Chapter No. 5: Case Studies

Kalyani Hayes Lemmerz Limited

1.1 Company Profile:

Kalyani Lemmerz limited was incorporated on 18th January 1996 and was jointly promoted by Kalyani Group and Lemmerze Werke GmbH (part of the Hayes group) with 75 percent and 25 percent equity participation respectively. The Company acquired Wheel Rim division of Bharat Forge Limited and commenced its commercial operations from 4th June 1996. The principal business of the Company is to manufacture wheel Rim for commercial vehicles. The manufacturing facility of the company is situated in Pune, India. In August 1998, the Hayes Group increased its holding in the company to 85 percent by acquiring additional 60 percent of the equity held by Kalyani Group.

As a part of expansion with diversification of product line, the company has entered into Passenger Car segment and has successfully started its new manufacturing product line as “Car Wheels” with effect from the 15th February 2010 at the company owned premises, adjoining to the existing Truck Wheel plant having installed capacity of 2 million wheels per annum.

Kalyani Hayes Lemmerz is one of the fastest growing Auto component Manufacturing Company. Company has shown a growth from Rs. 150 Crore (Approx. 33 MI USD @ 45 Rs per USD) during 2005 to Rs. 400 Crore (Approx 80 MI USD @ 50 Rs per USD) in 2011 and is expected to achieve a turnover target of Rs 650 Crore (Approx 130 MI USD @ 50 Rs per USD) in 2014. Company’s profit was in a range of Rs. 22 Crore to 45 Crore during the period year 2005 to year 2010. The business cycle impact and global automobile recession in 2008-09 have declined profits to Rs. 25 Crore in 2009-10. Company has experienced business cycles in 2000-2003, 2008-09 and witnessed a tremendous growth after 2009.

Product Portfolio:¹
Wheel rims range from 5.5 – 16 to 8.5 – 20, and drop centre wheel rims of 5.5 x 15 and 4.5E x 16 to 8.25 x 22.5 that are designed to reduce weight. The specially designed disc with a back bending effect imparts more durability, while the 2–piece design for HCV’s give a better grip on the gutter and are easier for removal and fitment. The 8 hole design improves cooling of the brake drum – critical in hilly terrains.

1.2 Organization Structure

Figure C-1.1: Kalyani Hayes Lemerz Organization structure

1.3.1: Crisis Faced by Company:

1. In economic recession cycle during 2003, company faced a crisis of under utilization of capacities and reduction in demand from customer. This crisis was an outcome of overdependence on one customer i.e. Tata Motors. 75 percent of sales turnover was from Tata Motors.

2. In 2010, when new car plant was ready, permanent employees went on strike and company suffered a production loss.

1.3.2 Impact of Business Environment:
1. Because of overdependence on one customer, during 2003 recession cycle, company faced problem of generating expected revenues and bottom line as well as top line were hampered. Profit margins were very low and capacity was underutilized.

2. The strike by permanent operators created a problem for production deliveries for new customers of car plant.

1.3.3 Perceived Crisis:

3. Low margins with high turnovers leads to financial crisis in inflationary environments

4. Negligence on cost reduction is losing a cost competitive advantage.

5. Lost business opportunity is sowing a seed for stagnation.

6. Avoiding Timely Investments in technology leads to productivity crisis.

1.4 Crisis Management Approach:

Company has managed crises successfully and also developed a proactive approach to manage the perceived crisis.

- Investments: Reinvest the profits in business for increasing product portfolio and customer base. Add new product lines, expansion in business.

- Financial: Establish return on Investment, Maintain critical financial ratios such as ROCE, Inventory turnover, Fixed Asset Turnover, Current Ratio etc.

- Product development: New product development, supported with qualified team

- Cost control: Offset the inflation with proportionate cost reduction

- Industrial Relations: Avoid IR problems, Deploy contract labour force.

Company has taken following important strategic decisions in line with crises faced and crises perceived. These decisions were implemented and company has generated real-time benefits and long term growth. The span of these decisions is from 2004 to 2011.
1. **Investment decisions:** Rs 40 Crore investment in 2005 for truck plant expansion, Rs 75 Crore for passenger car new business portfolio in 2008, Rs. 45 Crore for truck plant expansion in 2011 and proposed Rs. 80 Crore for passenger car expansion in 2014.

2. **Financial Decisions:** Company’s cumulative Earning before Depreciation Interest, Taxes and Amortisation (EBDITA) between 2005 and 2010 was Rs. 250 Crore. Cumulative Projected EBDITA for 2011 to 2015 is Rs. 400 Crore. Fixed asset turn over ration is ranging from 2 to 2.5 since 2005 and will be in the same range in 2015. Inventory turnover ratio is between 8 and 9 and is expected to increase to 13 to 14 in 2015. It is expected ROCE will fluctuate because of planned investment but net profit will show an upward trend. Current ratio will be optimised to industry standards.

3. **Product Development:** Since the incorporation of business, company was dependent on one customer having 75 percent of sales revenue for organization. With high volumes the margin was low which resulted in lower revenues. As a policy to invest from retained earnings, company decided to increase the margins and new product lines are added. The product portfolio has increased from 40 to 80 varieties and customer base has increased from 20 to 40. The overdependence of one customer from 75 percent production capacity utilisation reduced to 50 percent production capacity utilisation. Increased product portfolio and customer base have contributed higher margins and added momentum for desired growth. New skills are developed and recruited to support product portfolio development.

4. **Cost Control:** Company is successful to maintain the cost of Goods sold (COGS) at constant level for last 5 years. The goal to offset inflation with cost reduction was achieved through continuous process improvements. Manual operations were converted into automated robotic operations. 50 percent of manual operations are automated. Company have invested Rs 7 Crore for installation of new robots to enhance productivity.

5. **Industrial Relations:** With increased investment and need for large product folio and customer base, there was need to increase number of operators in the company. Company recruited people in a planned phase and they were taken on
permanent role of the company. When the investments were complete and new plant was ready for operations, workers went on strike. Workers were working with lower efficiencies to create a pressure on management. The operating efficiency was 50 percent of installed capacity and this situation resulted into lockout for the company. Company decided to be tough with union and legal action was initiated. 50 people were suspended and lockout was withdrawn. After lot of negotiations, compensation was paid to retrenched employees. It was an outlay of Rs 6 Crore to company but the production efficiency was increased by 130 percent. The total compensation paid was recovered within a span of a year with increased capacity. Company have developed flexible operation plan in factory. The production cycles are set in such a way by adjusting the 2<sup>nd</sup> shift working, the overheads on 2<sup>nd</sup> shift are saved and margins are increased. A trade off between 2<sup>nd</sup> shift operations and production targets is calculated for maximum profits and any shortfall in deliveries is fulfilled by addition of contract labours.

1.4.1 Decision Making tools used:
Company has installed SAP R3 ERP system. All decisions are taken by use of this system. Company has predefined reporting formats to monitor performance of each product line. These reports form are used for routine as well strategic decisions. Company has established a project management module for investments in technology and robots.

1.5 Observations:
1. Company has well defined organization structure and the roles and responsibility areas are clearly identified. Other than CFO, MD and Board of directors, other Head of Departments are involved in day to day and routine decisions.
2. Company is projecting continuous upward trend in coming next five years at the same time the operational risk is also increasing because of continuous investments.
3. Leveraging the resources for optimum profitability will be a major concern when investments are complete and assets are put to operations.
1.6 Analysis of Decisions:

Company’s Decision making process can be analyzed by using Balance Scored Card, a strategic decision support Tool. Decisions are scanned through four perspectives namely Customer, Finance, Learning and Growth, Internal Business Process. Use of balanced scored card is to evaluate interdependence of the various factors and underline their importance in strategic decisions or developing Vision, Goals etc for organization.

**Figure C-1.2 Kalyani Hayes Lehmaerz Balance Scorecard**

<table>
<thead>
<tr>
<th>Customer</th>
<th>Finance</th>
<th>Strategies, Goals, Vision:</th>
<th>Learning and Growth:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product life cycle?</td>
<td>Better Turnover ratios</td>
<td>Growth through Investments</td>
<td>Product Portfolio is doubled.</td>
</tr>
<tr>
<td>Frequencies of design change?</td>
<td>Uptrend in Net profits</td>
<td>Product portfolio</td>
<td>Truck and Passenger Car as separate product lines added.</td>
</tr>
<tr>
<td>Low cost benefits?</td>
<td>Minimum fluctuations in ROCE</td>
<td>Customer Base</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Change in product sales composition</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reduction on dependence on one customer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Timely Investments and completion of projects.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Internal Business Processes</td>
<td>Automation of processes,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>conversion of manual elements into robotic operations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Use of robots to improve productivity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Trust on Contract Labour</td>
<td></td>
</tr>
</tbody>
</table>

The various decisions taken by the organization when scanned through Balanced Scorecard, following important points are can be noted down

1. In decision making process customer perception is not reflected. Decisions are more concentrated on business growth rather than customer satisfaction. Company can increase market share by addressing various customer expectations in terms of satisfaction.

2. Company has successfully reduced over-dependence on one customer. Company can tactfully transfer the low margin business to competitors and acquire high margin business from them by developing appropriate product promotion strategy.
3. Fixed asset turnover ratio is constant, which is an alarm for long-term sustenance with continuous ploughing back profits into business. During the phase of stagnation, Slow down or reversal in business cycles, the lower fixed asset turnover ratio will erode the profits generated by continuous process improvements. It may also increase the total cost of production. There should be more emphasis on upgrading the benchmark performance of new assets.

4. With due reference to Maruti Manesar plant incidence, there may a need to revisit the strategy of having combination of Robots and contract labour to optimize the cost of production.

5. New product development cycle, flexibility to adopt new designs for manufacturing processes are some of the key areas contributing to bottom line of the company.

6. A BCG matrix also can be used to decide various categories of the products namely Stars, Question Marks, Cash Cow and Dogs. This assessment can be done considering the contribution of individual products in net earnings of the company.

1.7 Conclusions:

The Company is having well set project appraisal procedures and has expertise in project implementations. There are very few examples of cost or time overruns for the project. Company is able to manage finances and product portfolios efficiently. There is a need to have a product ranking system on the basis on net contribution to earnings.

From decisions taken by company, there is a feel that human aspect of business is neglected. It is quiet possible that there may be an unsatisfied workforce at all levels of employees and that may be one of the reasons to have range bound fixed asset turnover ratio. Employees may have developed there own thumb rules for utilisation of assets, restricting the asset turnover to a limited range.

Customer perceptions about the business, may be addressed to improve return on investment and minimizing fluctuations in ROCE.
Overall company is progressing very fast with its strong decision making capability. The decision making capability may have inbuilt process to create enough financial cushion to provide a support in business stagnation, business slowdown or business reversal cycles.
Continental Auto Components

2.1 Company Profile:

Continental corporation is a worldwide auto component manufacturing company. Group turnover is 30 billion Euro (Rs. 2,10,000 Crore at conversion rate of Rs 70 per Euro). Company has two main product lines.

Table C-2.1: Continental Global Business Portfolio.

<table>
<thead>
<tr>
<th>Continental Global Business Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rubber Group</strong></td>
</tr>
<tr>
<td>Tire Division</td>
</tr>
<tr>
<td>Original Equipment Replacement</td>
</tr>
<tr>
<td>Europe &amp; Africa</td>
</tr>
<tr>
<td>Replacement The Americas</td>
</tr>
<tr>
<td>Replacement Asia</td>
</tr>
<tr>
<td>Two-Wheel Tires</td>
</tr>
<tr>
<td>Truck Tires</td>
</tr>
<tr>
<td>Industrial Tires</td>
</tr>
<tr>
<td>Conti Tech Division</td>
</tr>
<tr>
<td>Air Spring Systems</td>
</tr>
<tr>
<td>Benecke-Kaliko Group</td>
</tr>
<tr>
<td>Conveyor Belt Group</td>
</tr>
<tr>
<td>Elastomer Coatings</td>
</tr>
<tr>
<td>Fluid Technology</td>
</tr>
<tr>
<td>Power Transmission Group</td>
</tr>
<tr>
<td>Vibration control</td>
</tr>
<tr>
<td><strong>Automotive Group</strong></td>
</tr>
<tr>
<td>Tire Division</td>
</tr>
<tr>
<td>Chassis and Safety Division</td>
</tr>
<tr>
<td>Electronic Brake Systems</td>
</tr>
<tr>
<td>Hydraulic Brake Systems</td>
</tr>
<tr>
<td>Sensorics</td>
</tr>
<tr>
<td>Passive Safety &amp; ADAS</td>
</tr>
<tr>
<td>Chassis Components</td>
</tr>
<tr>
<td>Interior Division</td>
</tr>
<tr>
<td>Instrumentation &amp; Driver HMI</td>
</tr>
<tr>
<td>Infotainment &amp; Connectivity</td>
</tr>
<tr>
<td>Body &amp; Security</td>
</tr>
<tr>
<td>Commercial Vehicles &amp; Aftermarket</td>
</tr>
<tr>
<td>Power Transmission Group</td>
</tr>
<tr>
<td>Engine Systems</td>
</tr>
<tr>
<td>Transmissions</td>
</tr>
<tr>
<td>Hybrid Electric Vehicle</td>
</tr>
<tr>
<td>Sensors &amp; Actuators</td>
</tr>
<tr>
<td>Fuel Supply</td>
</tr>
</tbody>
</table>

With preliminary sales of €32.7 billion in 2012, Continental is among the leading automotive suppliers worldwide. As a supplier of brake systems, systems and components for powertrains and chassis, instrumentation, infotainment solutions, vehicle
electronics, tires, and technical elastomers, Continental contributes to enhanced driving safety and global climate protection. Continental is also an expert partner in networked automobile communication. Continental currently has approximately 170,000 employees in 46 countries..

2.2 Continental group Organization Chart

Figure C-2.1 Continental Organization chart

2.3 Continental Automotive division India

Continental Corporation: India Plant : Chakan 2

History

Continental current plant is located in Chakan. This plant was used by Yankee Instrument Manufacturing company specialized in two wheeler control panel instruments. This business changed hand at least 4 times from 1986 to 2000. In 2000 Siemens VDO business took over the plant and they started manufacturing electrical and mechanical
power train components for passenger cars. In early 2007 Siemens decided to sell this plant and plant was taken over by Continental India a fully owned subsidiary of Continental.

Continental India also has same business structure parallel to global structure. Corporate office for continental India is in Bengaluru and has production units at three different locations Bengaluru, Manesar and Chakan Pune.

Continental has strategically distributed product portfolios in three different locations. All electronic components are produced in Bengaluru and Mechanical components are produced in Pune. Manesar produce combination of electro mechanical components. Siemens VDO unit was taken over by Continental with all existing assets and same management team. Continental decided to close the product portfolio taken over from Siemens during the economic crisis of 2008.

**Crisis Faced by Company:**

In 2008, company faced a severe problem to maintain market share for portfolio taken over from Siemens and Continental has to close the portfolio.

**Impact of Crisis:**

Continental has to close the existing portfolio and start a new product line.

**2.4 Strategic decisions taken by company are:**

1. Close down existing portfolio taken over from Siemens. Continue with management team and introduce new product portfolio and develop existing plant as a start-up company.
2. Introduce mechanical component product line in Pune as required manpower and technical skills are available in Pune.
3. Develop production capacity with three shift utilization considering future market potential available in Pune.
4. Technical support for design and product development will be from Bengaluru.
5. Invest in assets for power train business in Pune having initial concentration on fuel supply units including fuel pump and transfer lines required for cars.

Company has a business vision to grow in Indian Market as OEM supplier for Fuel Supply systems. Continental India has a growth plan for automotive unit to make a 1 Billion Euro company by 2020. Company’s automotive units have turnover of 20 Million Euro (Rs 150 Crore at conversion rate of Rs 75 per Euro)

2.5 HR Strategic Decisions

To manage the startup company and develop it on fast track, structured organization is developed. Company has a Matrix organization and hierarchy in reporting. There are department heads and well define reporting procedures. Currently total manpower is 120 employees including 40 managerial staff. In the process of development of Start-up Company, experienced people for all functions are recruited by offering competitive salary prevailing in Pune MIDC. Top management is same working with Siemens VDO unit.

