (set up in 1988) and the Sir Dorabji Tata Centre for Research in Tropical Diseases (1999) are in Bangalore.

In 1931, at the age of 50, Sir Dorab's wife Lady Meherbai died of leukaemia. Sir Dorab started two trusts in his wife's memory. The Lady Meherbai D. Tata Education Trust enables young women to go abroad and specialize in social work. The Lady Tata Memorial Trust (LTMT) sponsors international research into leukemia and the alleviation of human suffering.

Shernaz Vasunia, programme officer of the Sir Dorabji Tata Trust says "Over 75 per cent of our trust's funds come from dividends on the shares it owns in Tata Sons, the Group's holding company. The remaining comes from its own statutory investments." Adds Sarosh N. Batiwala, who heads the Sir Dorabji Tata Trust: "Our trusts don't handle corporate social responsibility; they are more of a funding agency, like the Ford
Foundation. The Sir Dorabji Tata supports different kinds of NGOs — some do social work, some research, while others are community based — usually for a period of three to five years. It also works with international agencies such as the United Nations, mostly in times of natural disasters. The Ratan Tata Trust, too, depends on dividends from its Tata Sons shares and its investments. "Today we get around Rs 35-40 crore through dividends and investments, of which we disburse around Rs 32-35 crore," says programmes manager Arun Pandhi. He says that the focus has changed over the years, from charity to development funding, though the provisions of Sir Ratan's will are still the trust's principal guidelines. These days 50 per cent of the funding is for rural livelihoods, 25 per cent for education and 10 to 15 per cent for other causes.

Since inception, the Tata group has placed equal importance on maximizing financial returns as on fulfilling its social and environmental responsibilities — popularly known as the triple bottom line. After decades of corporate philanthropy, the efforts of the group in recent years have been directed towards the synchronization of the Triple Bottom Line (TBL). Many group companies have also adopted guidelines laid down by the Global Reporting Initiative (GRI), an independent body that is part of the United Nations. GRI has what is known as the 'triple bottom line' (TBL) approach: financial, social and environmental. Companies following its guidelines have to report their performance on these three parameters. Through its TBL initiative, the Tata group aimed at harmonizing environmental factors by reducing the negative impact of its commercial activities and initiating drives encouraging environment-friendly practices. In order to build social capital in the community, the group has got its senior management involved in social programs, and has encouraged Employees to share their skills with others and work with community based organizations. The group companies are also encouraged to take up fund-raising activities. Adding economic value was the third dimension of the group’s TBL. The exercise helped the Tata group to build its brand and enhance its reputation. A survey conducted by the website, www.indianngos.com, revealed that the Tatas spent Rs. 1.5 bn on community development and social services during the fiscal 2001-02 — the highest by any corporate house in India. Even when economic conditions of India were adverse, as in the late 1990s, the financial commitment of the group towards social activities kept increasing from Rs. 670 mn in 1997-98 to Rs. 1.36 bn in 1999-2000.

"JRD Tata, the son of RD Tata, who was a business partner and relative of JN Tata, strongly believed that the CSR initiatives of the Tata group should be institutionalized and it should not be left to individuals to carry them forward. Therefore, suitable amendments were made to the Articles of Association of the major Tata group companies in the 1970s. Newly included was an article stating that the “company shall be mindful of its social and moral responsibilities to consumers, employees, shareholders, society and the local community.” “Furthering an attempt to institutionalize the CSR charter, a clause on this was put into the group’s “Code of Conduct.” This clause stated that group companies had to actively assist in improving the quality of life in the communities in which they operated. All the group companies were signatories to this code. CSR was included as one of the key business processes in TISCO. CSR was one of the eight key business processes identified by TISCO’s management and considered critical to the success of the company. The company believed that CSR was no longer externalized nor was it philanthropic but it was an internalized process for which sub processes had to be
established. To ensure that the CSR measures started by the group were sustained, a “social audit” of companies was also carried out. The institutionalization of CSR was put into practice by encouraging the group companies to conduct periodic surveys, institute community programs as part of the annual business plans and earmark a budget for this purpose in advance, so that these expenses were built into the cost of business as for any other cost like material, labor, etc. Each group company was required to frame its CSR objective/s and plan, which had to be communicated to all the employees in the company. The CSR programs undertaken by member companies had to be aligned with their core competencies and capabilities, besides involving local partners in development like NGOs to help in their completion. The CEO and operational heads acted as facilitators in the process. The integration of the CSR initiatives of the various group companies called for greater involvement, requiring the formation of a separate institution called the Tata Council for Community Initiatives (TCCI).”

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<tr>
<th>Exhibit III: Tata Trusts and their Activities</th>
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<tr>
<td>Trust Name and Year of Establishment</td>
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<td>Sir Dorabji Tata Trust (1932)</td>
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<td>Jamsetji Tata Trust (1974)</td>
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<td>J N Tata Endowment (1892)</td>
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<td>JRD Tata Trust (1944)</td>
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<td>Lady Meherbai D Tata Education Trust (1932)</td>
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<td>Lady Tata Memorial Trust (1932)</td>
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<td>M K Tata Trust (1958)</td>
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<td>Sir Ratan Tata Trust (1918)</td>
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<td>R D Tata Trust (1990)</td>
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<td>Tata Social Welfare Trust and Tata Education Trust (1999)</td>
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Source: “The Tata Trusts”, www.tata.com

Ballarpur Industries Ltd (BILT) India: BILT is India’s largest paper company
BILT policy of CSR: For BILT being a responsible Corporate will mean:
1) Using environment friendly and safe processes in production.
2) Making sustained effort in preserving environment.
3) Promoting the well being and development of employees and their families through an inspiring corporate culture that engenders good values.

4) Building active and long term partnerships with the communities in which they operate to significantly improve condition of disadvantage among them.

5) Observe good business practices with their stakeholders, i.e. business partners, customers, distributors, suppliers and contractors.

Today, BILT is making a strategic shift from a more conventional model based on philanthropy to a more development approach. BILT has institutionalized CSR. Involvement of all the employees is needed for the successful integration of CSR with other activities. A change in the mindset of people was essential. The method adopted by BILT puts a huge emphasis on the employees themselves for taking the process of CSR ahead. The ultimate objective is for management to see that each activity should make a socially responsible business sense. It is thus becoming an integral part of the business plans of a unit and not just an add on activity. Making CSR part of the reporting system of each site was initiated in 2003. The Employee Volunteer Program (EVP) was launched in Corporate office with the aim of maximizing employee participation in the CSR activity. One such initiative was taken up in 2004 to have all Management Trainees and Graduate Engineer Trainees were placed for 6 weeks with the CSR department at the time of joining the company. The CSR team works closely with the Corporate Communications team to create awareness about CSR and BILT initiatives with the company.

The paradigm shift in the management thought is a shift from emphasis on information to knowledge management and a shift from philanthropy to Corporate Social Responsibility. Areas in management like human resource, marketing etc have also experienced a change along these lines. Companies are increasingly being aware due to media and IT explosion of the shift and are adapting to it by incorporating knowledge management initiatives and Corporate Social Responsibility programs.
References

2 ibid
5 ibid
9 ibid
10 JJ Murphy, “Virtual Management: Changing the Management Paradigm”, http://www.calumcoburn.co.uk/articles/articles-management-paradigm.html
11 ibid
12 ibid
14 http://www.tata.com/0_our_commitment/corporate_governance/overview.htm
15 http://www.tatamail.com/0_our_commitment/community_initiatives/tata_trusts/overview.htm