CHAPTER FOUR
ANALYSIS

The researcher had gained a general understanding about the history and strategic perspectives of both B1 and B2 partly from the websites of the organisations and mainly from the interviews conducted during the first stage with the senior management. During the first stage of the interviews with the senior management of the retail strategic business unit of B1, the focus was more on gathering information about the organisation, nature of the business, the creation of strategic goals, the creation and implementation of action plans. In B2, the first stage interviews were focused on the business and financial models, the transformational nature of the project, the challenges faced by the management in a green field project. As capability development was conceptualised as a situated activity, information was also sought on relevant organisational initiatives that have contributed to the realization of the strategic goals from a historical perspective. The interviews in stage two were focused more on collecting detailed information on the organisational initiatives that contributed to the realisation of strategic goals and deciding upon the capabilities and to be studied in B1 and B2. The interviews in stage three were fully focused on collecting information on managerial activities with respect to specific capability development and the strategising practices used by managers and process owners in B1 and B2.

Data analysis consists of three activities: data reduction, data display and conclusion drawing and verification (Miles and Huberman 1984). Data reduction happens when the raw data from the transcription or field notes is selected, simplified, abstracted and transformed. Reduction of data happens throughout the research process and it sorts, sharpens, focuses and organises the data in such a way that conclusions can be drawn. Data display is an organised assembly of information in an accessible and compact form that permits conclusion drawing and action initiation. Data display forms easily understandable configurations and creates major context for valid qualitative analysis. Conclusion drawing and verification involves deciding on what things mean, noting regularities, explanations, possible configurations and propositions. The meanings emerging from the data have to be grounded (Glaser and
For data reduction, this research has used the different coding procedures of grounded theory. Grounded theory provides systematic inductive mechanisms to generate theory from data (Partington 2000), builds contextual explanations (Creswell 1998) and helps in understanding and improving work place practices. Grounded theory follows an interactive approach to inquiry and offers a number of open ended strategies for conducting emerging enquiry (Ng and Hase 2008). The grounded theory method used in this research represents the objectivist approach in this area (Charmaz 2000). The assumptions of the objectivist approach include (i) the subjects and community of the study can relate with facts within the context; (ii) the reality and the research participants are external to the researcher; (iii) the researcher is the representative of the research participants and (iv) the finding of the study offers useful analysis of the context to the research participants (Charmaz 2003). Multiple criteria have been evolved to select information rich cases for data collection in B1 after (a) thorough analyses of all the regional strategic action plans and (b) extensive discussion with managers at different levels of the company and company dealers. The purpose of this theoretical sampling is to select those regions that can provide rich data on the problem of study and to use the emerging theory to govern the data collection process till the process reaches theoretical saturation (Glaser 1992). All the relevant process owners of B2 were formed part of the study. The research was started out without any preconceptions about the research problem and the data analysis relied on the iterative method of moving among data, literature and emerging theory (Glaser and Strauss 1967). The coded data is combined into form different categories and concepts around the core category. The conceptual categories which are formed through the comparative analysis and the linkages among the categories and their properties form the elements of the theory generated through this approach (Charmaz 2006). Iteration is the feature of this approach as the process moves back and forth constantly through coding and analysis (Martin and Turner 1986). The data collection, coding and analysis are done together as much as possible from the beginning to the end of the research (Glaser and Strauss ibid.). This research generated various tables as data displays using an iterative stance to represent the linkages between concepts
for drawing conclusions (Miles and Huberman 1984). Following discussion forms the main analyses of this research.

**Analysis Step 1: Identifying Capabilities in B1 and B2**

The researcher has asked the respondents both at the centre, the top management and at the periphery, the middle and lower level management of both B1 and B2 to respond to the questions with respect to strategic goals, strategic initiatives, operational capabilities and the development of capabilities. During stage I and stage II of the interviews, the researcher has elicited information from the senior management about (a) the strategic goal or goals; (b) the development of strategic goals; (c) the strategic initiatives identified and implemented to realise the strategic goals; (d) the most important and the critical strategic initiative/s that contributed to the strategic goal at that point in time; (e) the reasons for deciding upon this/these strategic initiative/s; and (f) the role of the top management in the realisation of the strategic goal/s. The questions for Regional managers and process owners were framed to elicit (a) details about the strategic goals of the organisation; (b) details about the strategic initiative/s that were formulated by B1 and B2 to realise the strategic goals; (c) the most important strategic initiative/s that contributed to the strategic goal at that point in time; (d) the reasons for deciding upon this/these strategic initiative/s and (e) the day to day managerial activities through which the management team had sustained or improved the routine/s that contributed to the specific strategic initiative/s. Top management, middle management and officers in B1 were unanimous in identifying the retail network expansion as the operational capability. The managers have emphasised how reduction in the time frame in the commissioning the retail outlets had contributed significantly to the strategic goal to be number one in total motor fuel sales. In B2 both top management and process owners have identified three operational capabilities such as reduction in response time of the online processes, reduction in the processing time of the batch processes and the reduction in turnaround time of the product development processes that contributed significantly to the strategic goal to make improvement in the day to day operations efficiently and effectively. Apart from the managerial perception, an attempt was made in this research to collect relevant data from both B1 and B2 to link the ‘micro’ with the ‘macro’ or to link the day to day activities of organisational life...
Table 2: Year-wise Details of the Market Share, Number of Retail Outlets and the Number of New Retail Outlets

<table>
<thead>
<tr>
<th>Year</th>
<th>Market Share Percentage</th>
<th>Number of Retail Outlets</th>
<th>Number of New Retail Outlets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Motor Spirit High Speed</td>
<td>Total Motor Fuel</td>
<td></td>
</tr>
<tr>
<td>2004-05</td>
<td>25.22</td>
<td>24.21</td>
<td>5442</td>
</tr>
<tr>
<td>2005-06</td>
<td>25.32</td>
<td>23.34</td>
<td>6090</td>
</tr>
<tr>
<td>2006-07</td>
<td>25.35</td>
<td>24.15</td>
<td>7686</td>
</tr>
<tr>
<td>2007-08</td>
<td>25.56</td>
<td>24.43</td>
<td>8106</td>
</tr>
<tr>
<td>2008-09</td>
<td>25.68</td>
<td>24.65</td>
<td>8526</td>
</tr>
<tr>
<td>2009-10</td>
<td>25.78</td>
<td>24.74</td>
<td>9127</td>
</tr>
<tr>
<td>2010-11</td>
<td>26.09</td>
<td>25.17</td>
<td>10213</td>
</tr>
</tbody>
</table>

Table 3: Performance Statistics of Business 2 – Select Indicators

<table>
<thead>
<tr>
<th>Tax Payer Interface</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Entities Registered for Filing returns</td>
<td>1.5 million as on July 2009 to 2 million as on July 2010</td>
</tr>
<tr>
<td>(b) Service Locations</td>
<td>1100 as on July 2009 to 2000 as on July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tax Ledgers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Total Accounts</td>
<td>70 million as on July 2009 to 90 million as on July 2010</td>
</tr>
<tr>
<td>(b) Total Entries per Year</td>
<td>250 million as on July 2009 to 300 million as on July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of product releases</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>In 8 Modules</td>
<td>148 from August 2008 to 212 from August 2009 to July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form 26AS: Response Time</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Through Indexing</td>
<td>28 seconds in March 2010 to 2 seconds in July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form 26AS: CPU Utilisation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Through Indexing</td>
<td>98 percent in March 2010 to 10 percent in July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form 26AS: Threads per hour</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Through Indexing</td>
<td>1300 in March 2010 to 5000 in July 2010</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>User Access</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Hypertext transfer protocol</td>
<td>14,00,000 from 10th October to 17th October 2009 to 1,80,000 from 18th October to 24th October 2009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E-tax Payment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Page Weight Reduction</td>
<td>Original page 87.64 KB - New page 44.15 KB</td>
</tr>
<tr>
<td>Bandwidth Reduction</td>
<td>Original band width 14.64 Mbps - New band width 7.38 Mbps</td>
</tr>
</tbody>
</table>
to strategic outcomes. Table 2 has the year wise details of the market share of Total Motor Fuel (TMF), number of existing retail outlets and the number of new retail outlets commissioned. This table clearly establishes the linkage between market share of TMF and the retail network expansion as a capability in B1. Table 3 shows the select performance statistics of years 2009 and 2010 of B2. There was significant increase in the entities registered, total entries and total accounts in 2010 in comparison with 2009. The table has data on indicators such as product releases, response time, central processing unit utilisation and cost reduction that explicates how the identified operational capabilities have contributed positively to the strategic goal of B2.

Analysis Step 2: Coding the Interview Texts

The interviews were conducted by the researcher over a period of time and analyses of the interviews were also done one after the other to avoid any temporal biases in analyses. Interview transcripts were carefully read and looked for expressions of activities with respect to sustaining or making improvements in the select strategic initiative/s and strategic goal or goals. After the data scrutiny, all the experiences of interviewees association with any kind of activities were assigned distinct meanings and coded in the text. Coding of data represents breaking down the data into distinct units and put back together in new ways (Strauss and Corbin 1990; Goulding 2002) and supports the researcher to articulate the character of the theory (Locke 2001). The full transcription of the interviews was analysed line by line to identify key words or phrases which represent the interviewers’ experience of the area under investigation. As and when a potential expression of came across, the researcher tried to understand by asking questions himself like: What is this represent? What kind of an activity is this? What is the strategic initiative this activity is associated with? How the activity contributes to the strategic initiative? the community involved and whether any strategising practices associated with it? and coded it by giving initial common sense titles that included ‘improvement’ or “developing plans”. This was the first step followed in the data analysis similar to the open coding of data and it provided an overall understanding of the phenomenon under study.
Open codes are the base for creating constructs at a higher level in terms of categories which can be described or dimensionalised. In the initial stages of open coding as usual, a number of seemingly unrelated codes have emerged. The process of coding of the incidents continued as an iterative process till the activity categories started to emerge from the interview data. This is achieved by constantly asking questions related to the relevance of the data in the context of the study and constantly comparing code-to-code similarities and differences (Strauss and Corbin 1990).

During this phase the researcher had coded all the activities mentioned by the interviewees without practicing rigid judgments to see the relevance of the coded activity in the context of the study. The reported activities had either the singular involvement of the interviewee or interviewee’s team and peers or supervisors. After a thorough review certain activities were dropped as certain pieces of texts represented more of the interviewees’ aspiration than existing activities. A reference of activity like “discussing the objective is the first priority in our meetings” did not reveal the agent.

Many of the activities mentioned by interviewees’ could easily fit into more than one category. For example “taking note of successful and unsuccessful transactions at the payment gateway” could be coded either ‘monitoring’ or ‘process compliance’. Or an activity like “processing the files received from the banks on a priority basis” could be coded either ‘process compliance’ or ‘customer service commitment’. To address these challenges the researcher resorted to means such as (i) contacting the concerned interviewee again with specific queries (ii) rereading the interview transcripts of respective team members and peers and (iii) rereading the interviewee’s transcript to capture the essential meaning of the text and asked questions about the data, made comparisons between categories.

Another important area the researcher was looking for while reading the interview text was those expressions of interviewees referring to strategising practices. In other words, the researcher looked for comments that can be categorised as either procedural strategising or interactive strategising (Jarzabkowski 2005). This study has adapted the descriptions of the procedural and interactive strategising created by Hendry, Kiel and Nicholson (2010) in terms of (a) tone (b) key activities and (c) influence mechanism as a framework to guide the data coding. In procedural
strategising, tone is represented by administrative or hierarchical focus; key activities by the review, approval or the monitoring of capability development activity and the influence mechanism is represented by key characteristics such as formal procedures or tools like plans, budgets and diagnostic controls. The key characteristics in interactive strategising are represented by interpretive or reciprocal tone, continuous building of shared frameworks of meaning about capability development as key activities and open communication and normative controls as influencing mechanisms.

From the beginning, during every interview with managers and later while reading the transcription and during coding, the researcher kept memos to continuously write down doubts, ideas and questions concerning the data and analysis (Goulding 2002). It took almost two months each for the researcher to familiarise with the business, managerial and organisation specific terminologies managers spoke during the interviews. Whenever it was not possible to interrupt the interviewee, doubts were asked at the end of the interview to the interviewee or to his or her peers for clarification. An abbreviation-expansion list was made within a month after the start of the data collection both for B1 and B2 to understand the interviews thoroughly and for the researcher to ask relevant questions afterwards. The practice of writing down all the doubts during the interview process and seeking all clarifications has helped the researcher tremendously in understanding the business. During the data coding, whenever the researcher encountered problems in terms of activity categories, copious notes were written on the decision taken and the basis for it. Theoretical memos were written in a free flowing and conceptually systematic manner after the analysis of the themes that represent the empirical data (Martin and Turner 1986).

The activity categories for the capability development were built solely from the interview data to make the categories more relevant. Emergent categories like these were best fitted to the data with adequate indicators that can explain variance. Emergent conceptualisation needs to be preferred in theory building researches because established associations between variables can bias the researcher and can hinder generation of new categories (Strauss and Corbin 1990). The first step of the analysis has resulted in assigning codes for identified activity categories that contributed to the capability development.
Analysis Step 3: Developing Activity Tables

The researcher kept making comparisons between categories, sub categories and the descriptions and kept modifying coding and the accompanying categories. More number of activity categories got added and certain of those got deleted when more transcripts got the analysed. As the number of categories got increased, the researcher started moving to higher level of abstraction by creating hierarchy of categories. The researcher has created a set of main categories for a set of sub categories. This axial coding phase was achieved by specifying relationships between a main category and its subcategories (Strauss and Corbin 1990). The main categories were formed by analysing the similarities and differences between the sub categories. While creating the main categories, the researcher aimed at labeling them universally.

Table 4: An Excerpt from the Activity Table of B1

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
</table>
| Developing Action Plan | • Scanning the economic and social scenario of the region.  
• Projecting the industrial scenario.  
• Analysing the network and market share of B1 and competition.  
• Analysing the market segment - network profile  
• Analysing the customer segment- network profile  
• Analysing district wise sales of total motor fuel of B1 and competition.  
• Analysing the region using the strength, weakness, opportunity, threat tool.  
• Analysing the retail outlet wise sales of total motor fuel in the region  
• Analysing the existing throughput per outlet and the projected throughput per outlet.  
• Creating 2x2 matrices of throughput per outlet and market share.  
• Collecting information about nearby product supply points and about availability of products.  
• Using network development and dynamic pricing tool for the validation of projected volumes.  
• Making analyses about the cost of proposed outlets.  
• Analysing area wise mobile density of the region.  
• Locating areas where B1 is near to the competition in terms of sales volumes of motor spirit and high speed diesel.  
• Analysing the sales tax structure of adjoining states.  
• Compiling the details of the proposed locations.  
• Setting targets with timelines with respect to network expansion. |
so as to fit both the cases into these select categories. Initially detailed activity tables were made for both B1 and B2. The analyses in step 2 has resulted in two preliminary activity tables with main categories, sub categories and a brief explanations about activities that contributed to the development of capabilities. Part of the detailed activity table of B1 is presented in Table 4.