2.6 Product Development Focus

Company has a specific product development and market penetration strategy. Company projects the product as low cost and reliable products. Low cost is offered with continuous efforts for import substitution and reliability of product with proven record of accomplishment of manufacturing capabilities of Continental as a global auto component supply company.

Continental Pune auto component division is an OEM supplier for Tata Nano for fuel supply system. They have proved their capability by offering low cost and reliable product desired by Tata Nano as a basic requirement to qualify as an approved supplier for Tata Group. As a startup company Continental was working for Tata Nano and in 2009 they have increased their customer portfolio by winning confidence of Volks Wagon, Maruti Motors and Mahindra group.
Company has growth plan for Pune units as 50 million EURO IN 2015, 100 million Euros in 2017. Considering this business plan Spare capacity required is considered during installation. Currently company is operating at 35 percent of capacity utilization and is successful to achieve break even.

2.7 Product Promotion Strategy:

Continental has a matrix Organization and dedicated business development managers for each product line. Company is promoting India Automotive Division by using Existence of Global brand, Capability to provide low cost solutions with assured product quality, specific focus on import substitution and dedicated manufacturing capacity to fulfill the customer requirements.

2.8 Strategies for Growth

- Investments: Reinvest the profits in business for increasing product portfolio and customer base. Add new product lines, expansion in business.
- Financial: Establish return on Investment, Maintain critical financial ratios such as ROCE, Inventory turnover, Fixed Asset Turnover, Current Ratio etc.
- Product development: New product development, supported with qualified team

2.9: Decision Making Tools Used:

Company follows the global reporting systems used by continental group. Company use SAP R3 ERP system for reporting. Strategic decisions are taken by considering global business plan and inline with local business requirements.

2.10 Observations:

1. Company have well defined organization structure and the roles and responsibility areas are clearly identified. Other than CFO, MD and Board of directors, other Head of Departments are involved in day-to-day and routine decisions.
2. Company is projecting continuous upward trend in coming next five years at the same time the operational risk is also increasing because of continuous investments.

3. Leveraging the resources for optimum profitability will be a major concern when investments are complete and assets are put to operations. Currently company has achieved a break even but small negative trend in business can lead to losses.

2.11 Analysis of Decisions:
Company’s Decision making process can be analyzed by using Porter’s Five Forces model, a strategic decision support Tool. Continental’s decision to invest for a new start-up company can be well analyzed by using five parameters used porter’s model. Decision is scanned through five parameters, Barriers to Entry, Determinants of Supplier Power, Determinants of Buyer’s Power, Threat of Substitute, and Rivalry among the Competitors.

**Barriers to Entry:**
The fuel supply system consists of a fuel pump and transmission line to supply fuel from fuel tank to engines. This is highly technical component and requires precise machining. This requires specialized technology and designing skills to satisfy the customers. Being a low cost but high technology product there are very few players in the market. Continental is established brand as largest auto component supplier with proven technology capabilities, company can create a threat to other players in market.

**Determinants of Buyer’s Power:**
Today product life cycle of automobile products is shrinking every year. Frequency of new launch is increased to satisfy dynamic change in customer requirements. This demands the high responsive suppliers for the car manufacturer. High responsiveness in terms of new product design and supply are Key Performance areas for suppliers. With Hands on experience of new product development Continental can satisfy new customer needs.
Determinants of Supplier Power:
Continental has installed machines required for complete manufacturing of fuel supply system. Currently company is operating at 35 percent of installed capacity on single shift basis. Company can work in three shifts to satisfy the demand requirements. The human skill can be recruited easily depending upon demand requirements. Company is not depending upon the suppliers and sub contract for manufacturing. Practically there is not any threat from supplier.
**Threat of Substitutes:**
Fuel supply system is technology driven product line. The threat of substitute is from established competitors who have technology to manufacture. A perfect combination of Quality and cost can create a threat of substitute. Continental is promoting their products with a major thrust on import substitution and provides low cost quality solution for Indian markets.

**Rivalry Among the Competitors:**
Bosch from Germany, Delfi from US and Denso from German are the major players in fuel supply systems. These players are operating in India as a global sourcing strategy adopted by their buyers. Denso is OEM supplier for all Maruti Motors, Delfi is for US companies operating in India and Bosch for European manufacturers in India. There is clear market segmentation for market players. Continental has won the confidence of Indian auto giants on cost advantage. All leading brands have 13 to 14 percent of market share in Indian automotive market. Continental has a challenge to compete with all these global players operating in India.

**2.11 Conclusions:**
Continental corporation has implemented a decision to start a new company by introducing a fuel supply system in Indian automobile market. The strategic choice of Pune as a manufacturing location is a well though decision. Company has achieved a tremendous growth since inception and achieved a break even at 35 percent of installed capacity utilization is really commendable. Pune unit is well supported by Continental Corporation in terms of technology and design aspects of product.

Company has future business expansion plan to achieve Rs 1000 Crore turnover in 2020 a great leap from Rs. 150 Crore today in 2013. The critical aspect of business expansion is market segmentation in terms of global companies and their global vendors. Company has to work very hard to create a potential market to achieve global quality and cost leadership in business sector.
3 Eaton

3.1 Company Profile:

Eaton is a global engineering company and operates in different industrial manufacturing fields. Eaton is known by its business values and Ethics. Global group turnover was $16.2 Billion (Rs 90750 Crore at a conversion rate of Rs 55 per Dollar) in 2012.

Eaton is a diversified power management company providing energy-efficient solutions that help customers effectively manage electrical, hydraulic and mechanical power. Eaton is a global technology leader in electrical products, systems and services for power quality, distribution and control, power transmission, lighting and wiring products; hydraulics components, systems and services for industrial and mobile equipment; aerospace fuel, hydraulic and pneumatic systems for commercial and military use; and truck and automotive drivetrain and powertrain systems for performance, fuel economy and safety.

Table C-3.1: EATON Global Business Portfolio. 3

<table>
<thead>
<tr>
<th>Aerospace</th>
<th>Automotive</th>
<th>Electrical</th>
<th>Filtration</th>
<th>Hydraulic</th>
<th>Hybrid Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace systems and components.</td>
<td>Engine Valves and valve systems</td>
<td>Customized electrical designs, systems and products, Equipments, Control mechanisms</td>
<td>Bags and Cartridge</td>
<td>Accumulators</td>
<td>Electric Hybrid</td>
</tr>
<tr>
<td>Electrical Sensing And Control</td>
<td>Transmission systems</td>
<td>Self Filtration</td>
<td>Gas liquid separators</td>
<td>Clutches and Brakes</td>
<td>Hybrid Applications</td>
</tr>
<tr>
<td>Ground Fuelling</td>
<td>Advanced Machining</td>
<td>Portable Filtration</td>
<td>Oil filters</td>
<td>Connectors</td>
<td></td>
</tr>
<tr>
<td>AOG Support</td>
<td>Gears</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.2 Eaton Business System
What makes Eaton distinct is, power management focus, values-based culture and philosophy to run the enterprise as an integrated operating company. The Eaton Business System (EBS) is the embodiment of integrated operating company philosophy.

The Eaton Business System (EBS) in Eaton – it is how Eaton runs company in a common way.

- It is based on belief in standard processes and a teachable point of view
- It ensures that transfer best practices and key learning across the organization
- It encourages continuous improvement

The Foundation of the Eaton Business System is a single vision and mission, shared set of values and a common philosophy. EBS also includes a standard set of processes that are used to run company within these areas:

- Planning
- Growth
- Operational Excellence
- Functional Excellence
- Assessment
- Learning

The Eaton Business System is source of competitive advantage and, when effectively deployed, leads to superior performance.

Uniting the power of many into the Power of One – that’s the Eaton Business System.

### 3.3 Eaton : India Operations

**History**

Eaton India Operations were started in 2005. Vickers manufacturers of hydraulic systems and components, was taken over by Eaton Corporation. Vickers product line was same as
Eaton. It was a start of first plant in India to have presence in India. This plant is operating at Pimpri.

In 2007 Kirloskar Oil Engine plants at Ahamadnagar and Nasik were merged in Eaton. Company started green field project in Ranjangaon in 2005 which came in operations in 2007.

Eaton’s Indian manufacturing portfolio consists of Hydraulic Systems at Pimpri, Value and value systems for automotives in Nasik and Ahamadnagr, Vehicle Transmission systems at Ranjangaon.

### 3.4 Organization structure.

Eaton has Matrix Organization.

*Figure C-3.1: Eaton India Organization Chart*

Eaton worldwide follows same business practices and has standard business operations. The roles and responsibilities are specific and well defined. Matrix organization normally creates a problem of duel reporting but in Eaton the areas are specified. The plant heads are responsible for development of business and they report to Asia Pacific Heads for business decisions. Business strategic decisions are taken by Asia Pacific Business Heads. India Corporate office is responsible for ensuring Eaton global standards across
the functions and businesses. Plant heads report to India Corporate Office for matters related with Systems Development and Implementation, HR policies, Performance Appraisals, Training and Development, Legal and Industrial Relations

**Crisis Perceived:**

- Failure to create a brand for manufacturing critical engine components such as engine valves and valve trains
- Failure to create a potential market for patented engine transmission products in India.

**Impact of Business Environment:**

Company created focused brand development strategy to promote as experts in critical engine component manufacturing and leader in engine transmission systems.

**3.5 Strategic decisions taken by company are:**

1. Have same policies for Eaton India, in line with global policies.
2. Implement and ensure Eaton Business Systems
3. Grow by merger and acquisitions in related business areas.
4. Invest in green field project to manufacture patented transmission system products for Indian automotive industry.
5. Wait and watch policy for appropriate business valuations for merger and acquisitions.
6. Training and development of people to mould them Eaton Business Systems and Work Ethics.

Company has a business vision to establish Eaton India in Indian Automotive sector as a global quality component manufacturer with proven products and technologies. Project Eaton as business partner for Indian Auto giants with technology and patented products for improved product reliability and life cycle. Offer low cost and high quality technology driven products best suited for Indian Environment.
3.6 HR Strategic Decisions

1. To continue with existing employees of merged companies and mould them to Eaton Business System and work ethics by continuous training and development.

2. Develop work culture matching with global expectations.

3. Recruit skills to fulfill the skills gaps.

4. Transparent appraisal and promotion policies.

3.7 Product Development Focus

Company has a specific product development and market penetration strategy. Greenfield project started at Ranjangaon MIDC to manufacture patented Transmission System products. Eaton has monopoly in these products and use latest technology as per Eaton Global Standards to increase market share in India. Eaton has a continuous product development focus on critical engine components used in Automotives. Transmission systems, Engine Valves and Valve operating systems, hydraulic components and systems are critical components for manufacturing and require high quality manufacturing process to achieve desired performance. Focus on these critical components projects Eaton as technology driven company.

3.8 Strategies for Growth

- Mergers and Acquisitions in related business areas. Wait and watch for appropriate business valuations.
- Promote patented products in India
- Reversal of Export Oriented Status (EOU) of merged companies to promote products in Indian Market.

3.9 Observations:

- Company have well defined matrix organization structure and the roles and responsibility areas are clearly identified.
- Company strongly believes in Eaton Business Systems and Work Ethics. Employee development is priority to mould them into Eaton work culture.
- Focus is on technology and strong product development. High quality standards and proven products is major thrust in India.

### 3.10 Analysis of Decisions:
EATON perceived crises related to external business environment specifically with market share and brand promotion. Company has taken decision related with new product and market development. These Decisions can be well examined by using Ansoff Matrix.

**Figure C-3.2: Ansoff Matrix for Eaton**

<table>
<thead>
<tr>
<th></th>
<th>Existing Products</th>
<th>New Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existing Markets</strong></td>
<td><strong>Market Penetration</strong></td>
<td><strong>Product Development</strong></td>
</tr>
<tr>
<td></td>
<td>Hydraulic Components</td>
<td>Global products in Indian Markets</td>
</tr>
<tr>
<td><strong>New Markets</strong></td>
<td><strong>Market Development</strong></td>
<td><strong>Diversification</strong></td>
</tr>
<tr>
<td></td>
<td>Engine valves and valve chain components</td>
<td>Patented transmission system products</td>
</tr>
</tbody>
</table>

Ansoff Matrix is used to portray alternative growth strategies applied by corporate. This matrix is used to decide the priority for product development and promotion in different market segments. Eaton corporate strategies are well placed in Ansoff Matrix.

**Market Penetration:** Take over of Vikers Systems plant located in Pimpri is horizontal integration for Eaton Hydraulic division. Vickers was already operating in Indian markets and Eaton has developed it as quality manufacturer for critical hydraulic circuit components. Application of new technologies and training and development of
employees has improved Eaton’s market share in existing market acquired by Vikers Systems.

**Market Development:** Merger and Acquisition of Kirloskar oil engine plants at Nasik and Ahmadnagar by Eaton is market development strategy. After merger Eaton applied for reversal of EOU status of these plants to promote the products in Indian Automobile manufacturers. Specialization in engine valve technology and capability to supply Indian Auto Industry are the drivers for cancellation of EOU status for merged plants. This was better trade off for Eaton than EOU status.

**Product Development:** Eaton global market strategy is to promote products in all possible potential markets by way of distribution channels or by creating own establishments. Eaton is highly research oriented global company and they promote various innovative products in India. Eaton is focusing on solar energy and wind mills business options in India.

**Diversification:** Eaton has a range of patented products in transmission systems. The green field project in Ranjangaon is a product diversification strategy in Indian markets. The manufacturing of patented products for Indian Auto Industry has generated a leadership in transmission system in Indian Market. Company is successful to operate at full installed capacity at Ranjangaon plant. Introduction of patented products create easy acceptance in Industry and fast growth in market share. Today company is operating in nine step and twelve step transmission systems. Eaton has future plan to supply all categories of transmission systems to Indian Auto Industry.

**3.11 Conclusions:**

Eaton is technology driven company having a strong foundation of Eaton Business Systems. Eaton follows a global standard at all business location. Company has a large product range in every business sector. Use of Matrix organization with clear identification of roles and responsibilities has helped Eaton to create a transparent organization. Eaton has a corporate strategy for growth by mergers in related business
areas. A possible mergers will be considered only with appropriate business valuation and company follows a wait and watch strategy for mergers.

Eaton is successful to grow in India by producing niche market components. Technological competency, product quality and critical engine components are key performance areas of Eaton in India. Hydraulic system components, Engine valve and valve chains, transmission systems are most critical components in any automobile vehicle. These critical components provide an opportunity to earn premiums on quality products for established companies. Eaton is well set to acquire higher premiums in Indian Market.

Company’s major thrust on Eaton Business Systems and Eaton work culture are important points as growth strategy in globe. Company will grow and acquire Indian companies, which are best fit in this strategy. Waiting for appropriate business valuations may give better buying price but at the same time may have to compromise on growth opportunities.
4.1 Company Profile:

Autoline is listed company on BSE and NSE since January 2008. Autoline Companies Ltd (AIL) (incorporated on December 16, 1996, as Autoline Stampings Private Ltd.) was initially set up in January 1995 as a partnership firm known as "Autoline Pressings" under Indian Partnership Act 1932, with a capital of Rs. 0.30 million & term loan of Rs. 0.15 million from State Bank of India and Cash Credit limit of Rs.0.05 million. AIL has grown into a medium sized engineering and auto ancillary company, manufacturing sheet metal components, sub-assemblies and assemblies for large OEMs in the Automobile Industry. Autoline is engaged in Manufacturing various auto parts / sheet metal components for Passenger cars, Sports Utility Vehicles (SUV), Commercial vehicles, Two wheelers, Three wheelers, Tractors, etc.

