Chapter No. 1

1.0 Introduction:

Business Cycle is a natural phenomenon and ups and downs are of cyclic in nature. Journey through these peaks and troughs is always a challenge. Witnessing the growth and managing the crisis or slowdown is a critical aspect of business and has a major impact on subsequent decision-making process. A business is successful when the journey through these business cycles is with minimum turbulence having in built shock absorption systems. Success or a failure of any business is a function of management capabilities to achieve growth through effective crisis management. Capability to grow and sustain is a function of appropriate decision-making and crisis management approach.

Figure 1.1: Business Cycle

Crisis management is a process, where efforts are made to develop a solution that will reduce the impact of negative factors on business and people involved. It is a process to develop a workable solution with inbuilt action plan. Aim of any crisis management process is to overcome the disastrous impact of unwarranted situation. Crisis is relative to observer. A crisis for one
business unit may be an opportunity for other business unit. During crisis, sometimes management may have a reactive approach and search for quick fix solutions. This approach may give a temporary solution but business needs more proactive approach to design business solutions and overcome the crisis and reinstate business processes and operations.

Following are some of the important questions; one needs to answer to understand crisis management as a systematic process:

1. Is a crisis perception of observer?
2. What is first, decision making or handling the crisis?
3. Do business operations generate signals for unpredicted crisis?
4. Can proactive decisions avert crisis?
5. Is management deficiency a source of crisis?
6. Does a crisis create rebirth of business process?

Decision-making is an ongoing process in business. Decisions within organizations are of two types; regular functional or operational in nature and strategic decisions. Functional and operational level decisions are related with internal environment of business and are of routine in nature, which are delegated to medium level management; whereas strategic decisions are part of corporate function, influenced by external environment of business.

At every level of management, though nature of decisions is different, they are of prime importance for effective and efficient management control having a focus, to contribute for growth of the business. In various management literatures, more emphasis is given on decision making rather than taking accurate decisions. Decision is a collective output of the understanding of situation and relative environment of the situation. Human element plays a key role of fulcrum in decision-making process. Personal ability to understand the business, business environment and capability to correlate decision with expected outcome are important considerations in effective decision process.

Following are some of the important questions; one needs to answer to understand decision making as a subject.

1. Is decision making an individual skill?
2. Can someone develop decision-making ability?
3. What is a quality of decision? Can a methodological approach improve quality of decision?
4. Is it a gut feel or decision support system; which enhance quality of decision?
5. Can a quality of decision be judged unless implemented?

Decisions are required for smooth functioning of the operations. Today, management talks about the proactive approach rather than reactive approach for decisions. Today managers are expected to play a multidimensional role. It is expected, managers will study, evaluate and take decision before the problem arises or intensifies. This process sometimes is called as crisis management.

Decision making in crisis management have a long-term effect on enterprise. Nature of decision will depend upon the severity of the crisis perceived by top management. Perception of management about crisis, and crisis management approach will be reflected in action plan to handle the crisis.

1.1 Rationale and Significance of the study

Understanding of crisis and crisis management process is a focus area of faculty of management. Crisis management through appropriate decisions is an area of expertise expected from today’s new generation managers. Crisis management and systematic approach for quality decisions are two sides of a coin and one cannot study only crisis or only strategic decisions of various organizations. To understand the decision perspective one should look at the backdrop of perceived crisis by decision maker.

Automobile industry is most sensitive to the economic development of the country and more responsive to the business cycles. Business activity of automobile industry is an early signal of change in the trend of business cycles. Experts in the business always study the fluctuations in automobile market segments to capture the feel of economy.

Automobile industry is a key growth driver in any economy. Automobile industry has importance in any economy because of its direct or indirect multiplying effect on various industry segments. Following are some of the examples of industrial sectors, which directly or indirectly depend upon performance of automobile industry.
1. Manufacturing:
   a. Capital Goods, Machine tools,
   b. Small and Medium scale companies
2. Chemical
   a. Petroleum Products, Oils, Lubricants, Chemicals, Paints etc
3. Metals
   a. Steel, Aluminium, Brass, Bronze, Special Alloys, Copper, etc.
4. Leather, Plastics and Rubber
   a. Tyres, Plastic Components, Rubber parts, Dash board components, Seat covers,
5. Electrical and Electronics
   a. Instruments, Lamps, Wiring Harness, Control Panels, Fuel Gauges, Music Systems, Electronic components
6. Services
   a. Financial Services, Insurance, Loans and Advances,
   b. Vehicle Maintenance, Repairs, Garages, Workshops, Machine Maintenance
7. Consultancy Services
   a. Engineering Designs, Drawings, Methods, Tools, Instruments
   b. Quality Management, Recruitment, Training And Developments
8. Other Sectors
9. Information Technology
   a. Hardware Items Used In Industry, Communication Devices
   b. Software Applications, ERP, Database Management
10. Other Services
    a. House Keeping, Transportation, Canteen, hospitality, Tourism