**Analysis Step 4: Writing the Cases**

Case descriptions were written for B1 and B2 to familiarise with the organisation as a whole and to understand the complexity of each case. The transcripts of the interviews with the senior officials of both the organisations have helped the researcher to develop initial parts of the cases with the basic details and rich descriptions of the major initiatives that impacted the capability development process in these organisations from a situated perspective. The part one of the cases gave an overall understanding about the organisation, the structure, different business groups or units and the way business was conducted. To achieve this end, apart from the multiple interviews, the researcher utilised the company web sites, the strategy documents, the notes taken during interviews, multiple archival data, news paper and magazine articles and company reports. In the case of B2, referring to certain blogs written by the Managing Director of the organisation also helped in enriching the content of the case. The part two of the cases mainly focused on the major initiatives undertaken by both organisations over a period of time that impacted the development of capabilities in them. The Part three of the cases dealt with details of various capabilities in terms of the associated routines and managerial activities including the strategising practices. In this analysis phase, the researcher has highlighted relevant quotations and descriptions from the interview data into the case descriptions regarding managerial activities and strategising practices that contributed to the capability development in the organisations. The case writing and sifting between data and categories helped the researcher to refine the category descriptions in terms of breadth and quality.
Analysis Step 5: Creating Final Activity Tables for B1 and B2 and the General Activity Classification of Operational Capability Development

Constant comparison of managerial activities was done to create more general conceptual categories that included multiple activities and the activities that have specifically contributed to the categories themselves. The researcher kept looking for similarities and differences in activities and moved back and forth between data on activities and the conceptualisation of categories. The researcher had already created detailed case specific activity tables and preliminary activity classification with main category, sub categories and explanations for both B1 and B2. After writing the case descriptions, the conceptual categories were revisited to account for both similarity and differences in describing data incidents. To deepen the conceptual categories, more focus was provided to identify all the elements that contributed to the categories or their properties. All the categories were explored in greater depth by understanding the context and how the elements were interconnected. After that, summary tables were made showing major activity categories and summaries of activities for both B1 and B2. The final activity tables were created for both B1 and B2 with major categories, sub categories and brief explanations. As the next step, the case specific categorisations were merged and a general activity categorisation was created. The general activity categorisation had four main categories such as creating action plan, controlling, organising and driving improvement, seventeen sub categories and a brief explanation of each.

Analysis Step 6: Linking the Activity Categories with the Strategising Practices

This analysis step focused on evolving linkages between activity patterns and strategising practices. As the first step the researcher went through the interview transcripts and coded for procedural and interactive strategising using characteristics such as tone, key activities and influence mechanism. As the second step, the written case descriptions of B1 and B2 were analysed and looked for similarities and differences. Constant comparison of managerial activities with respect to strategising practices was done to create mutually exclusive and collectively exhaustive procedural, interactive and integrative categories. Strategising practices used by managers were captured by the activity system dynamics that indicate the linkage between activities that shape the capabilities and the practices. The unique patterns of
strategising practices with respect to each activity were identified after understanding the contexts of both the cases in greater detail.

**Analysis Step 7: Describing Capability Development**

Capability development is the core category, the central phenomenon in this research around which all other categories are connected. This step of the analysis has highlighted the core category and other main categories to evolve a framework (Goulding 2002) for explaining the development of operational capabilities that drive improvement in two organisations. Categories not only form the building blocks for the development of theory but provide the means to integrate the theory also (Corbin and Strauss 1990). Integrating the core category with the other categories enabled the researcher to think systematically about the data and to evolve linkages among them in complex ways. The researcher had evolved four activity categories that contributed to the development of capabilities in both B1 and B2. The different strategising practices managers used with respect to all four activity categories in both organisations were also understood in detail. Within case analysis allowed the researcher to familiarise with the unique patterns of each case in terms of managerial activities and strategising practices before getting into cross case comparison. Cross case analysis gives ample opportunity to the researcher to evolve accurate and reliable theory that fits close with the data (Eisenhardt 1989). In this final phase of the analysis, effort has been made by the researcher to verify the emergent relationships between constructs and then verifying them with evidences from the cases and to propose bold conjectures or propositions as the contribution of the study.

**4.1 Case Descriptions:**

**4.1.1 The Case of Business One (B1)**

**Part One: General Introduction**

B1 is a central public sector undertaking established within the ambit of Section 617 of the Companies Act 1956. 51.01 percent of the paid share capital is with the President of India and the remaining shares are held by different financial institutions, foreign institutional investors, banks, mutual funds, non resident Indians
and the general public. The shares are listed in both Bombay stock Exchange (BSE) and National Stock exchange (NSE).

B1 was formed in 1974 through the integration of Esso Standard Refining Company, Lube India Limited and the marketing operations of Esso Eastern Inc. The Indian assets of Caltex were acquired in 1976 and vested with B1 in 1978. Kosan Gas Company and the concessionaries of Esso that operated in the domestic liquefied petroleum gas market were acquired and merged with B1 in 1979. B1 saw a rapid expansion in the next three decades in terms of refineries and the lube oil base stock plant growing capacities and increasing the network of product pipelines. As part of the reform process, B1 had offered shares to employees, followed by an initial public offer in 1995. In 1998 the Government of India identified B1 as one of the ‘navaratnas’ as this organisation has the potential to grow into a global giant.

B1 is a Fortune 500 Oil Marketing Company (OMC) with an annual turnover of Rs. 1,32,670 crores for the financial year 2010-11. The net profit rose from Rs.11.88 crores in 1984-85 to 1539 crores in the year 2010-2011. B1 is actively involved in the business of refining crude oil and the marketing of various petroleum products like petrol, diesel, Liquefied Petroleum Gas (LPG), kerosene, lube oils, asphalt, aviation turbine fuel throughout India and at select foreign countries. Some of the products of B1 are exported to other countries. B1 has two major refineries, one in western India of 6.5 Million Metric Tonnes Per Annum (MMTPA) capacity and the other in eastern India with a capacity of 7.5 MMTPA. B1 holds an equity stake of 16.95 percent in Mangalore Refinery and Petrochemicals Limited, which has a capacity of 9 MMTPA. B1 with the Mittal Energy Limited formed a joint Venture, B1-Mittal Energy Limited to build an oil refinery of 9 MMTPA in north India. The project is expected to be completed by the end of 2011. The refinery will have a captive power plant for 165 Mega Watt, a Crude Oil pipeline with single point mooring and crude oil terminal.

B1 has structured its business operations into various Strategic Business Units. They are retail, LPG, aviation, lubes, refineries, bulk fuel, trade, exploration and production and other Ventures with the support of the shared services. Appendix II shows the organisation structure of B1 and Appendix III represents the B1 regional structure.
B1 has 7 retail and 6 LPG zonal offices, 90 regional offices, 10213 retail outlets, 32 major terminals / installations / tap off points, 7 lube blending plants, 70 depots, 43 LPG bottling plants, 2 LPG import facilities, 77 Compressed Natural Gas (CNG) pumps, 72 Auto LPG Pumps, 2250 gas LPG distributors, 1638 superior kerosene oil and light diesel oil distributors, 59 lube clearing and forwarding agents spread across various states of India. In addition to all these B1 has 23 aviation service stations to cater to the airline industry.

B1 is managed by a board of directors. Presently there are 11 directors, with the Chairman and Managing Director (CMD) as the head of the corporation. The board comprises of 4 whole time directors, also called functional directors namely director-marketing, director- refineries, director- human resources and director- finance, 2 part time directors and 4 part time independent directors. All these 6 part time and independent directors are nominated by the Government of India. The Board of Directors is assisted by executive directors, general managers, managers and officers in carrying out the day-to-day functions of the Corporation. As on 2010 March 31st, B1 employed 11291 employees across the country.

The retail Strategic Business Unit (SBU) contributed 58 percent to B1’s overall business. The retail BU focuses on selling petrol, diesel and lubricant oils to the customers mainly through a network of retail outlets across the country. Many select outlets sell LPG and CNG also. B1 had a market share of 25.16 percent in Total Motor Fuel (TMF), combined petrol and diesel retail volumes as on March 2011.

**B1 Retail SBU: 1997- 2003-2009**

The Retail entity of B1 has transitioned itself to an independent SBU to focus on its core business in the year 1997. In the same year the SBU implemented the first phase of the Business Process Reengineering (BPR) and reorganised the marketing around business lines to increase organisational effectiveness. The first phase focused mainly on the revision of Management Information System (MIS) to include value based performance metrics, sales management process and the amendment of LAM (Limit of Authority Manual), giving more authority to managers to give financial approvals for the purchase of materials and equipments and capital expenditure. The
phase II of the BPR focused on introducing modified human resources processes, superior information technology systems and solutions and on-line connectivity. In the year 1998, during the Phase III of the BPR, the Retail SBU Strategy got articulated, introduced the systems and processes related to budgeting and developed the job descriptions and key performance indicators.

The external environment of the retail segment in the petroleum sector is characterised by the fluctuations in the crude oil prices, rise in domestic crude oil production, increase in refining capacities both by public and private sector entities and the introduction of new business lines in the alternate fuel segments. In the Year 2002, the central Government abolished the practice of Administrative Pricing Mechanism (APM) in the country. While the APM ensured price stability, it did not encourage cost reduction, efficient use of capital and the creation of a customer oriented competitive environment. During that period, the Government had plans in principle to privatisethe oil public sector units too.

“B1 needs to be an outward looking Organisation”, the then Chairman echoed the deliberations of the Senior Management team of the organisation to the employees, when he met them in different zones and regions in early 2003. It was the start of the transformation process for B1 to grow and develop and to be one of the most dynamic companies of the nation, building significant value for all its stakeholders.

Part Two: Organisational Initiatives

“I should say that all the work which was done from 2003-06/7 that lay the foundation. It could also be true that if the foundation was not there it could not have been easy at all”

(Chairman and Managing Director, B1)

The transformation process was initiated with a visioning exercise for the top management team of the company. Participants have articulated their personal vision first to the team members and then worked towards creating an organisational vision after animated discussions and deliberations in the group. The management team could integrate their individual aspirations to a great extent with the organisational
aspirations. After three days of deliberation, the top management team articulated the B1 Vision 2006, as this vision had to be realised in three years.

The deliberation was mainly about understanding the prevailed reality of the organisation at that point in time. Interestingly, B1 not only analysed and understood the realities but gathered enough evidences to connect the realities with relevant other variables to create a holistic view of the organisation’s functioning and goals. The systemic view of current reality brought out the linkage between understanding customer needs and increase of market share and profits through the development of customer focused products and services and increased satisfaction of customers. The current realities in relation to business mainly pointed out to the lack of customer focus in terms of understanding their needs and their feedback on products and services. These led to the top management team to act on building a shared understanding that “meeting Customer needs is key to our success” across the organisation. They have prioritised on three areas to form the vision objectives such as learning and innovative organisation, customer delight, reputation and responsiveness to customers and stakeholders. Members of the top management team took charge of the operationalisation and implementation of these objectives. The action plan included (a) alignment and synergy workshops for all officers, (b) recognition of innovative ideas (c) focused training programmes for superior performers (d) documentation of success stories and (e) increased circulation of dealer news and safety bulletin.

As important as the vision building workshop was the realisation of the top management that shared aspiration created a lot of energy and enthusiasm to act towards fulfilling the vision. They have also noticed that the formation of shared aspiration has significantly reduced the functional and hierarchical differences. They were also convinced of the fact that to harness the collective energy and spirit, it is important to involve all the employees in the visioning process to realise the organisational objectives. It was decided to constitute an in house cross functional team, the team of internal coaches, as they are titled, to facilitate this organisation wide change, which was titled as ‘Project Transformation’.

The process of constituting this cross functional team involved an announcement in the company’s website asking interested employees from all the
functions to apply for the position of internal coaches. Out of the 20 employees who have applied, 14 have been finally inducted. Among these 14, only one person represented the Human Resources function and he took charge as the team leader and administrative head of the internal coaches. Highlighting the importance of inducting more number of line managers to this team, the advisor of the project transformation and the former director of another OMC stated that “the select line managers can connect well with front line employees as they have been in this company for considerable years and have experience in execution of projects”. Needless to say, line managers can easily identify with the work of the frontline employees and that facilitates genuine communication and develops trust among them.

These team members were trained to develop them as excellent coaches and after preliminary discussion it was decided to create a vision for the team of coaches. To start with, each one articulated their personal vision and shared it in the group. Invariably, every individual aspires to excel in one’s work and this is the area where personal aspiration to a great extent overlaps with the organisational aspirations. After a fair amount of deliberation they have a created a vision for the organisation and interestingly, it was almost identical to the vision created by the top management.

The team of coaches have set challenging targets each year, conducted hundreds of workshops covering more than 3000 employees of B1 during a period of five years. They have facilitated workshops on visioning, identifying and setting strategic goals and balanced score card.

The Retail SBU team came together at the B1 Management Development Institute and over a period of three days deliberated and decided upon the B1 Retail SBU Vision. In the similar manner zonal and regional office visions were also formed. After these exercise team members were asked to reflect on their feeling about the process, about the vision, and the way the members approached toward the realisation of goals. Facilitators played a remarkable role during the visioning process. They made sure that a regional office vision is aligned with the zonal vision and the zonal with the SBU Vision. It was important that the regional office vision needed to align with the zonal vision and the facilitator created such a climate within the regional team to decide upon their team vision keeping the local realities in mind.
“Before we have started the visioning exercise, we were compartmentalised: sales had to sell, operations had to supply the product, human resources had to support all the HR policies and finance had give support to make sure that the transactions are taking place. The finance and HR or even operations never had to interact with the customers. What happened in these exercises was the entire zone and the entire region were brought together and one suddenly started talking about customer and understanding about business more”

(General Manager, Finance)

“The visioning exercise brought us together. It had never happened earlier and shared vision helped. Whether you are in operations or sales or in refineries, there was more appreciation for common goals. And we also came in contact with customers. We have learned not to assume things”

(Regional Manager)

The retail SBU vision was collectively created by the retail SBU teams and the teams themselves have formulated the strategies to realise the vision. To this effect, thirty two cross functional teams comprised of front line officers, across four zones were formed to have a firsthand experience of the challenges customers face and to make them reflect on their own experience. First, the team members have created their personal vision. It generally revolved around having an enabling work culture for learning, building social networks and personal growth. The retail SBU vision was evolved out of the thoughts and the answers of their own questions, which they themselves have posed to address while articulating their personal visions. They were to familiarise with the customer needs by (a) market segmentation (b) customer segmentation and (c) understanding customers and creating (d) value propositions for different segments of customers. They spent weeks working together, travelling to distant places to have an experience of the needs and expectations of the varied customers. The employees have interacted not only with the customers but with vendors, dealers and dealer men also. With all these inputs, the cross functional teams have contributed significantly to the development of a value proposition for the customers belonged to various segments. The idea of introducing clean washrooms in highway retail outlets was the contribution of an officer from the finance department.
She had articulated the possibility of more families travelling on newly built highways and their impending need of using clean washrooms.

After detailed deliberations and consultation, different teams have examined alternatives and developed action plan for the (1) urban (2) rural and (3) highway market segments. While looking at customer segments in each category, the focus was on (a) delivering good fuel promise (b) building healthy relationship with business partners (c) providing value added services and (d) customer service delivery fulfillment process for the customers.

