Technical Guide on Internal Audit of Automobile Industry

The Institute of Chartered Accountants of India
(Set up by an Act of Parliament)
New Delhi

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Internal Audit Standards Board
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Foreword

Indian Automobile Industry is capital intensive, highly competitive, subject to price and market risks, effected by regulatory norms leading to a shorter life span of models, and driven by constantly changing consumer preferences. This industry faces many accounting and regulatory challenges stemming from various factors, including its capital structure, complex master supply agreements, sales agreements, large dealer networks, etc.

Considering the unique nature of this industry, internal auditors can play an important role in helping to optimize the operations; establishing financial reporting controls as well as business level operating controls; assisting in key strategic decisions and managing expectations of both internal and external stakeholders. I congratulate CA. Mukesh Singh Kushwah, Chairman, CA. Anil S. Bhandari, Vice-Chairman and other members of the Internal Audit Standards Board for bringing out this "Technical Guide on Internal Audit of Automobile Industry" which is an important publication providing practical and valuable guidance to internal auditors related to this industry.

I am sure that this publication will prove to be very informative and useful to members to understand the peculiarities of this unique industry and thereby apply best internal audit techniques and procedures while discharging their professional responsibilities as internal auditors.

February 5, 2017
New Delhi

CA. M. Devaraja Reddy
President, ICAI

Preface

India is one of the world's top automobile manufacturers as there is strong growth in demand due to growing working population, expanding middle class and favorable government policies. Global car manufacturers are ramping up investments in India to cater to growing domestic demand and also to set up export-oriented production hubs. This sector is also a top job creator and also one of the prime movers of manufacturing sector and "Make in India" initiative. In such a crucial industry, internal audit has emerged as "value added" function by helping this sector to not only meet growing stakeholder demands but by also offering valuable foresight.

Keeping this in mind, the Internal Audit Standards Board of the Institute has issued this "Technical Guide on Internal Audit of Automobile Industry" which provides an insight into the specific aspects concerning internal audit of the automobile industry from the point of view of Original Equipment Manufacturers (OEM). This Guide provides a brief overview of industry and regulatory framework applicable to the industry. It deals with specific key areas for audit review related to revenue recognition and inventory valuations pertaining to automobile industry. Risk assessment and audit planning have been discussed thoroughly with sample questionnaire for sales process, production process, inventory process and fixed assets process. There is a chapter on vendor development and procurement which explains role of procurement and purchasing department, vendor development process and practice, vendor monitoring and rating and procedure related to warranty. Engineering research and development being important aspect of this industry has been covered in detail including risk assessment for research and development. All major aspects related to production and production planning, inventory management, sales and receivable, and after sales receives have been included in the Guide.

At this juncture, I wish to place on record my sincere thanks to all the members of the Study Group formed based at Pune, *viz.*, CA. Yashwant J. Kasar (convener), CA. Shiwaji Bhikaj Zaware, Central Council Member, ICAI, CA. Dilip Apte, CA. Kusai Goawala, CA. Deep Jaggi, CA. Shreyas Petkar, CA. Sarika Jogalekar, CA. Pranav Apte and CA. Neeraj Jain for taking time out of their pressing preoccupations and contributing in preparation of this Technical Guide.

I would also like to thank to CA. M. Devaraja Reddy, President, ICAI and CA. Nilesh Shivji Vikamsey, Vice President, ICAI for their continuous support and encouragement to the initiatives of the Board. I must also thank my colleagues from the Council at the Internal Audit Standards Board, *viz.*, CA. Anil Satyanarayan Bhandari, Vice-Chairman, IASB, CA. Tarun Jamnadas Ghia, CA. Mangesh Pandurang Kinare, CA. Dhinal Ashvinbhai Shah, CA. Babu Abraham Kallivayalil, CA. K. Sripriya, CA. M. P. Vijay Kumar, CA. Ranjeet Kumar Agarwal, CA. Sushil Kumar Goyal, CA. Debashis Mitra, CA. Shyam Lal Agarwal, CA. Kemisha Soni, CA. Sanjiv Kumar Chaudhary, CA. Sanjay Vasudeva, Shri Vithayathil Kurian and Shri Vijay Kumar Jhalani for their vision and support. I also wish to place on record my gratitude for the co-opted members on the Board *viz.*, CA. Anil Kumar Jain, CA. Kartik Bharatkumar Radia, CA. Krishna Kumar T., CA. Vipin Gupta, CA. Vishwanath K., CA. Yashwant Jaywant Kasar and special invitee *viz.*, CA. Shobhit Dwivedi for their invaluable guidance as also their dedication and support to the various initiatives of the Board. I also wish to express my sincere appreciation for CA. Jyoti Singh, Secretary, IASB and her team for their efforts in finalization of this publication.

I am certain that the internal auditors connected to the automobile industry would find this Technical Guide immensely useful.

February 7, 2017
New Delhi

CA. Mukesh Singh Kushwah
Chairman, Internal Audit Standards Board

Contents

Objective and Scope of Technical Guide

The objective of this Technical Guide is to give an insight into the specific aspects concerning the internal audit of the automobile industry.

In this Technical Guide, we have covered automobile industry from the point of view of Original Equipment Manufacturers (OEM). The specific aspects relating to auto ancillaries have been covered in respective chapters.

The publication cover the areas unique to the automobile industry like, regulatory environment applicable to automobile industry, Vendor Development and Procurement for OEM, Auto Components and Auto Ancillary, Engineering Research and Development, Production and Production Planning, Inventory Management, Sales and Receivables, Dealer Management, After Sales, etc.

Generic areas like, Fixed Assets, Human Resource and Payroll Functions, Contractual labour, Statutory and Taxation, Finance and Accounts, Information Technology, General Controls, Treasury have not been covered in this Guide. Reference may be made to Standards and Guides issued by the Institute of Chartered Accountants of India (ICAI) on the above mentioned areas for guidance.

Chapter 1
Introduction

Industry Overview

1.1 Indian automobile and auto component sector today is one of the key sectors of the Indian economy. Indian automobile industry is one of the fastest growing and dynamic automobile industries in the world.

The industry accounts for 7.1 per cent of the country's gross domestic product (GDP) and employs as many as 19 million people, both directly and indirectly. As of FY 2014-15, around 31 per cent of small cars sold globally are manufactured in India. (*Source: IBEF, January 2016)*

A stable government framework, increased purchasing power, large domestic market, and an ever-increasing development in infrastructure have made India a favourable destination for investment.

1.2 The two wheelers segment with 81 per cent market share is the leader of the Indian automobile market owing to a growing middle class and a young population. Moreover, the growing interest of the companies in exploring the rural markets further aided the growth of the sector. The overall Passenger Vehicle (PV) segment has 13 per cent market share. India is also a prominent auto exporter and has strong export growth expectations for the near future. In April-January 2016, exports of Commercial Vehicles registered a growth of 18.36 per cent over April-January 2015. (*Source: IBEF, January 2016)*

1.3 There are two distinct sets of players in the Indian auto industry: automobile component manufacturers and the vehicle manufacturers, which are also referred to as Original Equipment Manufacturers (OEMs). While the former is engaged in manufacturing parts, components, bodies, etc. involved in automobile manufacturing, the latter is engaged in assembling of all these components into an automobile.

The automobile manufacturing sector, which involves assembling the automobile components, comprises two-wheelers, three-wheelers, four-wheelers, passenger cars, light commercial vehicles (LCVs), heavy trucks and buses/coaches. In India, mopeds, scooters and motorcycles constitute the two-wheeler industry.

1.4 The automotive sector with its deep backward linkages such as metals

like, steel, aluminium, copper etc., plastic, paint, glass, electronics, capital equipment, trucking, warehousing and logistics; and forward linkages including dealership retails, credit and financing, logistics, advertising, repair and maintenance, petroleum products, gas stations, insurance, service parts has been recognized and identified at different forums. Development Council of Automobile and Allied Industries, Planning Commission, National Manufacturing Competitiveness Council and Investment Commission, etc., as a sector with a very high potential to increase the share of manufacturing in GDP, exports and employment. The sector is also seen as a multiplier of industrial growth.

Evolution of Indian Automobile and Auto Component Industry

1.5 While the genesis of the Indian automotive industry can be traced to the 1940s, distinct growth decades started in the 1970s. Between 1970 and 1984, cars were considered a luxury product; manufacturing was licensed, expansion was restricted; there were quantitative restrictions on imports and a tariff structure designed to restrict the market.

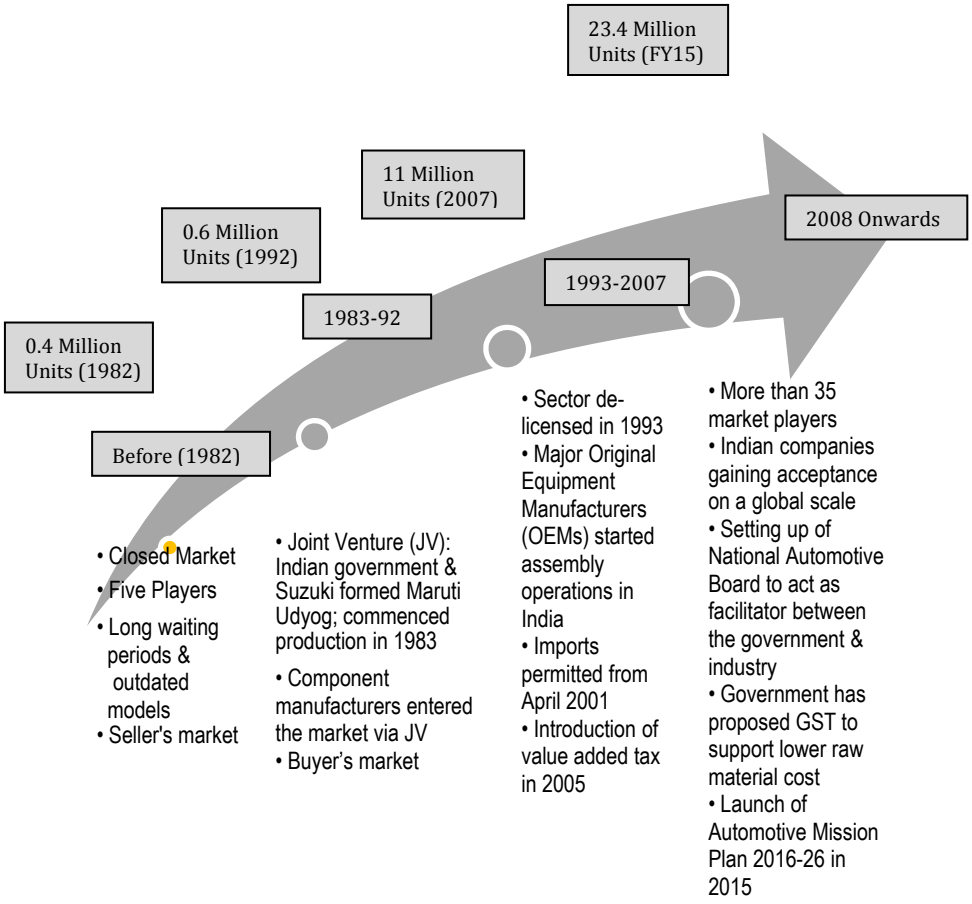
Economic liberalization, which started in 1991, led to the delicensing of the auto components in 1991 and passenger car segment in 1993 though quantitative restrictions on imports continued.