Being automobile industry a key driver in any economy, growth of automobile sector has a major role in economy. Every strategic decision in this sector will have multiple effects in the economy. This repulsive effect needs to be addressed, understood and dealt with critical care approach.
A mass production automobile industry operating in an economy will have both positive and negative effects on economy. A fast growing automobile industry will generate more employment and higher standard of living. At the same time, it may add fuel to inflation in the countries over depending on import of automotive fuels for home consumption. Growth of automobile industry generates multiple capital investments in terms of development of micro, small and medium enterprises working as original equipment manufacturer (OEM) for mass production units. More employment leads to more income and to more consumption and finally economic growth. Vice a versa; more crisis leads to more unemployment to reduced consumptions and finally to negative economic growth.

Automobile Industry is a mass production company. Every product requires few hundreds of components. Automobile companies create the innovations in manufacturing technologies and excellence in manufacturing processes. Considering the number of components handled for a single product, it becomes an impossible task to ensure 100 percent defect free component finally reaching to customer. A small single component failure can create a major crisis for the company and customer as end user of the product. Following are some of the major vehicle recalls for rectification and replacement of defective items assembled in vehicles.

**Following are some of the major vehicle recalls for rectification in last decade.**

A look at some large recalls in the Auto industry:

— Oct. 10, 2012: Toyota announces the largest single recall in its history, 74,30,000 vehicles globally to fix faulty power-window switches that can cause fires.

— April 14, 2011: Ford bows to government pressure and expands a recall of the popular F-150 pickup truck to include almost 12,00,000 vehicles to fix defective air bags.

— Jan. 21, 2010: Toyota announces U.S. recall of 23,00,000 vehicles to fix gas pedals that can stick and cause unintended acceleration. The company ends up recalling more than 14,00,000 cars and trucks globally to fix sticky pedals or floor mats.

— Oct 13, 2009: Ford Motor Co. adds 45,00,000 older-model vehicles to a long list of those recalled due to a defective cruise control switch that can cause fires, pushing Ford's total recall
due to faulty switches to 14,30,000. The series of recalls, which began in 1999, becomes the largest cumulative recall in U.S. history.

— Sept. 29, 2009: Toyota recalls 38,00,000 U.S. vehicles to address problems with a removable floor mat that could interfere with the vehicle's accelerator and cause a crash. Recall is expanded to 43,00,000 vehicles on Nov. 25.

— Aug. 2000: Bridgestone Firestone recalls 65,00,000 tires. At least 271 people are reported killed and hundreds more injured in accidents involving Firestone ATX and AT tires, which were widely used on Ford Explorers. Safety officials discover tires were prone to losing their tread, causing rollovers. Ford separately recalls more than 100,00,000 tires, and the crisis leads to congressional hearings and the passage of the federal TREAD Act in 2000 to spot safety defects earlier.

— March 2004: General Motors recalled 40,00,000 - 2000-2004 pickups worldwide because their tailgates can break without warning. The culprit: common cables that hold the gates in place can corrode or fracture. GM officials say they received reports of 134 injuries.

All these are mega recalls and created huge blow to bottom line as well as credentials in the market about product reliability. Companies have to spend more time and money to regain customer confidence rather than repair of defective components. Directly or indirectly, decision-making and crisis management approach of various automobile companies have a crucial role in economy because of its direct contribution in terms of creating multiple effects on various companies.

1.3 Reason to Choose the Subject and Its relevance to study.

Government of India has specific focus on automobile industry. The Ministry of Heavy Companies and Public Enterprises has a vision; “To emerge as a destination of choice in the world for design and manufacture of auto and auto components with a output reaching a level of Rs.7,97,500 Crore (US $ 145 billion at US $= Rs. 55 per dollar), accounting and providing additional employment to 2.5 Crore people by 2016 for more than 10 percent of GDP” ii This
expected growth is from Rs. 1,65,000 Crore in 2006. (Rs. US $ 36 billion at 1$= Rs 46 in 2006)
The Automotive Mission Plan (AMP) aims at doubling contribution of automotive sector in GDP, with special emphasis on export of small cars, MUVs, two and three wheelers, and auto components.