The groups have studied the existing relevant reports and articles to start with. Before approaching the customers they have had interactions with the company depot and terminal officials, drivers and staff to understand the customers in general. After that they had in-depth open ended conversations with customers to identify their articulated and unarticulated needs and expectations. The group created two customer segments within the rural market namely agriculture and fisheries; another two customer segments within urban market focusing on two-wheelers and tourist passengers, three wheelers and buses; five customer segments in the highway segment namely car owners and truck drivers, taxis, fleet owners, light commercial vehicles and large transport companies. The group members interacted with the customers in each segment extensively and converted the data into valuable information, identified and prioritised the customer needs and action points in terms of their importance. The proposed plan of action was evaluated by the cost attached to the execution of them and the intensity of the value perceived by the customer. The teams had also focused on developing required service standards at the outlets to elicit customer delight at their point of contact. The team worked on the area ‘delivering the good fuel promise’ had underlined the importance of providing the right quality products in the right quantity to the customers. This team has studied the processes from the dispatch of the products from depots and terminals to retail outlets to find out loopholes in the existing system and suggested mechanisms to ensure the good fuel promise. For ‘delivering good fuel promise’ the teams have made suggestions that included (a) removal of the interconnections of underground tanks; (b) automation of retail outlets, terminals and depots; and (c) setting up Company Owned and Managed by Company Officers (COMCO) outlets as role models for dealer
outlets. The team worked on ‘building healthy relationship with business partners’ had discussed about partnering with dealers, vendors, suppliers and contractors to have them share the organisation’s commitment to customers. The team deliberated on ‘providing value added Services’ had looked into (a) loyalty benefits through credit and debit card programmes; (b) allied retail business opportunities (c) introducing branded fuels and (d) opportunities to address certain customer needs through effective utilisation of the physical space at the outlets.

To develop concrete strategic direction and action plans the teams have interacted with target customers, channel partners and other relevant groups and used methods such as in depth interviews and focus group discussions. As the focus was on developing a customer oriented growth strategy, the teams had spent significant time in developing required service standards at the outlets to elicit customer delight at their point of contact. Trainees, officers and managers of various functions travelled the length and breadth of the country to have an in-depth understanding of the customer needs and expectations. Four to five meetings of the groups were convened at the zonal level with active participation of the SBU and the zonal heads. The suggestions were shared with the dealers and distributors and the regional members for their feedback.

As the next step, all the groups from different zones came down to the western zone and worked together for three weeks at a stretch to finalise the strategy and action plans for the Retail SBU. Firstly, the team members working on the same area from all zones discussed and deliberated on their recommendations and the proposed action plans were presented to the SBU head and Zonal heads. After incorporating their suggestions, the teams have briefed the plans to a cross section of the dealers and distributors and other SBU and department heads from the head office for their comments also. The proposed plans were further modified and presented to the Committee of Functional Directors (CFD) and to a group of 300 employees from different functions and levels. The teams have made further changes in their plan of action after receiving feedback from the CFD and other 300 employees assembled for this presentation.

The new ‘visual retail identity’ got introduced for the retail outlets and covered 2028 outlets by January 2009. As part of providing value added products and
services, B1 has introduced the ‘Club’ outlets positioned on the platform of ‘outstanding customer and vehicle care’. To ensure superior customer service, these outlets are audited periodically by a third party on certain pre decided and publicised norms. The company has also introduced automation in retail outlets and branded them as ‘e-Fuel stations’. The system driven processes in these stations have contributed significantly to the B1’s ‘good Fuel Promise’ among customers’ mind. The No Automation, No Operation (NANO) initiative also contributed substantially to the ‘good fuel promise’. NANO is operational in 265 Retail outlets as on 30/09/2008 and it ensures that fuelling operations are automatically suspended when any of the systemic components are not fully functional. To preserve and improve the quality of the retail outlet environment, the company has implemented Stage II Vapour Recovery System (SVRS) at 318 outlets as on 30\textsuperscript{th} October 2008. SVRS has direct implication on the well being of both customer and dealer man. Network Development and Dynamic Pricing tool (NDDP) was implemented to maintain optimum inventory levels, for forecasting anticipated volume at new locations, conducting scenario analysis, identifying attractive markets and unprofitable markets and analysing dealers’ performance. To enhance the customer engagement level, company has introduced card based loyalty programmes such as co-branded credit-debit card, ‘i –mint’, a multi party coalition card for household customers in urban segment, Drive Track Plus for fleet owners and commercial drivers in the highway segment. B1 has partnered with several banks and have set up over 900 Automated Teller machines (ATMs) and offered relevant ‘non fuel offerings’ by partnering with Café Coffee Day, McDonalds, Nirulas, Rajdhani hotels, Vishal retail stores and Baskin Robbins. As part of the highway initiative 103 Junction- Model outlets have been commissioned as on 30\textsuperscript{th} October 2008 to provide a home away from home for truck drivers and provided amenities to rest, recreate and refresh for the highway travellers.

‘Hamara pump’ was a rural flagship initiative. ‘Hamara Pump’ was B1’s way of reaching the people of rural areas who have been travelling long distances to procure fuel for their agricultural equipments. After identifying an appropriate land in a rural area, the organisation set up the infrastructure with the owner of the land and the owner was given the charge of operating the outlet. Apart from fuel, select ‘hamara pump’ outlets offered added services such as selling seeds, pesticides and
fertilisers to the farmers through the ‘Kisan Vikas Kendra’. In certain areas after identifying the credit needs of farmers, B1 has tied up with certain financial service institutions and rolled out schemes for farmers for the purchase of seeds, fertilizers and farm equipments.

One of the latest B1’s engagements with dealers proved very effective for the company in identifying 5 Key Success Factors (KSFs) to improve dealer productivity. For this research B1 has studied their top 2000 high performing outlets across India. The KSFs identified are (i) full time working and involvement of the dealer at the outlet (ii) giving credit to customers (iii) knowledge of customers and proactive solicitation (iv) ethical and honest operations and (v) taking care of dealer-men. Individual dealer score cards are developed for periodic evaluation and to facilitate outlet performance.

B1 has developed (i) a unique four week residential management development programme for the scheduled caste and tribe dealers and new dealers to enhance their behavioral and functional skills for managing dealerships and (ii) periodic in-house functional and behavioral training programme for dealer and dealer men. Another unique initiative that contributed to the strategic goal at B1 was that the customers could post their complaints, suggestions and feedback about the products and services through the on-line complaint management system which was closely monitored and appropriate actions were taken by the senior management.

**B1 Retail SBU: 2009 and After**

The top management team of B1 met at Bangalore in early 2009 and reviewed the overall company performance with respect to the articulated goal of increasing the market share of products. The team noticed that, despite having all the infrastructure facilities in terms of pipelines, depots to make B1 Number one in terms of market share in the top petroleum product consuming states such as Karnataka, Maharashtra, Andhra Pradesh, Rajasthan and Uttar Pradesh, the company was Number 2 or 3 in sales. “On deliberation, the top management primarily held the view that in general the company lacks ambition to aim high and realise the goal” and “the call to be Number One in the market was essentially to ignite the little spark in the mind of all in B1, saying that you can do it too”. Stated the CMD of B1.
Later, the top Management took stock of the Retail business in these states in terms of supply and distribution. While the company performed well in terms of infrastructure and product availability, the district wise data revealed that in terms of reach in certain districts of these states, may be due to bad planning over a period of time, B1 is not represented at all. The top management has decided to start retail outlets in these districts and to analyse district wise data of market share of B1 vis–a-vis competition. Unlike before, where the company was looking the nearest competitor and developing action plans to increase the market share, this time, it was decided to plan out measures to outperform others and become the market leader by 2013-2014.

Alignment Exercise:

The CMD’s call ‘to be number one in terms of sales” first appeared in his blog and he has asked all the employees to respond to that. He had presented logical arguments taking the example of certain states where despite adequate supply of products B1 is positioned second or third in terms of sales. Appendix IV shows the screen shot of the blog post of B1’s Chairman. The call attracted a number of positive responses in terms of strategic initiatives and action plans to be number one in the market place. As a first step the top management got all the regional and zonal employees of the east zone for a three day long discussion on the newly articulated strategic goal of the company and the ways to realise the goal. The discussion was mostly on ways and means through which alignment of various functions, systems and processes can be realized to contribute to the strategic goal. Regions were asked to prepare the strategic initiatives and action plans to become number one in sales in their respective regions and to present in proposed zonal meetings. The regional team met, deliberated at length and developed strategic initiatives for the region. Top management had participated in all the zonal meetings where regional plans were discussed and deliberated. The corporate plan is a compilation of all the regional plans which are developed by the regions.

“The coordination among the functions has been a lot better after the alignment exercise”

(Manager, Engineering)
“We are not very hierarchy conscious and I have noticed such an attitude across many regional offices. It must have happened because of the visioning exercise and the alignment exercise that happened across the Company”

(Regional Manager)

“Alignment exercise gave us clarity about our course of action or what has to be done, to realize the strategic goal of Number one in sales. It was an inclusive process, where we wanted our employees to articulate their aspirations in the context of the strategic goal”

(Executive Director: Human Resources)

Organisation alignment is successful when all the organisation members are committed to achieving and sustaining alignment. Broadly the alignment framework of B1 involved i. Developing Action Plan ii. Structures and Processes iii. Internal Customers and iv. External customers.

i. Developing Action Plan:

Formulation and implementation of strategic action plan is always a challenge for top management of any organisation. Employees should know the strategic goals, the strategic initiatives and the action plans to realise them and how their work is contributing to them. The interactive strategising practiced by the managers of B1 helped employees to understand the importance of formulating and implementing the action plan keeping both, local realities and organisational objectives in mind. B1 has resorted to making plans at the regional level for a customer focused growth. All the regional members were participated in the formulation of action plans. The organisation members have made an analysis of the current state, the strategic goal and the action plans to realise the strategic goal.

ii. Structures and Processes:

The team based structures at the zonal and regional levels played a significant role in the implementation of action plans by taking fast and effective decisions. Working in cross-functional teams gave an opportunity for employees to understand others views, the challenges faced while dealing with different business
situations. The various inter functional groups constituted at different levels with higher responsibilities such as the contracts committee, the bids committee and the business councils met as and when required to take important and better decisions for faster execution of strategic plans. The company has set up a number of new regional offices, depots and terminals to contribute to the organisation goal of becoming number one in sales volume. Like other divisions, retail division also got an embedded finance department. The Human Resources (HR) function has implemented a new structure to align with the new developments, where their officers were located at zones or regions to work with marketing and sales professionals to resolve all the HR issues, if any in minimum time.

Organisations must develop and implement processes and procedures to align the strategic goals, internal and external customers. Zonal and regional heads were made responsible for reviewing the systems and processes and making changes to contribute effectively to the strategic goals. To free employees from their day to day basic routine activities and to use their time productively for the strategic activities, a number of processes were automated using the enterprise resource planning technology. The company has entrusted zonal and regional teams with a number of responsibilities with respect to infrastructure development, tenders and vendor selection. Team based decision making helped B1 in evolving educated and unbiased decisions for the realisation of strategic goals.

B1 has evolved a specific human resources philosophy to align with and support the reformulated vision. The HR philosophy highlighted the integration of employees at three levels such as personal, professional and cultural with B1. The initial visioning exercise, Vision Leadership and Planning (VLP) and the alignment exercise contributed significantly in the personal integration with the organisation. While psychometric and competency assessments facilitated the professional integration, mentoring and coaching initiatives, coordination and working in teams contributed to the cultural integration.

The implementation of Balanced Score Card helped B1 to translate the strategy into action. HR was actively involved in developing a framework for mapping the competencies and developing necessary competencies for the employees to translate the strategies into action.
iii. Internal Customers:

The participative method of strategy making such as VLP and the later alignment exercise have contributed substantially for integrating the employees’ personal objectives with the organisational objectives and in creating a shared vision for B1. Operations and the sales teams discussed the alignment between them and with the finance team to evolve strategies to improve the logistics and to distribute the products according to the demand of the retail outlets. Unlike earlier, the middle managers got important responsibilities as B1 resorted to developing strategic action plans at the regional level. As part of the alignment exercise, zonal and regional managers of B1 were made to deliberate and identify five most important responsibilities that can contribute to the realisation of the strategic goals. This brought out a lot of cohesion in terms of the working of the managers. As a policy, B1 recruits only fresh graduates at the base level and do not hire laterals. The alignment exercise helped the new entrants to have a clear idea and perspective about the work they are engaged in from day one. Alignment exercise also helped in developing clarity about various processes end to end and in turn providing information for the competency mapping team to focus on results rather than the processes themselves. B1 has trained 24,000 dealer-men in customer service during 2009-2011.

iv. External Customers:

The external customers of B1 included the end customers, dealers, Government officials and the vendors. The business strategy of B1 was customer focused and all the evolved strategic plans were aimed at adding value in the services provided to the end customer. Employees came together and made cross functional teams and had travelled to distant and remote places to interact with customers of various segments to understand their articulated and unarticulated needs and to develop strategic plans for the company. In the petroleum business dealers play a critical role because they interface with the customers and obviously they need to align with the strategic goal of the company. Apart from the soft skill training that was given for the dealers and dealer men to enhance customer service, scheduled caste and scheduled tribe dealers and new dealers were given a four week training programme to manage the retail outlet professionally. Dealer meets are conducted periodically to share best practices and to address grievances, if any. In the dealer
meets, the sales figures of B1 and the competitors were discussed and action plans were decided for increasing the market share of B1.

**Corporate Plan:**

In response to the Chairman and Managing Director’s blog in the intranet articulating the vision to be Number One in the downstream marketing in the industry, B1 has developed strategic initiatives to realise the envisaged growth for 2009-10 to 2013-14 for the retail Strategic Business Unit (SBU) as part of the corporate plan. This plan is the co-creation of the employees through participative processes starting with the workshops and brainstorming sessions at the regions. The employees at the regions made thorough analysis of the current realities in terms of competitor analysis, B1’s strengths and weaknesses, district wise market share, performance of the existing outlets, and the geopolitical scenario of the locale and developed an action plan and outcomes with timelines. From the region-wise analysis and action plan, zones have made a comprehensive action plan and presented to the top management of the retail SBU. Constructive ideas that have evolved out of the discussions in the Retail Business Council and feedback from the Director- Marketing and CFD were incorporated before finalising the retail SBU action plan.

The corporate plan was in alignment with the modified vision statement of the retail BU, which reads as “highest performer in sales over industry”. The earlier vision was focusing on achieving higher sales growth in comparison with the industry. The new vision has translated in terms of the retail SBU objective to achieve a sales volume of 22 MMT by 2014 from the current volume of 12MMT in motor fuels, an increase of 7 percent market share from 23 percent. The target volumes were decided after review and moderation of volume projections arrived during the zonal workshops involving field and regions. Based on the proposed zonal targets, region, sales area and retail outlet wise targets were finalised.

To be the highest performer in sales, B1 needed to retain its existing customers and acquire new customers. To acquire new customers, the company needed to create new infrastructure, augment the existing assets and strengthen the existing processes. As part of the infrastructure development, current and projected requirements in various regions have been identified in terms of new depots, terminals, railway
sidings and augmentation of facilities in existing depots and terminals. To expedite approvals, two committees were set up at the zonal level. These were the infrastructure committee for all projects up to an investment of Rs. Five Crores and the major infrastructure Committee for all projects beyond investment of Rs. Five Crores. Another aspect identified as affecting the sales of fuels is the dependence of B1 on other Oil Marketing Companies (OMCs) for product supply. Zones have identified the dependencies and coordinated with Operations and Distribution (O and D) business unit for sourcing products. O and D SBU conducted periodic assessments and followed up with the product sources to ensure uninterrupted supplies.