1.6 Between 1995 and 2000, several international players entered the market. Advanced technology was introduced to meet competitive pressures and adhere to environmental and safety norms. Automobile companies started investing in service networks to support maintenance of on-road vehicles. Auto financing started emerging as an important driver for demand.

Starting in 2000, several landmark policy changes like, removal of quantitative restrictions and 100 percent foreign direct investment (FDI) through automatic route were introduced.

Prior to 1985, the auto component sector was a protected market with high import tariffs. The market was oriented primarily towards supply of components to domestic manufacturers.

In the 1990s, global Original Equipment Manufacturers (OEMs) and Tier 1 suppliers started operations in India. This paved the way for many new joint ventures.

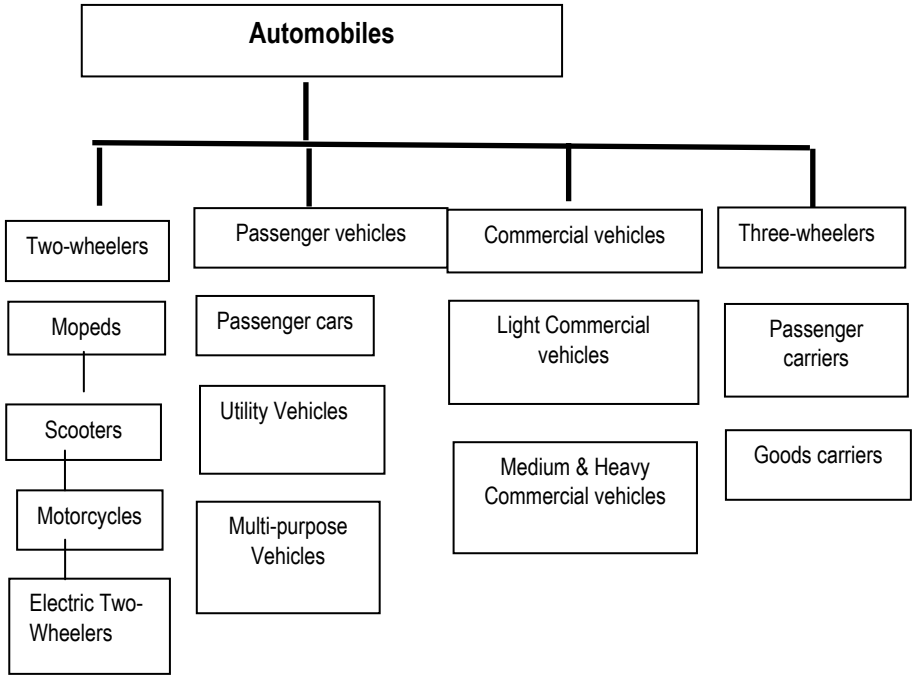


Source: Society of Indian Automobile Manufacturers (SIAM), TechSci Research

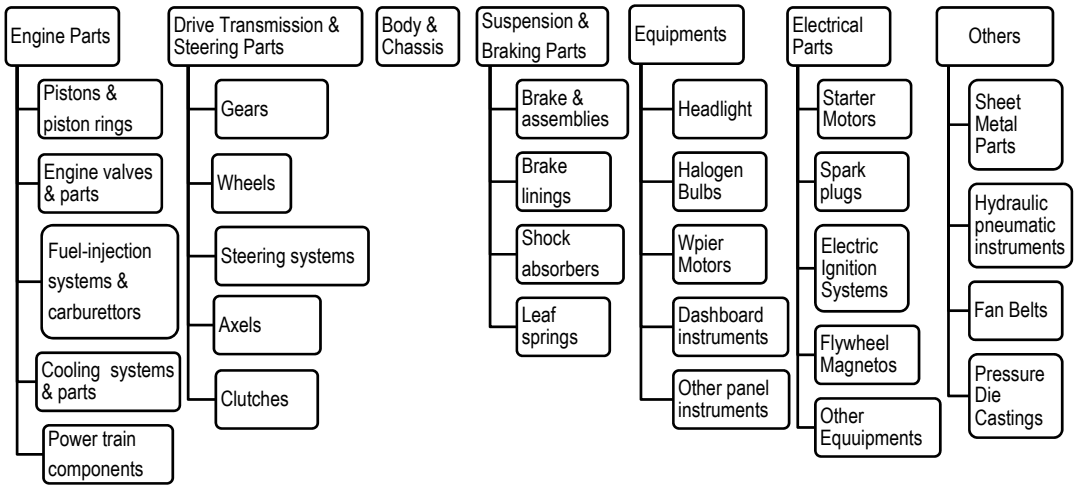
Market Scenario — Indian Automobile

1.7 Following is diagrammatic representatic of automobile industry :

(i) The automotive market is split into four segments:



(ii) Auto components market is split into six product segments:



Progress of Automobile Industry

1.8 Automobile exports grew at a CAGR of 14.65 per cent during 2010-15. Passenger Vehicles, Commercial Vehicles, Three Wheelers and Two Wheelers grew by 6.89 per cent, 13.77 per cent, 18.69 per cent and 16.60 per cent CAGR during 2010-15.

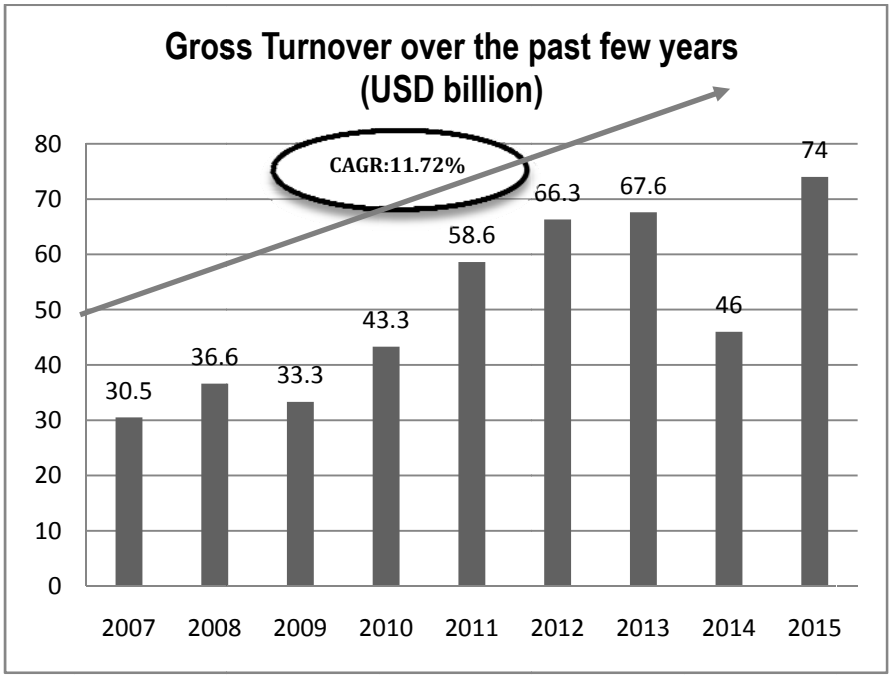
Two wheelers accounted for the largest share of exports at 69.4 per cent in FY15. Passenger vehicles comprised a sizeable 16.7 per cent of overall exports. Exports of three wheeler vehicles registered around 11.1 per cent share in exports in FY15.

(*Source: IBEF, January 2016)*

Robust Growth in Revenues

1.9 The gross turnover of automobile manufacturers in India expanded at a CAGR of 11.72 per cent over FY07-15.

The domestic Two Wheelers segment accounted for 81% of the total domestic market share* for the year 2014-15.



Source: SIAM, TechSci Research

Note: *Does not include three wheelers

Initiatives by Government

1.10 The government has formulated a Scheme for Faster Adoption and Manufacturing of Electric and Hybrid Vehicles in India, under the "National Electric Mobility Mission 2020" issued by Department of Heavy Industry, Ministry of Heavy Industries Public Enterprise GOI*, to encourage the progressive induction of reliable, affordable and efficient electric and hybrid vehicles in the country.

The Automobile Mission Plan (AMP) for the period 2016–2026, designed by the government is to promote safe, efficient, and comfortable mobility for every person in the country with an eye on environmental protection and affordability through both public and personal transport options. Also, the well-established Regulatory Framework under the Ministry of Shipping, Road Transport and Highways, plays a part in providing a boost to this sector.

Vision Statement AMP 2026 "Vision 3/12/65"

1.11 "By 2026, the Indian automotive industry will be among **Top three** of the world in **engineering, manufacture and export** of vehicles and auto components and will encompass **safe, efficient, and environment friendly** conditions for **affordable mobility of people and transportation of goods** in India comparable with global standards, growing in a value to **over 12%** (Estimated GDP at constant prices taking 2004-05 as base) **of India's GDP** and generating an additional **65 Million jobs**".

The government aims to develop India as a global manufacturing as well as a research and development (R&D) hub. It has set up National Automotive Testing and R&D Infrastructure Project (NATRiP) centres as well as a National Automotive Board to act as facilitator between the government and the industry.

1.12 Alternative fuel has the potential to provide for the country's energy demand in the auto sector as the CNG distribution network in India is expected to rise to 250 cities in 2018 from 125 cities in 2014. Also, the luxury car market could register high growth and is expected to reach 150,000 units by 2020.

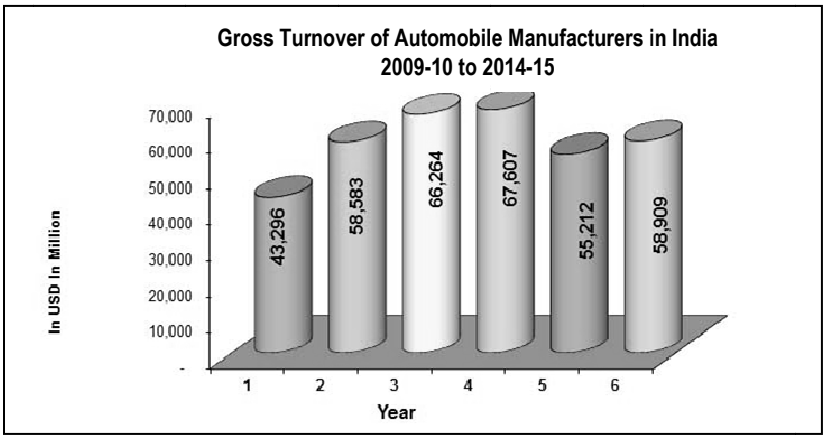
* www.dhi.nic.in

Indian Automobile Industry

(Source for Statistics: SIAM)

Gross Turnover of the Automobile Manufacturers in India (In USD Million)

Financial Years	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**
Gross Turnover	43,296	58,583	66,264	67,607	55,212	58,909
(USD Conversion Rate)	47	46	47	50	60	61