Expected growth in automobile sales is, from 1,83,61,000 units in 2010-11 to 2,82,04,000 units in 2015-2016.iii Auto component industry turnover is expected to grow from Rs 2,19,459 Crore to Rs. 3,64,650 Crore ( US$ 39.9 Billion in 2010-11 to US$ 66.3 billion in 2015-16. 1, US$ = Rs. 55). iv Government support for automobile Industry will generate new opportunities for automobile and auto component industry. These new opportunities will require the decision-making and crisis management skills for these auto component industries.

Considering the vision of government of India and the projection given by ACMA (Automobile Component Manufacturers Association); in this research, focus is duly given to analyze the crises faced and crisis management decisions taken by Auto Ancillary units during years 2000 to 2012. During this business cycle, especially during recession year 2008-09, MSME (Micro, Small and Medium Enterprises) had taken a toll of more than 60 percent of contracting labour and 20 percent of permanent labour. Many large units had been virtually closed and some of them had reduced their production shifts due to drastic cut in their normal orders. There had been a 60 percent cut in schedules in terms of volumes and more than that in terms of value; total amounts to about a huge loss of Rs. 20,000 Crore during especially last two quarters for financial year 2008-09.v Even though there are effects of business cycle, ACMA and Government of India have positive outlook about Automobile Industry, which makes this topic more interesting.

There have been so far very few research theses published by universities in Maharashtra State, which make comprehensive study of production operations to tackle the business crisis. There have been many research papers and expert committee reports on the theme of “The Causal analysis of sickness of small companies in India”. There has never been any systematic effort to enquire and explore the appropriate managerial solutions to the various crisis of MSME sector.

The researcher is motivated to make the choice of this subject of research, which is exploratory, directly useful and beneficial to auto ancillary units belonging to the automobile industry of Pune, because they will get some practical clues and guidelines to tackle their problems. Taking
into consideration, this significant contribution, we have selected topic of research, which is as challenging as gratifying.

1.4 Review of Literature:

Review of literature has focus on following aspects of decision making and crisis management related with automobile companies. The researcher was not able to find out M Phi and Ph.D. research work on the subject under study.

1. Definitions of decision, Theory of decision making as a process. Definitions of crisis and crisis management. Scanning of various environmental factors, external and internal, having impact on the strategic decisions.
2. Study of factors leading to crisis in organization. Approach of various companies towards decision making process and crisis management
3. Study of various strategic decision models such as BCG Matrix, SWOT Analysis, Value Chain Analysis, Balanced Score Card etc.
4. Development of auto ancillary and auto component companies.
5. Various case studies published in books, research reports, newspapers, internet related with strategic decisions in automobile companies.

1.5 Research Problem:

The business cycles in automobile industry are becoming of shorter lengths. Companies are experiencing shorter life cycles not in terms of products only, but in terms of customer loyalty, market development and to sustain in their business line also. Since they faced the crisis of various natures, it has become imperative to think about the appropriate strategies and tactics to tide over their problem of stagnated growth by the use of proper techniques of crisis management.

This research has analyzed the causes and consequences of various crises in automobile component manufacturing companies in Pune and appropriate management decisions to revive operations for coping up with crisis.
In normal conditions of growth, progress and increasing profits, management decision-making does not face challenges and serious threats; but under the conditions of business crisis, it is very very difficult to take appropriate management decisions. The strategic decisions may involve the plans of diversification and sustained profits by cost reduction, value addition, rationalization, technology innovations, as well as loss reduction. Minimizing the risk and losses is also a more difficult task rather than maximization of profits; therefore, those who have proved guts and acquired intelligence can afford to find appropriate management solutions for coming out of the common crisis. This research therefore is concerned with that kind of “Resourceful Crisis Management”.

Thus, the research problem selected is “An Analytical Study of Crisis Management Decisions in Selected Auto Ancillary Units in Pune (2000 - 2012)”

1.6 Aims and Objectives

1. To study the various causes of crisis occurrence in Automobile Component Manufacturing companies.
2. To study crisis management and decision making process among the select automobile Component companies.
3. To study the gap between strategic crisis management decisions and its implications.
4. To suggest a model / remedies to overcome the problem in bridging the gap.