The focus areas identified by the regions to achieve the leadership position in the sales of total motor fuel were the following:

1. **Network Expansion:**

   This is one area which was figured in all the regional documents and where the regions have contributed significantly in realising the articulated target. Regions were asked to leverage the NDDP tool to validate the sales potential of the locations and to set up quality outlets. B1 has developed a number of outlet formats targeting various markets and customer segments including a new format called B1 Raja, which needed minimum investment, meant for rapid network expansion in unrepresented areas. B1 has created new regions and new sales areas to implement the aggressive plans for network expansion.

2. **Improving network productivity:**

   Identifying top performing leaders and providing them differentiated services can contribute to improving network productivity. Regional office should coordinate with the depot to ensure that the product was delivered on time and the business at the outlet was unaffected. The benefit of this initiative was assessed periodically for refinement and replication. Low performing and high potential outlets were focused to understand the problems and identified action plans like merchandising and operations at the outlet to improve the sales volumes. B1 has developed a manual with all the Standard Operating Procedures (SOPs) for the use of retail outlets to ensure consistent delivery of services. Regions were also asked to leverage the existing training programmes like *Sada Aap Ke Liye*, *Gurukul* and *Club Champ*
programme aimed at developing skills and enhancing productivity of dealer men. Regions were also advised to take measures in terms of revival of closed outlets. Regions were responsible for ensuring the uniform and consistent implementation of SOPs and close monitoring of the outcome of all the action plans implemented to improve network productivity.

3. **Improving Dealer Productivity:**

B1 has learned from the field that reconstitution of dealership can contribute to dealer productivity. To facilitate this, Limited Authority Manual (LAM) was revised and majority of the authorities were delegated to zones and regions for reconstitution of dealerships. Regions were asked to involve in dealer counseling for improving sales performance wherever necessary. Professional dealership ensures efficient operation and best practices at the outlet keeping the customer in mind. Based on the 5 KSFs, B1 has developed a dealer score card for assessing the skill of dealers and for developing interventions to address the areas of improvement. For improving the services at the outlets, dealer meets were conducted in sales areas and regions during every quarter. All the regional office and supply location personnel attended this meet, discussed and sorted out the dealer challenges with respect to the fuel supply from the depot, regarding credit and Real Time Gross Settlements (RTGS), issues related to retail outlet and dealer- men management. Dealers were also encouraged to share the best practices they followed at the outlets, suggestions for improving Quantity and Quality (Q and Q), forecourt services and all the issues affecting the sales area or region. Regions were also asked to leverage the existing training programme aimed at improving productivity like the management development programme for the dealers.

4. **Leveraging Technology:**

To ensure the delivery of Q&Q, B1 has leveraged retail automation in many of the outlets. The benefits can be derived only when the system is fully functional in terms of generating cash memos and when monitoring of transactions at the outlet can be done remotely. As a first step in this direction, B1 has introduced NANO as part of the modernisation in select outlets.
5. **Focus on Highways:**

Regions were asked to identify flagship outlets at intervals of 150 kilometers along Golden Quadrilateral (GQ), Major National Highways, North South (NS) Corridor and East West (EW) Corridor to create a unified network. At strategic locations in highways where B1 did not have network presence, regions were asked to commission junction or model outlets within a specified time. All these identified outlets deliver consistent customer service and an upgraded loyalty card programme for highway customers called Drive Track Plus. B1 has identified five key areas to be focused in these outlets for customer delight. They are (i) uniform world class facilities; (ii) consistent and uniform services; (iii) making Q and Q a hygiene factor; (iv) achieving Nil customer complaints and (v) value added service at the outlets. Initially the focus will be on NH2, NH4, NH5, NH8, NS Corridor and EW Corridor.

6. **Allied Retail Business (ARB):**

ARB is strategically very important in urban markets. To expand the ARB activities B1 has formulated ARB guidelines and dealer share policies. Many regions have dedicated marketing personnel to focus on ARB activities.

7. **Safety:**

As part of institutionalising the safety culture, B1 has conducted safety audits in all retail outlets and ensured compliance of safety processes. Regions ensured that dealers and dealer men were following safe operating procedures and practices at retail outlets and implemented the guidelines as per the safety standards.

8. **New Regional offices and Sales Areas:**

To execute the aggressive plans of opening new retail outlets, to implement the retail initiatives uniformly across network, to enable focused attention to improve the network and the dealer productivity, to facilitate better outlet administration, to enhance the coordination with Government authorities and other agencies B1 has created new regional offices and sales areas.
Part Three: Retail Network Expansion

Till 2003 the dealer selection was done by the dealer selection board and the regional offices of oil companies played hardly any role in that. The regional offices were given responsibility of setting up outlet in respective regions in consultation with the zonal and head offices after 2003. The visioning exercise of 2003 and the reformulation of the strategic goal in 2009 have made significant difference in the way work has been happening in B1. After the initial companywide visioning exercise the coordination between functions has improved significantly. The alignment exercise reaffirmed the need for greater coordination to cater to customer needs and to realise the strategic goals.

“When we started the visioning exercise in 2003, to sync the concept in, I think it took about a year or two years almost; And at that point of time we were trying to discover the customer. Therefore primarily the people who were engaged in this exercise were literally the bottom of the hierarchy, the ABC level officers. And there was support from the top. And in between there was a vast set of decision makers, middle managers, who were not directly involved in it. So what happened was that whenever the top intervention took place, down below their ideas were accepted and we had a huge meeting wherein all those who went down to the country side who said this is possible. It was not put in an organised fashion; thought came as to find out what were the gaps between us and the customer and that got bridged there. Probably 2003 to 2005-06, it was a large exercise and mind set change takes time, doesn’t it”

“And the name of the game in petroleum business is infrastructure. If you have got the infrastructure right, then there is a good chance that you will win”

(Chairman and managing Director, B1)

“It all depends on the focus given for the activity. If a higher focus is given, everything falls in place. Network expansion is the best way to improve market share”

(Regional Manager)
Within a region, locations for retail outlets are identified based on the sales potential, competitors’ presence and the efficacy of the existing outlet(s) of B1 in that location.

“The entire regional office team sat together for four days, made district-wise analysis of the volume of TMF sold in each district by B1 and competitors and did a Strength, Weakness, Opportunity, threat (SWOT) analysis. First, we focused on the opportunities and decided to have a rapid network expansion plan to realise the number one position in sales.”

(Regional Manager)

“If possible, we will analyse the previous data of dealer conversion rate of certain areas and will have a detailed understanding the nature of customers who are expected to avail the service in proposed locations”

(Sales Officer)

Before finalising the locations, multiple visits are made by the sales officers to discuss with other nearby dealers, other business people to get maximum information about the area and people. The manager, Engineering visits the locations to check the plot size. At the regional office these proposed locations are further scrutinised for their potential by using the Network Development and Dynamic Pricing (NDDP) tool.

“We always cross check the proposed TMF volumes with the NDDP tool. We also use NDDP tool to identify possible locations for putting up the retail outlet”

(Manager: Engineering)

“I do a lot of planning in advance in terms of timelines from releasing advertisements to handing over the Letter of Intent to the dealer aspirant.”

(MIS Officer)

Based on these inputs the regional office takes the decision in terms of the number of outlets they propose to put up within a specified time frame and the
proposal is forwarded to the zonal office for their approval. A roster is made at the regional level to guide the allotment of dealership based on the reservation policies of the Government. Reservation policies are well laid down and transparent with respect to dealership selection. 50 percent is allotted for the open category and the rest 50 percent is reserved and divided among scheduled castes and tribes, physically handicapped persons, paramilitary personnel, defense personnel, freedom fighters and outstanding sports persons. 35 percent of dealership in each category will be reserved for women. The roster which is made based on these guidelines is also send to the zonal office for approval.

“I do a lot of planning in advance in terms of timelines from releasing advertisements to handing over the Letter of Intent to the dealer aspirant. I take less time to complete the process this way”

(MIS Officer)

The select locations are advertised for dealership at least in two news papers, one English and one regional vernacular newspaper in the case of regular Retail Outlets (ROs). In the rural markets, the advertisement especially for Hamara Pump is given in the local newspaper and in one State level newspaper. Dealership aspirants need to be Indian nationals who are matriculates or with any equivalent educational qualification and of not less than 21 years of age as on the date of application. To apply for a dealership of Hamara Pump, the dealership aspirant should be a resident of the concerned District.

“In many places especially in the rural region we may have to counsel eligible people to apply for the dealership”

(Sales Officer)

Dealership aspirants have to apply for dealership in the prescribed application form with all the necessary details and certificates within 30 days from the date of advertisement. After receiving all the filled in application forms and necessary documents, the Management Information System (MIS) group at the region creates a master database, makes copies and location wise files with applications and documents.
“The MIS group sends these documents to respective sales officers or arranges to get all the sales officers in the regional office for one or two days to scrutinise all the application forms and the accompanying documents to ascertain the eligibility of the candidates within a specified timeframe. The “how to do” of things is totally left to us and we device methods to reduce the cycle time of each process associated with this”

(MIS Officer)

“A lot of coordination is involved in network expansion work. We have a culture where the pattern of communication is open and informal communication and these really help”

(Sales Officer)

The Sales Group after a thorough review of applications rejects those applications that are not acceding to the eligibility criteria and not supported by necessary documents. The sales group sends both the selected and the rejected applications with remarks to the MIS group for further processing. The MIS group also connects with the Engineering group and informs them about the details of the selected dealer aspirants after the preliminary screening. After ascertaining the eligibility, the candidates are informed about the visit of the three member committee which includes managers/officers of sales, engineering and finance or any other officer of the region for technical and commercial (TC) evaluation of locations. The TC assessment is done based on the following parameters. They are sales potential; frontage; earth filling requirement; presence of overhead low tension line, overhead telephone line, divider and trees; proximity to culvert; soil type; availability of power and water; visibility from road and outside octroi limits. Marks are allocated differently to each parameter depends on the location of the proposed outlet which may be in a city or town and in a highway or rural area. The three member committee makes their assessment of the TC suitability of the land offered by dealer aspirants and hands over to the MIS group before the Level One interviews.

The MIS group simultaneously connects with the concerned officers in the retail outlet network team in the zonal office for constituting the selection of panel
members for the Level One screening and Level Two selection Interviews of dealers. The MIS group periodically follows up, if need be with the zonal office for setting up the committee for the screening and interviews of the dealer aspirants. After finalising the panel and the dates, the MIS group makes necessary call letters and sends to the select dealer aspirants to appear for the Selection interview. For the Level one screening, the zonal office generally nominates three officers belong to level C. This committee scrutinises the applications and evaluates the parameters based on the documents submitted along with the applications. Thereafter the Level two interview will be held for all the eligible candidates for the non document based parameters by a three member selection committee nominated by the zonal office. The Level two interview committee members generally belong to level D and level E. The MIS group of the region plays a major role in following up with the zonal office for the constitution of this committee too. The norms for evaluating the candidates are (a) suitable land for the retail outlet (b) ready availability of finance (c) educational qualification (d) ability to generate business including sales potential (e) age (f) business experience in relevant field (g) business acumen mainly in terms of people and finance management and infrastructure development (h) information related to trade and (i) personality which is assessed with respect to communication, passion and influencing skills. The level 1 scrutiny and evaluation carries 91 marks and level two interview carries 09 marks.

After the completion of the interview for a location, results along with the detailed marks under various parameters are displayed in the notice board of the location on the same day and on the B1 web site in the internet. If none of the dealer aspirants scored minimum qualifying marks during the level one and level two rounds, the location will be declared as “no candidate found suitable”. Otherwise a “merit panel” list will be published with three names of candidates for the award of dealership for the location. The detailed list with candidates’ names and marks are displayed for thirty days outside the location to check whether any objections or complaints are filed by anyone regarding the selection process. ‘The merit panel’ is considered as final only after a detailed scrutiny of marks conducted by a senior officer of BI, who is a grade higher than the chairman of the level two committee, and found to be in order by the zonal office. In case the senior officer recommends
any change in the ‘merit panel’, the empanelled candidates will be advised suitably by the competent authority.

The Letter of Intent (LOI) is issued to the eligible candidates from the ‘merit panel’ on the basis of field verification by the sales officers. The concerned sales officers go to the residence of the eligible candidates and verify all the credentials provided in the application. LOI is issued after 30 days from the date of publication of the ‘merit panel’ or till the disposal of complaints if any received with regard to the selection of dealers. If the first candidate in the list is not found suitable or fails to fulfill the terms and conditions, the dealership will be offered to the second candidate in the list after necessary verification. The third candidate will get a chance provided the second candidate is unsuitable or fails to fulfill the prescribed terms and conditions. The selected candidate, except those who avail the corpus fund facility will have to make an interest free, refundable security deposit amount ranging from Rs 2 lakhs to Rs 5 Lakhs to B1 depends on the location. After the issue of the LOI, the person would be required to fulfill the terms and conditions within the specified time frame for the speedy commissioning of the dealership. The tenure of a retail outlet dealership will be for an initial period of 10 years, which is renewable for 10 years thereafter, depends on the performance of the dealership.

As the next step, B1 collects all the land related documents from the LOI holders to initiate the process of the plot transfer. The concerned sales officer discusses with the Manager –Engineering about the site, layout, format of the retail outlet, to have Compressed Natural Gas (CNG) facility or not and possible alterations in the format, if need be. The Manager-Engineering visits the location and coordinates with one of the approved architects of the company with the land details and the details of the proposed retail outlet for the preparation of blue prints and comments. The Manager Engineering takes the approval of the Zonal office in the event of any deviations from the specified measurements of standardised retail outlet formats. The drawing is passed on to the MIS officer to initiate the process of getting the plot transferred on lease. Simultaneously B1 applies for the Non Agriculture (NA), No Objection Certificate (NOC) from the District Collector for the commercial use of the land and also apply to the explosive department for their approval. This approval from the explosive department is also issued by the collector after getting necessary
clearances from the public works department, fire department and the town planning department. On an average it takes seven to eight days to get this approval. It is also necessary to get a NOC from the police department, issued by the Commissioner of Police. The LOI holder connects periodically with the MIS and Sales office at the B1 regional office and coordinates with different departments to get all the NOCs. When this process of issuance of NOCs reaches the advanced stage, the MIS group makes a detailed land report to get the necessary legal clearance from the legal department of B1 for acquiring the land on lease. Meanwhile B1 also carries out the evaluation of the land with a Government approved valuator. After taking the inputs from the valuator, the engineering department conducts own evaluation of the land based on factors such as sales potential and location and negotiates the amount with the LOI holder. In effect there needs to be a lot of coordination among officers of the MIS, Engineering, Sales and finance department and the regional manager during the negotiations with the LOI holder.

B1 generally takes the land on lease for minimum thirty years. Once the NOC from the collector comes through, another application is submitted to the same office for approval of the commissioning of outlet. After that an officer from the explosives department visits the outlet and he/she grants the final license. Before selling the products, the dealer has to get the retail selling license also. It is pertinent to note that local variations in terms of rules and regulations can have an impact on the way the regional offices connect with the LOI holders during the process of putting up retail outlets. For example, in Gurgaon, Haryana the local administrative body which gives building plan approval does not encourage any activity other than dispensing motor fuels in the retail outlet. The body observes that safety is bypassed if you have any other facility in a retail outlet like having an Automated teller Machine (ATM) which is common in Delhi retail outlets.