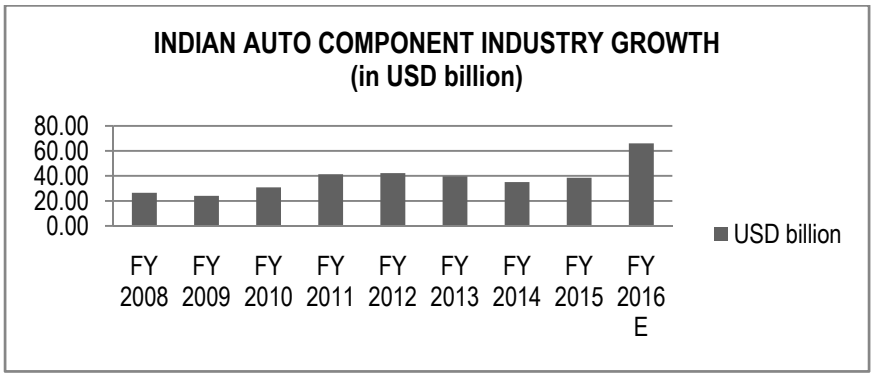


Installed Capacity

Installed capacity	**In Millions**	
	2014-15	**2013-14**
Four Wheelers	7.19	6.53
Two & Three Wheelers	24.30	19.16
Engines	0.54	0.54

Type	**% Share**
Passenger Vehicles	14
Commercial Vehicles	3
Three Wheelers	3
Two Wheelers	80
Total	**100**

Indian Auto Components Industry

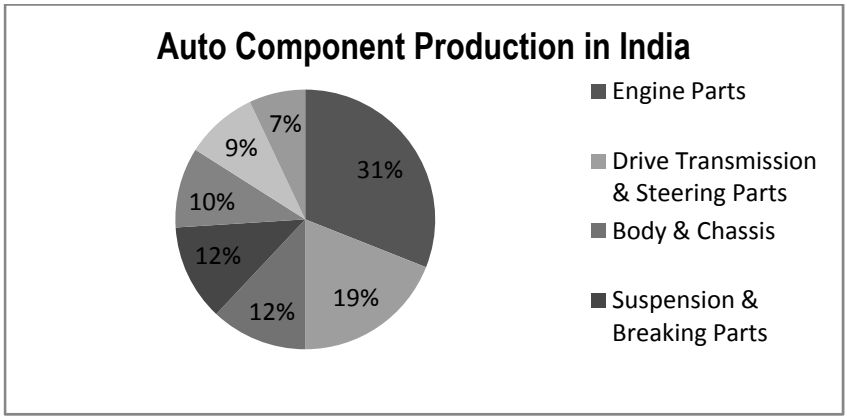


1.13 The above chart reflects the size of Indian auto Component Industry. The industry is showing upward trend till FY 2012. The industry has suffered for two consecutive years in FY 2013-14 due to general slump in overall market. There was marginal increase in FY 2015, however, FY 2016 shows substantial revival in the auto component industry.

The growth of the industry has been accelerated since 2014-15 due to thrust of new Government on road and infrastructure building.

Auto Component Production in India

1.14 As per data published by India Brand Equity foundation, Trust established by the Department of Commerce, Ministry of Commerce and Industry, Government of India.); Engine parts account for 31 per cent of the entire product range of the auto components sector. Whereas steering and Drive Transmission parts comprise 19% of component manufacturing.



(Source for Statistics: SIAM)

Chapter 2

Regulatory Environment Applicable to Automobile Industry

2.1 Government regulation in the automotive industry directly affects the way cars look, how their components are designed, the safety features that are included and the overall performance of any given vehicle. The automotive regulations in India are governed by the **Ministry of Road Transport & Highways** (MoRT&H).

Automotive regulations are designed to benefit the consumer and protect the environment, and also ensure that automakers face stiff fines and other penalties, if they are not followed.

2.2 MoRT&H has constituted three committees to recommend and advise the ministry on issues relating to Safety and Emission Regulations:

(i) Automotive Industry Standards Committee (AISC): The AISC governs all the standards related to the safety in the automotive industry. The national rules are drafted by the Bureau of Indian Standards (BIS).

(ii) The Central Motor Vehicle Rules (CMVR), 1989: CMVR has a technical standing committee which has members from heavy industries and public enterprises. The CMVR-TSC (Central Motor Vehicle Rules- Technical Standing Committee) consists members from the following associations:

- Central Institute of Road Transport (CIRT).
- Automotive Components Manufactures Association (ACMA).
- Bureau of Indian Standards (BIS).
- Society of India Automobiles Manufacturers (SIAM).
- Tractors Manufacturers Association (TMA).
- Automotive Research Association of India (ARAI).

(iii) Standing Committee on Implementation of Emission Legislation (SCOE): This Committee is primarily responsible for setting the emission norms in India. It sets up the future emission norms and the technology involved.

The Ministry has a principle instrument governing the motor vehicle

regulations. It is called as the Motor Vehicles Act, 1988. This act governs the emission norms and the safety standards in India whereas the Central Motor Vehicles Rules, 1989, provides rules and guidance for the Act.

2.3 Under Rule 126 of the Central Motor Vehicle Rules, 1989, every manufacturer of motor vehicle has to submit a prototype of the vehicle to be manufactured to any of the test agencies mentioned hereafter. After testing the vehicle for compliance of all standards and norms, the test agency shall grant a certificate to the manufacturer.

These tests can be carried out at testing facilities that are relevant to the type of vehicle. There are six testing facilities all over India. They are:

(i) Automotive Research Association of India (ARAI), Pune — This is primarily associated with the testing of Passenger Vehicles or Light Duty Vehicles.

(ii) Vehicle Research and Development Establishment (VRDE), Ahmednagar — Primarily associated with the testing of all the defence vehicles that are produced in India. Also, the vehicles that are imported have to be tested at VRDE before introducing on field.

(iii) Central Farm Machinery Testing and Training Institute (CFMTTI), Budhni — All the agricultural vehicles and the construction vehicles have to be approved via CFMTTI.

(iv) Indian Institute of Petroleum (IIP), Dehradun

(v) Central Institute of Road Transport (CIRT), Pune — The CIRT is mainly involved with the testing of the vehicles which will be used for public transport. Mainly buses used in public transport.

(vi) International Centre for Automotive Technology (ICAT), Manesar — This is a single private organization affiliated to the MoRT&H. This is involved mainly with new innovations in automotive technology and innovations to comply by the global standards.

Automotive Industry Standards

2.4 The Automotive Industry Standards (AIS) are put forward as the guidelines for automotive standards to which every OEM has to adhere to. These standards are applicable to all the automotive parts manufacturers and also the vehicle manufacturers. These standards include main points such as, specifications for body type, devices, permissible levels for electromagnetic radiations, installations of lights and their lux numbers, etc. Most important is the safety and type approval of critical components.

2.5 “Procedure for Type Approval and Establishing Conformity of Production for Safety Critical Components Critical Components”, are covered under AIS 037 to bring in better control at the OEM and after-market. The regulation brings these components also under Conformity of Production.

List of Components Covered Under AIS-037 are follows:

- Tyres
- Rear View Mirrors
- Speed Limiting Devices
- Safety Belts
- Warning Triangle
- Lighting and Light Signalling Devices
- Retro Reflectors
- Bulbs
- Safety Glass
- Brake Hose
- Wheel Rims
- Horns
- CNG/LPG Regulators and Vaporisers
- CNG/LPG Kit Components

Any new vehicle to be introduced in the market has to comply by all the rules suggested in the AIS. Also, vehicles for conformity of production should comply by the standards and there should be no variation from the previous models unless otherwise stated.

Emission Norms

2.6 The Standing Committee on Implementation of Emission Legislation (SCOE) has defined emission norms for new vehicles, which are tested while performing Type Approval as well as Conformity of Production by testing agencies. The same are defined basis type of vehicle and for each type limits of emissions are defined.

Category	Light Duty Diesel Vehicle (LDDV)	Light Duty Petrol Vehicle (LDPV)	High Duty Diesel Vehicle (HDDV)	Two & Three Wheelers (TTW)
Norms applicable (Till 2020)	Euro 4	Euro 4	Euro 4	Bharat Stage 4

Emission Standards for vehicles include complying with the limits of gases as specified in a certain category of vehicles. These vehicles are classified on the basis of their use, engine, fuel type, etc:

CO: Carbon Monoxide

HC: Hydro Carbon

HC + NOx: Hydro Carbon + Nitrogen Oxide

NOx: Nitrogen Oxide

For diesel engines, in addition to the above mentioned, Particulate Matters (PM) are also included. As a norm, the levels of emissions from the car are required to be mentioned in Vehicle Manuals (Information booklet) for every car manufactured.

Regulatory Compliance

2.7 Regulatory Compliance for Vehicle Manufacturing Industry are:

- Audit/ Surveillance Checks
- Import regulations
- Third Party Certification (Type Approval)
- Conformity of Production

Other applicable norms for an automobile industry are:

- Vehicle Level — engine, brakes, emissions from the vehicle and engine noise.
- System Level — Seats, anchorage of the seats, forward vision, blind spots etc.
- Component Level — Horn, mirror, safety glasses, etc.
- General — Anti Thefts, kerb weight and Dimensions.

Chapter 3

Risk Assessment and Audit Planning

3.1 According to Standard on Internal Audit (SIA) 1, "Planning an Internal Audit", an internal audit plan is a document defining the scope, coverage and resources, including time, required for an internal audit over a defined period. The internal auditor may, in consultation with those charged with governance, including the audit committee, develop and document a plan for each internal audit engagement to help conduct the engagement in an efficient and timely manner.

A well-defined audit plan assists the auditor in managing the risk of the internal audit activity; while there is no way to mitigate all of the risks, an internal audit activity can proactively manage its risks by developing a strategic plan.

3.2 Audit planning refers to process of defining a strategy by means of which the internal auditor defines the nature, extent and timing of the process reviews in line with the objectives of the internal audit. It is an essential part of an internal audit; fundamentally, it takes place at the onset of the audit process to ensure adequate focus on vital areas, timely identification of possible deficiencies, and the efficient and orderly review of the audit areas. An internal audit plan is the key to a good and effective audit procedure. It helps to address the minute as well as the major details of the objectives, where the audit will take place, who will perform the audit, the duration, when it will occur and how will it be done.

Organizations function in a dynamic environment where the only constant is change. To accommodate the persistent new developments, flexibility becomes a key factor. In order to maintain this level of flexibility, audit plan must be frequently reviewed and updated.

Risks to be Mitigated in an Audit Plan

3.3 The internal auditor is required understand the audit risk involved in a process prior to planning a review. Audit risks, therefore, influences the audit planning methodology in a significant manner. Audit risk is composed of Inherent Risks, Control Risks and Detection risks which are explained below:

(i) ***Inherent Risks***— Inherent risks are defined as the risks involved in the nature and volume of the business transaction; for instance,

purchase negotiations involving materials with prices linked to London Metal Exchange (LME) would involve a higher risk than the purchase of material with stable prices.

(ii) ***Control Risks***— Control risks are the possibilities of design deficiencies in a process on account of absence of adequate internal controls; i.e., on account of absence of controls in the process design to prevent such deficiencies; for instance, absence of maker–checker controls in recording journal vouchers would not prevent unauthorized, inaccurate or back-dated journal entries.

(iii) ***Detection Risks***— Detection risks are the risk that the internal auditor may not be able to detect the deficiencies in the process through substantive tests and data analysis.

3.4 Assessing the audit risks shall assist the auditor in identifying the quantity and quality of evidences that are required to be gathered and the detailing required in the analysis while performing the audit. For example, in the event of a higher audit risk, the auditor would require to increase the level of details in the audit plan. The auditor is expected to plan the audit in a manner that reduces audit risk to an acceptably low level that is consistent with the objective of an audit.