Autoline is one of the prime vendors to various Automobile Companies like, Tata Motors Ltd. (Earlier Telco), Bajaj Auto Ltd, Kinetic Engineering Ltd, Mahindra & Mahindra Ltd., Fiat (India) Pvt. Ltd., Walker Exhaust (India) Pvt Ltd (A Subsidiary of Tenneco, a fortune 500 U.S. company), etc. AIL is also exporting auto parts i.e. brake shoes for Mercedes Benz Trailers to Saudi Arabia, 

**Autoline company has:**

- Twelve state of the art manufacturing facilities located in Pune, Maharashtra, Pantnagar, Uttarakhand, Dharwad, USA (Butler, Indiana State) and South Korea.
- Four Design Units in Pune, Chennai, Troy - Michigan, USA and Milan, Italy
- State of the art Tool Room Facility at Chakan, Pune.
- Unique capability of offshore Designing and Manufacturing model.
- Diversified product range with a portfolio of over 1,000 products ranging from PVs, SUVs, MUVs, LCVs, MCVs, HCVs.
- A strong Clientele – leading OEMs like - Tata Motors, Mahindra & Mahindra, General Motors, Volkswagen, Ashok Leyland Nissan, Bharat Benz (Daimler India), Ford to name a few.
4.2 Product Portfolio

Pedal Assembly, Park Brake assembly, Bottle jacks, High Deck Load Body, Brake and clutch assembly, Jack assembly, Load Body, Composite Vehicle body, Cab stay, Cabin floor structures, Drive control systems Assembly floor, front panels and various press components for automotive companies.

4.3 Company Growth Story:

In 2004 turnover of was Rs 51 Crore, 2008 Rs 260 Crore, 2010 Rs 495 Crore and in FY 12-13 Rs 687 Crore. Autoline has increased customer base and added various products in portfolio. Today company has seven manufacturing plants in India and two plants abroad one in Dubai and one in Germany. Company has developed two different specialized capabilities, manufacturing services and Engineering Services. Autoline has patented products and provide value added services to customers.

Figure: C-4.1 Autoline Organization chart
4.4.1 Crisis Faced by Company

Autoline is dependent on Tata Motors for majority of the turnover. 90 percent of the revenue is from Tata Motors. After the recession cycle of 2003, Tata Motors came out with new products and introduced new policy for vendor development. The labour jobs were converted to with material jobs and for new components, vendors were responsible for development of entire job. Only technical support was provided by Tata Motors. This change in policy by Tata Motors, created a pressure on Autoline and for new product development.

It was a challenge for Autoline to develop engineering and designing capabilities as per the requirements of Tata Motors.

4.4.2 Impact of Business environment:

Autoline has to develop complete component solution capabilities. It was mandatory to add tool engineering and process design capabilities.

4.4.3 Crises Perceived by Management:

1. Failure to understand customer requirements

2. Failure to connect customer
3. Negligence for growth opportunities

4. Failure to develop interdependence with customer.

**4.5 Strategic Decisions taken by company**

1. To establish “**Art to Part**“ Service Provider for Key Customers.

2. Project company as End to End solution provider right from conceptualization, styling, designing, proto typing, tooling and mass manufacturing of auto components

3. Grow by mergers and acquisitions in related businesses

4. Focus on research capabilities for patented products and as solution provider to auto giants.

5. Establish two strategic business units namely Engineering Services and Manufacturing Services.

6. Convert organization from dependent on customers to interdependent with customers.

7. Establish manufacturing units as “Wagon Development” to provide better services to key customers.

**4.6 Impact of Strategic Decisions:**

Autoline is consistently doing efforts to achieve customer satisfaction and establish as End-to-End OEM component manufacturing company. A company has grown from a single unit to twelve manufacturing units. As a Wagon Development strategy, Autoline has established manufacturing units at every location of Tata Motors manufacturing units. This has helped to transform the company from dependence to interdependence for Tata Motor and Autoline. Today Autoline manufactures in total 1200 components covering practically entire range of vehicles manufactured by Tata Motors. Autoline has developed a heavy duty pressing capacity specific for Tata
Motors. Today company has wide range of hydraulic presses as high as 3000 tonnes. This unique heavy press capability projects Autoline as partner for Tata Motor’s heavy duty manufacturing activities.

Wagon development strategy requires continuous investments for establishing new manufacturing facilities at different locations. Creating a long-term partnership with Tata Motors also create some restrictions in decision-making. Tata motors have a global sourcing policy and it is compulsion for OEM component manufacturers to buy the components from Tata Motors specified global Vendors. It creates a pressure on margins for company.

A welcome step to transform company form ‘Part’ to ‘Art to Part’ company has helped to develop complete engineering capabilities. This change has created a confidence among the customers and new long-term contract are signed by valued customers. End-to-End solution capability has helped to develop a dedicated team contributing in top line and bottom line results of the company.

Complete engineering solutions from concept to component manufacturing has generated a cost advantage with reduction in product development cycle.

Autoline has SAP system for management control and production scheduling for all plants. All plants are centrally connected through SAP. It helps management for better control on costs and delivery schedules.

4.7 Observations:

1. Autoline is over dependent on Tata Motors. 70 percent of revenue is from Tata Motors.

2. Following global sourcing strategy of Tata Motors is a compromise on profitability for Autoline.

3. Company needs to explore their engineering capabilities for tapping other automotive companies for OEM supplier.
4. Because of interdependence, Tata Motors provide a financial help in crucial times for Autoline. It creates a relief from financial crisis.

5. Backward integration for ‘Art to Part’ solutions is a good move for company. The Mergers and Acquisitions done by company have helped to create international presence for Autoline.

6. Design, development and manufacturing of press machine tools and equipments generate a cost advantage and develop a confidence for employees to excel.

4.8 Analysis of Decisions

Autoline is strongly working on developing core competencies to provide qualitative ‘Art to Part’ solutions for the clients. Backward integration of product line by adding design services, tools and dies manufacturing for own products have certainly helped to promote company as a guanine business partner specially for Tata Motors. Wagon development strategy adapted by Autoline adds value for customer satisfaction.

Manufacturing capability achieved by investing in heavy duty presses of 3,000 ton capacity is a long term sustenance strategy for the company. Autoline is successful in developing interdependence with Tata Motors. A large portfolio of 1,200 components only for Tata Motors may be a risk for both Autoline as well as Tata Motors. Any business crisis or slow down of Tata Motors will have direct impact on profitability and long term sustenance of the company. Being a listed company, this is high risk for stake holders.

Utilization of heavy duty press may not be optimum and can create impact on return on capital employed. There is a need for evaluation of product portfolio. Autoline can use BCG matrix for the products and clearly define the strategy for each category of products. The backward integration and investment in heavy duty press can be utilized for star performers and converting the question marks to star performers.
4.9 Conclusion:

Autoline is growing very fast at an exponential rate. The fuel for growth is ‘Wagon development’ strategy to support Tata Motors as a reliable OEM component supplier. Company is having combination of strategies for growth. Mergers and Acquisition, Backward Integration and capital investments to increase production capabilities with value added services to customer.

Company is also exploring the opportunities in diversification to add value to shareholders. There is need to increase customer base with enhanced production capacities and ‘Art to Part’ approach. Major auto giants of the globe have manufacturing units in Pune and this is global opportunity for Autoline, which can be enchased by appropriate marketing and product development strategies.

Application of BCG matrix analysis will help to focus on selected product portfolio to enhance profitability and reduce the business risk. The assets can be better utilized and customer portfolio can be increased.
5 Badve Engineering Limited

5.1 Company Profile

Badve Engineering limited was started as a small company in 1986 by the proprietor to manufacture small-machined components for Bajaj Auto ltd, Aurangabad plant. With commitment for quality, Bajaj Auto offloaded more components to Badve Engineering. This opportunity was well accepted by the proprietors and they decided for investments and expansion of the plant. A small scale unit having a turnover of Rs 8.0 Lakh in 1986, grow exponentially because of opportunity offered by Bajaj Auto and achieved annual turnover of Rs 50 Crore in year 2000. Company enjoyed this exponential growth by adding more capacities and production capabilities. Today there are 13 manufacturing units operating at various parts of Maharashtra and Pantanagar. Group turnover has crossed annual turnover of Rs 600 Crore in 2012. Employee strength is more than 3000 employees including staff and managers.

Badve Engineering has developed a full manufacturing capacity and technical capability for fabrication, and press components required for Bajaj Auto and other automotive companies. Company has major turn over share from Bajaj Auto. Badve Engineering is OEM supplier for two wheeler chassis and range of silencers and exhaust systems for all variants of motorbikes manufactured by Baja Auto.

5.2 Product Portfolio: 5

Company is exclusive OEM supplier for motorbike chassis, silencer, exhaust systems and other press components for Bajaj Auto, Tata Motors, Honda Motors, Volvo and Ingersoll Rand. Company has added plastic moulding facilities for exclusive supply to LG electronics for washing machines.

5.3 Organization Structure:

Company has typical Indian Management organization structure with various levels of hierarchies. Plant heads are responsible for efficiency and quality output to full fill customer requirement. Corporate office has specific role and is responsible for business
growth, development, and implementation of various policies to achieve desired growth. Corporate office consists of corporate Human Resource, Finance and Engineering Heads. Identification of new business opportunities is a major expected contribution from corporate office. Plants heads have freedom for day-to-day functional decisions but they should refer to corporate office for policy decisions.

**Figure C-5.1: Organization structure**

Proprietor of Badve Engineering Mr. Shrikant Badve is a very dynamic person. For him Quality is a way of life. His commitment to quality is the only factor in exponential growth of the company. He has received TPM award from Prime Minister of India. He is recipient of many other prestigious awards because of demonstration of higher level of entrepreneurship skills. This quality approach is a guiding principle in Badve Engineering. Company strongly believes in quality in every action in business.
5.4.1 Crisis faced by Company:

In year 2004 Baja Auto came out with new variants of Pulsar Motorbikes. There was a requirement for faster prototyping of various components required for exhaust system. The decision for accepting the proposal was delayed by company considering the time constraints and technology development.

5.4.2 Impact of business environment:

As a result of delay in analysis of proposal and acceptance turnout as a cancelled proposal from Bajaj Auto and Badve Engineering lost opportunity for long term business for new products.

5.4.3: Crises Perceived

- Failure to acknowledge our own potential.
- Failure to understand the value of “Now”
- Negligence in Quality systems
- Negligence towards customer requirements

5.5 Crisis Management Approach:

**Speed:** Organization believes in speed and they practice fast decisions. Company is successful to develop a strong corporate group capable of performing in depth project analysis and provides inputs for fast decisions. Company’s philosophy is “NOW” always aims for speedy actions in every part of organization. Belief in fast decisions and implementation is a key success factor for company’s growth.

**Quality policy:** Quality is way of life and TPM is motive in Badve Engineering. Company has successfully implemented TPM in Pune and Aurangabad Plants. They encourage healthy internal competition between various sections for quality and process improvement. The participants with innovative ideas are encouraged with non-monetary benefits. Company has successfully implemented the TPM. Company is self-certified OEM supplier for all components supplied to Bajaj Auto Ltd.
Investment is done for automation and new welding robots are installed to improve welding quality and production efficiency for chassis and silencer products. It has created in saving person-hours.

**Human Resource Policy:** Company has developed HR manual and procedures are well documented. Processes at all plants are standardized and strictly monitored. Company have annual performance appraisal for all staff and managers. Plant heads and functional heads have Key Performance Area related to business growth and 15 percent to 20 percent business growth is expected from each plant. For middle management and junior level staff goal setting is done to improve their operational efficiency. Performance goals are set from their functional areas and it includes qualitative and quantitative measures. Contribution in process and quality improvements is one of the important performance areas for annual appraisal. Company has strong HR systems and corporate HR is responsible for implementing the systems in all plants of Badve Engineering. Company believes in retention of employees and majority of work force is permanent employee. Only unskilled jobs, helpers, fitters, are on contract.

**Women Empowerment:** Company strongly believes in fulfillment of social obligations and work for Women Empowerment. Rs 100 Crore worth new plastic moulding plant is started in Ranjangaon near Pune. This is a state of the art plastic moulding company. Women employees work in this plant on all plastic moulding machines and for painting operation. Badve is first company having female industrial painters for engineering jobs.

**Work “NOW” for business growth:** As a part of growth strategy, company has entered into diversification in non-auto component industry sectors.

- Plastic moulding plant for LG electronics
- Joint venture with Cellino, Italian company for components required for Volvo company
- Export promotion unit for components required for Ingarsoll Rand Company engaged in capital goods manufacturing company.
- Vermar Helmets diversified product range manufacturers various types of helmets.
Corporate Social Responsibility:

Health and safety measures are provided to all employees. There are annual health checkups for all employees. Company organizes Blood donation camp in all units and collects 1000 bottles every year for blood bank. To promote rural employment for poor families, company has invested in Floriculture Park and fifty families are provided employment opportunities. All amenities including residence are provided to these families. The income from floriculture is used for upkeep of these employees and their families.

5.6 Observations:

- Company’s 80 percent turnover depends upon the key account, Bajaj Auto Limited. Growth of Bajaj Auto is fuel for exponential growth of Badve Engineering.
- To acquire this growth ‘Wagon Development’ strategy is followed. This strategy has increased the investments and created short-term pressure on return on investments.
- The components manufactured by Badve Engineering are fabrication and welded components. Some press parts are also produced. These processes are labour intensive processes. Badve Engineering has more employees than Industry standards.
- Internal TPM competition is a good approach to develop team building culture and working in teams for common goals.

5.7 Analysis of decisions:

Company strongly believes in Speed and “Now” for growth. This approach may have worked because of the need of Bajaj Auto for faster offloading of components to increase the product varieties and production capacities. The requirement of Bajaj Auto has helped Badve engineering in fast growth. Badve Engineering is self-certified quality OEM supplier for Bajaj Auto. The expectations from Bajaj Auto are increasing and it may create pressure of performance. The new product development cycle is becoming short in
two-wheeler industry and it demands rapid product development at OEM suppliers. Company is following very generic strategies for growth.

Company has stated exploring opportunities for diversification. This will help to sustain when Bajaj Auto faces a crisis. It will reduce overdependence on Bajaj Auto and give extra confidence to move faster.

Company has higher No of employees as compared to industry standards. Investment in automation is started late. This is creating double pressure on company as additional cost of investment and high wage bills for employees.

5.8 Conclusion:

Quality as a way of life and Speed, these characteristics of proprietor has transformed the Badve Engineering. Normally it is observed, in ‘Speed’ companies compromise on Quality. Company is really on fast track of growth but there is need to revisit the policy of Speed and Now. It may become very crucial for a company to grow and sustain at exponential growth. Over recruitment of permanent employees may create pressure by way of heavy wage bills when growth is stagnant and there is reversal of business cycles.
Saint Gobain Sekuritat:

6.1 Company profile:

Saint-Gobain, the world leader in the habitat and construction markets, designs, manufactures and distributes building materials, providing innovative solutions to meet growing demand in emerging economies, for energy efficiency and for environmental protection. Company is constantly innovating to make homes more comfortable, cost-efficient and sustainable worldwide. Saint-Gobain solutions span from self-cleaning windows and photovoltaic glass to smart insulation systems, water supply systems, solar solutions and building materials distribution.

Being market leader in all businesses; Saint Gobain offer solutions to the major challenges of energy efficiency and environmental protection. No matter what new needs emerge in the habitat and construction markets, the future is made of Saint-Gobain.

Since 1665, Saint-Gobain has consistently demonstrated its ability to invent products that improve quality of life. As one of the top 100 industrial groups in the world, Saint-Gobain continues to deploy its technological know-how, often in partnership with the most prestigious universities and laboratories. To give an idea of commitment to innovation, 20 percent of Saint-Gobain products did not exist five years ago.

Fact file: € 43.2 billion sales (Rs 3,00,000 Crore at conversion rate of Rs 70) in 2012. 1,93,000 employees, presence in 64 countries, 12 research centres and 101 units, world leader in all of its activities.

6.2 Product portfolio:

Saint-Gobain's activities are either European or world leader.

Focusing on the habitat and construction markets has make it possible to implement major growth synergies within a more integrated Group, thereby optimizing operational performance via cost savings.
**Construction Products** include the Insulation, Gypsum, Exterior Products, Pipe work and Industrial Mortars activities. Their complementary nature allows the Group to meet the needs of every field of activity in both the new construction and renovation sectors.

**Innovative materials** cover Flat Glass (flat glass manufacture, transformation and distribution of glass for the building industry, automotive glazing and specialities). These also include High-Performance Materials taking in the Ceramics & Plastics, Abrasives and Textile Solutions activities with developments in the fields of housing, energy and the environment.

**Building Distribution**, which grew out of the two subsidiaries POINT.P and Lapeyre acquired in 1996, is Europe's leading building materials distributor and the No.1 distributor for tiles in the world.