Just after the negotiation and settlement with the LOI holder, B1 releases requests for tender to keep the best vendors ready for commissioning the outlet at a faster pace. Depends upon the need and to expedite the process, B1 sometimes uses multiple vendors. Using paver blocks instead of concrete and chain link fencing instead of boundary wall have contributed to reduction in time of the overall commissioning of the outlet.
Meanwhile, the regional office takes up the matter of commissioning of the outlet, the proposed format and the proposed expenditure with the zonal office for approval.

“We send requests to the zonal office in the specified format through our Enterprise Resourcing Planning (ERP) for approval and this system has revolutionised the way we work. Earlier we were sending files for getting approvals from the zone and approvals had happened after weeks of waiting. Even the region can allocate funds up to Rs 75 lakh now unlike the earlier limit of Rs 5 Lakh”

“Earlier there was no transparency. Instead of the movement of files, all transactions are made online with the help of system. The concerned authorities can approve everything in the ERP system itself”

“Significant decentralisation happened as limits of authority manual has given maximum limit in terms of resources and authority to the regional manager”.

(Regional Manager)

After the approval of the funds, the Engineering team makes an appropriation request with details such as location, the format and the proposed expenditure, the estimated sale of TMF and other revenues and the break even period. In the event of a proposal to make a variation from the standardised format of retail outlets, the details of proposed changes and expected additional expenditure due to these changes in format are also given as part of the request. The appropriation request is send to the regional bids committee which is headed by the Regional Manager for approval. Once the approval comes, the whole information is uploaded in the system for the release of the money and making necessary payments by the Engineering Department.

“The interlinked jobs can be given to one contractor and rest of the job is given to a different contractor to expedite the process of commissioning. There are no companywide standardised rules or norms in this regard and depend purely on local needs, availability of good contractors and the immediacy of commissioning”.

(Manager, Engineering)
After the transfer of the land, from the LOI holder to B1, the development of the outlet starts. Generally in a retail outlet, a tank, dispensers and a canopy has to be installed apart from the drive way, fencing and hoarding and other facilities like installation of water cooler and facility for air filling. As installation of canopy is an independent job, the foundation for canopy is done first, and measurements are also taken for its fabrication. After that, the tank installation and the drive way jobs are given to a select contractor. Once the work is done, engineering team makes sure that the dealer is in receipt of all the NOCs so that the outlet can be formally commissioned.

In 2004-2005 B1 started standardising the retail outlets with different formats based on market segments. The retail strategy manual of B1 which came into existence in 2005 has all the sizes, drawings, measurements and details of all the different outlets including the way it has to be constructed. Due to paucity of funds, earlier some officers and contractors used to do the driveway before making the canopy foundation. But now the canopy foundation is made first as a standard procedure so that digging up the drive way can be avoided at a later point in time for the canopy construction.

“All proposed retail outlets in their standardized formats can be commissioned without any special approval from the sonal and head office. Only those retail outlet formats with certain changes from the existing standard formats need to approval from the zonal office”.

(Officer, Engineering)

“On an average nowadays it takes three months for the issue of LOI to the dealer aspirant unlike six to seven months before. And after that the time to commission an outlet will vary depends on the kind of outlet. If the proposed outlet is on a national highway, it may take three to four months as the NOC has to taken from the Ministry of Road Transport and Highways. A smaller format outlet like hamara pump is commissioned within two to three months”.

(Regional Manager)
“We do not have a structured way of communication and have a culture of open communication”

(Manager, Finance)

“We have a lot of one to one and group informal interaction happening at the region. There is lot of transparency and everybody knows everything. This helps in aligning all to the common goal of achieving the market share or what we now call as the ‘shikar volume’”

(Regional Manager)

A lot of changes have happened in the way people communicate in the organisation with respect to the realisation of organisation goals. Earlier each department in the regional office had a manager to whom the officers were reporting. Only the managers of the various functions were reporting to the regional manager. The Strategic Business Unit structure of B1 has changed this and made all the sales officers to report to the regional manager directly and removed the position of Manager Sales. The designation and pay scales of the sales officers may be different but they are all sales officers with same responsibilities. It was very bureaucratic with so many secretaries for assistance and with very less communication between Departments. Decisions are now taken by the regional manager in consultation with the concerned officials. Earlier only the regional manager was communicating with the zonal office but now anyone could connect with the zonal office. In 2003 a position titled Chief Manager – Network was created at the zonal office to facilitate the network expansion. The MIS officer of the region coordinates with this network manager of the zonal office with regard to network expansion.

4.1.2 The Case of Business Two (B2)

Part One: General Introduction

India’s first securities depository was established in 1996 subsequent to the enactment of Depositories Act in 1996, and it brought forth a total transformation of Indian Capital Market. The Depository was incorporated under the Companies Act, 1956 and promoted mainly by Industrial Development Bank of India (now IDBI bank), Unit Trust of India and National Stock Exchange of India Limited. Currently
the promoting institutions together hold 62 percent of the equity and the remaining equity is with certain public, private and foreign banks. The Board of Directors of the depository was entrusted with the responsibility of the management of general affairs, direction and performance of the organisation. The board was comprised of six independent directors, five representatives of shareholders and the Managing Director (MD) and Chief Executive Officer (CEO). Day to day operations of the organisation were managed by the business or functional heads and their team members and the whole group was headed by the MD and CEO. Though the depository is a profit making company, it is not a profit maximising entity. Reduction in cost on account of efficiency gain was mostly passed on to the clients and thus the depository has been able to significantly reduce the cost of operations for the users. The Depository is a zero debt company and all the projects are financed by internal accruals and not dependent on stakeholders or any other entities for financial support.

Despite being the first initiative of its kind, the conceptualisation and implementation experience of the depository highlighted the possibility of rolling out technology intensive projects with aggressive targets for implementation. The depository used Information Technology (IT) systems for processing huge amount of data and Wide Area Network (WAN) for user accessibility. The depository has brought down the transaction cost in our country as one of the lowest in the world, eliminated settlement risk and significantly improved the efficiency of operations. By the year 2000, the depository had gained wide acceptance and all the settlements of securities happened through the depository route since then.

This success exemplified the possibility of developing similar models for providing services at affordable price points through a nationwide agency network. The experience of the depository in processing large volumes of data and transactions gave confidence to the Government in building solutions in other areas where the use of technology could provide better services for society at large. Currently, the depository is viewed as an information utility serving the capital market enabling the holding and transacting of shares and debt instruments in dematerialised form, providing e-governance solutions to the Ministry of Finance in the area of direct taxes and acting as a central record keeping agency for the new pension system. Through its wholly owned subsidiary, Database Management Limited, the depository has also
implemented the National Skills Registry which is a pre verified pool of professionals in the area of Information Technology and Finance and the Special Economic Zone (SEZ) online project for Ministry of Commerce and Industry.

Business Two (B2) is a major transformational initiative of the depository, implemented on behalf of the Income Tax Department (ITD) of the Government of India. B2 was established in January 2004 on the recommendation of the task force on Direct taxes set up by the Government of India. The task force analysed the various problems in relation to tax administration and recommended the creation of a composite database integrating tax payments made in designated banks, tax deduction at source and information on high value transactions to provide a 360 degree view of the tax payer. B2 has also launched the issuance of Permanent Account Number (PAN) services in June 2004.

B2 interfaced with taxpayers, the banking network comprising of 13,000 tax collecting bank branches of 32 tax collecting banks and entities, builds tax payer ledgers against the PAN of each taxpayer and helps ITD in better tax administration and service delivery. The needs of the deductors and tax payers are catered through 2000 Facilitation Centres (FCs) across India located in 700 cities.

The Services offered by B2 are:

(a) Generates the Annual Statement (AS) of tax credit (Form 26AS) for tax payers with all the third party deduction and direct deposit details.

(b) Manages taxpayer registration for both Income Tax and for withholding tax, for which it processes application for Permanent Account Number (PAN) and Tax deduction and collection Account Number (TAN).

(c) Provides facilities for e-filing of Tax Deduction at Source (TDS) and Tax Collection at Source (TCS) returns for Government, Corporate and other deductors.

(d) Uploads challan details received from the banks and maintains the records of the tax payments made through the On- Line Tax accounting System (OLTAS).
(e) Acts as registrar for processing applications for registration as e-Return Intermediary (e-RI) by eligible entities to electronically file the income tax returns on behalf of the taxpayers.

(f) Provides facilities (i) to the Pay and Accounts Office (PAO), District Treasury Office (DTO), Cheque Drawing and Disbursing Office (CDDO) to prepare and file Form 24G electronically and (ii) to those responsible for making payments to a non resident or a foreign company to file Form 15CA on line.

(g) Consolidates the data received from banks and tax payers (including deductors) and flagging exceptions and reporting the same to the ITD to ease their service delivery of annual income tax assessment.

(h) Provides details of Annual Information Returns (AIR), the high value transactions to ITD which are reported to B2.

(i) Enables participants such as banks, Government Agencies, Mutual funds, Credit card agencies to access quality data with added services like on line PAN verification.

(j) Provides dashboards to taxpayers, deductors, banks, controller of accounts, income tax department, Ministry of Finance to view respective data pertaining to their domains through a common portal.

B2 has revolutionised the tax collection in our country in multiple ways. The establishment of B2, facilitated small ticket transactions as the cycle time for income tax processing got considerably reduced by the efficient use of Information Technology (IT). B2 has contributed to societal reforms by providing transparent transactions and end to end audit trail and substantially eliminating paper based fraud. B2 exemplifies how information technology and connectivity have helped improve compliance at reduced cost at a national scale.

B2 contributes to the effective functioning of the ITD by (i) ensuring that the tax credit given to taxpayer is against the funds received in the Government account
(ii) monitoring compliance in tax payments and returns filing (iii) providing a central database of the tax payment details that helps in better assessment (iv) helping in data mining for non-intrusive investigation and for policy implementation and evaluation (v) contributing substantially to increase the tax collection on account of better compliance (vi) identifying trends and making projections through data analyses (vii) facilitating faster transfer of tax collected to the Government (viii) enabling speedy reconciliation. B2 got fully implemented in the financial Year 2005-06. This facility helps deductors to reduce the cost of compliance and deductees get timely feedback on their tax credit and their tax returns processed fast.

According to the recent Finance Ministry update, in our country the direct tax collection has grown at an average annual rate of 24 percent in the last five years and has nearly tripled from Rs. 1,32,771 crore in 2004-2005 to Rs. 3,78,000 core in 2009-2010. The budget target for the direct tax collection for 2010-2011 is revised by 20,000 crore- from Rs. 4.3 lakh crore to Rs. 4.5 lakh crore on January 2011, as the first nine months of the 2010-11 fiscal has shown a 19 percent increase than the same period of the 2009-2010 financial year. The direct tax share in country’s Gross domestic Product (GDP) has increased from 4.1 percent to 6.1 percent. The Finance Minister of India has attributed this sustained growth to the improvement in tax administration and rationalisation of tax structure.

In terms of total accounts and total entries per year with respect to tax ledgers, B2 has shown an increase of approximately 27 percent in 2010 than 2009. As on July 2009 B2 generated 70 million total accounts and 224 million total entries and by July 2010 these numbers have increased to 90 million and 300 million respectively. Currently on an average B2 issues 1 million PAN cards per month and services 2 million entities registered for filing TDS returns. To provide superior services B2 interfaces extensively with Central Board of Direct Taxes (CBDT), Reserve Bank of India (RBI), Controller of Certifying Authorities (CCA), 13000 bank branches, deductors, 2000 facilitation centers and taxpayers through efficient systems and processes. The customer relationship cell of B2 handled on an average 3500 communications every day. In the tax information network business B2 had maintained 100 percent market share and in PAN issuance segment B2 had a major share of 57 percent.
The depository has focused on developing expertise in certain key areas for contributing to the effectiveness of large scale transformational projects like B2. These include; (a) solution design and architecture - design of IT based solutions for large transaction based systems for e-governance applications in the area of direct and indirect tax administration, pension, and capital market; (b) business process reengineering- to establish processes focusing on efficiency, effectiveness and user convenience (c) policy changes and legal enablement- through evaluation of the existing policies and legal framework and modifying the same to match the e-enablement for successful implementation and sustenance of projects; (d) delivery of results- takes charge of complete delivery of solution, results and service levels; (e) financial model - develops innovative financial models that keep the upfront investment low for clients and payment as per the usage; and (f) change management- the transformational nature of projects demand the use change management strategies including periodic training for users and intermediaries. While the above mentioned core knowledge contributed positively to the growth and development of B2, there were major challenges it faced in terms of environmental uncertainties and the transformational nature of the project.

Business Model:

B2 focused on two functions by way of implementation. First, the tax related information from various third parties like deductors, banks and other entities were collected, consolidated and organised into a central database. Second, this processed information was provided to ITD as an input to improve quality of tax assessment. These can be viewed as back office and front office functions faced with very significant challenges. While the in-house expertise of B2 drives the solution design for operations, application development and system maintenance were outsourced to multiple vendors. Client servicing of B2 was handled by an agency network. B2 had significant flexibility in procurement and recruitment unlike typical Government departments.

To focus on the core functions in the areas of policy making and administration, tax assessment and detection of tax evasion, the ITD had decided to outsource the back office function to a third party. This model permitted the third
party to use their expertise specifically for faster and better data analysis and the ITD to enforce specific service standards from the third party.

**Financial Model:**

Implementation and operations of the B2 project required capital investment, regular operating expenditure, periodic investment for upgrading the capacity and accommodating changes in the income tax laws. The ITD has decided to adopt a financial model where the payment is made by the user based on the usage of the system. One source of revenue came from the deductors when they paid the upload charges while filing Tax Deduction at Source (TDS) and Tax Collection at Source (TCS) returns. This expense was lesser than what they were incurring earlier when they were filing returns with challan copies and tax deduction certificates. The other source was the payment the ITD made for data processing and consolidation, maintenance of the database and organisation of the data on the basis of usage. B2 has the flexibility to administer market linked compensation and benefits system to its employees.

The viability of this financial model basically depended on organisation’s capability to build processes which can contribute to improving efficiency in operations and thereby reducing cost. It was also very important to make sure that there was a high degree of compliance and the quality of data furnished by the tax payer. A multi pronged strategy in terms of feedback, education and enforcement were needed to ensure this.

**Solution Design and Architecture:**

One of the major challenges faced by the B2 team initially was about establishing the systems, procedures and the infrastructure for the 13,000 odd tax collecting bank branches for uploading the details about tax payments to the central system on a daily basis. It was decided to have a state of the art infrastructure, which has a three tier architecture based implementation comprising web servers, application and database servers with enterprise storage system. The user interface, business application and database hosting were segregated to improve maintainability and enhance security. B2 used high end Reduced Instruction Set Computer (RISC) multi processors with Unix Operating System (OS) for application and database servers for
stability and scalability. For load balancing, application and data base servers were hosted in an active-active mode. Web servers were arranged in clusters using virtualisation technology with high degree of horizontal scalability. As a policy, the organisation upgraded the capacity of the system as and when the existing utilisation exceeded an average of 40 percent.

The other major challenges were (i) to establish a nationwide network of Facilitation Centers (FCs) to interface with customers and (ii) an online facility for the deductors to furnish their returns directly.

**Process Redesign:**

Process Redesign was done to make use of the Information and Communications Technology (ICT) tools to make relearning by the stakeholders minimal. An online procedure called Online Tax Accounting System (OLTAS) was introduced for the 13,000 tax collecting bank branches to digitally upload the challan. The new system consolidated the prevailed 19 forms for filing TDS and TCS returns, into four forms. From Financial Year 2005-2006 filing of TDS and TCS returns has been made quarterly to provide timely feedback for the concerned. All the deductors could file the returns online or through B2 facilitation centers. The total taxpayer interface was called Electronic Return Acceptance and Consolidation System (ERACS). OLTAS and ERACS formed the two principal components of the Network.