Importance of Audit Planning

3.5 An audit plan is prepared to ensure that the auditor can formulate an effective response mechanism to each of the material risks identified in a process. The importance of an audit planning can be summarized using the following points:

(i) **Efficiency and effectiveness in conducting the review**: An efficient audit can be performed if the audit has been thoroughly planned. By defining an audit plan, the auditor can ensure that all the in-scope areas/ processes/ activities are duly covered in the audit plan and are covered during the review. The audit plan would enlist the necessary tools (data analytics, etc.) and information requirements from the management, thereby enabling efficiency. Also, for recurring assignments, it is ensured that all the audit activities undertaken in the previous assignment are covered in the review.

(ii) **Defining the nature, timing and extent of the review**: The auditor is required to identify risks associated with the processes, therefore, a detailed audit planning enables identification of the level of details/ analytics and documentation requirements for the review. The same

facilitates documentation of the audit procedures to be followed for review of each activity included in the scope of the assignment.

(iii) **Requirement planning and assignment of responsibilities**: A detailed audit plan would enable the auditor to identify the resource requirements for each process/ sub-process based on the level of complexities and the risk rating for the activities involved in the sub-process. In addition, based on the criticality of the control framework at the client location, the auditor can identify the skill-set and level of experience expected from the person responsible for conducting the review. On finalization of the same, the auditor can assign responsibilities within the audit team for conducting the review and obtaining management responses.

(iv) **Flexibility in performing the review:** During the course of the audit, the auditor may need to re-visit the focus of the audit/ criticality of risk areas based on the audit evidence collected and audit documentation. An audit plan incorporates the risk rating against each activity, sub-process and process. The same enables mapping the potential risks implication on account of the findings of the review with the risk tolerance levels of the company and therefore, assists in updating the level of details and data analysis required for the review. By preparing a detailed audit plan, an auditor can update the activity wise time and resource requirements, based on the findings during the progress of the review.

(v) **Mapping the objectives of the assignment with the outcome**: Preparation of an audit plan would ensure that the auditor can duly focus the audit procedures on the key concerns/ pain areas of the management. The auditor would obtain management feedback for developing the audit plan, ascertain management responsibilities with respect to the provision of data necessary for audit execution; and would also be able to ensure that all management concerns are adequately addressed

(vi) **Progress monitoring:** By preparing an audit plan, the auditor would be able to define activity/ sub-process wise timelines for conducting review of each process. The same would facilitate identification of deviations, if any and taking suitable corrective actions.

Key Factors in Audit Planning

3.6 The internal auditor needs to prepare an audit plan in order to ensure that all the relevant audit areas are identified and included in the audit plan in

accordance with the level of details required. The following are the factors that the auditor would need to consider in defining an audit plan:

Knowledge of the Entity and Its Environment

3.7 The internal auditor may obtain preliminary information about the following before initiating an audit:

- industry segment in which the company operates,
- statutory and regulatory changes,
- nature of ownership of the company, etc.

Once the engagement is accepted, the internal auditor needs to know the following aspects critical to the audit:

- details of the assignment;
- the expectations from the management;
- the purpose with which the assignment was initiated;
- the key pain areas of the management;
- the stakeholders involved;
- the materiality of processes;
- company's policy, strategy and vision;
- control environment in the company;
- level of automation of controls in the processes;
- organization structure and authority limits; and
- effectiveness of the previous audit plan and the previous feedback, if applicable.

The above aspects will help in identification of the skill– set/ experience level required for conducting the review, the possible timelines, and this would assist in planning the engagement.

Terms of the Internal Audit Engagement

3.8 The auditor may identify the scope and coverage of review based on the terms agreed with the client in the engagement letter. In accordance with the guidelines issued by the ICAI, the engagement letter with the client should include the following:

- Objective of the internal audit

- Management's responsibilities
- Scope of internal audit (reference to the applicable legislation, regulation, various pronouncement of ICAI, where applicable, etc.)
- Access to records, documents and information required in connection with the internal audit
- Expectation to receive management's written confirmation in respect to representation made in connection with the audit.

The above shall act as guiding principles for definition of the scope, processes, areas and timeline planning for the audit.

Identification of the Audit Universe

3.9 Based on the understanding of the business, the internal auditor shall be able to identify the key risk areas to be covered in a process. Thereafter, the auditor needs to consolidate the areas and fragment the sub-processes to identify an audit universe. A sample audit universe is provided in **Appendix 1.**

On identification of the audit universe (processes as well as sub-processes), the auditor shall be able to identify the population for the review; i.e., the number of transactions under each sub-process in order to facilitate the audit planning.

For instance: if the client company (auditee) purchases majority of raw materials through vendors in foreign countries, the process of import documentation and payment of duties is required to be considered as a critical area. However, in the event that the company purchases all material domestically, the aforementioned process shall not be applicable for the company.

3.10 Bifurcation of audit universe into processes and relevant sub-processes would assist the internal auditor in identifying the relevant risks in the sub-processes and the actual controls in place at the company in order to mitigate the risks. Such a practice shall ensure that the auditor covers all relevant risks in areas identified and facilitates planning the time to be spent on the audit, identification of process owners, skill–set/ experience level required for conducting the review, etc.

3.11 The following are some of the mechanisms that may be used by the auditor for identification of the process universe:

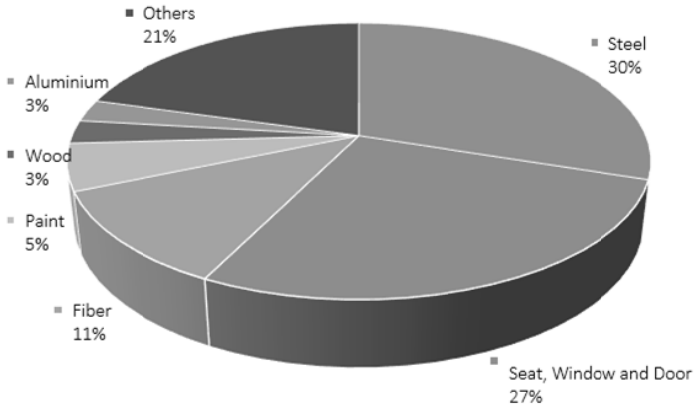
(a) Process understanding and management feedback: The auditor would initially need to conduct an opening meeting/ kick-off meeting/ introduction to business/ orientation session to understand the following:

- Overall business framework;
- Internal stakeholders in the company and their roles and responsibilities;
- A bird's-eye view of the complexity in operations;
- Objective and methodology for internal audit;
- Key performance indicators (KPIs) used to measure the critical areas in the company;
- Understand the functionality of ERP in the company;
- Overall period to be considered for the review;
- Management Information Systems (MIS) in place for the company and the key summaries presented to the Management and Board.

Based on the same, the internal auditor would need to identify the overall operations structure, and the high-level list processes to be covered for the review. The internal auditor, thereafter, would be able to obtain an overall understanding for each process from the key stakeholders to determine the process flows and sub-areas under each process. It is recommended that the auditor documents the understanding of processes in the form of narratives and/ or process flow diagrams in order to ensure coverage of the processes and also to facilitate identification of critical activities/ key controls in the process. Where available, the internal auditor may also obtain the company's policies, group philosophies, vision and mission statements, etc. Such documents provide detailed understanding of the company's processes and control environment and thus would help in identification of the audit universe.

(b) Data analytics: The internal auditor may also conduct a preliminary data analysis to identify the criticality of processes and the activities in consideration; for example: % of raw material procured from the parent company/ single sources (that would not involve material price negotiations), number of employees joined/ separated from the company in the review period, number of intra-company transactions (for stock/ funds transfer), etc. Based on the same, the auditor may prepare a basic overview of the process in order to identify the criticality of the area.

For example: the following is a sample overview of the procurement function for a commercial vehicle manufacturer:



Details	Amount (in INR Crs)
Steel	150.19
Seat, Window and Door	136.66
Fiber	56.27
Paint	27.40
Wood	13.63
Aluminum	12.85
Others	103.00
Total	**500.00**

Based on the above, it is understood that the company's purchases are highly dependent on base materials for which the prices fluctuate regularly (i.e., steel, aluminum and paint). Therefore, the auditor may bifurcate the review of the price fixation process in a manner to ensure that the price fluctuations (adverse as well as favorable) are considered and the benefits of the same, where applicable are availed by the company. The auditor may also include in the audit planning process, the mechanism developed by the company to ensure that all price inflations are subsequently recovered from the customers.

Data analytics also help the internal auditor in identifying the population and sample sizes for each of the review areas and activities.

(c) Previous audit reports and open issues: Based on the audit calendar and the scope of the previous year, where available, the auditor may form a reasonable understanding of the key and critical issues that have

been highlighted previously and the risks that are not mitigated in the company. Audit reports, generally, also provide a detail on the background of the observation which would assist the auditor in identifying the operational processes and adherence to company policies. Based on the criticality of the previous observations and open issues highlighted, the auditor may form an opinion on the control framework within the company that would assist in identifying the key areas that need to be covered for the review.

(d) Industry benchmarking: The auditor may also avail the benefit of experience of internal audit within the industry (at other clients) to identify the sub-processes and areas for the review. Benchmarking leading practices across companies as well as industries assists the auditor in identifying control lacunas in an efficient manner.

Appendix 1: Sample Audit Universe

Sr. No.	Process		Sub-process
1	Sale of vehicles	1.01	Budget vs actuals - monitoring and action plans
		1.02	Order management
		1.03	Dealer Management
		1.04	Maintenance/ updating of price master
		1.05	Maintenance/ updating of customer master
		1.06	Invoicing and Revenue recognition
		1.07	Goods In Transit recording and monitoring
		1.08	Sale to related enterprises
		1.09	Post-Dispatch Inspection and repairs
		1.10	Customer credit implementation and monitoring
		1.11	Transportation of finished goods
		1.12	Recording and monitoring of refurbished units
		1.13	Reconciliation of records (Dealers vs. Company records)
		1.14	Receivables management
		1.15	Price fixation
		1.16	Monitoring of incentives and schemes
		1.17	Write off/ write on of receivables
2	Sale of auto components	2.01	Order management
		2.02	Dealer Management
		2.03	Maintenance/ updating of price master
		2.04	Maintenance/ updating of component master
		2.05	Invoicing and Revenue recognition

Sr. No.	Process		Sub-process
		2.06	Sale to related enterprises
		2.07	Storage and dispatch at Regional Sales Offices
		2.08	Reconciliation of records (Dealers vs. Company records)
3	Procurement to Payment	3.01	Planning and alignment with sales plans
		3.02	Order management
		3.03	Benchmarking with international markets (LME) and price fixation
		3.04	Maintenance/ updating of vendor and material master
		3.05	Service Level Agreement monitoring
		3.06	Storage/ receipt and utilization
		3.07	Quality management and approval
		3.08	Supplementary invoices - approval to recording
		3.09	Stock in transit
		3.10	Reconciliation of records
		3.11	Liability recording and accounts payable monitoring
4	Sub-contracting management	4.01	Vendor selection
		4.02	Price fixation
		4.03	Material reconciliation
		4.04	Quality management and rejections
		4.05	Debit policy and monitoring
		4.06	Transportation of sub contracted goods
5	Procurement of services	5.01	Logistics management
		5.02	Material handling
		5.03	Testing and calibration