**Packaging**, the world’s second-ranking producer of glass containers, makes bottles and jars for foodstuffs and beverages.

*Figure C-6.1 Saint Gobain Sekuritat Organization Structure*
6.3 India Operations

There are three plants operating in India. Bhosari Plant manufactures Tempered Glass, Car door glass, backlit Glass. Chakan Plant manufactures windshield glass and laminated glass. Chennai plant manufactures all types of glass. Float glass for Chakan plant is manufactured in Chennai and is used for making windshield glass.

All major car manufacturers including commercial vehicles, passenger cars, luxury cars, three wheelers are customers of Saint Gobain Sekuritat. Company derives the advantage of global leadership in product development and innovations. Company is successful to increase the turn over from Rs. 80 Crore in 2001 to Rs. 450 Crore in 2012.

6.4 Environmental Objectives

- Reduction in consumption of natural resources
- Reduction into solid / liquid waste generation
- Reduction in paper consumption
- To improve environmental awareness amongst suppliers and employees
- Increase in green belt development
- Compliance to legal statutory requirements
- Continual improvements in environmental performance
- Elimination of Asbestos and CFC item
- Recycle / reuse of waste
- Optimistic conservation of raw materials

6.5 Key issues for the company

Uncertainty of take off and variations in volumes, Panic reactions from customers and too safe approach by customer. These issues are specifically related with the nature of product and possibility of breakage during handling and storage. Glass breakage is a loss for the person who is holding it. Breakage is always uncertain and creates shortages in product line. Customer wants to avoid loss during handling and storage and adopts too safety approach.
To overcome this issue company follows an inventory management policy, manufacture to stock for key customer. Company maintains a stock of one-week consumption for key customers.

6.6.1 Crisis Faced by company

During 2007 to 2009, global automobile companies started their operations and manufacturing activities in Pune. This was an opportunity for Saint Gobain for growth. This new opportunities created pressure on product development. Considering the nature of product, inventory management, Handling and storage created a problem for company. Handling rejections were increased and deliveries were delayed.

Impact of business environment:

To increase production efficiency and reduce inventory levels, company invested in CNC profile cutting machines and computer aided design facilities.

6.6.2 Crisis Perceived by management:

1. Health safety issues for employees due to peculiar nature of product.
2. Shorter product development cycles
3. Labour union problems
4. Inventory management for large product varieties.

6.7 Approach for crisis Management

HR Policy: Company believes in caring attitude and has strong EHS (Environment, Health and Safety) policy and is considered as a base for training and development of employees. Glass being highly brittle, can create accident at any moment and it can create severe damage to human being. Company follows a strong guideline for reporting of every accident at global levels. Safety training is ongoing activity and stringent safety norms are followed in production process. A team of senior managers is responsible for implementation of EHS policy and norms.
Company has unique performance appraisal parameters for employees. These parameters are environmental performance parameters and Safety performance parameters.

Environment performance parameters include Rate of accident incidences, Reduction in water consumption and energy saving. Safety parameters include the safety audit and corrective actions taken. Every employee must do at least two safety audit in a month. He can conduct audit of any workplace and follow the prescribed audit procedure. All employees are instructed for cooperation for safety audits. The corrective actions are decided for deviations observed and the actions taken are considered in annual performance appraisal.

To avoid industrial relation issues, company has permanent employees only for few selected and critical operations. All non value-adding activities are done by contract labour. Safety norms are same for both, permanent and contract employees.

**Technology Policy.** Glass manufacturing is a technology driven product. The quality of product cannot be improved after completing production process. There are only two options either acceptance or rejection of the product. No reworks and rectification of finish products. Company is doing investment in technology up-gradation demanded by product quality requirements. Company has CNC profile cutting machines and computer aided design facilities.

**Product development policy:** Glass manufacturing is highly technical process. Being global leaders in industry, Saint Gobain offers extended support to their automobile manufacturing clients. Saint Gobain works as a development partner from the conceptual stage of new product development. Today product development cycles need to be shorter and reliable. A dedicated team works with client designing team for in detail analysis of the new product. There is continuous interaction till actual product is developed and fitment trials are through. Glass design activity is a simultaneous activity with body design and requires close interactions with clients. Working with clients avoids cost overruns in product development. It also provides an advantage of defect free product development and ensures long term business.
**Process development policy:** Current production yield for company is between 87 percent and 92 percent. The overall rejection is 10 percent of finish products. Today company have large product portfolio of 90 varieties and includes all major automobile manufacturers. Company has a target yield of 95 percent. The loss of 5 percent should include design loss, Process loss and material handling loss. To achieve this goal efforts are being made to improve material handling processes. New investments are done for up-gradation of equipments. Through continuous training and development for employees, quality awareness programmes are initiated.

**6.8 Observations:**

- All three plants produce different varieties of glass. It is a focused strategy for development and quality improvement of the product. It helps to satisfy customer requirements with high product varieties and volume variations for delivery schedules.

- Collaboration with clients from the conceptual development helps Saint Gobain to create a defect free product and ensures long term business relationship with the client.

- Environment, health and safety are the policy drivers for the company.

- Company has a potential for after sales market and the products with minor defects are supplied to after sales market.

**6.9 Conclusion:**

Saint Gobain Sekuritat is concerned about environment, health and safety of employees and plant as a whole. Companies all policies are derived through EHS. Inclusion of EHS in annual appraisal and defining as KPA (Key performance area) is an unique approach in the industry. This approach certainly adds value to all stakeholders and contributes directly to top line and bottom line of the company.
7 Suyog Auto Cast Pvt Ltd

7.1 Company Profile:

Suyoug Auto Cast private limited is a proprietorship company. Company was started in 1981 a small-scale unit working for Bajaj Auto Ltd. Company was initiated with a subcontract labour cost job. Initially company was doing the rework and deburring of various aluminum casting produced in Bajaj Auto. This was a totally unskilled job and contract labours were employed.

Proprietors started investing slowly in low technology and general purpose machines as more operations were given to them. Bajaj Auto asked them to invest in simple machining operations. With support from Bajaj Auto and continuous work load, company slowly progressed to achieve a sales turnover of Rs 2 Crore in 1994, 10 Crore in 1998 and 18 Crore in 2004. Today company’s turnover is Rs 60 Crore and in 2015 It will cross Rs 100 Crore.

7.2 Crisis Faced by Company

Since inception Suyog Auto Cast was dependent on Bajaj Auto and till March 2004 entire sales turnover was depending on Bajaj Auto. There was a growth of company but over dependence on only one customer. Number of product varieties were large and there was a single customer.

On 12th March 2004, proprietors were having meeting with MD of Bajaj Auto and the efforts of Suyog Auto were misrepresented to Managing Director of Bajaj Auto by vendor development department and meeting was not fruitful.

Impact of business environment:

This meeting gave a signal to proprietors of Suyog Auto Cast and a turnaround phase started in Suyog. Signals from the meeting were the driving force behind the turnaround story of Suyog Auto Cast.
After the meeting, Managing Director of Suyog Auto Cast called a meeting of department heads and announced the new strategy for business and a turnaround approach for growth of the company. This meeting have created a “Change Process” and initiated a change management culture in the organization.

Important Decisions taken during the course of various series of meetings in Suyog Auto Cast include:

1. To become versatile manufacturing unit.
2. To develop engineering company rather than auto component company.
3. To reduce overdependence on Bajaj Auto
4. To introduce diversified fields and components for different sectors of Industry
5. To develop an export capability
6. To create a change and manage a change
7. Invest in diversified assets to develop capability for flexible batch sizes of components.
8. To project company as OEM supplier rather than subcontract vendor.

7.3 The Change Management Approach

Step 1: Create strategic Business Units:

Four Strategic business Units are created to manage a change. Four business lines are created and these strategic units are developed
Table C-7.1: Suyog Auto Cast Business Profile

<table>
<thead>
<tr>
<th>SBU 1</th>
<th>SBU 2</th>
<th>SBU 3</th>
<th>SBU 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bajaj Auto Components</td>
<td>Casting Components</td>
<td>Engineering Business other than auto component.</td>
<td>Export Product development</td>
</tr>
<tr>
<td>Dedicated unit to care of Existing Bajaj Auto requirements</td>
<td>Expertise in all type castings; Aluminum, SG Iron, Sand, Pressure Die Casting</td>
<td>Engineering Products required for Railways, Shipping, Earth Moving, Food technology, Capital Goods, Pumps and High tech components</td>
<td>Export orders from any field of engineering, Manufacturing, Auto Industry with end to end solutions and OEM suppliers</td>
</tr>
</tbody>
</table>

Step 2: Create Organizational Structure

Every Strategic Business Unit has organization structure. Suyog Auto cast has created well defined organization structure to create a change management organization. All SBUs have plant heads. Budgetary control mechanism is established to ensure effective utilization of resources. Financial budget is prepared for every unit at the start of financial year. Every plant heads is asked to prepare a production budget depending upon the in hand and projected orders for coming year.

Financial incentives are given to plant heads depending upon their performance. Company has a growth strategy and performance target of increase in sales turn over by at least 20 percent is set for all plant heads. Financial incentives to plant heads depend upon their achievement.
Step 3: Create a Learning Organization

To achieve the growth plan and successful diversification, company created a recruitment program and efforts were made to recruit required skills in terms of technology and change management. Currently total group have 250 employees including 50 managerial staff. As a part of human skill development activity, In-house training sessions are organized regularly and experts from industry are also called to develop competency and managerial skills. Company has a policy to recruit the retired and experienced people from large scale manufacturing and multinational companies on contract basis as mentors to support the change management and competency development of junior and middle level management.

Step 4: Create Strong Support Functions

To support change management following actions were taken by Company.

Market Research: professional market research consultants were hired by company to support the development of goals and objectives of company. The focus of market research was to identify the business expansion opportunities in non-automobile manufacturing sectors and the opportunities for export of engineering products. The
extensive market research was done. The recommendations of research reports were implemented. Company identified hi-tech components and pump components to diversify and develop manufacturing competency.

**Quality System:** To develop competency for quality product and create acceptance in export market, quality systems were implemented in organization and company got international Quality Certification TS 194 a gateway for export promotion. Internal audit is well implemented to ensure effective implementation of quality systems and ensure quality products acceptable in international competition.

**HR policy:** Labour welfare policy was redefined. Wages are upgraded regularly to retain skilled employees. Labour health welfare scheme was introduced. Regular medical checkup of employees is done. Incentives schemes are introduced for critical operations and key employees.

**Technology and Plant Layout:** Continuous investment is done in infrastructure and installation of new technologies. New machines are purchased which will provide flexibility in manufacturing. New CNC machines are purchased to take care of variable production order quantities. New product design centre was developed to support production function and optimize utilization of resources. New software for machine design was installed and employees were trained by external experts in the field. ERP system is installed to ensure effective and efficient material and production planning.

**Vendor Development:** Suyog Auto Cast believes in dedicated vendors and company has a policy to provide complete support for up-gradation of vendors. Company provides technical and financial support for dedicated vendors. A lease or Rent arrangement is made for machines and equipments for vendors who cannot invest in assets.

**7.4 Impact of Change Management:**

In year 2004 change process was initiated and focus was to develop diversified skills to support expected growth of organization. As initial reaction the turnover of Bajaj Auto Components was reduced gradually from Rs 18 Crore to Rs 12 Crore from 2004 to 2006. Strategic business units were developed and group turnover increased from 12 Crore in
2006 to Rs 60 Crore in 2013. Today company has developed 500 components and added 45 clients. Company has developed a strong export business and contribution of export turnover is 50 percent of Total turnover. 100 percent turn over from Bajaj Auto in 2004 is reduced to 30 percent in 2013. With the diversification in manufacturing activity the Impact of automobile recession on company is drastically reduced. Today Suyog Auto cast have clients from US, Germany, Australia, France, Italy and China. Company is successful to develop versatile manufacturing competency and is able to serve customers from different industrial sector. In 2012 Company have invested Rs 5 Core in fully automated aluminium pressure die casting plant. This plant will be operational in July 2013 and it is expected that the group turnover will cross Rs 100 Crore by 2016.

Company has done investment in training and development of employees but retention of skill employees is a concern for organization.

7.5 Observations

1. Suyog Auto Cast is very successful in creating a change by using a turnaround strategy. The over dependence on one client is drastically reduced by adding additional 45 clients.

2. The impact of business fluctuations in Indian business environment is well reduced by creating well established export market

3. Company is successful in developing versatile manufacturing competency and is able to cater demands of different industrial sectors. More than 500 components and components from more than 8 industrial sectors is a commendable achievement.

4. Company’s policy to recruit experienced and retired people as mentors for junior managers has produced fantastic results.

5. Use of professional market research services, development of quality system and TS 194 certification are key drivers of success for company.

Suyog Auto Cast has taken strategic decisions for turnaround strategy and create a change Management process for desired goals of the organization. Company has worked on various activities simultaneously and these processes can be well examined by application of Value Chain Analysis approach. Value chain Analysis is a strategic tool used to derive the expected value addition of different functions in organizations. The value adding elements are normally grouped into Primary Value Adding Functions and Support Functions. Primary functions are Inbound Logistics, Operations, Outbound logistics, Marketing and Sales, service. The support functions are Procurement, Technology Development, Human Resource and Infrastructure.

Figure C-7.2: Suyog Auto Cast Value Chain

<table>
<thead>
<tr>
<th>Suyog Auto Cast Value Chain</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Primary Value Chain elements which have created impact on business</strong></td>
</tr>
<tr>
<td><strong>Research and Design:</strong> Company has invested in New software for design and development of products. Experts from industry are recruited as mentors for junior In house design of tools, fixtures and gauges</td>
</tr>
<tr>
<td><strong>Operations:</strong> New machines are purchased for diversified manufacturing activities. End to end solutions with supply of complete component with material Flexibility to match batch to mass production customer demand.</td>
</tr>
<tr>
<td><strong>Support Function Value Chain elements which have created impact on business</strong></td>
</tr>
<tr>
<td><strong>Procurement:</strong> Company is providing financial and technical support for dedicated vendors. Major thrust is purchase of raw material rather than components. Sub contract is done on labour cost basis, Raw material is supplied to vendors.</td>
</tr>
<tr>
<td><strong>Technology Development:</strong> Competency in manufacturing for different industrial sector. Advance machinery and quality system. TS 194 certification Application of ERP for material and production planning Versatile manufacturing processes</td>
</tr>
<tr>
<td>Distribution:</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td>Supply is directly to product manufacturing companies. No need of distribution channel. Only B to B distribution.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Marketing and Sales:</th>
<th>Infrastructure:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of market research to create export market.</td>
<td>Investment in building, New plant layout, new equipments and technologies, material handling equipments.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>After sales service is not required is only components are manufactured and sold to product companies.</td>
<td></td>
</tr>
<tr>
<td>Replacement of defective components.</td>
<td></td>
</tr>
</tbody>
</table>

### 7.7 Conclusions:

Suyog Auto Cast as taken positively the threat created by Bajaj Auto for supply of components. This has changed the management approach for business. The perceived crisis arising from complete dependence on one customer and one product line was well addressed by company. A positive approach to accept the challenge is a well learned lesson for other companies also. Using technical and manufacturing capabilities, on the job work experience of promoters has created a real change in the organization. Creating a change environment and achieving a change in medium scale company where resources are always short is commendable job.
Product diversification, Industry sector diversification, product resources diversification and creating a right team to handle change are the extra-ordinary achievements of the company. Companies projected growth in coming years to cross a turnover of Rs 100 Crore will be certainly achieved with qualities of leadership of Suyog Auto.
8 Victor Gaskets

8.1 Company Profile, Anad Group

Victor Gaskets is one of the group companies of Anand Group. Anad Group is Industry leader in Automotive Solutions in India. 21 longstanding Global Partnerships. 15 Joint Ventures. 6 Technical Collaborations. 19 Companies. 49 locations. 13000 people.

Provider of the widest range of solutions to the Indian Automotive Industry. Anand is among India's leading manufacturers of Automotive Systems and Components making it the country’s leading OEM supplier. Anand has a major presence in the Indian Aftermarket as well, with some of its major brands being Market Leaders, The group supplies to every major vehicle and engine manufacturer in the country.