The Central PAN Ledger Generation system (CPLGS) at B2 would match the tax deposit information received from the TDS returns and from the banks. After the confirmation about the tax deposit from the bank, using the PAN, the system created a PAN wise ledger for each tax payer for the use of the ITD. Tax payer could view the tax ledger online for verification and there are provisions to make corrections, if any.

Entities who were handling specified high value financial transactions could file a consolidated return in electronic form with all the details. This AIR helped ITD officers to make comparisons of income and expenditure unobtrusively, to ascertain the possibility of tax evasion. Currently ITD has standardised the process of PAN and TAN issuance and it has outsourced the processing of applications.
Project Implementation:

As the scope of the business project was quite large, it was implemented in phases with stringent monitoring of specific deliverables.

The first phase was focused on the issuance of PAN and TAN, acceptance of data from banks and acceptance of TDS annual returns from deductors. The second phase involved the continuation of the first phase, acceptance of quarterly returns from deductors and processes related to annual information return. System had been evolving since its phase two. The primary focus of this phase was to provide online services to B2 customers. B2 provided dashboards for ITD and Banks, Form 26AS for the Tax payer, TAN registration, Form 15CA filling, online e-tax payment for the deductors and PAN verifications to banks and deductors.

The new system demanded that the returns had to be filed in electronic form. In the Financial Year 2002-2003 the corporate deductors were mandated to file the returns in electronic form. From 2004-2005 the Government deductors were also asked to file the returns in electronic form. When the new system was introduced, tax payers were allowed to deposit their taxes even without mentioning TAN and PAN numbers. Currently more than 98 percent of TDS challan and 95 percent of non-TDS challan have valid PAN.

B2 is an International Organisation for Standardisation (ISO) 9000 and ISO 27001 certified organisation. While ISO 9000 ensures that the needs of customers and other stakeholders are met, ISO 27001 deals with information security. Periodic audits as per ISO regulations were conducted to ensure that quality standards were maintained. The Six Sigma initiative embarked upon by B2 has contributed positively in enhancing business efficiency in terms of streamlining the processes and in improving the service delivery.

Technology Strategies:

Since the technological readiness and technology infrastructure may vary with entities who are filing returns, the ITD permitted multiple avenues. Through its outsourced entity ITD also launched a free return preparation utility for the small deductors. A File Validation Utility was made available freely to check whether the
returns were on specified format. Introduction of a new system provided multiple channels like the Central system or the FCs across the country, for return acceptance. The new system has also provided internet based tracking facility for timely feedback for the users in terms of whether the returns have been successfully uploaded, the provided details were in order and the accounts had been successfully booked. ITD has prescribed a file format for uploading challan details for the banks. It has established a dashboard facility for top management of banks and the Reserve bank of India (RBI) to reconcile the OLTAS challan data with the funds data from RBI and for the Ministry of Finance to track day to day tax receipts. Assesses could also avail the e-tax payment facility by making payment through the linkage with the net banking facility of the banks which are authorised to collect tax. B2 had arrangement with multiple internet service providers to increase bandwidth based on the usage and to have Network to Network Interface (NNI). Data is transferred through Wide Area Network (WAN) that enabled higher throughput by way of compressing the files.

Risk Management:

B2 had a very comprehensive risk management policy and related procedures to address the risks associated with the operations in view of their criticality. B2 used the state of the art technology and tools for the security and integrity of the data it manages. B2 as an ISO 27001 certified organisation for implementing information security management standards, it always made reference to ISO 27001 guidelines for implementing all security practices. B2 had a compliance manager to oversee all the transactions employees made with various stakeholders in terms of Standard Operating Procedures (SOPs). Third party application security tests were conducted to detect and remove Structured Query Language (SQL) injection, cross site scripting and other vulnerabilities in the program code and database. Apart from these a number of server and application security controls like pre set access with security token and password, digital signature certificate, server event logging, role based access and maker-checker functionality have been implemented. The information Security Steering Committee reviewed the security challenges, requirements and security enhancement measures periodically. Stringent performance and confidentiality clauses were in order while dealing with contractors, system integrators and vendors. B2 was also within the ambit of the Risk Assessment Group.
set up by the depository to study and assess the risk associated with all critical processes. B2 has instituted an internal audit by an external agency of its operations, systems and processes and an annual IT audit by an external agency.

**Stakeholder Education:**

It is very important to educate the users of the system about the frequent changes in the manner of filing returns and payment of taxes to ensure compliance. The initiatives included (i) dedicated website to give extensive information regarding notifications, filing returns and paying taxes and Frequently Asked Questions (FAQs) (ii) focused awareness seminars for both Government and non Government deductors (iii) Special training programmes for chartered accountants and tax payers (iv) training for the ITD staff to familiarise them with the new system of filing e-returns and to process the e-returns in the new format using the modified processing software and (v) training for bank officers on consolidation of the challan information and upload to the central system.

**Disaster Recovery (DR) System:**

B2 has established a state-of-the-art business continuity plan. This is one of the few organisations in our country that shifts the operations to the DR site on a regular basis. The DR site with fully equipped data center is located 150 kilometers from the main data centers and connected through high bandwidth, low latency links with online data replication redundancy. Over a period of time the business continuity planning process was systematised through periodic drills. Systems group was entrusted with the responsibility of taking the back up and the periodic transfer of files. Certain productions were tested in DR environment as well. Twice in a year, after updating the whole DR system, business was run in the DR environment for a period of seven days to make sure that the systems functions efficiently.

**Project Management Structure:**

Complex projects with multiple objectives and multiple stakeholders similar to B2 required diverse mix of skills ranging from managing large decentralised entities to specific skills in domains such as technology, vendor development, relationship building, communication and outreach. B2 has maintained a lean and flat structure by
developing an effective model of outsourcing of almost all the non-core activities and leveraging the superior expertise of their vendors. B2 was the largest entity within the depository with 304 employees and 110 outsourced staff in December 2010. The Outsourced staff was mainly the software developers attached to external entities. In terms of domain expertise B2 had employed 181 employees within the business area, 64 in Information Technology and 59 in the customer relations area. Managers were professionally qualified in graduate or post graduate degrees in Engineering, Chartered Accountancy and Management or successfully completed the courses conducted by the Institute of Company Secretaries of India or Institute of Cost and Work Accountants of India.

The major business processes of B2 were organised into modules in terms of the nature and quantum of work. Each Module was managed by single or multiple Process Owners (POs). POs were either a Senior Manager, Manager or an Assistant Manager, who was fully responsible of an entire process. Sub processes were identified within each major process and the process owners or team members manage each of the sub processes. The major processes at B2 were TDS, OLTAS, PAN, TAN, SSG, Booking, AIR, Master Module, Online PAN/TAN and back office.

Functionally the two to four POs of major modules reported to one of the three Heads of the Departments (HODs). The business processes are periodically reviewed by the HODs and by the Head of B2, the Executive Director (ED). The ED reports to the MD and CEO of the depository.

Operations at Business 2:

Business Two (B2) had two major areas of operations: B2a and B2b. B2a focused on the issuance of PAN and TAN, Billing and handled the Annual Information Return (AIR) related activities. B2b handled the generation of the form 26AS, the annual tax statement of individual tax payers. B2b interfaces with FCs, ITD and deductors.

As far as issuance of PAN and TAN was concerned, B2a had both online and offline operations. The back office of this operation was outsourced. Customers registered their request for PAN and TAN to B2 through online and offline mode or through B2 FCs. There were separate back offices for the online and offline mode of
registrations. After the registration and verification of the submitted documents and personal background, the details were sent to the ITD for the allotment of PAN number. The details were sent to the printer for the preparation of the PAN card after the allotment of PAN numbers. Later the prepared card would be couriered to the customer.

AIR deals with high value transactions. The concerned banks that handle the high value transactions will forward the detailed information about that transaction to the ITD through AIR. AIR will be filed at the B2 central system and then it will be extracted by the B2 periodically and sent to the ITD. Another offering of B2a is the PAN Verification Facility. Only certain entities like banks, mutual funds, RBI are permitted to use this facility, after taking necessary approval from the concerned.

B2b was mainly involved in the generation of Form 26AS, the Annual Statement (AS) for the taxpayer after processing information received through OLTAS and ERACS through CPLGS. OLTAS uploads the details of tax deposited in various tax collecting branches across the country to the central system on a daily basis. ERACS consists of an infrastructure for interface with the taxpayers through the nationwide network of FCs and a web-based utility for upload of electronic returns of TDS and TCS and AIR to the central system of B2. CPLGS consolidates (a) PAN-wise matching and booking of the data of the tax payments made by the taxpayer from the assigned banks and from the deductors, (b) details of the tax deposited (advance tax/self assessment tax) directly by the taxpayer with the bank and (c) the details of major expenditure by the PAN holder from the AIR filed by specified entities. The matched data would be sent to the ITD and it formed the part of the ledger created for each tax payer. B2 maintains this data for a fixed period of time.

ITD was charged monthly on the basis of the business transactions the B1 handled. The bills were system generated for different modules.

The daily operations at B2 were handled mainly by three groups. They were (i) Business Operations (ii) Systems and (iii) Network and Infrastructure. The other entities such as Call Center (CC), Support Desk (SD), System Support Group (SSG) and Software Development engaged outsourced staff in their operations and B2
employees managed them. While the Call Centre was managed by the Business operations (BO) group, Support Desk, System Support and the Software Development were managed by the Systems Group.

**Business Operations (BO) Group:**

B2 interfaced with outside entities, specifically with its major client ITD through the BO group. BO dealt with activities related to PAN and TAN application, TDS returns, AIR, Form 24G and OLTAS. The BO group had six teams with members ranging from a minimum of two to a maximum of seven. Teams were created based on the nature and quantum of work. TDS, as a big module, was divided into sub modules focusing on development and operations. The development team interfaced with the ITD to understand about validation requirements and new developments in TDS. BO got most of the requirements in terms of developing certain software and generating certain MIS from the ITD and they discussed them with the TAN/PAN group of the systems. Based on the kind of requirement, the BO group interfaced with the systems group or directly with the vendors for software development. The BO team members collated all the information regarding the new release and conveyed that to all concerned team members. After the production release, the queries and feedback related with the new product were handled directly by the BO member till the time FAQs were made and the customer queries got routinised. After this, the general queries related with the product were handled by the Customer Relationship Management (CRM) personnel. The operations team of TDS interfaced with the Facilitation Centers (FCs) and B2b, who manages the FCs. The Statement Acceptance Module (SAM) used by all FCs was provided to them by the BO group. Operations and development related to SAM was equally shared by the process owners of both BO and B2b. The BO group also monitored the general day to day operations of all FCs. The third team handled the OLTAS. They periodically interacted with the ITD and the tax collecting banks. The fourth team handled all the development and operations related to online services except that of 26AS. This team interfaced with the relevant end users. The fifth team was exclusively involved in all operations related to 26AS. The sixth team handled the corporate communications and the management of the call centre. Depended on the needs of the business the concerned team members stationed themselves for a specific period of time at the call
center location, which is 150 kilometres away from the place where the main operation has been taking place.

**The Systems Group (SG):**

The primary responsibility of the systems group is to design and maintain the application software and the system infrastructure. The group played a major role in facilitating software development, testing and maintenance. All the process owners and the business operations are clients of the systems group. It handled the master module, PAN/TAN verification, online PAN/TAN and their status track, BOD and EOD activities such as processing of files, enabling data uploads, processing for extracts with respects to modules, file processing and tracking the status of processes of the e-Return Intermediate (e-RI) and the Business Intelligence (BI) project. In general, the SG handled the Software Development Life Cycle (SDLC), System Operations, Business support and Production Support. This Group interfaced with the vendors keeping view of the needs of the business such as introducing new functionalities, making changes in the existing products, fine tuning for optimisation and facilitating the testing of the new products. With respect to software development, the systems group received the requirements of customers such as business operations and other groups on a daily basis. The group discussed the requirement with the vendor and the requisition was made. After doing the impact analysis and testing, the production was handed over to the Systems group. System group provided the testing support to the SSG team whenever necessary. SG evaluated the effort estimates submitted by the vendors, the Service Level Agreements (SLA) and the pay out of incentives and initiated procedures for management approval of all updates in the database. The Support Desk reported day to day production problems that were of non routine in nature and not within their scope to the systems group for their intervention. The systems team interfaced with the SSG team for the maintenance of the system, upgrade of system software and production of application software for efficient operations. Apart from these the SG also worked with vendors who were tracking the status using Short Message Service (SMS) of certain online applications such as net payment and online PAN and TAN. To make decisions with respect to system related aspects such as increasing the capacity to upgrade the system, procuring new technology and for selecting the vendors, the systems group evaluates the various
possibilities in terms of relevance, cost and quality of the product or service with the
development team and the management.

A thorough review of the functioning of the Web, application and database
servers was done periodically for the effective operation of the various processes. The
SG tracked the processes, both at the format level and at the database level and
measured the response time to locate problems either in the system or software. The
SG analysed the time sheets and respective Customer Service Commitments (CSC)
and suggested changes for enhancing efficiency in processes. Based on the alerts from
an assigned outsourced agency, SG kept track of the downtime of the system and took
adequate measures to avoid such errors in future. The Systems group generated
Management information system (MIS) and responded to various business queries of
the customers as and when necessary. SG prepared the budget proposal for the system
infrastructure with necessary allocations for new products and services with necessary
evaluations of those for approval. Through the Integrated Support System (ISS), the
systems group interfaced with the back office that dealt with the issuance of PAN. B2
had a payment gateway with a leading private bank where customers could use credit
cards for online payment of taxes and the systems group kept track of the transactions.
As part of the production Support role, SG also handled many ad hoc activities like
generating extracts of certain unusual processes and hardware upgrades.

Network and Infrastructure:

The system has a three tier architecture with independent database, application
and web servers. The web server interfaced with clients, mainly the tax payers and the
ITD. All the processing happened in the application server and the data was kept in
the database server. The network components included the host of web servers for
load balancing and the server that authenticated all the processes. The web servers and
application servers were operated in separate local area networks. B2 had different
sets of web servers called Apache and Tomcat. Dedicated teams were formed to look
into the software related aspects of web servers, database servers and separate teams
for different operating systems that were installed in the machines. There was a
system interface that facilitated communication of organisational members.
The network and infrastructure team managed the installation of operating systems, certain software programmes and periodic migration to new versions of software packages. The network team has outsourced the management of certain activities such as interface and interlinking the network and the maintenance of individual machines to the system support group.

The System Support Group (SSG):

The SSG had three outsourced entities; the first one handled the system maintenance and related aspects and the other two dealt with applications. SSG supported the web, application and database servers for the efficient execution of all the processes. The functioning of the application software was overseen by the SSG. The SSG updated this software whenever a new version was introduced. As a policy in general, B2 always used the software which was one version below the one that was available in the market as the earlier version would be more stable with less number of bugs and minimal updates. SSG also handled all the day today production problems, the production promotion that happened every week and managed all the 150 servers in the testing environments. SSG also evaluated the tools that were used for monitoring the servers and the upgradation of hardware. Whenever a new feature was introduced, SSG created the menu in the memory database of the authentication server. SSG got the requests for services mainly from the systems group.