1.7 Research Questions

1. What calamities were faced by automobile companies in Pune during recession?
2. What crisis management decisions were taken by management?
3. Whether management was successful to manage crisis?
4. Whether the decisions were effective?
5. How companies have overcome the crisis?

1.8 Hypothesis
The impact of business cycle and effects of common calamity of recession are not likely to be uniform, exactly similar and equiproportional on unit-to-unit basis, because they are likely to vary due to the impact of differences of management skills, management decisions and modified processes & operations. It can be expressed by simpler statement that there will be difference in degrees of losses depending upon the differences in management skills and prudence during a common setback faced by all units suffering from business cycle and subsequent crisis. Therefore, the whole problem of crisis management is an outcome of human intelligence and effort to deal with a problem. This proactive role of modern manager is highlighted in this thesis.

**The Statement of Hypothesis:** while summing up, categorical statement of proper hypothesis related with decisions and crisis management in auto ancillary units is as follows viz.

1. There are certain external or internal reasons which may have impact on business performance of auto units leading to crisis
2. With the help of crisis management decision-making strategies, crisis can be managed effectively.

### 1.9 Research Design and Methodology

This research is empirical and diagnostic in nature. The researcher has taken 16 cases by undertaking a survey of the companies and has collected the factual information from MDs, CEOs, Plant Heads through their interviews. The researcher also participated in discussions of those authorities in their company offices.

**Scope of Study**- This research is done for auto ancillary units in and around Pune. The companies selected for research are having a turnover between Rs. 50 Crore and Rs 500 Crore. There are around 113 companies in this range. The companies having turnover below Rs. 50 Crore depend upon these companies and they follow the decisions taken by these companies. Companies having turnover more than Rs 500 Crore, are considered as large-scale units, and they dictate the terms and conditions of their business to their vendors. Typically, companies in the selected range perform both roles as buyer and vendor and decision-making is more crucial for them.
Selected auto ancillary units are considered as medium scale companies. **Medium Enterprise** is an enterprise where the investment in plant and machinery (original cost excluding land and building and the items specified by the Ministry of Small Scale Companies vide its notification) is **more than Rs. 5 Crore but does not exceed Rs. 10 Crore.**\(^vi\)

**Time Span of Study:** The researcher has done study of various decisions taken by these companies in a span of Year 2000 to Year 2012. The span of 12 years, considerably is a large span of time and has provided the measurable evidence to perform analysis of various strategic decisions taken by these organizations.

**Sources of Data and Data Collection:**

**Primary Data:** primary data is collected from organizations through their reports, personal meetings, discussions and interview. A questionnaire is used for systematic interview for studying the causes and assessment of the crisis management decisions. The researcher has approached the various authorities from the selected establishments and conducted an interview. The basic attempt was to establish a concrete relationship between different variables namely company profile, product profile, organization charts, crises arised, crises management as well in-depth decision making analysis for said purpose.

Companies are selected considering the vehicle structure and cover entire vehicle rather than component Group. Automobile vehicle is divided into five major parts namely

- Chassis Components
- Engine Components
- Body parts
- Electrical and Electronics
- Other components

**The distribution of Case studies:**

**Chassis Components** : Bosch Chassis, ALF Engineering, Badve Engineering, Kalyani Lehmerz limited, Total 4
**Engine Components**: Eaton, Radheya Machining Limited, Kalyani Forge, Suyog Autocast, Total 4

**Body parts**: Wadhokar Group of Industries, Gange Pressing, Autoline Industries, Total 3

**Electrical and Electronics**: Flash Electronics, Lucas TVS, Total 2

**Other Components**: Victor Gaskets, Saint Gobain Sekuritat, Continental Group, Total 3

16 case studies are prepared considering the vehicle structure. The component variety is also considered while selecting a sample and preparing the case.