Sr. No.	Process		Sub-process
		5.04	Insurance of raw material, components and consumables
		5.05	CHA management
6	Warranty management	6.01	Warranty terms finalization/ amendments
		6.02	Claims approval and settlement
		6.03	Inspection of parts replaced under warranty
		6.04	Warranty material identification
		6.05	Debit to OEM supplier
		6.06	Dealer debit for warranty material
		6.07	Provisioning against warranty
7	Vehicle production and planning	7.01	Alignment with sales plan
		7.02	BOM creation and alignment with material master
		7.03	Monitoring of vendor performance at shop floors
		7.04	Utilization for man power and machines
		7.05	Optimization of production cycle
		7.06	Monitoring of cost of poor quality (COPQ)
8	Inventory	8.01	Inventory levels planning
		8.02	Analysis of inventory balances
		8.03	Reconciliation of inventory (physical vs records)
		8.04	Recording of physical verification variances
		8.05	Monitoring of WIP inventory
		8.06	Dispatch of vehicles to RO/ RSO/ Dealer

Sr. No.	Process		Sub-process
9	Product development	9.01	Production specification testing and feasibility
		9.02	Quality management
		9.03	Budgeting and cost estimation
		9.04	Defects identification and rectification
		9.05	Prototype development
		9.06	UAT (User Acceptance Testing) for prototype
		9.07	Manufacturing of vehicles and road test
10	Capex management	10.01	Pay back and approvals
		10.02	Finalization of contractual terms
		10.03	Performance monitoring
		10.04	Capitalization
		10.05	Commissioning test and user sign off
		10.06	Vendor invoices certification
		10.07	Asset verification and reconciliation
		10.08	Disposal and retirement of assets
11	Payroll	11.01	Recruitment
		11.02	Training
		11.03	Maintenance of employee masters
		11.04	Payroll processing and disbursements
		11.05	Attendance recording
		11.06	Leave management
		11.07	Loans and advances to employees
		11.08	Exit management
12	Regulatory	12.01	Direct tax
		12.02	Indirect tax
		12.03	Motor Vehicles Act

Sr. No.	Process		Sub-process
		12.04	Corporate laws
		12.05	Related Party Transactions
		12.06	Environmental laws
		12.07	Health and Safety laws
		12.08	Duties/ taxes refund for sales to institutions/ hospitals
13	Finance and accounts	13.01	Fund management
		13.02	Debt management
		13.03	Investment management
		13.04	Liquidity management
		13.05	Covenant compliances
		13.06	Share capital
		13.07	Reconciliation of ledgers
		13.08	Closure of books
		13.09	Analysis of significant accounts
		13.10	Provisioning
14	Information Technology	14.01	IS policy
		14.02	Compliance with ISMS (Information Security Management Standard) (if applicable)
		14.03	Budget vs actuals - monitoring and action plans
		14.04	Disposal and retirement
		14.05	Movement of hardware
		14.06	Buy or lease analysis
		14.07	Physical access controls
		14.08	Logical access controls
		14.09	Annual Maintenance Contracts
		14.10	Network Security Management

Chapter 4

Specific Key Areas for Audit Review

Revenue Recognition

4.1 The process of revenue recognition in auto and the auto component sector is complex, as it includes revenues from sales of goods and services (royalty, commission, after-sales services, etc.), and also income from customer financing. The internal auditor may review the contractual agreement and ensure that revenue is recorded only upon transfer of risks and rewards and no significant uncertainty exists regarding the amount of consideration (in line with AS 9). Revenue on a sale transaction can be recognized only if both of the conditions are satisfied.

4.2 The following aspects typical to the automotive and auto component industries impact revenue recognition in the industry:

(i) Consignment sales/ Stock transfer— Consignment Sales/ Stock Transfers are a common practice in the sector, where the material is dispatched by the company; however, the risks and rewards on the material are not transferred to the transferee. The terms/ basis of the transfer are agreed in the contract with the transferee. Based on such terms, the sales (if recorded in the financials) are required to be reversed and a provision is required to be created in the financials.

(ii) Dumping of sales quantities— The automotive and auto component industry sales volumes are fixed by the senior management and are closely monitored for target achievement. On account of the same, there lies an increased risk of dumping of quantities to dealers without a corresponding demand for the same. The internal auditor may review the revenues recognized by the company and confirm that the same are in line with the agreement and sales returns should be analyzed in detail to confirm that the same do not relate to dumped sales quantities.

(iii) Extended warranties— Revenue from extended warranty maintenance contracts should be deferred and amortized to income on a straight-line basis over the extended warranty contract period except where sufficient past evidence is available which indicates that the cost of performing service under the contract is incurred other than on a straight-line basis.

(iv) Cash discounts— The industry involves high cycle time (conversion

of inventory to realization). Therefore, companies in this sector prefer providing a cash discounts to customers for up-front payments. Such discounts should not be deducted from sales volumes (unlike trade discounts).

Warranty Provisions

4.3 Warranties are a very crucial aspect to companies in the sector; despite the fact that the sales have been executed and the risks and rewards have been transferred to the customer, the company needs to provide for warranties proportionate to the value of sales. The basis for provisioning for warranties is required to be documented and adequately reviewed as per the defined Schedule of Authority for the company. Contingent liabilities, on account of warranties, if any are required to be disclosed in the financials.

Provisions for Retrospective Price Revisions

4.4 Sale prices in the sector are, generally, based on the metal prices over a period of time (average)/ price as on a date. Therefore, as a prevalent practice, sales are made at a provisional price and the same are later revised (on finalization of basis benchmarked for sales price). For example, if a company sells aluminum castings (weighing 15 kgs) and agreement with the customer states that the sale price shall be based on the annual average price of aluminum (based on LME prices), the sale shall be initially recorded at the dispatch price; however a provision for revising revenue recognized shall be recorded based on the monthly trend of aluminum price fluctuations. The same methodology is also applicable for purchase price determination. The purchases/ sales should be adequately revalued prior to reporting the same in financials for a true and fair reporting.

Revision of Purchase Price

4.5 *Purchase prices revised based on price manuals shared by large players in the industry*. Various automotive majors/ OEMs release price lists for spare parts in the final product based on metal prices/ overhead rates, etc. The same is considered as purchase price for all spares purchased by the respective companies. On various occasions, the price lists released by these companies (market leaders) are used as the basis of purchase price revisions by other companies. Such revisions in prices are treated similar to revisions based on raw material price fluctuations.

Inventory Valuations

4.6 Companies are required to value their inventory at cost or realizable value, whichever is less (in accordance with Accounting Standard (AS) 2, "Inventory Valuations"). However, the cost of inventory would fluctuate at a later period based on retrospective invoicing. The impact of such revisions would impact the inventory purchase as well as realizable values. Company is required to revalue inventory in books in order to demonstrate a true and fair value of the financials.

Brand Fees

4.7 Generally, in specific segments like oil, paint, tyre, etc., manufacturers promote their brand by showcasing partnership with an automotive major. The automotive major charges a fee for usage of the brand name.

Royalties

4.8 Global automotive parent companies charge a royalty to the respective entities in various countries based on the sales from the entity during the period. The companies need to recognize and make provision for such royalty income/ expense. The provision recorded needs to incorporate the foreign exchange fluctuation rate as well, if applicable.

Scrap Purchases

4.9 The companies in the industry deal in steel, aluminum, copper and other such metals which can be re-melted and molded and therefore, have a high salvage value. Companies often explore opportunities of purchasing metals from scarp vendors instead of the organized vendors. Similarly, un-damaged glass doors/ windows may also be re-sold to car owners in need of replacements; as also removable parts like, headlights, blinkers, mirrors, seats, etc. Purchasing and re-selling of scrapped parts is a prevalent and profitable practice in the automotive and auto components industry.

Inventory Absolution

4.10 Auto and auto component companies need to plan ahead for all new designs; the finalization of the same is initiated 2-4 years ahead of the actual product launch. Inventory/ molds/ castings are procured in bulk based on such finalized designs in advance for a product launch. On account of the bulk purchases, resulting in the risk of blocking working capital and obsolete inventory; the auditor may link the purchase plan with the strategy for product

launch to identify potential for obsoletion, if any. Companies need to agree on the pricing terms to ensure that the contracts for new products do not turn onerous, on account of fluctuation in raw material prices.

Tooling Advances

4.11 As a practice in the industry (detailed above), the tools for a new product launch are required to be designed and procured in advance. The design for component tools are finalized in advance and the same are provided to a partner (for manufacture). Generally, the auto company would require to provide an advance to the partner to enable acquisition of the assets necessary for manufacture of the tools. The duration of the advance may vary from 2-4 years (generally); the company is not entitled to charge depreciation on such advances.

Treatment for Molds

4.12 Various external components of vehicles are molded from plastic; eg., radiator grills, air ducts, fuel tank parts, air vents, bumpers and other exterior trims, dashboards, front interior assembly panel, etc. The molds for such items are procured by the manufacturer based on the designs and provided to third parties/ outsourced vendors for manufacture of the external components. Such molds are capitalized in the books of the manufacturer and retained by the third party.

Melting/ Casting Losses

4.13 All components that are molded from metal / plastic in the auto sector involve process losses on account of oxidation of the raw material. The mount of melting losses would be impacted by the moisture content in the material, furnace practices and the equipment used. Some companies follow a practice of claiming of abnormal melting losses from the vendor (where the same is on account of high moisture content). Companies need to define a procedure for treatment of normal as well as abnormal losses.

Confidentiality and Non-disclosure

4.14 Automotive companies have high confidentiality standards, to prevent leakage of their designs and technical know-how. The companies enter into non-disclosure agreements for assurance of the same and all parties involved are required to adhere to the same. Company needs to develop a practice Service Level Agreements (SLA) monitoring, in order to ensure that all the agreed terms and conditions have been adhered.

Liquidated Damages

4.15 Liquidated damages are imposed by the buyer based on contracted deadlines, i.e., in the event that the seller fails to meet a deadline then an agreed penalty is levied. The same is considered as “Other Income” by the buyer in financials. In the event that such Liquidated Damages are waived off, the company needs to document a process for obtaining exceptional approvals (in line with a Schedule of Authority) for such waivers.

Dealership Arrangements

4.16 In most auto companies, sales are made via authorized dealers. The same impacts the revenue recognition as well as the sales planning. In a dealership arrangement, discount schemes, trading arrangements, etc., impact the revenue volumes for the dealer as well as the company.

Discount Schemes

4.17 Auto and auto components manufacturers issue various discount schemes for their dealers on a periodic basis which are based on sales targets (i.e., targets of sales to be made by the dealers within the validity of the scheme). The companies may also float various seasonal discount schemes for the customers; various factors impact the schemes like the quantity of stock with the dealer at the beginning of the scheme period, actual sales made by the dealers during the said period and the sales returns after the scheme period. Companies need to provide for the scheme discounts at financial closure, during the scheme period to reflect true and fair value of revenues. Companies would need to prepare a detailed working/ basis for provision of such discounts and the same is required be adequately reviewed, in line with the company’s schedule of authority prior to recording the provision.

Assets with Third Parties

4.18 Various assets (including molds or even inventories) are held by third parties in the auto industry. Companies need to track the status (and ownership) of such assets on a periodic basis to ensure true and fair valuation of assets in financials.

Rebates vs. Volume Discounts

4.19 The basic difference between rebates and volume discounts is that while rebates are dependent upon sales values, volume discounts depend upon quantities of goods sold. At each financial closure, an appropriate accrual is required to be recorded in the books of account for incentive schemes. At scheme closure, the company would also need to calculate the incentives to be awarded to the dealer based on the approved scheme.