An Industry leader in automotive solutions, the group recorded a sales turnover of INR 52.5 Billion in 2012, targeting to achieve INR 100 Billion by 2015. Today, with nineteen companies spread across 49 locations and 11 states of the country, Anand also has a business vertical operating in the area of Luxury Hotels. Anand has built up a sizable export market, currently about 13 percent of the total sales of existing products but targeted to reach 30 percent over the next few years.

The group has provided a number of technology firsts to the Indian Automotive Industry over the six decades of its existence starting with being the pioneer of Ride Control products in the country.

8.2 Victor Gasket

Victor gaskets is Rs 80 Crore turnover company. Company manufactures 4000 varieties of sealing products used in almost all vehicles manufactured in India. It operates as OEM supplier for vehicle manufacturers and after market for vehicle servicing centers.

As a leading supplier of high quality Engine Sealing products, Victor Gaskets India became the country’s first asbestos-free Gaskets Company when it led the way in eliminating the use of asbestos from the Gasket manufacturing process. Victor
manufacture a wide range of Heat shields and Gaskets for a variety of applications - automotive, industrial, agricultural, refrigeration, compressors and stationary engines.

Victor Gaskets India ranks among the best-known names in India's engine component industry and is recognized as a high quality sealing technology supplier to both the Original Equipment Manufacturers as well as the Replacement market in India and abroad. Products are marketed under the brand names of ‘iSEAL’ and ‘Victor’.

**Large number of patented products**

Known for the quality of products, Victor has developed a number of patented products indigenously over the years, specially designed and developed in line with customer requirements.

### 8.3 Organization Chart

*Figure C-8.1 Victor Gasket Organization Chart*
8.4.1 Crisis Faced by Company

From year 2002 to 2006, company was under growth stage and variety products were developed for Indian automobile Companies. After 2007, Global auto giants started their operations in India and offered accelerated growth to victor Gasket. Product varieties were increased drastically and it became a serious problem to manage inventories and production schedules to take care of all customers.

Impact of business environment:

Company faced difficulties in production planning of large varieties and maintain delivery schedules for these orders.

8.4.2 Crisis Perceived:

- Servicing of after markets.
- Reducing through put time for deliveries in after sales market.
- Developing long term relations in after sales market.
- To improve operating efficiency to international bench mark of 90 percent.

8.5 Crisis Management Approach:

Anand Group and Victor Gasket strongly believe, mistrust in supply chain and artificial internal breaks in systems are the root cause of internal crisis. If these causes are not handled or addressed properly, they could lead to serious crisis. These causes are opportunities to break the barriers of communication in teams and the stepping stones for future growth of company.

During the times of recession, management simply have focus to ensure top line and bottom line. Cost reduction, material optimization, identification, and elimination of non-value adding elements and wastages, help to reduce loss in profit. It creates a shock absorption mechanism and creates a foundation for strong growth.

Company use ‘MOST’ technique for standardization of work.
Learning Attitude:

1. Victor Gaskets manufacture 4000 varieties of products to cater the requirements of automotive manufacturers and automotive service centres located all over the country. Quantity requirements are varying as low as 20 to as high as 20,000 in a particular production cycle. Inventory Management was a serious issue for company. Victor gaskets came out with an innovative approach and they visited various retail chains to study their inventory management process. Inputs from retail chains were practically converted to manage huge varieties of gaskets.

2. Servicing after sales market is a major business area for Victor Gaskets. The servicing time was as high as 52 days for the end user and they were building the inventories to take care of erratic supply from Victor Gaskets. To handle this issue company came out with innovative idea and discussed with various media channels how they capture any event in India within an hour of happening of the event. With lot of discussions and brain storming sessions, Victor Gasket came out with a software development proposal for communication with after sales market consumers. The new software is in place and automobile service centres can submit their requirements through mobile applications. This communications are linked to company’s system to collect the various requirements from the different parts of country. This mobile order processing has reduced the servicing time for customers and there is a drastic reduction of through-put time from 52 days to 12 days.

3. After reduction in through put time for after sales market, company is helping these consumers to reduce their inventories in stores and release their working capital for other productive use. This inventory reduction at consumers end is creating a long term relation with after sales market consumers. Victor Gasket Brand is enhanced in market. Company discuss with customer their consumption pattern for optimum inventories and plan for production schedules.
Employee Empowerment:
Victor gasket has different approaches for crisis management.

- **CFT Mechanism**: Problems at corporate levels are handled by formation of a Cross Functional Team (CFT) mechanism. Functional experts come together and form a team. Regular meetings are conducted for containment of crisis. Analysis of the problem is done by various analytical tools, techniques and models. Detail discussion is done with application of strategic tools and models. Brain storming sessions are conducted. Detailed recording of every meeting is done. The records include the various views discussed, the techniques, tools and model used for addressing the correct issue and the outcome of this exercise. These records are used to master the skills of using various tools and techniques, methodologies to solve the problem. These documents are used as reference material for various in-house trainings for employees.

- **War Room**: To address the problems related with production plan and customer requirements, customer complaints, every morning at predefined time, all functional heads come together in a War Room Meeting. War Room meeting have a focus on process rather than a person. The transparency is maintained in the meeting. Various issues addressed are noted down and priorities are fixed with assigned responsibilities for resolution of problem. Focus is on settling the issue and action plan is prepared. For the problem of serious nature, detailed ‘Why Why’ analysis is done.

Continuous Learning and Practicing Innovations:
‘Orbit shifting Innovation’ Frame work is a long term learning process to master the skills of innovation. Victor Gasket is continuously investing in this training module for employee empowerment. The Industrial experts in Innovation conduct regular training sessions at all levels in the organization. This model has a capacity to change the attitude of the employees, change the way they think and change the behaviour they behave. Experts believe that, if genuine efforts are done to work on this model, it is a game changer in the industry. People who say ‘I Can’t’ are changed to ‘Yes I Can’. Victor Gaskets have experienced a noticeable change in employee’s behaviour and their
willingness to contribute for excellence in performance. Company has achieved benchmarking performance of 90 percent efficiency of production resources with involvement of employees.

Figure C-8.2 Orbit Shifting Innovation

As a part of employee empowerment and continuous improvement, innovation methodologies are practiced in company. Some of the techniques used are

- Externalization to internalization: What I could have done in the situation.
- Challenging the fundamental and boundaries: The way things are done and why the way things are done.

Developing innovation culture is not an easy task. To cultivate innovation a separate model is used by Victor Gasket.

**8.6 Observations:**

- Company is practising employee empowerment and continuous training at all levels in the organization.
- CFT is a standard approach in various organizations. The innovative way is to use various decision models, record the details of meetings, and use the records as a reference material for further trainings.
- War room meeting and focus on purpose and process rather than person is difficult to practice. Normal experience is avoiding the responsibility by giving new excuses every time. Everybody expects someone else should shoulder the responsibility.
- Working on long term innovation models is a tedious job. Making it interesting for employees is a tough job.

**8.7 Analysis of Decision:**

Employee empowerment and creating a team is long term approach. This approach works normally when there are loyal employees and who are engaged for longer duration with the company. People who have witnessed the growth of company normally easily accept the change and support the company. Continuous training and practicing innovation may seem initially a costly affair but in longer run it will generate sustainable benefits for organization. There may a hurdle to mould a new employee in ‘Innovation’ culture of the organization. It may create some mental blocks for realignment of new employee and probably HR will need more efforts to mould him.

Learning from non related companies and extrapolation of their best practices for the company is a new approach, which has generated fabulous results for the company. The
leadership plays a vital role in adopting these approaches to achieve long-term goals of the company.

**8.8 Conclusion:**
Victor Gasket has demonstrated application of trust in people for long-term growth and increase in top and bottom lines of company. Reduction of throughput time for after markets from 52 days to 12 days and increasing the production efficiency to international benchmark of 90 percent efficiency are the real long-term benefits generated for organization. Company’s employee empowerment and ‘innovation’ culture has truly worked for the organization. This also shows commitment of top bosses towards creating “Innovation” culture in organization.
9. Wadhokar Group of Companies

9.1 Company profile:

Wadhokar group of companies is supplier of various press and fabricated components for Tata Motors. This group was started by Dattatraya Wadhokar in 1986-87 with small investments in press machine. Small press components were manufactured and supplied exclusively to Tata Motors. Quality of components and delivery scheduled were adhered even though the simple components were produced.

With growth of Tata Motors, more jobs were offloaded to Wadhokar Group and Wadhokar group started growing. Today there are 13 companies under the group. The expansion is done only in related business. Expansion is done by acquiring some small units operating in Chinchwad MIDC and new units are started by doing investments from internal accruals only.

Group has manufacturing units at Pune, Lucknow, Jamshedpur and Dharwad to supply components for Tata Motors. All units under the group are started by involving family members.

This is a family owned business, grown from Rs 64 Crore Turnover Company in 2001 to Rs 450 Crore Turnover Company in 2012. Company’s turnover has fluctuations in-line with Tata Motors Business Cycle.

9.2 Product Portfolio:

Group as a policy, manufactures exclusively for Tata Motors. 750 varieties of press components are manufactured and supplied to all plants of Tata Motors practically for all products of Tata Motors. The components manufactured are primarily low technology and semi skilled or unskilled labour jobs. Majority of the components are finish products and directly used for vehicle assembly. Product portfolio includes a small business from Piagio, Force Motors and LG Electronics for plastic moulded components.

Group is self certified vendor and enjoys special payment terms of 30 days from Tata Motors.
9.3 Organization Structure:

Group has a simple organization structure. Corporate office controls all administrative departments including Business development, Human Resource, Purchase and Accounts. Plant heads are responsible for production and quality and distribution functions. Corporate office conducts weekly meetings with unit heads for next week production schedule and reporting of current activities. Continuous and close monitoring for group activities is a part of corporate policy.

Figure C-9.1 Wadhokar Group of Companies Organization chart

9.4 Crises Perceived by Group:

- Group manufacturing focus is on simple and low technology jobs. Simple and low technology jobs have low profit margins. Desired profit is always a concern.

- Manufacturing costs are increasing every year because of inflation but the margins are not increased in same proportion. There is always a pressure on cost reduction to achieve desired profits
- Low margins cannot absorb cost of financing and debt finance is a costly affair. Low cost financing is a concern.

- Growth and investments are only through internal accruals. Growth rate may not match industry expectations and new opportunities are lost.

**Impact of business environment:**

Material cost control is always a pressure, Managing financial resources and retaining people is crucial part of the business.

**9.5 Crisis Management Approach**

**Cost Reduction:** Company strongly believes in cost reduction to compensate the inflation to achieve desired profitability Cost reduction is done through various techniques.

- Quality improvement programs are practiced by providing continuous training to employees. TPM culture is being developed and implemented to reduce rejections. Focus is always on self certification to ensure long-term relations with customer.

- Material Cost reduction is an important factor for the company. Material cost contributes 50 percent to 55 percent in press components. Increased material prices create pressure on margins. Group has entered a tri-party agreement with material suppliers and Tata Motors. Company follows a practice of three months forward contracts for supply of material as per production schedule at all production units. This has helped to improve material quality and reduced rejections and indirect contribution to bottom line.

- Material is procured in desired size in coil form and is cut to required size for optimum utilization.

- Group is doing continuous efforts to reduce scrap. Offcuts in process are used for manufacturing small components. Scarp generation is reduced and input material
cost is reduced. Because of quality of input material, there is better realization for disposal of scrap.

- To reduce administrative cost, Purchase, Accounts, Human Resource functions are controlled by corporate office. Centralized material purchase generates quantity buying advantage with better payment terms.

- For better production control and utilization of capacity, all units have unique products and duplication of production is avoided. Entire requirement for a specific component will be manufactured in one of the units and supplied to all locations of Tata Motors.

**Investment Policy:** Group focus is on simple and low technology components. Considering the market requirements and cost reduction in manufacturing cost, group has started investments in more sophisticated equipments which will improve productivity and add value to customer in-terms of delivery and quality. New generation in management is accepting some business risk for faster growth and market opportunities.

**Finance Management:** Because of low margins on components, group cannot afford high cost of capital. Group is very conservative on cost of capital and application of funds. All investments are done through internal accruals and debt financing is avoided. Group is debt free group. Group has special payment terms of 30 days credit accepted by Tata Motors, provides a strong financial support. Group has successfully linked all payments with cash inflow cycles. Cash inflow and outflow cycles are synchronized with consistent support from Tata Motors. Working capital finance is done by taking loan against fixed deposits with the banks to reduce cost of working capital.

**Human Resource policy:** Employee satisfaction and welfare is a guiding principle of Wadhokar Group of Companies. Group has following guidelines for all units under group, and thrust is given for compliance of these guidelines.

- No union in the group. Major work force is contract labour.
- All facilities for contract workers such as safety shoes, uniform, medical checkup, canteen, Providend Fund, ESI, General Insurance with Mediclaim policy, Annual Bonus

- Wage rates above the industry prevailing rates.

- Wage revision every three years, payment of salary on 1st of every month.

- 100 percent fulfillment of statutory requirements. Group ensures benefits are received by all employees. Group ensures monthly payment of PF and other benefits to all employees. It is compulsion for contractors to deposit money in their contract employee accounts. Contractor payments are released only after verification of all statutory compliance.

- In case of emergency, group offers interest free Rs 1 Lakh personal loan, to all employees.

- Duty hours 8+4, 4 hours overtime with double payments as per law.

**9.6 Observations:**

Group is conservative in nature and avoids adventures in business. Growth of company fully depends upon support from Tata Motors. A very conservative approach may have lost potential growth opportunities offered by market. Company’s focus on cost reduction and employee welfare is supporting the business management. There will be a time when customers will pressurize to change a conservative approach and be aggressive in business development. That will be a real test for Group for survival.

**9.7 Analysis of Decisions:**

Crisis management approach of group can be well studied by performing SWOT analysis for the group.
**Figure C-9.2** Wadhokar Group of Companies SWOT Analysis

<table>
<thead>
<tr>
<th>SWOT Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S - Strengths</strong></td>
</tr>
<tr>
<td>Group is well aware of their strengths.</td>
</tr>
<tr>
<td>- Self certified vendors</td>
</tr>
<tr>
<td>- Long-term relations with Tata Motors</td>
</tr>
<tr>
<td>- Financial Support from Tata Motors</td>
</tr>
<tr>
<td>- Low cost simple products</td>
</tr>
<tr>
<td>- Debt free company</td>
</tr>
<tr>
<td>- Family owned business for better control</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>O - Opportunities</strong></th>
<th><strong>T - Threats</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities available for group</td>
<td>Self developed threats are</td>
</tr>
<tr>
<td>- Global Automobile companies coming to India</td>
<td>- Negligence in technology advancement</td>
</tr>
<tr>
<td>- Availability of High margin components from these companies.</td>
<td>- Lost growth potential because of conservative approach</td>
</tr>
<tr>
<td>- Exponential growth opportunities with investment in technology</td>
<td>- Limited business potential for simple and low technology components.</td>
</tr>
</tbody>
</table>

### 9.8 Conclusion:

Wadhokar Group has progressed within their technological limits. This growth is possible only because of support from Tata Motors. If Tata Motors is under severe business crisis, they may revive the payment terms for group which is a direct threat for existence of Group. Entire financial planning of group is linked with cash inflows from Tata Motors and there is not a cushion to absorb the shocks if payments are delayed or payment terms are changed. 100 percent compliance to statutory requirements is well thought approach to avoid disturbance in business by the outside government agencies. Labour welfare and better salaries than industry practices is a rare example in family owned businesses when low skilled employees are available at lower costs.

Group is performing well within their preset boundaries, but group can grow faster if they add some aggressive attitude for their business.
10.1 Company Profile:

Kalyani Forge Ltd established in 1979, is one of India's oldest and most established manufacturers of precision forged and machined components. Technical capabilities include hot, warm and cold forgings as well as precision machining. With TS 16949 certified facilities in Pune, India, Kalyani Forge is ideally located near raw material sources as well as the seaport of Mumbai. Customer base includes global leaders in automotive and non automotive segments. With over thirty years of experience and deep technical expertise, Kalyani Forge today provides ‘design-to-launch’ capabilities which are critical for its customer's success. Company has developed an in-house die designing facility to manufacture Dies and Tooling to high levels of accuracy. Company is able to produce complex, critical profile forgings of high accuracy.