B2 Support Desk (SD):

The SD team worked on morning, general and night shifts and actively involved in the routine Beginning of the Day (BOD) and End of the Day (EOD) tasks. SD was the single point where all the production problems were logged on to by different entities. The responsibilities of SD included running of scripts for production at predefined times, monitoring and analysis of system parameters like Central Processing Unit (CPU) utilisation, responding to enquiries of different entities and attending to ad hoc requests of customers, problems faced by FCs, production related challenges and coordinating with vendors and different teams. Based on the nature of the problem in terms of systems or application related, the problems were either resolved at the SD team level or by the concerned members of the other groups.
Call Centre:

Call centre interfaced with the all the external customers of B2 and it handled on an average 3500 customer communications every day. The Call centre operation was managed by B2 and the daily operations were handled by Customer Service Associates (CASs) belonged to an outsourced entity. As on December 2010, the Call Centre had 140 CSAs on roll providing their services. The customer queries related to all the services offered by B2 was handled by the Call center. Queries related to the new functionalities after the release were directed by the CSAs to the concerned employee who handled the project. This helped in fine tuning the new functionality and to understand the concerns of the customers in relation to this.

B2 Facilitation Centers: (FCs):

B2 reached out to the various customers through the FCs, numbering 2000 in 700 locations across the country. FCs offered services such as (i) acceptance of electronic and physical TDS and TCS returns, (ii) processing of new PAN and PAN change request applications, (iii) processing of new TAN and TAN change request applications, (iv) acceptance of AIR, (v) registration by a PAN holder for viewing its annual tax statement (Form 26AS), (vi) accessing the details of deductors’ quarterly statement status including financial details through the B2-FC who has uploaded their statements and (vii) acceptance of e-TBAF (e-TDS and TCS Book Adjustment Form).

B2 has outsourced the FC service to four agents across the nation. Each FC was provided with the software known as Statement Acceptance Module (SAM). SAM is instrumental in generating receipts for all financial transactions it accepts during operations. All the financial transactions accepted by SAM were transferred to the B2 Central system through the Monitoring and Control System (MACS). MACS facilitated the stock taking of the pending returns for filing at the FCs and the system health. Using the software SAM, necessary MIS was generated and uploaded in the system. The functioning of the system was also monitored regularly. One of the major monitoring done by MACS was through the matching of the MIS provided by SAM and data uploaded by the FCs. MACS also monitored the progress in terms of the updating of the incremental files that were sent to FCs with the information of new TAN applications.
Part Two: Organisational Initiatives

“Our business excellence is the result of the continuous effort our people keeping the end objective in mind. Our business excellence is the impact of the way people think to reach the kind of perfection we envisage. Continuous improvement has become an attitude of our members while keeping the customer as the focus”

(Executive Director, B2)

B2 has started its operations in January 2004 with 25 employees. The business was managed by the systems and the business operations team. Both the teams maintained high level of interaction for the effective realisation of business objectives. Junior team members were encouraged to express their views on business processes to all the senior members of the B2.

The major modules handled at B2 initially were (i) Customer Relationship (CR): Enquiries and grievances of customers were communicated to B2 through letters and e-mails. B2 received on an average 800 e-mails and 200 letters per day. This module was managed by 12 members of the CR team; (ii) Inward cell: B2 received on an average 3000 documents per day. The Inward cell sorted out the documents, segregated them on the basis of categories, made the database and forwarded the documents in small lots at regular intervals to the scanning team. Inward cell was managed by 6 team members; (iii) Document scanning cell: Certain categories of documents were scanned so that the respective process executives could work on scanned images of the documents and made the associated processes faster. On an average 7000 pages were scanned per day; (iv) Handling the communications received from the deductors in response to the inconsistency letters sent to them by B2: Deductors were informed on a quarterly basis about the inconsistencies made by them while submitting the TDS and TCS returns in e-form. A large number of the deductors responded and B2 handled these communications by writing back to them with further details, if needed. On an average B2 responded to 200 deductors per day; and (v) Handling the communications received from the deductors in response to the non-filer letters sent to them by B2: Those deductors, who have not filed TDS and TCS in e-form were informed by B2 periodically. These responses were analysed and
reported to ITD about the nature of challenges deductors faced. On an average an eight member team handled 1500 communications per day.

For the efficient implementation of various processes, to start with, processes and sub processes were clearly defined. Databases were created and maintained on excel sheets and elaborate tracking mechanisms were initiated to ensure seamless flow of documents through each sub processes. Standard Operating Procedures (SOPs) were developed and possible processes were automated. A system of escalation of the critical cases was made operational apart from the regular audit of the work done by team members to ensure quality. B2 had developed specific MIS reports to monitor the efficiency of various processes. Process owners and team members were encouraged review the processes regularly to contribute to the areas of process improvement. Once a particular process got considerably streamlined, a module was developed to make the process simpler, efficient and error free in B2’s intranet based user friendly environment known as the Integrated System Software (ISS). Training needs were periodically assessed and executives were trained for handling the projects efficiently.

Team members were generally assigned to tasks based on their interests and expertise in functionalities. Responsibilities were assigned to team members by the process owners based on mutually agreed upon targets evolved out of the time and motion study. Critical aspects of each module and their linkage with the performance of each team member were highlighted and circulated among team members everyday early in the morning. Team members were periodically swapped across teams to create new learning opportunities and ensure that they do not lose interest due to task repetitiveness. Heads of the different departments met the process owners regularly to review the process improvements made, if any, to discuss the impending issues and to decide upon the action points and corresponding timelines.

As the business evolved in terms of scale and operations, B2 started experiencing certain challenges. One of them was the coordination between the operations and the systems staff. Operations staff had to depend heavily on systems staff to get response on ad hoc queries and for new product development and Management Information system (MIS). The staff in the systems group believed that
the staff in the operations group did not understand their business compulsions by posing too many ad hoc queries, MIS requests and periodic changes in specifications of products. Another challenge was to attract right professionals to work with B2. While B2 was looking for professionally qualified personnel to develop them as leaders, many of those who had joined found their work either as mere routine or as not connected directly with their educational qualifications. B2 had offered career growth, enriched jobs and an empowered work environment to attract and retain talent. The major technological challenge was about handling large volumes of transactions and the criticality of time associated with them.

**Project Management Workshops:**

*“The project management workshop helped us in understanding the importance of being cohesive as a group with result orientation, in a project management environment”*  

(Process Owner)

One of the most important initiatives undertaken by the management from the beginning was the training of all the employees of B2 on Project management. The training programme was evolved out of the understanding that employees faced higher level of uncertainties in project management environment and they required different kind of competencies to manage the situation. The programme highlighted the importance of inculcating specific ideas in their day today life for successful implementation of projects. These include (i) Persistence: Look out for new ideas and options continuously in uncertain work situations; (ii) Individual commitment: Commitment to the project at an individual level is extremely important before one demands the commitment of the team to which he or she belongs; (iii) Critical evaluation of plans and collaboration in execution: In uncertain situations it is important to dissect each plans thoroughly by team members before deciding upon the course of action keeping in view of the objective. While implementing, it is equally important that each one should contribute to realising the set objective in a collaborative way: (iv) Think differently: Be willing to experiment with ideas while working to achieve the goals. Do not get entangled by stereotyped solutions offered by vendors and consultants. Case studies are only learning tools and not the best
answers; (v) Self confidence: Both leaders and team members need to be very confident about what they believe is right for the organisation and to pursue their cause and take decisions. Distractions are too many in public policy domain and decisions made can create controversies: (vi) Show your guts: Project Management demands execution of uncommon ideas at unusual speeds specifically in emergencies and crises. When the chances are limited to test out assumptions and site credible references, the strength of conviction and courage to take a position become very critical; (vii) Be in sync: Dynamism and complexity are synonymous with project management. Formal communication channels often fail to update all members on changes and new developments. Ability to judge the impact of any action in all domains and bring them to the attention of the concerned is critical in project management environments. It is important that mechanisms are in place to make all team members aware of developments in almost real time; (viii) Passion: Team members should have the passion to make a difference and to make things happen. Self motivation is crucial in the initial stages of the project implementation. Team should understand the processes well enough to predict the results; (ix) Initiative: Members should make extra effort to identify spaces for action, stretch their limits of work and create opportunities for teams’ meaningful engagement; (x) Walk the talk: The process owner needs to know about the possible challenges he or she would face and ready enough to handle himself or herself. Mid course corrections are common while handling projects in uncertain situations; (xi) Fun at Work: Find meaning in what one does and needs to view challenges as enriching experiences in course of realising meaningful outcomes; (xii) Future oriented: Develop an attitude that takes pride in looking ahead and realise that new challenges require new solutions in a dynamic and uncertain project environment.

**Team Orientation Workshops:**

“I have understood the importance of keeping the customer in my mind while taking decisions during the team goal realisation workshops. I always impress upon my new team members with the learning from this workshop”

(Senior Manager, B2)
Another very important initiative B2 has undertaken was the ‘team orientation workshops’ to create more interfaces that could make people to understand each other. Different groups were made to come together and the facilitator asked them to list the constraining and facilitating factors in relation to their behaviour while striving to realise their team objectives. The facilitator had identified a set of challenges experienced by each group and asked them to rate on a five point scale so that each group could understand about others’ perception about them. Over a period of time the perceptual gap got reduced between groups.

The introduction of 360 degree performance evaluation in B2 also facilitated the linkage between team members and teams. It is important to align business orientation with customer orientation when the organisation is pursuing a customer focused growth.

“Apart from assessing the performance, the 360 degree system can be used as one of the most important personal development tools”

(Team member)

In 2007 B2 had grown as the largest entity within the depository with 55 own staff and 80 outsourced staff. By the end of 2007, B2 had 800 FCs to cater to external customers, in 270 locations across the country. The business was headed by an Executive Vice President, who in turn worked with one Assistant Vice President, one Senior Manager, four managers and forty three Assistant Managers and Executives. In 2008, as the business grown, the Operations group got bifurcated into Operations One and Operations Two.

To recognise the contribution of employees B2 has instituted an award titled ‘squirrel award’ on a monthly basis. Employees were asked to recommend their colleagues who have made significant contribution in relation to systems or process improvement. The best practices identified in the business for the month were also announced during the squirrel award presentation. Employees were provided with periodic feedback on their performance and action taken, action to be initiated and areas of improvement were discussed during this evaluation process. Through all these initiatives the management of B2 created an empowering work environment for
the employees. Employees were willing to take up responsibilities whenever possible and that resulted in more employee commitment.

“We have a very open and informal culture in B2 where any of our junior team members is free to express his or her views openly. We are open to any new ideas of all team members at B2. Anybody can walk in directly to the Head of the Departments’ or executive director’s cabin and discuss about the work we do”.

(Team member)

B2 had a strong culture of coaching that contributed significantly to the ongoing processes of employee development and business performance. Employees were coached periodically to develop new skills and to take up new responsibilities. The senior manager of the BO group facilitated the learning process of the team members by making them part of the discussions she carried out with the client, ITD. The Manager has also overseen the work of new team members and the performance on new assignment of members from time to time to give timely feedback. As a policy, all the team members in all the groups were asked to escalate all their workplace challenges to their process owners as and when necessary.

Each team member was required to make a presentation about the processes they were involved to the concerned group on a weekly basis. Process owners had to make presentations about the various processes in their group and the contribution to the business to other process owners and team members. B2 has also invited experts from different walks of life to address their organisational members periodically. While the presentation by team members and process owners was an effective practice that helped the members to keep abreast of the various processes supporting the business, the experts’ talk exposed the members to the latest developments in similar areas and in the external environment.

Collaboration within and between Teams:

B2 practiced collaboration at two levels. First was the team formed by the process owners and their respective team members and the second was the Delta Force, a group of select process owners who worked with the Executive Director on
various technical challenges with respect to operational efficiency, measurements, new projects, innovations and change processes. It was noticeable that the process owners were the common factor in both the collaborative teams and formed the link between the top management and the team members.

The process owners and the team members met or communicated whenever necessary for the effective planning and execution of an assigned task or project. During the meetings process owners mainly reviewed the status of the assignment and involved themselves with it by facilitating the process. Once a team member got familiar in his or her work newer tasks or assignments were given based on the availability of the time. Team members were also encouraged to work in other modules whenever possible to facilitate their learning. Knowledge sharing was the key to the successful management of projects. Assignments and related challenges were discussed in the collaborative team meeting of team members and process owners only after articulating the set objective of the assignment and its impact on the module or the project. Discussing the objective of an activity at hand gives a comprehensive understanding of the problem, various means to realise the objectives and helps in evolving relevant matrices. Articulating the activity can evoke only narrow, specific and reductionist means to realise that. Team members were encouraged to question the rationale of set procedures that addressed the challenges and to look for alternative ways and means to realise the goal efficiently in minimum time. The process owners worked with the team members in solving any emerging issues in processes. Process owners developed their own Customer Service Commitment (CSC) in discussion with the ED. The process owners used CSCs and kept monitoring the time spent on activities in a separate time sheet. CSC objectives of the process owners were tracked every month with timelines by the concerned process owner and a consolidated report was submitted to the ED. All team members were advised to keep a project tracker where their objectives of a project were decomposed into specific goals and specific activities with timelines. Comparative analysis of time sheets in terms of time spent on a specific activity over a period of time can assist members to streamline processes. On a daily basis, the relevant details about the status of the projects were communicated through e-mails to the concerned members with remarks and comments. In their meeting, the process owner and the team members discussed and refined the CSC periodically.
The Delta force at B2 was a select team of process owners and the Executive Director. Delta force aimed at (a) making assessments of relevant system and process parameters that indicate and influence performance and (b) being proactive in evolving and implementing ideas and solutions for enhancing superior performance in a dynamic environment. The delta force kept deliberating on how to optimise the resources and evolved systems and processes in alignment with the long term strategy of the organisation. It was pertinent for B2 to create an adaptive work culture committed to learning and personal development. The strong coaching culture prevalent at B2 provided organisation members with effective ways of interacting with the working environment to realise the best business results and individual growth. Delta force evolved the basic structures and processes to facilitate such a culture and to evolve desired processes as well as behavior. To deal with the complex socio-technical system, delta force members were assigned with additional technical responsibilities with respect to certain internal processes for making continuous improvements. Delta force members have overseen the log analysers that monitored indicators such as efficiency parameters, the utilisation of bandwidth, thread counts, Central Processing Unit (CPU) and memory utilisation at different points in time and presented the time series data for analysis, scaling up and improvement. They were also involved in database related activities such as fine tuning and data archival. The delta force met once in a week, deliberated on new ideas, on the improvements made by the various teams and their impact on system performance. The delta force members kept meeting the relevant internal customers to discuss business developments, trend shifts and volatility of efficiency indicators if any and generated ideas to address those. After every meeting, the minutes were sent to all the team members of various teams for their action and comments. The BO generated a host of customer related data in terms of queries posed regarding various services offered by B2 and discussed in delta force meetings to device methods to present the offerings more user friendly.

**Focus on Processes and Continuous Improvement:**

The collaborative learning groups at B2 facilitated communication and collaboration to share and equip process and project expertise as much as possible. Team members were oriented thoroughly about the objective, the ways to carry out
the processes and how to execute. B2 believed that excellence in the business evolved out of strict adherence to certain key components related to processes, technology and customers. These included measurement and continuous improvement of processes, technological optimisation and adoption of new technology and focus on both internal and external customers for evolving process refinement. These key components drive the alignment of processes with the business strategy and build organisational capabilities for developing competitive advantage in a dynamic environment.