Annual Maintenance Contracts

4.20 Such contracts are entered by the companies for after sales services of the products sold.

Residual Value Agreements

4.21 The agreements for sales where the risk and rewards have been transferred to the buyer; however, the seller makes a commitment to the buyer which is to be fulfilled at a future date are called Residual Value Agreements. Some examples of residual value agreements would be buy-back agreements, minimum value guarantee agreements, etc.

Regulatory Norms

4.22 Regulatory environment impacting the auto sector has been undergoing constant changes, especially since the recent debacle involving a major car manufacturer and the violation of emission norms. The Bharat IV & NEMMP 2020 norms are expected to be implemented in the near future and the same shall impact the regulatory requirements of all Indian companies. Similarly, implications of any new regulations, for example, GST, may be identified by the auditor and the auditor may plan for the reviews accordingly.

Chapter 5
Risk Assessment

5.1 Risk assessment is vital to the internal audit methodology. Post identification of the audit universe and obtaining the base data for the transactions, the internal auditor may evaluate the criticality of risks involved in the transactions and the audit areas, preferably sub-activity wise. The auditor could seek management inputs in identification of the parameters that impact the criticality of risks in the area and thereafter, based on the same, identify the critical risks in the area.

5.2 The following parameters may be considered for risk evaluation and assessment by the internal auditor:

(a) Critical to Business Objective: The risk associated with an activity/ sub-process would be determined based on criticality of the same with the business and the management's strategy; i.e., the more critical the activity is to the business objective, the higher risk is involved in the same. Some of the critical activities (illustrative) in the auto and auto component sector based on the criticality to business objective are as follows:

Process	Sub-process	Activity
Manufacturing Operations	Assembly and Inspection	Costing
		Final Inspection
		Maintenance of production facilities
		Process capability/ Line balancing
		Production planning and scheduling
		Quality/ Productivity in manufacturing
		Maintenance of BOM for Regular Models
		Rework and rectification
		Quality in manufacturing (Incl Rework and rectification in manufacturing area and final

Process	Sub-process	Activity
		inspection)
		Warranty expenses- Claim settlement
New Product development	New Product Introduction	Abandoned Projects
		Business case evaluation and monitoring of expenditure
		ERC - Specific model BOM walkthrough
		Failure analysis for designs and processes (DFMEA and PFMEA)
		Manufacturing of prototypes
		Post-launch issue management
		Pre-launch activities
		Production clearance of vehicles
		Quality Function Deployment
		Reliability Specification and Testing
		Testing and Validation

(b) Value at Risk: Risks involved in a business process/ sub-process/ activity is also impacted by total value of transactions involved in the same; the higher the value of transactions, higher the risk. Below is an illustrative list of key risk areas based on value of transactions.

Process	Sub-process	Activity
Manufacturing	Manufacturing process	Maintenance of BOM for Regular Models
Order to Collection	Vehicle Sales	Invoicing of vehicles
		Warranty expenses and claims settlement
		Post–sales expenses
		Dealership Managements
		Supplementary invoices and price revisions
Procurement to Pay	Direct Materials	Inwarding of Materials through CRS/ CRDO

Process	Sub-process	Activity
		Issue and Liquidation of Hundi
		Logistic Invoice Verification and Payment Processing
		Payment Processing for Imported Material
		Price amendment, approval and update
		Provision for Retrospective Price Amendments and materials w/o GR.
		Quality of vendor parts/Quality Validation
		Receipt, acknowledgment and storage of materials at stores
		Supplementary Payment
		Vendor Evaluation and Quality Rating
Capital Expenditure	Asset Verification	Asset Identification and verification
		Asset Master Maintenance
Information technology & IT Security	Logical Access Control to application systems	Creation & maintenance of user master (Application Systems) - SAP (modules), CRM, SRM, PLM, Remedy etc.
	Network Security	Network security - Vulnerability assessment/ penetration testing
Inventory Management	Direct Materials	Inventory Analysis
		Verification and reconciliation of sub-contracted materials
		Physical verification and inventory adjustments

(c) Volume at Risk: The volume involved in an activity is the number of transactions impacted by the activity in the review period. The propensity of errors increases in high number of transactions; therefore, the risk involved

in activities with higher transactions tends to increase. An illustrative list of high risk transactions based on the volume is provided below:

Process	Sub-process	Activity
Procurement to Pay	Materials	Recording of receipt of materials and storage
		Logistic Invoice Verification and Payment Processing
		Payment Processing/ Liability recording and supplementary invoices
		Price amendment, approval and update
		Quality of vendor parts/ Quality Validation
		Vendor Evaluation and Quality Rating
Order to Collections	Vehicle sales	Dispatch controls and invoicing
Manufacturing	Warranties	Warranty expenses- Claim settlement
Treasury functions	Treasury	Bank operations and Reconciliations
		Borrowings
		Cash Verification
		Foreign Exchange Transaction
		Insurance and Investments
		Loans and Advances (Supplier financing and Vehicle financing)
	Accounting	Book Close procedures
		Contingent Liabilities and Deferred Tax
		Inventory Valuations, Provisions and Accruals
		Related Party Transactions

Process	Sub-process	Activity
Capital expenditures	Assets Procured/ Leased	Capex Appraisal/ Approval and Procurement Procedures
		Capitalization, Commissioning And Cenvat Availment
		Leased Assets (Non IT)
		Ordering/ Liquidated Damage (LD) Clause, Performance Bank Guarantee
		Post Implementation Monitoring
		Post transfer issues - Capital items
		Tooling Assistance

(d) Maturity Level of System: The maturity levels of the ERP in the company determine how strong is the control framework within the company. The maturity level of the ERP can be assessed by assessing the number of manual vs. automated controls in the company. As a thumb rule, higher the automation in systems, the lesser is the risk involved. Additionally, in the event that the company does not have transaction level controls (for instance, maker-checker controls for transaction recording or auto linkages of the subsidiary accounts to the control accounts) the risk implication shall be increased.

It may be added that companies, generally, have manual controls for the following processes:

- Vendor evaluation and assessment
- Assessment of credit limits for customers
- Price master maintenance
- Purchase negotiations
- Compliances to service level agreements
- Dealership operations
- Discount scheme and claim verifications
- Manufacturing process and finished goods generation recording
- Granting logical access to systems
- Hazardous waste management

- Compliance framework and regulatory monitoring
- Quality assessment procedures
- Safety and security
- Patents and Licenses
- Disaster recovery and business continuity

The maturity of ERP and automated controls framework within the company would impact the reliability levels of the data received based on the source of data, the number of filters/ categories used for extracting reports from the system and the manual intervention in extraction of the data from the system. It is advisable to review the maturity of the system based on system extracted reports and matching the same with the MIS presented to the management for periodic review/ published financials in order to determine financial accuracy of the data extracted from the system.

(e) Regulatory and Ethical Issues: Fraud risks (ethical issues) are a major component of the inherent risk in any activity. The higher the propensity of fraud in a transaction, the higher would be the potential risk implication in the activity. An illustrative list of the key fraud risk areas in the auto and auto component sector is as follows:

Process	Sub-process	Sub-Process
Treasury	Cash Management	Access to cash and cash records
Procurement to Pay	Procurement process	Negotiations and price finalizations
		One time purchase orders including open market purchase
		Allocation of share of business and execution
		Advance to vendors for materials
		Recovery against debit note
	Receipt process	Receipt, acknowledgment and storage of materials at stores
		Acknowledgement of services receipt
		Employee expenses and

Process	Sub-process	Sub-Process
		reimbursements
		Repairs and maintenance of building, plant & machinery and inventory
Order to Collections	Disposals	Disposal of old stocks and metal scrap
	Collections	Receivables/ Sales Realization/ (Channel Financing/ Cash Sales)
	Schemes	Incentives and discounts to dealers
	Sales processes	Sales to Govt agencies/ Institutional sales
Inventory Management	Direct Materials	Verification and reconciliation of subcontracted materials
	Direct Materials	Inventory Analysis
Capital Expenditure	Assets Procured/ Lease	Estimate Sheet Preparation
	Assets Made In-house	Make/ Buy Analysis
Fully Built Vehicles & Re-conditioning	Fully Built Vehicles	Selection of Recon agents and Franchise operation

For feasibility of the risk assessment and evaluation, the auditor may develop a checklist for each process and identify the risk areas in the same. Following sample questionnaires have been given as appendices to this chapter:

(i) Sample questionnaire for risk assessment of procurement process

(ii) Sample questionnaire for risk assessment of sale process

(iii) Sample questionnaire for risk assessment of production process

(iv) Sample questionnaire for risk assessment of inventory process

(iv) Sample questionnaire for risk assessment of fixed assets process.

Based on the risk assessment, the internal auditor would be able to identify the High, Medium and Low Risk areas. A comprehensive internal audit plan is to be prepared by the auditor and the classification of all activities in scope, based on the criticality of risk areas shall assist the auditor in planning for the audit with respect to timelines, level of documentation and analysis required for the audit and the skill-set required for execution of the audit.

Industry Trends

5.3 Automotive industry is constantly adapting to the regulatory and innovative changes in the market segment. In addition, there has been a significant increase in the latent demand for commercial as well as passenger vehicles in the country, as well as on a global level. On account of the same, the companies in the auto and the auto component sector will undergo vast changes with respect to

- Shift of fuel sources to unconventional methods (electricity, solar power, etc.).
- Increase in capacity and sales
- Higher controls over emission norms and pollution control systems
- Increased focus on fuel efficiency
- Organic growth in the business
- Increase in global reach and market penetration strategies
- Shift towards environment-friendly technologies, specifically in passenger vehicle segments
- Need of innovation in optimizing the Internal Combustible Engine (ICE)
- Focus on increasing vehicle lifespan
- Consumer focus on ergonomics and comfort
- Safety innovations.

As a result of the same, the following aspects need to be considered with the purview of strategy and growth risks:

- New product design
- Research and development
- Capital expansions/ payback calculations
- Sales (For analysis of market penetration strategies).

Internal Financial Control (IFC) Documentation

5.4 The Companies Act, 2013, has mandated documentation of the Internal Financial Controls for each company. Key risk areas are identified by the management in the IFC documentation and the same are tested by the statutory auditors. Based on the same, and the qualifications in the statutory audit report w.r.t. the controls framework to identify the control framework developed by the management and the effectiveness of the key controls, the key risks areas and controls in the processes may be identified. The same would enable the internal auditor to identify and evaluate the criticality of processes defined and the level of details required for review of each sub-process and activity.

Preparation of Audit Plan

5.5 Post identification of the audit universe and identification of the risk ratings against each activity, the internal auditor is required to prepare the audit plan ensuring that all the key risk areas are covered in higher details and at a higher frequency than the rest of the areas. The internal auditor should seek management feedback on the risk ratings identified and the frequency at which the management seeks to review the business transactions. Based on the same, the internal auditor would finalize the internal audit plan.