Company has consistently managed to be a globally competitive company taking a lead in quality and technology. Company has gained a reputation of being a preferred source of forged and machined components and is a leader in manufacturing of close tolerance precision forgings. Company has constantly innovated in Hot, Warm and Cold forging technology over 30 years.

As an organization company has evolved through continuous innovation and technology tie-ups. In 2011 successfully implemented a partnership with Zenotech, Japan, to increase cold forging expertise. Company has achieved a consistent growth in terms of technological capabilities and sales revenue. Company’s turnover is increased from Rs 54 Crore in 2001 to Rs 280 Crore in 2012.

10.2 Product Portfolio:

The company has developed in-house research activities, achieved marked improvements in design and production technology to specialize in manufacture of a variety of intricate profile forgings such as connecting rods, crank shafts, shifter forks, under brackets, valve rocker arms, rotor claws, tulips, shafts, and kidney gears which find
application in several companies, Front and rear axle parts, Steering parts, Transmission system parts.

### 10.3 Organization Chart.

Company has a simple organization structure. Corporate office controls all administrative departments including Business development, Human Resource, Purchase, Marketing and Accounts. Plant heads are responsible for production and quality and distribution functions.

Company has three divisions, two divisions for forging production and one for machining components. All products are divided into 16 groups and every group is considered as a value stream for company. These 16 value stream are further grouped in three divisions depending upon the nature of products. These value stream managers report to plant head and are responsible for goals and sales targets for the stream. Value stream management and strategic business units are created for effective control and reduction in wastages.

**Figure C-10.1 Kalyani Forge Organization Chart**
10.4 Crisis Perceived:

Kalynai Forge was not experiencing a severe competition in initial years of business. Since 2000 growth opportunities were available because of globalization. These opportunities were coupled with higher customer expectations in terms of quality performance and through put times. Company perceived following crisis to acquire growth potential.

- Increased quality standards and product performance
- Reduction in throughput time
- Capacity expansion associated with return on investments
- Shorter product development cycles.
- Rising costs

Impact of business environment:

- Company made continuous investments in up-gradation of technologies and product design solutions.

10.5 Crisis Management Approach

Manufacturing policy: To satisfy increased customer demands and acquire potential market, Kalyani forge has taken planned action with time bound targets. Some of the major milestones achieved by company are.

- 2010 – Entered into technology transfer alliance with ZenoTech Corp. Japan
- 2007 – Supply of Fully Machined Fracture Split Connecting Rods
- 2006 – Forging and Machining Capacity Expansion
- 2004 – Forging Capacity Expansion
- 2003 – Machining Capacity Expansion
• 2002 – Upgraded Technology for CAD/CAM Facilities
• 2001 – QS 9000 Certification
• 2000 – Acquired Technology for Constant Velocity Joint Parts – Tulips from GKN (UK)

Company has developed an in-house die designing facility to manufacture Dies and Tooling to high levels of accuracy. This supports flexibility in designing, production and reduced design time with improvement in quality. Company is doing consistent efforts to improve installed capacity and set higher targets for performance. Knowledge acquisition through collaborations is another strategy for growth.

The thermal refining of own products is achieved by employing the Continuous Heat Treatment lines equipped with facilities for oil/polymer/water quenching and tempering. For thermal treatment of the ‘Near Net Shape’ products, controlled atmosphere furnaces are installed.

A state of the art phosphating and bonderising facility is installed to take care of special processes that need to be carried out before cold forging operations.

Cost Control Policy: Company has started a change management process to match with customer demands. Identification of non value added activities is ongoing process. Efforts are made to eliminate wastages at all levels. Company is implementing”5S” principles to improve overall productivity of the organization.

As a part of cost control focus, efforts are made to avoid IR problems and expert consultant services are taken as and when required to sort-out the issues. Company has launched profit sharing group incentive scheme to improve productivity of employees.

10.6 Observations:

Kalyani forge is following very generic strategies for growth by capacity expansion and quality improvement programs. Continuous investment is creating a pressure on return on capital employed. Forging industry is capital intensive industry and requires sophisticated
manufacturing equipments. The Die design and manufacturing cost along with toolings is also high. Forging industry requires long term relations with customer and consistency and continuity of demand for faster recovery of investments. Any change in product demand can create non-moving inventories and higher investments in working capital. Product development cycle is comparatively longer as compared to machined components, there are always restrictions on exploring new markets.

10.7 Analysis of Decisions:

Kalyani Forge is following proven strategies of growth and expansion. In line with customer requirements, additional capabilities are developed including design of dies, manufacturing and machining processes to supply complete machined components. Company seems to be rather conservative on decision making and follows safe path. The decisions are taken after lot of precautions to avoid major risks arising out of market fluctuations and dynamic customer requirements.

10.8 Conclusions:

Kalyani forge is very conservative company and follows cautious path for growth. The capital investments in expansion and higher working capital requirements are the major concerns for the company. The varying business demands and product life cycles are basic reasons for reducing return on capital employed and asset utilization. Customer loyalty is a major consideration in forging industry and requires long term commitment from customer. The investments in terms of time and capital are higher in forging industry. Even though operating efficiency is high, short run batches and low production volumes will reduce fixed asset turnover and under recovery of overheads. This may lead to pressure on bottom line for the company.
Gange Group of Companies.

11.1 Company Profile:

Gange pressing ltd was started in 1986 as small press shop for Tata Motors press components. Initially was started as partnership firm and was converted into a Pvt limited firm. Company was exclusively working for stamping and press parts for Tata Motors. Company improved on quality requirements and quantity supplies as per production requirements. Tata Motors started offloading various components as a strategic move to offload low technology and laborious job to small companies in MIDC area. This was an opportunity for various small scale companies in MIDC. Gangae pressings captured this opportunity of guaranteed business from Tata Motors. Company has grown from Rs 100 Crore turnover in 2000 to Rs 425 Crore in 2012.

Owners approached Tata Motors with a proposal for investment in heavy duty press machines if Tata Motors is ready to offload heavy press components. It was an opportunity for Tata Motors to reduce inventories and cost of heavy components used in commercial vehicles. Tata Motors and Gange Pressing came to a joint agreement for offloading of heavy press components. This decision changed life at Gange Pressing and company started growing very fast and earnings increased drastically. Automotive Metal and Poona Tools Pvt ltd, these two companies were acquired by Gange Pressing in 1996 to increase production capacities. Gange became cash rich company in 1996 and reverse brain drain started from Tata Motors to Gange Pressings. People were eager to join Gange Pressing and ready to quit Tata Motors because of pay packages offered by Gange Pressing.

11.2 Product Portfolio:

Company is exclusive supplier of Tata Motors for heavy duty press components and stampings. Company manufactures heavy duty commercial vehicle and passenger car body parts, chassis frame, containers, and other 400 different components for all product varieties for Tata Products. Company is specialized in heavy duty press components and has wide range of press machines ranging from 100 ton capacity to 2,200 ton capacity.
11.3 Organization Structure:

Company has a typical Indian management structure. There are four divisions and each division has a plant head. He reports to corporate. HR and Finance are controlled by corporate office.

Figure C-11.1 Gange Group Organization Chart

11.4 Crisis Perceived

Currently Company is facing following crisis-

- Labour cost reduction
- Financial management
- Working capital management
- Return on investment
- Debt servicing
Company faced severe labour crisis in 1996 and it changed life at Gange Pressings. All union members were suspended from operations. This event created a financial setback to company. Company again recruited contract workers to start normal production. This transition period was of three years and three important productive years were lost. 1996 to 2004 were normal production years and growth was stagnant. In 2004 company made investment for Pantnagar plant in Uttarakhand. Rs 70 Crore from internal accrual were invested. This created a truly financial crisis for company. The project was completed in 2006 and came in operations in 2007. 10 Acres of land was purchased and 3.5 acres are used for construction. Borrowed capital was used to complete project.

**Impact of business environment:**

Increased production requires more working capital and company made arrangements for working capital loan. New investments and loans created financial pressure for company. Debt service ratio became crucial.

**11.5 Crises management Approach:**

**Cost Reduction:**

WC reduction -To reduce working capital requirement, company converted some of the major jobs from bought items to labour subcontracted jobs. It helped to reduce investment in material but at the same time overall profitability of the firm was reduced by 4 percent to 5 percent.

Head count reduction -In depth manpower audit was conducted to reduce head count. Job specifications and job requirements were analyzed. Restructuring of manpower was done. Head count was reduced including high paid top bosses also.

Material cost reduction -Material Cost reduction is an important factor for the company. Material cost contributes 50 percent to 55 percent in press components. Increased material prices create pressure on margins. Group has entered a tri-party agreement with material suppliers and Tata Motors. Company follows a practice of three months forward contracts for supply of material as per production schedule at all production units. This
has helped to improve material quality and reduced rejections and indirect contribution to bottom line

Group is doing continuous efforts to reduce scrap. Offcuts in process are used for manufacturing small components. Scrap generation is reduced and input material cost is reduced. Because of quality of input material, there is better realization for disposal of scrap.

**Financial Restructuring:**

Fixed asset turnover ratio and debt service coverage ratio are two major concerns of the company. Investment of internal accrual in new factory has created fund management crisis for firm. Heavy debts for fixed assets and working capital have increased interest cost for the company. Poor debt service coverage ratio and lower fixed asset turnover ratio has affected credit ratings in financing institutions. Offered lending rates are higher.

**Financial Model:** with help of Tata Motors, company has raised a Letter of Credit (LC) for three month amounting Rs. 25 Crore from bank. Company has a unique model of balancing cost of LC. The material is purchased on credit and Hundi payment is received from Tata Motors. Company discounts the Hundi with Tata Motors for immediate cash and entire cash is reinvested in business to reduce burden of LC. This cycle is followed. Company is trying to create a balance between Hundi and use of LC. Circulation of cash in business is 4 to 5 times in one cycle of LC. End result of this model is company enjoys cash and support of LC. Even after discounting Hundi, there is considerable saving on interest payments for LC. 2 percent to 3 percent interest cost is saved for every cycle of using LC.

**Restructuring of Fixed Assets:** To improve fixed asset turnover ratio, Balance Sheet assets are converted to non Balance Sheet assets. Assets mortgaged with bankers are sold out to leasing firms and are converted into operating lease for seven years. Company has taken a bank guarantee or operating lease. Funds received from sale of assets, are used for repayment of debts. There is not any production loss, as assets are in factory premises. Company is confident that this scheme will generate cash for operations by reducing debt servicing. It will increase debt servicing coverage ratio and fixed asset turnover ratio. It
will also provide option, to decide the repurchase or disposal of assets at the end of lease period.

**11.6 Observations:**

- Company works only for Tata Motors and entire cash flow management depends upon the support from Tata Motors.

- Heavy duty press machine is added advantage for production capabilities at the same time it require huge investments

- Use of internal accruals for business expansion has created pressure for financial management.

- Green field project started at Pantnagar was beyond financial capabilities. Of the firm. Being dependent on Tata Motors, it was compulsion for Gange pressings to adopt Wagon Development Strategy for sustenance of business.

**11.7 Analysis of Decisions:**

Complete dependence on Tata Motors has given benefits as well as limitations for Gange group of Companies. There is limited scope for cost reduction and savings through process improvements in press components. Company’s profitability depends upon financial management skills and effectiveness in restructuring sources and application of funds. Cost of financing is higher than offered to other companies and it creates pressure on bottom line. It will take some time to realize actual benefits after restructuring the finance. Major risk in optimizing the LC and Hundi payment model is delayed payment by Tata Motors and failure to revive LC on scheduled date. The failure may create another financial trap for the company.

Group was cash rich and there was unanticipated labour crisis in the company. Group was not prepared for managing labour crisis and it has created major setback for company.

From the situation it looks like that company’s approach is reactive rather than proactive.
Restructuring of assets may compensate the risk involved in balancing Hundi and LC interest cost. It will help to improve cash flow for the group.

11.8 Conclusions:

Company needs to be more proactive and anticipate the crisis. Group has very little scope for process improvements and labour cost reductions. Group is trying to generate a sum of cash benefit by adding savings in interest cost of financing for fixed assets and working capital by doing financial restructuring. The final tradeoff between compromise on profitability by converting bought-out items to labour cost and benefits derived from financial modeling is a key for success in long term. Current solutions are of short term in nature and there should be serious thought for long term financial planning. Company should work seriously on exploring market opportunities other than Tata Motors. Improvement in credit rating and improving debt service coverage ratio may give relief in-terms of cost of financing but it may not add fuel for long-term growth of the group.
12.1 Company Profile:

Radheya machining limited was started as green field project in 2001 having a specific focus on machined components for various automobile engines. The proprietors of company have vast on the job work experience and technical capabilities and expertise in machining processes used for critical component manufacturing. They decided to explore their technical expertise to start the venture and Radheya Machining Limited was started. In the early phases of business, focus was on manufacturing of critical engine parts and gear transmission systems.

Company has a philosophy to accept difficulties of the customer and produce quality products. Company is consistently working on this guideline and has successfully developed various product lines. A small company started in 2001 has now four manufacturing units located in Pune, Nagar and Solapur. Radheya Machining limited followed a planned growth plan with specialization in critical machining processes with higher quality standards. Company has invested in developing complete manufacturing facilities including Coordinate Measuring Machine (CMM) a computerized measuring instrument.

Radheya has machining capabilities and are used for diversified critical product manufacturing. The technical capabilities are used to manufacture wide variety of engine components, used in automobile, stationary engines, tractors, generators, special vehicles. Company has diversified production facilities and has four manufacturing divisions. Company has grown from a green field project to a complete machining solution provider of having annual turnover of Rs. 140 Crore in a short span of 12 years. Since inception company is growing at 40 percent CAGR. Company’s growth is restricted because of three business cycle slow down and short supply of adequate sources of fund.

Company has created a vision to change over from additive model to multiplicative model and has a target turnover of Rs. 1000 Crore in next five years. Company has vision
for growth of connecting rod division from 20,000 units to 1,00,000 units per annum. Company has mission of developing a business as low cost but perfect and reliable solution provider for manufacturing difficulties of customers.

12.2 Product portfolio:

Radhey Machining limited is using full machining excellence in manufacturing various engine and transmission parts such as all types of Gears, Gear shafts, Crank shafts, connecting rods, Main shafts, Engine valves, Hydraulic and water pump valves, Non Auto and non engine components etc.

12.3 Organization Structure:

Radhey Machining has simple organization structure. Corporate office takes care of finance, Business development and recruitment. Plant heads report to corporate office and are responsible for production and distribution of components as per production schedule to customers.

Figure C-12.1 Radhey Machining Ltd Organization chart
12.4.1 Crises Faced by Company

Since formation of Company, it has faced two major economic downturn cycles in 2002-2003 and 2008-2009. During these years customers were asking for cost reductions and cost saving. Company faced a crisis for cost reduction proposals given by key customers. Critical component were opportunities but supply chain was a crisis.

Impact of business environment:

Company invested in backward integration and introduced forging manufacturing. With forward integration a supply chain company with own transportation fleet was started to improve deliveries.

12.4.2 Crises Perceived:

Company strongly believes that crises are created because of failure to explore the capabilities.

- Market is unlimited, crisis is failure to capture opportunities
- Customers have difficulties, crisis is failure to provide solutions to these difficulties
- Customer should be satisfied. Crisis is failure in supply chain
- Customer is in hurry, crisis is delay in creating customer support initiatives.
- People are assets, crisis is failure to create net worth out of it
- Business requires market and finance, crisis is shortfall of both.

12.5 Crisis Management Approach:

Company strongly believes in following business principles

- Take difficulties of customers
- Work with customer to resolve his crisis
- Work together and grow with customer and competitor
• No Boughtouts in organization

**Industrial Relations policy:** Company is firm and against of any Labour Union activity in all plants. In November 2012, there was a strike by union members and as a corrective action; all union members are terminated from the employment. Management strongly believes that union leaders are hurdles in employee’s personal growth and indirectly growth of organization. Gates are open to all employees to rejoin the organization only if they stop union activity. Company’s firm stand has worked and 50 percent of employees **have agreed to stop union activity and have rejoined the organization.**

**Human Resource policy:** company consistently follows the principle, “No Boughtouts” in recruitment also. Management have a strong focus on development of unskilled or semiskilled employees through on the job training, classroom training and prepare them for shouldering higher responsibilities. Company gives higher weightage for longer service and learning attitude. All supervisors are developed from machine operators and are working as group leaders for various production lines. Company doesn’t recruit a readymade person for higher posts. Senior people recruited at managerial positions have a specific role as a mentor and guide to develop people in the organization. Company believes in creating DNA for organization rather than individual. There are separate defined career paths for engineers and machine operators. Company follows annual salary increment policy for all employees.