Building suitable processes and relevant measures with a focus on the customer have a major influence on the competitiveness of any business. B2 focused on both, internal and external customer concerns as the focus of the work. In a transformational, dynamic project management environment, such a focus is crucial to business success as the customer requirements keep changing. Customer focus is the primary factor that contributes to developing newer business and other support processes and refining the existing processes. One of the major aspects within the customer focus domain is the process discovery, which entails the process capture and listing, preparing the process flow chart, developing the process Standard Operating procedures (SOPs). Locating the process ownership, team members and identifying the responsibilities keeping the customer in mind is necessitated in a dynamic context for realising the strategic objectives. Internal customers are equally important like the external customers in developing processes and associated measures. In B2 team members and process owners developed the CSCs with timelines in consultation with internal customers and got reviewed in delta force meetings. Process excellence, which was aimed at the customer, was operationalised in terms of three parameters such as process compliance, process efficiency and process delivery. Process compliance represented a very significant micro measure in the context of an information utility like B2 that facilitated governance. The second parameter, process efficiency ensured consistent performance with optimum utilisation of resources and facilitated the process of scaling up. The third parameter, process delivery was the most important from a customer perspective. The process delivery at B2 was very complex and the organisation practiced a comprehensive project management approach with adequate measures aimed at managing the risk proactively for complaint delivery.
Generating metrics and measurement plans are integral to the management of processes. B2 has tracked process exceptions, trend shifts and volatility of select measures and analysed CSC exceptions periodically to contribute to enhancing process excellence. In a dynamic environment customer concerns drive the development of processes and measurement matrices. Based on the processes and in consultation with the internal customers CSCs and respective measures were developed in B2. Apart from the internal and external regular compliance audits, the team members ensured that processes were compliant to the set standard. Most of the process checks were automated and alerts were sent to the concerned periodically. All the exceptions were documented, analysis was done to prevent such exceptions and rules were laid down to handle all the exceptions. Process delivery was tracked with respect to response time of online processes, processing time of batch processes, turnaround time of new product releases and the quality and the cost associated with these processes. Quality represented the functionality provided to the customers and the cost included both the tangible price and the other charges and the less tangible costs such as cost of learning and downtime during installation, if any. B2 kept building time series data and tracked trend shifts and volatility of select measures to create process excellence. B2 analysed the user queries, user feedback and internal customer feedback and refined the business processes periodically.

Part Three: (a) Reduction in the Turnaround Time of Product Development Process

B2 has promoted 212 software releases in production in 2009-2010. As an outsourced entity of the ITD, B2 had the arduous task of coordinating different teams and B2’s outsourced entities to cater to the needs of its client. B2 has contracted out a larger traction of software development to select vendors. This has contributed to shorter turnaround time and higher developmental efficiency by simplifying the tasks of project coordination to manageable level. Turnaround time is the total time taken between the submission of a task for execution and the return of the output to the customer. Efficient Service Level Agreements (SLAs), incentive systems for up-SLAs and the possibility of employing multiple vendors gave hardly any opportunity for vendors to seek monopoly rents.
For developing new products B2 followed the Software Development Life Cycle (SDLC) guidelines developed by them. SDLC starts from the product specifications for a new product, gets raised to the point where the release goes on production and it involves three different stages such as requirement analysis of a proposed product, product development and User Acceptance Testing (UAT). As the first step, the client initiated a discussion with the Business Operations group of B2 about a new product requirement to address certain challenges they face in their work. As soon as they decided upon on a feature for development, the BO team did a specification analyses and feasibility of developing the product within a specified time frame. After this, the BO team discussed the requirement with the systems team and then the development team for the preparation of the requirement document.

“B2 has a strong coaching culture and many opportunities for competency development. For example, The Senior Manager of the BO group facilitates the learning process of the team members by making them a part of all the discussions, the senior manager carries out with the main client, ITD. The Manager gives enough opportunity to team members to address a problem and involves only when it is necessary. She only oversees the work of new team members and new assignments are given from time to time to enhance their performance”

(Process Owner)

B2 has developed a standard template to spell out all the specifications of the product for development. The template included what was in scope, what was out of scope, how to handle the expectations and the performance expectations. B2 has created a work flow management system, to raise a requirement in the specified template in a small website, named Bugzilla, within the Systems. After the review of the requirement, the development team responded to the systems group about their understanding of the requirement, the expected effort and the timelines. Systems group communicated this to the business group with their evaluations on the proposed effort and timelines for their approval and for assigning priority, if necessary. More often than not, the requests for development may be many and prioritising a particular request for development was important as there was a limit to the available resources. BO took stock of all pending development work and tracked the urgency of
requirements before prioritising any request. Once BO assigned the priority and approved the estimated effort and timelines, the development team starts working on the proposed feature. In the event of any difficulty in deciding upon the course of action for the development of a software product at the managerial level, the unresolved issues were discussed and decisions were taken in the Sub-Software Review Committee (SRC), where senior management was also represented. Sub-SRC convened once a month.

The development team also provided an impact analyses for the particular release describing its impact on other modules. The systems department reviews the impact analyses and responds to the developmental team before the development starts. Once the development starts the systems group prepares the test conditions for the testing of the software. B2 was very proactive in creating possible test conditions and testing the release with advanced tools similar to production itself. While the systems group focused on the performance of the features like response time during the testing, business operations focused on the business related testing from a user point of view like the response of a particular release. One of the process owners was made the point of contact for the development team with respect to a particular product. The process owner assigned the responsibility of testing and documentation to his or her team members. The team members did the testing to find out whether there were any bugs, impact analyses on testing, ad hoc requests, queries, amount of data that was impacted and of alternative means, if needed. In the event of finding any bugs in product releases, they were reported to the development team using a specific open source tool through the work flow management system. The development team addressed this and sent the product to systems for updating the shortcomings. Once the bugs were cleared and after doing a thorough review by the concerned, a release note was send to all the senior officers for approval. The release note was an authorisation by multiple entities, giving their consent that the product release can be promoted. The release note was initiated by the developer and approvals were taken from the project manager, the business module leader, the business HOD and the System Process Owner. Meanwhile one of the team members of the project assessed the product release in terms of whether it required system downtime or any other formalities to be completed for the release. After his or her approval the release note was sent to the System HOD and to the Information security Manager, as mandated.
by the ISO 27001 and then to the Executive Director for their concurrence. After all these approvals the feature went live in production. The process of approval was automated and the note was passed on from one to another by e-mail. In testing too, automation played a crucial role. ISO certification mandated the documentation of the processes with respect to releases and the documentation got reviewed on a monthly basis to identify the lapses in processes. Risk assessment of all the proposed releases were done in parallel with their development to tackle all the risk issues, if any, in advance. Even if the requirement for a new product development came from internal sources, the same procedure was strictly followed.

Developments of a standard template to spell out all the specifications of a proposed product made the requirements of the customer very explicit for the development team. Lack of clarity in terms of requirements was one of the major reasons for the delay in production releases. Earlier it used to take considerable time for a product to move from the testing phase to production. Root cause analysis revealed that products needed modifications after testing and it was sent again and again to the development team as specifications were not articulated upfront. B2 has understood that the business operations group, while articulating the requirement was driven by customer expectations and the software developer understood this from the point of view of programme code. Based on these experiences B2 has streamlined the specifications and a comprehensive template was made with all necessary pointers. Moreover, the systems group and the development team carried out discussions and exchange e-mails for all kinds of clarifications related to the requirement. Apart from the specifications, functional, business and volume test conditions as well as test cases were also provided to the development team in advance.

Before, for volume and functional or regression testing, team members have manually keyed in the data and made the files. Currently, B2 has automated the process of generating the files to create specific test conditions. Another area where B2 has made significant improvement was with regard to the transfer of files to utilities like SAM and then testing in that environment. Initially B2 was using multiple versions of operating systems such as Windows 97, Windows 98 and Windows XP and installing and uninstalling them to create various test environments. In course of time, B2 started using the concept of virtualisation and has created virtual
machines within the same available physical resources to create different testing environments and thereby reducing significantly the cycle time for testing. Process owners and the concerned members from the development team interacted periodically through a dashboard regarding releases, testing that were pending and other issues related to production. The data related to these with comments and remarks were sent to all concerned by e-mail.

The bugs in product releases were reported to the development team through an open source tool. It was mandatory that this particular tool had to be used for reporting all the bugs and related challenges during the functional and business testing. Through this, a central repository has been created as part of ‘wiki’, the B2 knowledge management system. The development team reviewed the repository periodically to circumvent instances to avoid possible errors.

B2 maintained a dashboard to have dialogues about the product development between the systems group and the development team. These interactions helped the teams in taking stock of the pending issues with respect to production and testing and to stick to the timelines of proposed productions. Whatever decisions were made in these meetings were e-mailed to all concerned.

Before the start of the month, the development team was expected to circulate their software development and testing plan for the coming month to all concerned with complete details, including the effort estimate. While this worked as a tracker for the product over delivery or under delivery, it also helped system team members and development team to plan their other engagements and in turn contributing to the on time feature release.

As stated, the upstream coordination of process owners and members of the outsourced entities with respect to the discussion about the proposed product, development plans and various aspects related to testing, helped B2 to carry out fast and effective product development and production release. The inter-stage coordination helped in reducing the lead time of product development considerably. Over a period of time, the process owners and team members have built a set of complimentary routines for the effective management of interconnected problem
solving cycles that resulted in shorter turnaround times, product quality and overall efficiency in product development.

(b) Reduction in Response Time of the Online Processes and (c) The Processing Time of the Batch Processes:

“Considerable time was spent many a time for the reconciliation between B2 and ITD as the B2 members were doing the activities on the databases for making the files and later processing them for this. Database is the central repository of information and it was more a legacy that members keep working on established patterns on routine problems related to that. When one of the members faced with a similar problem, the member thought of experimenting with Linux to address this. The member did some search on the internet for certain commands to work with Linux and found that certain tasks that takes ten steps in databases can be done on Linux using a single command. Instead of 4 days work, he could finish the work within a day”

(Process Owner)

“B2 has improved upon the time taken for page loading by reducing the image of the logo and by minimising the java script. These initiatives have significantly contributed to the better performance of web pages. Raising the parameters of the apache and tomcat servers have also contributed positively to the performance of the system”.

(Process Owner)

Keeping the focus on customer, B2 has strived towards minimising the response time for all their online processes and the processing time for batch processes.

B2 provides the following online services through their website:

1. View Annual Tax Statement (Form 26AS)
   - Facility for a PAN holder to view the details of tax deducted/collected on its behalf and also tax paid by itself.
2. Quarterly Statement Status:
   • Facility for deductors to verify status of e-TDS/TCS statements submitted to FC or online at this website by providing TAN and respective provisional receipt number (PRN).

   Besides this, a deductor can also check:
   • whether challans in statements have been matched with challans uploaded by banks;
   • number of deductees whose PAN accounts have been booked;
   • line number of deductees in statements whose PAN accounts could not be booked;
   • whether a specific PAN account has been booked.

3. Acceptance of returns/statements:
   • Facility to submit TDS/TCS statements and related correction statements through internet.
   • Facility to submit Annual Information Returns (AIR) and related supplementary returns through internet.

4. e-tax payment:
   • Facility to pay tax online, wherein the taxpayer can fill up and submit the challan through Internet.

5. OLTAS Challan Status enquiry:
   • Facility for taxpayers to enquire online about the status of challans deposited in banks.

6. PAN:
   • Facility to apply for PAN online;
   • Reprint of PAN card with existing/revised details;
   • Status enquiry.
7. TAN:
   - Facility to apply for TAN online;
   - Reprint of TAN allotment letter with existing/revised details;
   - Status enquiry.

8. e-RI:
   - Facility to register as an e-Return Intermediary (e-RI)
   - Status enquiry

Response time represents the amount of time a generic system or a functional unit takes to react to a given input. B2 aims at maintaining a standard that the average response time for their online processes should be less than 5.0 seconds. Response time and Processing time for each process were tracked closely and time series data was generated to locate the prevalence of trend shift and volatility. Unexpected downtime of the production system was closely monitored by an outsourced entity and alerts were sent to the production support team. The production team and the system maintenance team worked in collaboration to identify the factors that contributed to the downtime and to resolve them.

B2 had monitored all the information technology process periodically using a monitoring process framework. The framework was comprised of steps such as (a) choosing a control subject; (b) establishing measurement; (c) establishing standards of performance; (d) measuring actual performance; (e) comparing to standards of performance; and (f) taking action on difference.

B2 was more proactive in responding to challenges with regard to the response and change over time of various online and batch processes. One of the major factors that affected the response time of online and the processing time of batch processes was the load factor that got generated either internally or externally. Bugs or errors in the programme within the system can also influence the response and changeover time. To maintain the expected response and the processing time, the SG and the SSG worked together to have the database, application and the web servers were always up and running. Expected downtime for promotion or for a specific business requirement, should be planned in such a way that it was for minimum time. To
maintain the system uptime, B2 maintained the Central Processing Unit (CPU) utilisation less than 70 percent. The team kept monitoring this and in case it went beyond the above mentioned level, root cause analysis was done to locate the source of variation. CPU utilisation could be high due to excessive business load on certain days where web server was exposed to 2-3 lakh hits, high memory utilisation and thread count to the tune of 500 and more. B2 has two data base servers that worked on a load sharing basis. When the CPU utilisation was high due to business load B2 added an additional web server to production for load balancing. On a regular day CPU and memory utilisation, and thread counts were monitored every 15 minutes and notified to the concerned automatically. The volatility of various processes was measured periodically to locate marked differences, if any. In the event of such occurrences, the business operations group analysed these to understand the responsible factors in the external environment and to locate the emergence of particular trends.

TDS and AIR files were processed in memory in batches. Memory utilisation was periodically monitored and in the event of an error, certain big chunks of files were processed using a different logic. B2 made sure that the work flow got streamlined by tracking and monitoring the files. The web servers were programmed to balance the work load at any point in time. B2 also kept monitoring the cycle time of all the processes and if necessary, optimised the programme code of the process that might utilise more time than the set standard.

On every weekends the database got fine tuned so that the database was always ready for processing. B2 kept monitoring the wait state and the extent of paging in the system. If paging exceeds 25 percent, additional memory was added or application was fine tuned.

Time series data on the status of achieving file population for each module was used as an indicator of business logic and the functioning of the scripts. Vendors were asked periodically to review the scripts and in the event of any fine tuning, the old codes and the new codes compared with the consequent performance. Back office applications were monitored on (a) relevant parameters in terms of module specific queries to locate problems, if any at the database level, application code or web server
and (b) the application loss, the web server loss and the database query time. In case the database queries were taking more than the prescribed time, the CPU, database and related parameters are closely monitored by the systems group. B2 was in the process of setting up real time monitoring of these processes as reviewing the exceptions at a later stage would be cumbersome and fraught with many limitations.

Earlier, the focus was more on processes and achieving the individual objectives were of prime importance. Over a period of time, the members have realigned their objectives, articulated team objectives to contribute to the organisational objectives and worked towards realising them collaboratively. B2 has become more customer focused and the members were driven by customer needs and demands for prioritising strategic goals and deciding upon action points. B2 had been constantly striving to evolve ways to improve, make business processes faster while maintaining data accuracy.