Appendix 1: Sample Questionnaire for Risk Assessment of Procurement Process

	Sub- Process	Risk Question	Remarks
1	Vendor Master Maintenance	Have there been any significant vendor additions during the period at this location?	The risk rating to this sub-process would vary depending on the number of additions to the vendor master.
2	Vendor Master Maintenance	Have there been any changes to the Vendor Master during the period (i.e., vendor deleted, vendor information changed, etc.)?	The risk rating to this sub-process would vary depending on the number of changes to the vendor master, more specifically in the case of changes to Bank Master, Regulatory information (VAT / ST Registration, etc.).
3	Vendor Master Maintenance	How frequently is the Vendor Master reviewed?	Periodic review of vendor master or audit trail helps in ensuring that no unauthorized change has been made. More frequent reviews would imply lesser risk (subject to an audit trail and defined process of review).
4	Vendor Master Maintenance	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
5	Vendor Selection	Have there been any significant vendor additions during the period at this location?	Automotive companies have various PPAP audit requirements prior to confirmation of a vendor; due to the same vendor

	Sub- Process	Risk Question	Remarks
			registration requires significant time and a limited number of vendors are finalized/ registered for all raw materials and primary consumables. If a high number of vendors are registered in the period, the risk rating for the sub-process would be high.
6	Vendor Selection	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
7	Vendor Selection	Is the share of business defined? If yes, have there been any violations to the same?	Violations to share of business may imply potential risk of fraudulent practices/ liaisons with external parties; higher the violations, higher the risk rating for the sub-process.
8	Vendor Selection	Is the number of single vendor procurements high?	Higher the number of single-vendor procurements, higher the weightage or risk rating to the sub-process.
9	Vendor Selection	Has the vendor performance evaluation been conducted in line with the policy? Is the evaluation cross-functional?	Higher the deviations to the policy, higher the risk potential in the sub-process.

	Sub- Process	Risk Question	Remarks
10	Vendor Selection	Has the quality clearance of vendor been obtained prior to vendor acceptance?	Lesser the complexity in quality clearance process, higher would be the compliance risk in the sub-process.
11	Purchase Orders	Were there any purchase orders issued outside of the ERP System at this location during the period? What was the value of purchase orders issued outside of ERP during the period?	Higher the number of manual purchase orders, higher is the weightage or risk rating for the sub-process.
12	Purchase Orders	Have there been any changes in the location's approval/ authority norms during the period?	Significant changes in the approval authority leads to higher risk rating to this sub-process.
13	Purchase Orders	Are purchase price and quantity tolerances defined in the system?	If tolerance limits are not defined then 3-way match in procurement process cannot be ensured. Absence of tolerance indicates higher risk rating to this sub- process.
14	Purchase Orders	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.
15	Purchase Orders	Are price escalations clauses defined in contracts with vendors?	Higher risk of inadequate pricing in case of ambiguity in the price escalations.
16	Purchase Orders	Are the number of purchase orders	Higher the number of purchase orders, higher

	Sub- Process	Risk Question	Remarks
		benchmarked within processes and products (as well as across industry practices)?	the risk of violation of DoA for the sub-process.
17	Purchase Orders	Are negotiations reviewed in line with delegation of authority?	Lesser the approval requirements in the negotiation process, higher the risk rating for the sub-process.
18	Goods & Services Receipts	Does this location have a significant amount of open PO's or aged 3-way match exceptions?	Higher the number of open purchase orders/ 3-way exceptions, higher is the weightage or risk rating for the sub-process.
19	Goods & Services Receipts	What is the value of goods received but not invoiced at this location?	Higher the value of open GRIR, higher is the weightage or risk rating for the sub-process.
20	Goods & Services Receipts	Has there been any fraud noted at this location in regards to procurement process? Specify the number of cases?	Higher the number of fraud cases, higher the weightage or risk ranking of this sub- process.
21	Goods & Services Receipts	Are weighbridge calibrations monitored?	A high-risk rating shall be awarded to the sub-process in case the weighbridges are not calibrated / calibrations are not reviewed.
22	Goods & Services Receipts	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.

	Sub- Process	Risk Question	Remarks
23	Verification & Approval	Have there been any changes in the location's schedule of authority during the period?	Significant changes in the authority/ approval limits leads to higher risk rating to this sub-process.
24	Verification & Approval	Have any new significant recurring payments been set up at this location during the period?	Significant recurring payments lead to higher risk rating to this sub-process.
25	Verification & Approval	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.
26	Debit Notes	Was there a significant amount of debit/ credit memos issued at this location?	Higher the number of debit/ credit memos, higher is the risk rating to this sub- process.
27	Debit Notes	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.
28	Freight Expense	Is there significant increase in the freight expense?	Significant increase in the freight expense leads to higher risk rating to this sub- process.
29	Freight Expense	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.
30	Supplementary invoices	Is the periodicity of supplementary invoicing	Higher risk rating is granted to the sub-

	Sub- Process	Risk Question	Remarks
		defined?	process in case the price revisions are ad-hoc.
31	Supplementary invoices	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.
32	Segregation of duties	Has there been any turnover in personnel that perform key AP duties that could result in an employee performing incompatible tasks?	Frequent/ major change in function for procurement role may lead to higher risk rating for this sub-process.
33	Segregation of duties	Has there been any fraud noted at this location in regard to AP during the past 3 years?	Higher the number of fraud cases, higher the weightage or risk ranking of this sub- process.
34	Segregation of duties	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher is the weightage or risk ranking of the sub-process.

Appendix 2: Sample Questionnaire for Risk Assessment of Sales Process

Sr. No	Sub- Process	Risk Question	Remarks
1	Sales Ordering	What was the value of credit sales at this location?	Higher the value or proportion of credit sales, higher is the risk at the location in terms of collectability and liquidity.
2	Sales Ordering	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
3	Dispatches	What was the value of total sales at this location? What is the increase of percentage to last year?	Higher the value or change in percentage of sales from previous year, higher the weightage or risk ranking of the sub-process.
4	Dispatches	Has there been any turnover in the preparer or reviewer of shipping information in this location?	Shipping is one of the important functions in Sales process. If there is any significant change in this function, it increases the risk around this sub-process and needs more attention in the year of transition.
5	Dispatches	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
6	Revenue Recognition	What was the value of new contracts at this	In case high value contracts have been

Sr. No	Sub- Process	Risk Question	Remarks
		location?	entered into, it needs auditor's attention to ensure that compliance with company policies has been ensured and due diligence has been performed.
7	Revenue Recognition	Were there any adjustments to existing arrangements where prices are not fixed in functional or local currency at this location?	Volatile and non-standard prices leads to higher weightage of risk to this sub- process. Inconsistencies/ ambiguities in creation of supplementary invoices to customers would also result in a high risk rating for the sub process.
8	Pricing of SKU	Were there any changes to the Price Master File at this location?	Higher the number of changes in price master, higher is the weightage of the risk to this sub-process.
9	Pricing of SKU	Has there been any turnover in the personnel responsible for the Price Master File at this location?	Pricing is critical function in the sales process. If there is any significant change in this function, it increases the risk around this sub-process and needs more attention in the year of transition.
10	Pricing of SKU	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
11	Invoicing	What was the value of total sales at this location	Higher the value or change in percentage of

Sr. No	Sub- Process	Risk Question	Remarks
		during the audit period?	sales from previous year, higher the weightage or risk ranking of that sub-process.
12	Invoicing	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
13	Daily Sales Settlement	What is the percentage of Direct Sales in this location?	Higher the percentage of Direct Sales, higher the weightage or risk ranking of this sub-process.
14	Daily Sales Settlement	Has there been any fraud related to the daily sales settlement process? If yes, please specify the number of fraud cases identified.	Higher the number of fraud cases, higher the weightage or risk ranking of this sub- process.
15	Daily Sales Settlement	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
16	Sales Return	Were any goods returned during the year at this location? What was the value of goods returned during the year at this location?	Higher sales return indicates higher risk in the sub- process.
17	Sales Return	Has there been any turnover in the returns department at this location?	Approval for sales return is significant process to ensure the quality compliance. If there is any significant change in this function, it increases the risk around this sub-

Sr. No	Sub- Process	Risk Question	Remarks
			process and needs more attention in the year of transition.
18	Sales Return	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
19	Accounts Receivable Monitoring	Was there any turnover in the revenue accounting personnel at this location?	Monitoring of Accounts Receivable is critical to control the bad-debts. If there is any significant change in this function, it increases the risk around this sub-process and needs more attention in the year of transition.
20	Accounts Receivable Monitoring	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
21	Volume Reporting	What is the value of unit case sales at this location? What is the percentage of change compared to previous period?	Higher the value or change in percentage of sales from previous year, higher the weightage or risk ranking of that sub-process.
22	Volume Reporting	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
23	Master Data Maintenance	Have there been any risk significant customer master file changes at	Higher the number of changes in price master, higher is the weightage

Sr. No	Sub- Process	Risk Question	Remarks
		this location?	of the risk to this sub-process.
24	Master Data Maintenance	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
25	Sales Analysis	Was there any turnover in the revenue accounting personnel at this location?	Frequent/Major Change in function for sales analysis role may lead to higher risk rating for this sub-process.
26	Sales Analysis	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
27	Allowance for Doubtful and Bad Debts	Were there any changes to the methodology for calculating allowance for doubtful accounts?	Significant change in doubtful debts calculation methodology can affect the bottom line. This leads to the higher weightage of risk rating for this sub-process.
28	Allowance for Doubtful and Bad Debts	What is the value of accounts over 30 days?	Higher value of old outstanding increases the risk of recoverability and hence is assigned higher weightage of risk rating for this sub-process.
29	Allowance for Doubtful and Bad Debts	Was there any turnover in the personnel who calculate or review the Allowance for Doubtful	Frequent/ Major Change in function for Working Capital Management role may lead to higher risk

Sr. No	Sub- Process	Risk Question	Remarks
		Accounts calculation at this location?	rating for this sub-process.
30	Allowance for Doubtful and Bad Debts	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
31	Segregation of Duties	Has there been any turnover in personnel that perform key Sales and AR duties?	Frequent/ Major Change in function for Sales and AR Role may lead to higher risk rating for this sub-process.
32	Segregation of Duties	Has there been any fraud noted at this location in regards to Sales and AR during the past 3 years?	Higher the number of fraud cases, higher the weightage or risk ranking of this sub-process.