Complete solution provider: As a principle “No boughtout” company has added all support functions as shown in figure.

Radheya Machining limited has added all support functions to become a cost effective and complete solution provider. The support system includes the ERP development team and transportation flit for product supply also. All IT systems are in-house developments. Benefits derived are; system integration is very fast and specific to business requirements. It is cost effective and reliable solution.
12.6 Observations:

- Radheya machining limited has focus on critical machining components and developed capacities in manufacturing components for all types of engines.
- Related diversification is done for captive consumptions only
- Cost control and cost reduction is a major focus
- Up-gradation of technology is a continuous focus.

12.7 Analysis of Decisions:

Radheya machining limited has focus on continuous and fast track growth. Company has changed philosophy from additive model to multiplicative model. Focus on exponential growth will always create a financial crisis. There will be always a negative gap for the requirements of funds and sources of funds. Company’s ‘no boughtouts’ policy requires more investments in terms of resources considering future expansion plans. There will be always unutilized capacities and pressure on recruitment and development of required skills. On the job skill development program may not catch the speed of growth and at
certain time there will be a threshold point for company and will create serious issue for company. Manufacturing capabilities developed for captive consumption cannot grow as independent organizations because of shortfall working capital.

Having ERP capabilities and logistics solution really provides a cost effective advantage in-terms of time and money. Systems can be more effective and complete aligned with business requirements. Company’s tough and firm stand on labour union activities is a short term loss but long term win-win situation for employees and organization. On the job training and skills development program will increase attrition rate because of potential opportunities available in same industry sector for skill employees.

**12.8 Conclusions:**

Developing manufacturing capabilities for critical machined components requires strong process controls to minimize the wastages and reduction of overheads. Machining processes require process controls to avert in-process rejections. Machining companies are capital intensive companies and working capital requirement is also high. Working capital is required for various consumables like cutting tools, measuring instruments, coolants, oils, cleaning materials etc. It requires additional manpower for quality assurance and system developments. Machining activity demands recruitment of technically qualified people who can operate various machines. Winning a customer confidence is a lengthy and time consuming process. Major productive time is invested in trial run of small batches for approval from customer.

The peculiar characteristics of machining factory has inbuilt slow growth rates because of requirement larger investments in lateral activities. Radheya machining limited is facing a resources gap crisis between opportunities available and potential to grab the opportunities. No boughtouts philosophy will create certain restrictions for growth and prime machining business will face a financial crisis. Company should think about tradeoff between investments in backward integrations and the growth opportunity lost because of shortfall of working capital for machining business.
Flash Electronics

13.1: Company Profile

Established in 1989, Flash Electronics is at the forefront of cutting-edge technology in the automotive industry.

Flash Electronics promises excellence in service and quality product for every customer, and has earned the reputation for reliability and is proud to have esteemed customers in the global automotive industry like Bajaj Auto, Bosch, Dell’Orto, Honda, Renault, Tata Motors etc.

Flash is the First Indian SME in Automotive Electrical & Electronics to get R&D House Recognition from the Ministry of Science and Technology, Government of India. Flash was awarded Emerging India award in 2010 for best Indian Engineering SME Company.

Flash has grown in the automotive parts sector as a total service provider and have two major technical collaborations with Novotechnik, Germany and SonceBoz, Switzerland.

Core competencies consist of development and production of automotive electrical and electronic products. With focus on innovation, Flash believes in building brand as best in class and quality, and exceptional service is key to success.

Up to 2006 Company was operating in Delhi. In 2006 Bajaj Auto gave offer for product vendor development as OEM supplier for various electronics items used in motorcycles. Condition was to start manufacturing unit in Bajaj Auto Cluster in Chakan MIDC. Offer was accepted by company and Chakan Plant was started. Company was having a turnover of Rs 50 Crore in 2006 and has crossed Rs 400 Crore in 2012. Since 2006 company has achieved 25 percent CAGR. Chakan plant was started as venture capital with SIDBI having 20-80 investment ratio.
13.2 Product Portfolio:

Company has developed product portfolio for all type of vehicle ranging from Two and Three wheelers, Passenger cars, Light commercial vehicles and heavy commercial vehicles. Product range include Starter Motors, Magneto Assembly, Ignition Coils, Spark Plug Caps, Line Actuator, Thermostat, Sensors, CDI, Flashers, LED Modules, Wiper Motors, EGR Valves, Alternators, Regulators.

13.3 Organization chart:

Company has simple organization structure and has completely demarked the authorities and responsibilities of various functional heads in all plants. Company has 4 plants, 3 located in Faridabad and Haryana and one in Chakan. Company has three distinguished functions, Business development, Research and Development, Product support.

*Figure C-13.1 Flash Electronic Organization Chart*
13.4: Crisis Faced by Company:

In year 2006, A green field project started for Bajaj Auto Limited and requirements were high volumes of production with certified quality. There was urgency for Bajaj auto for starting production and supply of high volumes. This growth opportunity was coupled with various crises. Crisis faced during initial years 2006 to 2009 by company are

- Product development
- Establishing production processes for mass volume production as per Bajaj Auto Requirements.
- Perfect Quality systems for defect free products.
- Recruitment and retention, current labour turnover is approximately 25 percent to 30 percent because of opportunities available for experience people in same industry belt.

Impact of business environment:

Company has to recruit people at higher costs and pay additional incentives for development of products. Company implemented TQM to improve quality of product. Employee development drive was a must to achieve higher efficiencies.

13.5 Crisis Management Approach:

Manufacturing policy: Bajaj auto was on fast track of transformation from scooter manufacturing company to motorcycle manufacturing company. Reliable and quality vendor development was a crisis for Bajaj Auto. This crisis generated an opportunity for Flash Electronics. The production requirements given by Bajaj were,

- Magneto assembly for all variants of motorcycles
- Starter Motors for all motorcycles
- Wiper motor for three wheelers, 25,000 units per month
- CDI units 50,000 per month
- Ignition coils and flashers 1,00,000 units per month.
- Spark Plug caps 1,00,000 units per month.

Flash Electronics accepted these production challenges with opportunities for long term sustainable business. New investments were done with financial restructuring. Finance was taken from ICICI bank an aggressive bank. Cost of finance was high but availability was easy. Company installed state of the art manufacturing facilities to achieve desired production targets.

Starter motors for Motorcycles was new business opportunity to fetch premium in two wheeler segment. Wiper motors for three wheelers was a challenging product development and it opened new business options for Flash Electronics. With production capabilities for high volumes, company gained business from Mahindra two wheelers, Greaves and Piagio for three wheelers, Royal Enfield for starter motors.

**Customer Retention Policy:** The business from other customers is not in volumes as compared to Bajaj Auto, but Flash also accept lower production levels to retain customers for long term relations. There are resistances from production lines for small orders to avoid frequent change in production setups, but issues are managed with transparent communication. Flash electronics follow a policy of customer retention rather than concentration on only dedicated customers.

**International Customers:** Company is doing continuous efforts to have international tie-ups for product up-gradation. To maintain these relations, offers with very low product volumes are accepted and delivered. Flash electronics also accept challenges of doing risky businesses for international clients. Some German clients route their business to Iran through Flash Electronics and company earns a premium on this. This also creates international standing and global partnership for long term business development.

**Quality Policy:** A high volume with quality was a real challenge. Electronic components cannot be reworked. In-process quality assurance is of prime importance in electronic component manufacturing industry. Company has implemented TPM and continuous
improvement work culture to achieve desired quality standards. On the job training, classroom training is ongoing activity in Flash. Customer complaints are addressed immediately. Strong Research and development support is an added advantage for Flash electronics.

**HR Policy:** In the initial phase of green field project, recruitment and selection of skilled people was a major concern. Company recruited employees at higher salaries for faster development expected by Bajaj Auto. Large investments were done for product development and training for employees. Company has a professional approach and complete demarcation of roles and responsibilities at various levels. Company is doing improvements in HR policy to reduce labour turnover. This labour turnover has reduced salary packages for new recruits as compared to initial development phase but cost of recruitment and training and development is increased.

**Product diversification:** As a growth strategy Flash electronics have a focused approach on new product development. Company has developed Energy Consumption meters for household applications and started commercial production. Current contribution of this segment is 15 percent of total turnover.

**13.6 Observations:**

- Company has strong research ability which generates diversified business opportunities. Most neglected three wheeler wiper motor segment is developed and acquired by Flash. It has helped company to create confidence in various automotive companies and generated new customers.

- Retention of employees will be ongoing issue for electronics industry and training costs will be higher.

- Quality systems need continuous monitoring and improvements because of specific nature of finish products.
13.7: Analysis of Decisions

Accepting a high volume and low cost product range was a good approach of Flash Electronics. It has created a confidence to manufacture high volume quality products. This is a prerequisite for growth of company in two wheeler automotive segments. This will create business opportunities with other players in two wheeler market segment.

Initial recruitment at higher salary has paid back in-terms of desired production growth and customer satisfaction.

Tapping new business opportunities and handling critical components like three wheeler wiper motors is better growth strategy in electronics component business. An innovation is a key for success in electronics components.

Complete demarcation of authorities and responsibilities avoid personal clashes and ensures smooth functioning with better performance of employees.

13.8 Conclusions:

Flash electronics has taken right decision to materialize the opportunity generated by crisis faced by Bajaj Auto. Strong Research and Development team is added advantage for the company. Today company is well posed with high volume manufacturing capacity, diversified product, a wider product range and fast new product development. These will be selling points for Flash Electronics to capture larger opportunities in global automotive markets.

Company’s approach to retain all customers irrespective of production volumes will help to create a cushion in tough times or slowdowns in economic cycle. Relationship with international partners and providing extended support is an added advantage for the company.

Company will always face shortfall of skill employees because of knowledge gap between academia and industry requirements. These gaps are much wider as in electronics industry as compared to manufacturing industry.
Quality System improvements and employee empowerment will be always stress points for company.
14 Lucas TVS

14.1 Company Profile

The TVS Group traces its origin to a rural transport service, founded in 1911 in Tamil Nadu, India. Today, this renowned business conglomerate remains faithful to its core ideals of trust, values, service and ethics. The TVS Group is India's leading supplier of automotive components and one of the country's most respected business groups. With a combined turnover of more than USD 5 billion, (Rs 30,000 Crore at exchange rate of Rs 60 per US$) the TVS Group employs a total workforce of around 25,000. Charting a steady growth in terms of expansion and diversification, it currently comprises around 43 companies. These companies operate in diverse fields ranging from two-wheeler and automotive component manufacturing to automotive dealerships, finance and electronics. Uniting these multiple businesses is a common ethos of quality, customer service and social responsibility.

Lucas - TVS established in 1961 as a joint venture between Lucas UK and T V Sundram Iyengar & Sons (TVS), India to manufacture Automotive Electrical Systems. Lucas-TVS is the Leader in Auto Electricals in India today with 50 years experience in design and manufacturing. 4 out of 5 vehicles rolled out daily are fitted with Lucas-TVS products.

Lucas TVS group have distinguished product lines, Auto Electricals, Diesel Fuel Injection Equipment, Electronic Ignition System and Lighting systems.

Lucas - TVS is a TS16949 and OHSAS 18001 certified company. Lucas-TVS has bagged the Deming application price in 2004 from the Japanese Union of Scientists and Engineers (JUSE).

14.2 Product Portfolio:11

Company is specialized in auto electrical components and has a wide range of products used by all automobile manufacturers in India. The product range consists of Starter Motors, Wiper Motors, Ignition Systems, Alternators, Gear Reduction Starter Motors,
Power Window Motors, Internal Fan Alternator, Engine Cooling Fan Assembly, Ignition Coils, Blower Motors,

Chakan Plant was started as green field project in 2006 to cater requirements of automobile manufacturers in Pune and also improve after market servicing in Pune. Pune is largest automobile market in India and provides better after sales market opportunity. Company has crossed Rs. 125 Crore turnover in 2012.

14.3 Organization Chart:

Figure C-14.1 Lucas TVS Organization Chart

14.4: Crisis faced by company:

Chakan Plant was started as green field project in 2006. During Initial years of establishment company faced following crises.

1. Inventory Management because of large varieties and low production volumes

2. Quality of the products. Most of assembly are critical and play crucial role in vehicle performance

3. Developing a work culture
4. Servicing of after sales market.

Impact of business environment:

It was important for company to have focused recruitment considering critical assembly requirements of products. Recruitment of technically qualified women was a problem and company adapted on the job training program for these employees. It was necessary to establish quality standards and Kaizen concept is practiced by company. Company developed manufacturing excellence model to achieve higher efficiency.

14.5: Crisis Management Approach:

Inventory Management Policy: Company has installed SAP system for effective inventory management. Efforts are made to ensure adequate inventory at customer levels. Lucas TVS in Pune is assembly shop and all components are outsourced. Company has taken extensive efforts to develop dedicated suppliers with education and technology transfer. Vendor development has provided reduction in lead times and improved inventory management. Company provides extended technical support to upgrade the quality of products at source of manufacturing.

Design Policy: Company has a mission to design, develop and manufacture of Auto Electrical / Electronic products to world class standards at competitive price through applying lean product development.

Quality and Manufacturing Policy: Lucas strongly believes in in-built product quality and makes efforts to achieve quality in every process. Company use JIT and LEAN practices in manufacturing to improve quality standards. Various techniques developed and practiced in company are-

- Flow manufacturing
- Standardized operations
- SMED techniques
- Level Production
- Multi process manning
- TPM
- QA systems supported by Pokayoke, Kanban, Automation.

Company has developed five step manufacturing excellence model for world class quality. Continuous training and updating is done to all employees to develop expertise in using manufacturing excellence model.

Figure C-14.2 Lucas TVS Manufacturing Excellence Model
**HR and Recruitment policy:** Lucas TVS is well known for promoting women employment. In Chakan plant also major thrust is given for women empowerment and providing various job opportunities for technically qualified women. TVS experience at Pondicherry plant about women employment has given better results as compared to men employees.

TVS Lucas products are critical by design and require complete attention and sincerity during all stages of manufacturing to ensure correct quality for each and every product produced. Any small negligence can create severe quality problems.

TVS believes in women employment because women by nature are sincere and follow the perfect systems when they are trained properly. They are methodological and systematic during the processes. Normally they are not negligent towards their job and have positive attitude for completion of their responsibilities. Women are more committed and contributive sincerely. They don’t bypass the systems and use shortcuts to complete their assignments. Women are having as special quality of multitasking abilities and it is proved women can acquire multitasking skills faster than men employees. With this all experiences, unless otherwise demanded, company strongly promote women empowerment in Chakan Plant. Company has developed women supervisory staff to handle specific issues. Company ensures safety during transportation, pickup and drop facility, in all shifts. Special medical care centre is established for women employees. Company also provides mentoring and counseling sessions by calling successful women in the society. Company is facing a retention problem; after marriage of women employee. There is a shortage of technically qualified women to take up the responsibilities. Company provides on the job training to fulfill production requirements.

**14.6 Observations:**

Following are important observations-

- From the initial phases of development of company, management has taken manufacturing excellence as a way of life.
- Manufacturing excellence model is used a path for continuous journey for world class quality standards and customer satisfaction.

- Dedicated vendor development approach is a key success factor for inventory management.

- Belief on women employees and their capabilities is a plus point for company’s uninterrupted production.

14.7 Analysis of Decision:

Manufacturing excellence model should be continuous process. It will require consistent commitment from top management to avoid any deviation from excellence model. It is a long term approach and will require refinement or up-gradation in the model. Company should follow a time bound review mechanism for further modifications or alterations in the model. Employees practicing excellence model should be trained for higher levels of decision making processes.

Women employment certainly generates a quality and sincerity advantage, but at the same time it will add additional recruitment cost. Retention of women employees after their marriage is a major concern.