<table>
<thead>
<tr>
<th>Company</th>
<th>Components Manufactured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosch Chassis</td>
<td>Vehicle Braking Systems</td>
</tr>
<tr>
<td>ALF Engineering</td>
<td>Chassis Fabrication</td>
</tr>
<tr>
<td>Badve Engineering</td>
<td>Chassis and Exhaust Systems</td>
</tr>
<tr>
<td>Kalyani Lehmerz</td>
<td>Wheel Rim</td>
</tr>
<tr>
<td>Eaton</td>
<td>Engine valve systems, Transmission systems</td>
</tr>
<tr>
<td>Radheya Machining</td>
<td>Gears, Connecting rods, Engine components</td>
</tr>
<tr>
<td>Kalyani Forge</td>
<td>Engine components, forgings and machining</td>
</tr>
<tr>
<td>Suyog Autocast</td>
<td>Engine components and machined components</td>
</tr>
<tr>
<td>Wadhokar Group</td>
<td>Light Stampings and sheet metal body press parts</td>
</tr>
<tr>
<td>Gange Pressings</td>
<td>Heavy duty vehicle body press parts</td>
</tr>
<tr>
<td>Autoline Industries</td>
<td>Heavy duty sheet metal body press parts</td>
</tr>
<tr>
<td>Flash Electronics</td>
<td>Magneto Assemblies, Ignition coils, Flashers</td>
</tr>
<tr>
<td>Lucas TVS</td>
<td>Starter Motors, Wiper motors</td>
</tr>
<tr>
<td>Victor Gaskets</td>
<td>All types of gaskets</td>
</tr>
</tbody>
</table>
Interview and observation technique is used to collect primary data about the crises faced and crises perceived and crisis management approach used by these companies.

**Secondary Data:** Secondary data is collected from various published books, journal, research papers, government reports, various commission reports etc.

**Sampling Design** There are about 113 Auto Ancillary units in Pune whose annual turnover is between Rs. 50 Crore and Rs. 500 Crore. In order to provide due coverage to these auto ancillaries in Pune; a stratified sample survey has been conducted by taking sample units from each product category. A sample of 14 percent i.e. 16 units are taken for study.

**Data Analysis:** Primary data of 16 Auto Ancillary Units from different groups, is collected, analyzed, processed and interpreted. The findings and conclusions of proposed research are fully based on the factual data and the implications of data analysis. To sum up, this research is done by the use of both secondary and primary data collection methods, and the main findings and conclusions largely are based on the actual primary data collected from these auto ancillary units of Pune. A case study and observation method of research is used to conduct in-depth study of the various aspects of the management decisions taken by the units.

The required data analysis has been given throughout the chapter no 1 to chapter no 6. Since the nature of data collected is not purely quantitative, statistical tools are not used.

**1.10 Contribution of Research Work:**

Management effectiveness is measured by ability to manage the situations. In the business, leadership is known by the ability to grow and sustain through different business cycles. This research has added in-depth knowledge in crisis management and consequent effective decision-making process. Industry and academia will get a benefit by having addition of knowledge about the various crisis management decisions taken by companies and the actual effectivity of these decisions. This research work provides a qualitative input in decision-making and crisis management.
The valuable inputs received on

- The best practices followed in various companies for crisis management.
- The thumb rules of experts in industry for effective crisis management
- The commonality between various decisions and crisis management approach
- The new approaches for crisis management

1.11 Chapter-wise Research Plan

1. Introduction
   This chapter explains the basics of decision-making process, crisis management, role of management in decision making, effective crisis management. Need and Importance of Research.

2. Review of Literature and research methodology : The major aspects are covered as follows-
   - Survey of theoretical and conceptual literature related with decision theories, crisis management theories, strategic decision making tools, decision support systems, crisis management approach, new trends in decision making and crisis management, Various case studies discussed in books, published literature related with automobile industry and crisis management

3. Case studies:
   This chapter includes the case studies of various companies prepared by researcher. There is a presentation of case studies under study with detailed analysis of individual case. The cases are prepared from the data collection and interviews of various authorities in selected companies.

4. Data analysis :
   In this chapter, detailed analysis is done for the various causes of crisis faced by these units and the decisions taken by companies to manage the crisis. Data analysis is a consolidated presentation of various case studies.

5. Observations, findings and conclusions:
Chapter includes main observation and findings of the research; Conclusions are derived from analysis based on primary and secondary data. Suitable policies are suggested for crisis management in auto ancillary units.

\[\text{http://bigstory.ap.org/article/auto-industry-recalls-glance}\]

\[\text{ii Automotive Mission Plan 2006-2016, Ministry of Heavy Companies and Public Enterprises, Government of India, 2006}\]


\[\text{v MCCIA report, on Automobile Industry Jan 2009}\]

\[\text{vi RBI Circular RBI/2006-2007/306 RPCD.PLNFS. BC.No.63/ 06.02.31/ 2006-07}\]