14.8 Conclusion:

Lucas TVS is practicing learning from previous experiences. The experience in other plants is shared with Chakan Plant to create fast track implementation of quality systems. Introduction of Manufacturing Excellence model from the start of manufacturing activity has helped to develop organization culture and efforts are saved to create a change in a fully operating manufacturing plant. Employees are tuned for new work culture from the day one when they join the organization.

Quality and reliability is ensured in the system by creating atmosphere of manufacturing excellence and vendors are also part of the system. Company demonstrates quality consciousness and takes all actions required for world class quality.
Women employment with specific consideration for quality is a good approach and can be a set example for other companies.
Bosch Chassis Systems Pvt. Ltd

15.1: Company Profile:

Bosch group has various manufacturing units in India. The manufacturing sectors include Automotive Technology, Consumer Goods, Industrial Technology, Energy and Building Technology. Bosch India group turnover is Rs. 12,190 Crore in 2012. Bosch was started in India in 1951; has employees more than 26,000. Group global turnover €52.5 Billion (Rs 3,67,500 Crore at exchange rate of 1 € = 70 Rs.)

Established in 1985, Bosch Chassis Systems India Limited is a subsidiary of the Bosch Group in India. The Bosch Group holds a stake of 98 percent in the company. This company was taken over from Kalyani Brakes. Company purchased entire stake in 2005 and Kalyani Brakes was converted to Bosch Chassis Systems Pvt ltd. Company has achieved a turnover of Rs 484 Crore in 2012.

The Corporate office is in Chakan (near Pune) and the state-of-the-art manufacturing plants are at Chakan and Manesar (near Delhi).

The Chassis Systems, Brakes Division develops and manufactures innovative braking systems for the automotive industry within a global network. As part of the world’s largest independent parts supplier to the automotive industry company offer customers advanced technology, quality and excellent services, all from a single source.

Full Brakes System Competence is strength of Chassis Systems Brakes. It offers all products and services around braking systems. That includes: Noise Vibration And Harshness, Integration Of The Newest Simulation Models, Competence In Hydraulic Braking Systems, Disc Brakes, Rotors, Friction Material and Close Coordination with Brake Modulation Like ABS And ESP.

15.2 Product Portfolio:

12
Business areas include actuation and modulation of the Braking System. The company manufactures products to comply with the stringent requirements of the leading OEMs in the automobile industry as a manufacturer of brakes for 3-wheelers, Passenger Cars, Utility Vehicles, and Light Commercial Vehicles. Company uses its system engineering capabilities to suggest the right kind of brake system for the OEMs.

- Brake modulation like Antilock Braking System (ABS) and Electronic Stability Program (ESP®)
- Passive Safety Systems like Airbag Electronic Control Units (ECUs)
- Driver Assistance Systems
- Solutions for Electric and Hybrid Electric Vehicles
- Hydraulic braking systems: Brake boosters, master cylinders and brake-assistance systems
- Wheel brakes: Disc brakes, drum brakes, parking brakes and rotors

The continual improvement of driving safety and comfort supports company’s aspiration to be the preferred partner of customers.

15.3 Organization chart:

Company has simple organization structure and has completely demarked the authorities and responsibilities of various functional heads in all plants. Company has 10 plants and 7 research centers in India. Bosch India has a hierarchy of managerial levels at all functions in a company. India heads reports to global business heads for all business operations.
15.4.1 Crisis Faced by Company

In 2005, Bosch Chassis Systems purchased entire stake from Kalyani brakes. Kalyani brakes was having Indian Management style of working. Bosch faced a real challenge to install global work standards and processes; develop employee attitude and change work culture to match with global reporting systems.

**Impact of business environment:**

Company is still in the transformation phase of developing work culture matching with global expectations. Training and development efforts are continuous activities. Company is doing lot of expenditure to establish Bosch best practices.

15.4.2 Crises Perceived:
Bosch group globally technology driven Product Company. Company offers innovative solutions to customers and sets a new market trend. Company focus on following crises

- Instantaneous events- temporary break downs in production systems
- Short term crisis – Market fluctuations arriving because of change in consumer demands and business cycles
- Long term crisis – Obsolescence of products and investment arising out of new product developments and technologies available in market.
- Integration of company to group policies and excellence model.

15.5 Crisis Management Approach:

Bosch globally is a system driven system. There are manuals for all business operations, which detailed insight about the systems that are followed globally in all Bosch group companies. There are instruction manuals to perform various business activities in structured way. Bosch Chassis Systems is undergoing a transition phase. Company is passing through phase of implementation of systems and creating a change in work culture to adopt the systems. Company has retained employees from Kalyani Brakes limited. There is vast difference between organization culture of Bosch and Kalyani group. Bosch needs to remould these employees for Bosch Systems.

**Communication policy:** Bosch believes in transparent communication. There are regular meetings at different levels of managements. The minutes of meetings are recorded for all types of meetings. Main agenda of meeting is focus on continuous improvements, identification of potential problems in systems and doing risk analysis for identified problems.

Town hall meeting is a special type of meeting conducted once in a month. This is open meeting and any employee can participate in meeting. This meeting is conducted for open discussions and for direct communication with senior management and employees. Employees are free to put their concerns directly to senior management. All genuine concerns are addressed by management.
**CLT Weekly Meeting:** Central Leadership Team is a concept used in Bosch to handle critical issues. Very few top officials are part of this CLT. They meet weekly to add value by giving different facets about the problem.

**HR Policy:** Company provides continuous training to employees to mould them into systems. Company has competency mapping process at all levels of employees. Skill set requirements at all functional levels are defined. Competency mapping has a focus to identify the existing gaps and knowledge management requirements to reduce these gaps. A systematic approach is defined to fulfill the requirements. Competency mapping is a simple four step model – ‘Define role, Perform Gap Assessment, Reduce Gap by training and development, Fulfill the requirement’

Employee skill matrix is displayed at his work place and updated regularly. This visibility helps management to use available resources efficiently and in the emergency it helps for better solutions to tackle instantaneous events.

**Manufacturing and Quality policy:** Company is system oriented and believes in best practices and excellence in operations. Guidelines and ingredients are driving forces for business for generations. Bosch best production systems are uniform across the group. The best practices of different factories are derived together to ensure quality of products. Continuous improvement in manufacturing processes is ongoing practice.

Company performs regular audit for Excellence model EFQM (European Foundation for Quality Management). EFQM Model consists of

- **Vision** - Long term for Group
- **Mission** - 3 year Milestones
- **Strategy** – Multiple faceted; Leadership, Processes, People, Resources and partnership with society.

**Business Development policy:** Bosch has defined systems for business development.
• Rolling business plan is prepared yearly and two year plan is a guide line. Considering the dynamic market three year guide line plan is now considered for two year. This is very intensive activity and all plant heads are involved to develop a global business plan.

• Deriving market potential and business opportunities is a joint activity done by all groups and divisions. All divisions give their inputs to decide growth and market volume planning for next six months. Business planning is reviewed four times in a year.

• Business continuity plan and risk assessment is a structured process and a rigorous activity. A predefined matrix is used by all functional heads to identify various risk levels and to identify the impact on business plan.

• Flexibility in business plan is developed by considering economic indicators and market indicators.

15.6 Observations:

After takeover of Kalyani Brakes, Bosch Chassis Systems is passing through a transition phase. Bosch is highly system oriented company and it is a time consuming task to change people and make them system oriented. Company believes in technology development, best practices for manufacturing and quality as a brand.

Bosch has a systematic business planning and risk management methodology. Businesses planning as a group activity, add value and perspectives for appropriate decisions. Team efforts, motivation, participation and reactive management are key aspects in transition phase.

15.7 Conclusions:
Bosch is highly system driven group. Company is doing investment to ensure complete implementation of systems. HR policy is guided by systems and is focused on developing system oriented human resource. It takes time to change mindset of a new employee and training cost is added.

Company has systematic business planning process and risk management approach. The group activity ensures flexible business plan to grab maximum market potential and create long-term growth.

Study of economic factors and market indicators, cost controls and tightening the budget control on fixed costs and non-value added items are some of the key performance areas for managers.

Transparency in communication and town hall meeting is a specific approach adopted by Bosch. It helps to create confidence and team building in organization. Recording, updating and communication of skill inventory is an added advantage to manage short term crisis and emergencies in regular production process. It is ready reference for optimum utilization of human resource. This also helps to identify efficient and multitasking people which can be developed for higher responsibilities.
Starting in suburban Mumbai in 1980, in a small 2500 sqm facility, ALF now operates 8 plants across the country. Alf Engineering Pvt Ltd is a leading OEM manufacturer of automotive Chassis, and currently manufactures over 1200 frames/day from its plants across India. Alf Engineering has integrated facilities for the manufacture and assembly of chassis frames. All required fixtures & Tools are developed and produced in house. Currently about 150 variants of chassis are part of the manufacturing mix.

Alf Engineering Pvt Ltd is also making strides in the indigenous design and development of hydroformed components for the automotive industry, and sees this space as an emerging area of strength. A Hydroforming facility is operational at Nasik, with a design centre to support customers in design & development. ALF offers a complete solution in hydroforming, from concept to production and has proven over many development cycles of products for different automotive manufacturers. ALF has a dedicated design center for this purpose in Nasik, and has currently four hydroforming presses ranging from 1000 Ton to 5000 Ton.

ALF also manufacturers and supplies assemblies and parts for suspensions - both front and Rear. They include cradles, control arms & links.

ALF has developed and supplies assemblies and components:

- Mahindra & Mahindra
- Leyland Nissan (new development)
- Tata Motors
- Reva
- Bajaj Auto
- Ford India
- GM India
16.2 Product Portfolio:

Company is specialized in manufacturing of chassis and frames for various vehicles manufactured in India. Company has developed extraordinary fabrication and engineering skills to manufacture heavy duty fabricated parts such as:

Chassis for SUV’s, LCVs, Pickups, 3 Wheeler

Hydroformed Parts including Side Rails, Trailing Arms, Engine Cradles, Rear Cradles . Cross Members

Suspension Assemblies / Parts Upper Control Arms . Lower Control Arms . Links

16.3 Organization chart:

Company has simple organization structure and has completely demarked the authorities and responsibilities of various functional heads in all plants. Company has 9 plants and design center in Nashik. ALF Engineering has a hierarchy of managerial levels at all functions in a company. Plant heads reports to corporate office for all business operations.

Figure C-16.1 ALF Engineering Organization Chart
16.4 Crisis Faced by company:

ALF Engineering is a heavy duty fabrication company and manufacturers primarily chassis for Mahindra vehicles. Chakan plant was started as a green field project in 2008 in Mahindra cluster. Crisis faced by company are:

- Recruitment of employees for heavy duty jobs
- Political interferences in factory operations
- Establishment of product quality and production targets
- Qualification as quality vendor by Mahindra Group.

Impact of business environment:

Company transferred temporary operators from Nashik to Pune to match delivery schedules as per Mahindra expectations. Company paid incentives to operators to work on heavy duty fabrication jobs.

16.5 Crisis Management Approach:

HR Policy: In the initial phases of green field project, company faced a serious problem of employees for heavy duty jobs. There was a shortage of technically qualified welders. Company offered incentives and extra benefits to retain the people for continuous production. It was not possible to complete the production targets as operators from Pune area were not available. Company took a strategic decision to employ people from Nasik plant to Pune Plant. Temporary operators and contract labours working in Nasik plant were asked to work in Pune and company offered them permanent job. Hundred and ten operators were transferred from Nasik to Pune. Company provided complete support for establishment of these operators and their families. Additional incentives were given and overtime is offered to complete the production targets.
Company offers in-depth product training and technology training to all operators. A mandatory training of sixteen hours for every six months is provided to all operators. Continuous communication with operators to impart new skills and improve their skills is ensured. Efforts are made to address their issues at right time.

**Manufacturing and Quality policy:** Company is system oriented and believes in best practices and excellence in operations. In a green field project, efforts are done to install latest technologies and advanced machineries for quality outputs. Installed capacity is of 800 chassis per day and currently operates at 500 chassis per day. A single piece flow concept is established and a production rate of one chassis per six minutes is achieved. For critical operations robots are utilized to ensure welding quality of long run welds. Material handling cranes are provided at every stage to reduce fatigue on operators. Efforts are made continuously for converting manual operations into automated operations.

Company is OEM supplier to Mahindra Group and Mahindra provides extensive technical and system improvement support to ALF Engineering. ALF is part of Mahindra Supplier Evaluation System (MSES), a ranking designed by Mahindra for various suppliers. A score is derived by conducting quality system audit by Mahindra Auditors. A score of 60 percent is a minimum performance level for long term business. Currently ALF has achieved a score of 55 and will achieve the target figure 60 percent in December 2013.

Every morning a meeting is conducted with operators to communicate, various problems observed by customer and concerned people are informed. The recording is done about the problem discussed and the solutions sought. This meeting helps to avoid miscommunications and involves operators for better solutions.

Company has installed online electronic inspection gauges and each component is verified to these gauges. A component must answer the gauge. If any problem is identified, corrective and preventive action is initiated for all other components in production line. Single flow helps company to reduce reworks and rejections in production line.
**Political Interference Management:** In the initial phases of green field project, there was unbearable political interference by the active supporters of various political parties. The pressure was mounted by these supporters for various contracts such as transport, labour supply, canteen, raw material supply. Practically they wanted share in every business activity and they threatened the existence of company. ALF approached Mahindra for their help to sort out the issue. Mahindra production line was also suffering because of these disturbances. Mahindra top management took active part in resolution of crisis and a top level meeting was conducted with Ministers in Maharashtra Government. Government assured full support to industry and the police action was initiated to avert this problem. Party supporters were punished and peace was ensured in the Mahindra cluster.

**16.6 Observations:**

Company has taken a right step to transfer temporary and contract labours from Nasik to Pune. This has helped ALF to minimize the training and development time for new operators recruited from Pune. Company has given full support to employees and established the desired production levels in a short span of time.

ALF is working consistently for quality improvement and customer satisfaction. A complete designing solution has generated results for process improvements.

**16.7 Analysis of decisions:**

Job opportunities available in Nasik as compared to Pune are limited and people accept the opportunity available to them in Nasik. This may be a reason why ALF is not facing labour crisis in Nasik as compared to Pune. A gut fill of ALF to transfer employees from Nasik to Pune is a outcome of job market in Pune and Nasik. ALF is well known company in Nasik and people accept employment easily. A green field project started in Pune, a new establishment in new city, may be another reason for shortage of skilled operators.

Efforts to create transparency in communication with first line operators will pay in long term and major contributions will come from the team. Active participation in Mahindra
Supplier Evaluation System (MSES) has helped to establish process and product quality as desired by Mahindra. Improvements in process is ongoing activity but ALF has demonstrated their strengths in heavy duty fabrication.

16.8 Conclusions:

ALF is heavy duty Fabrication Company and highly labour oriented organization. There are certain limitations for automation of production systems and operator requirement cannot be reduced below certain limits. Employees are always reluctant for heavy duty jobs thus skilled employee shortage will be ongoing crisis for the company. Incentives and overtime wages will be an additional cost for the company. This will reduce a retention cost for ALF in long run. ALF will require a dedicated HR team to motivate people for long-term loyalty of employees. Every occasion it may not be feasible for ALF to recruit people from Nasik and provide support for establishment in Pune. This maybe a costly affair for company.

ALF’s commitment to quality is a must factor for long-term commitment for business from Mahindra Group. Mahindra has provided land to ALF considering their technology and focus on process and product improvement approach. This will generate premiums for ALF in-terms of consistent growth in bottom line and business portfolio.
1 http://www.bharatforge.com/company/kalyani_Lemmerz_ltd.asp
2 http://www.conti-online.com/www/automotive_de_en/
3 http://www.eaton.in/EatonIN/index.htm
4 http://www.autolineind.com/
5 http://www.badvegroup.com/
6 http://www.saint-gobain.co.in/
7 http://www.indiamart.com/suyog-autocast/profile.html
8 http://www.victorgasketsindia.com/
9 http://www.kalyaniforge.co.in/
10 http://www.flashgroup.in/
11 http://www.lucas-tvs.com/
13 http://www.alfengineering.com/