Appendix 3: Sample Questionnaire for Risk Assessment of Production Process

	Sub- Process	Risk Question	Remarks
1	Production planning	Is the production plan adequately documented and approved as per the Schedule of Authority?	If the production plan doesn't have an audit trail, the process may be considered high risk area.
2	Production planning	Is the production planning linked to sales orders?	Lesser the controls to ensure linkage of production planning to the sales orders, higher the risk weightage to the area.
3	Production planning	How frequently are the sales order quantities updated?	Higher the frequency of updates to the dispatch scheduling from customers, higher the risk rating for the area.
4	Production planning	Are the production processes outsourced?	If the company outsources the production process to a third-party, the risk weightage to the area would increase.
5	Production planning	Does the company have high working capital to turnover ratio?	If the amounts of working capital and aged inventory have been increasing over a period, the risk weightage to the area would increase.
6	Production planning	Is the production process standard for all customers?	In the event that the production processes are customized for each customer order, the risk rating of the area would increase.
7	Production planning	Has the company defined target resource	If the company has a lower resource / capacity

	Sub- Process	Risk Question	Remarks
		utilization rates? Are the resources adequately utilized?	utilization rate (in comparison to peers and previous year's performances), the area would be considered a high risk area.
8	Production planning	Have the machines been adequately utilized in the review period?	Higher the machine breakdown time/ idle time, higher the risk rating for the area.
9	Production planning	Does the month-on-month yield from plant vary beyond tolerance levels?	Higher variances in month-on-month yield would result in a higher risk rating for the area.
10	Production planning	How many sales orders were closed without dispatches?	High open orders/ closure of sales orders (without dispatch) would mean a higher rate of inefficiency in the production process.
11	Production planning	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
12	Bill of materials	Is the Bill of Materials adequately reviewed?	If the company does not have a process to review Bill of Materials and ensure accuracy, the same may be incorrect, leading to incorrect inventory recording and hence, misstatement of inventory values.
13	Bill of materials	Is the consumption recording process manual or Bill of Materials based?	If the raw material consumption is auto calculated based on Bill of materials, the process of consumption recording

	Sub- Process	Risk Question	Remarks
			may be considered a low risk.
14	Bill of materials	Can the consumption recording be traced to the respective production orders (in line with Bill of materials)?	Consumption recorded without a production order/ not in line with the Bill of Materials would render the area a high risk area.
15	Bill of materials	Is the process of recording consumptions manual?	Manual consumption recording (instead of auto-recording based on production) would imply a higher risk rating for the process.
16	Bill of materials	Can alternate material be consumed in the Bill of material?	Potential for update to production orders to accommodate alternate material against a Bill of Materials would result in a high risk rating to the sub-process.
17	Bill of materials	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
18	Production recording	Are the production and consumption quantities certified by the plant team?	In the absence of process to confirm the actual consumption and production quantities, the area must be considered high risk.
19	Production recording	Reconciliation of materials	If the material consumed is reconciled with the production recorded; the risks in the process may be considered mitigated.

	Sub- Process	Risk Question	Remarks
20	Production recording	Cut off procedures	Lack of controls to prevent delays in production recording and ensuring cut off procedures would result in a high risk weightage to the area.
21	Production recording	Changes to processes	If there has been a change in the process of recording production in the last year, the risk weightage to the process should be high.
22	Production recording	Changes to personnel	Frequent/ major change in function for inventory role may lead to higher risk rating for this sub-process.
23	Production recording	Are production rejections recorded in system?	The risk rating of the sub process would be high in case the rejections are not recorded in ERP.
24	Production recording	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
25	Wastage analysis	Is the wastage / scrapping of material adequately recorded?	If the company does not record wastage and / or scrapping in the process and the same is not analyzed to identify process inefficiencies and abnormal losses, the area may be considered as a high risk area.

Appendix 4: Sample Questionnaire for Risk Assessment of Inventory Process

	Sub- Process	Risk Question	Remarks
1	Receiving	Does this location have inventory? What is the percentage of change over previous period?	Higher the percentage of change or inventory value, higher weightage of risk rating to this sub-process.
2	Receiving	What was the value of inventory purchased during the period at this location?	Significant amount of purchase of inventory indicates higher risk rating to this sub-process.
3	Receiving	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
4	Costing	How much is the production volume in terms of units and values?	Significant change of percentage of production volume or values over previous period leads to the higher risk rating to this sub- process.
5	Costing	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
6	Counts	What is the value of inventory at this location?	Higher inventory value leads to higher risk rating to this sub-process.
7	Counts	Were there any material adjustments made to the inventory accounts based on inventory counts during the period?	Significant adjustment entries in Inventory accounting indicates higher risk weightage to this sub-process.

	Sub- Process	Risk Question	Remarks
8	Counts	Are there any inventory items at these locations that use a different unit-of-measure for count and recording purposes?	Non-Standard use of unit of measurement and different methodology leads to the higher risk rating to this sub-process.
9	Counts	Does this location have inventory held by third party?	Inventory located at multiple warehouse owned by third party amounts to higher risk rating to this sub-process.
10	Counts	What is the value of inventory held by others?	Higher inventory value held by third party leads to higher risk rating to this sub-process.
11	Counts	Involvement of the company in inventory counts at third party	If physical verification for inventory at depots/ third parties is not conducted by the company and only by means of a confirmation from the third party, rate this sub-process as high risk.
12	Counts	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
13	Book to physical adjustments	Has a physical inventory count been performed at this location during the period?	If physical verification was not performed, rate this sub-process as high risk.
14	Book to physical adjustments	Were any material differences in inventory noted at this location during the counts?	Significant differences during physical verification indicates higher risk rating for this sub-process.

	Sub- Process	Risk Question	Remarks
15	Book to physical adjustments	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
16	Inventory Accounting	Were there any significant/ unexplained adjustments to the Inventory accounts for this entity/ location?	Significant adjustment entries in inventory indicate higher risk weightage to this sub-process.
17	Inventory Accounting	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
18	Molds and tooling	Does the company maintain a track of the molds and tools owned by the company at third party location or tools provided by the customer?	If the track is not maintained, the process is a high risk process.
19	Molds and tooling	Have there been adjustments recorded to molds/ tools?	If there have been high / no adjustments to the value of tools and molds over the recent past, the area may be considered as high risk.
20	Obsolete and slow moving inventory	Has the inventory turnover ratio decreased at this location during the period?	Lower inventory turnover means idle inventory and leads to higher risk weightage for this sub-process.
21	Obsolete and slow moving inventory	Does this location maintain a separate area for materials and goods which are obsolete or expired?	In case inventory is not bifurcated for good and obsolete stock, the risk rating is high for the sub-process.

	Sub- Process	Risk Question	Remarks
22	Obsolete and slow moving inventory	Does this location maintain a reserve for obsolete inventory?	In the absence of reserve for obsolete inventory, rate this sub-process as high risk.
23	Obsolete and slow moving inventory	Has this location materially adjusted inventory (write-offs) during the period?	Significant write offs leads to higher risk weightage to this sub-process.
24	Obsolete and slow moving inventory	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
25	Impairment	Have economic or market events occurred which would result in the net realizable value of inventory decreasing at this location during the period?	Any indication of such event leads to higher risk weightage to this sub-process.
26	Impairment	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
27	SOD	Has there been any turnover in personnel that perform key Inventory duties that could result in an employee performing incompatible tasks?	Frequent/ major change in function for Inventory Role may lead to higher risk rating for this sub-process.
28	SOD	Has there been any fraud noted at this location in regards to Inventory during the past 3 years?	Higher the number of fraud cases, higher the weightage or risk ranking of this sub- process.

	Sub- Process	Risk Question	Remarks
29	SOD	Please indicate how many issues were noted during last assessment.	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.

Appendix 5: Sample Questionnaire for Risk Assessment of Fixed Assets Process

	Sub- Process	Risk Question	Remarks
1	Asset Capitalization- Accounting and Recording	Did the entity have fixed asset additions during the audit period?	Significant increase in fixed assets amounts to higher risk rating to the process.
2	Asset Capitalization- Accounting and Recording	Did the entity have fixed asset transfers during the audit period?	Significant amount of fixed assets transfers amounts to higher risk rating to the process.
3	Asset Capitalization- Accounting and Recording	What is the value of total asset additions, including transfers and CWIP?	Significant addition/ transfer to the asset amounts to higher risk to the sub-process.
4	Asset Capitalization- Accounting and Recording	Have there been any changes in operation that affect this sub- process (i.e., M&A activity resulting in large amounts of additions, applications used, etc.)?	Significant change in this function amounts to higher risk to the sub-process.
5	Asset Capitalization- Accounting and Recording	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
6	Asset Capitalization- CIP and Projects	Did the entity have any capital projects begin this year?	Significant amount of capital project initiated amounts to higher risk rating to the sub-process.
7	Asset Capitalization- CIP and Projects	Is interest capitalized automatically or is it computed using a manual process?	System driven interest capitalization leads to higher risk for the application controls whereas manual process

	Sub- Process	Risk Question	Remarks
			leads to higher risk to the sub-process.
8	Asset Capitalization-CIP and Projects	Were there any material budget shifts or increases between capital projects?	Significant shift of budget amounts to higher risk of the sub-process.
9	Asset Capitalization-CIP and Projects	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
10	Balance Sheet Recs	Were there any material adjustments to the PPE accounts for this entity/location?	Higher the number of adjustments in PPE account leads to higher risk rating to the sub-process.
11	Balance Sheet Recs	Has there been any turnover in the preparer or reviewer of PPE account reconciliations for the location?	Significant change in this function amounts to higher risk to the sub-process.
12	Balance Sheet Recs	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
13	Disposals	Did the entity have any fixed asset disposal or transfer requests during the year? What is the value of disposals?	Higher the value of disposals, higher is the risk rating to the sub-process.
14	Disposals	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.

	Sub- Process	Risk Question	Remarks
15	Fixed Asset Register	Were there any asset movements (additions, transfers or disposals) during the year?	Significant movement amounts to higher risk rating to the sub-process.
16	Fixed Asset Register	Does the location have a formalized fixed asset process including tagging and tracking assets?	Non availability of standard procedures and tagging amounts to higher risk rating to the process.
17	Fixed Asset Register	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
18	Impairment	Have there been any impairments recorded this year? If applicable, what was the value of impairments recorded during the year?	Significant amount of impairment amounts to higher risk rating to the sub-process.
19	Impairment	What types of assets make up the fixed asset balance?	Higher proportion of intangible assets or fixed assets amount to higher risk rating to the sub-process.
20	Impairment	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub-process, higher the weightage or risk ranking of the sub-process.
21	Maintenance	Have there been any changes to fixed asset policies (i.e., useful lives to asset categories, depreciation conventions) during the audit period?	Significant change in the policies and guidelines amount to higher risk to the sub-process.

	Sub- Process	Risk Question	Remarks
22	Maintenance	How many issues were noted in last audit in this sub- process?	Higher the number of issues identified in a sub- process, higher the weightage or risk ranking of the sub-process.
23	Physical Controls	Have there been any instances of material known theft or misappropriation of fixed assets at this location?	Instances noted for theft and missing assets recommends higher risk rating to the sub-process.
24	Physical Controls	Were there any material adjustments to PPE balances as a result of PPE inventories (i.e., PP&E was not fully counted, etc.)?	Significant adjustments to PPE balances indicates gap in physical and book assets and amounts to higher risk rating to the process.

Chapter 6
Vendor Development and Procurement

6.1 In the highly competitive automobile industry, vendor development and procurement is an important aspect for making supply of automobile at an affordable cost with quality and latest trends. Generally, manufacturing process of an Automobile Manufacturer (AM) comprises of an assembly line wherein the components are outsourced from vendors. The AM primarily focuses on its core competencies like, technology development, research, product development, etc.

Initially, AM were importing the entire product under CKD (Completely Knocked Down) or SKD (Semi Knocked Down) condition from the parent company. Later, with development of Indian industry, the components were manufactured locally. This led to development of auto component manufacturers.

6.2 Unlike other industries, vendor development and procurement in automobile industry is a specialised task which determines the long term viability of the AM. It is not just a process of buying raw materials or semi finished products. The process involves development of vendors more as a partner rather than just a supplier. Substantial efforts are required in providing technical expertise and knowledge sharing for obtaining high precision quality output in a timely manner at a competitive cost.

6.3 Industrial sub-contracting or outsourcing is defined as the provision, by one firm to another firm, of relatively specialised inputs (auto components and parts as per certain specifications, makes and models), which are distinguished from inputs of a standard kind such as, raw materials or stores, which are incorporated into the final products of the buying firm. The procurement of standard raw material inputs being of a generalised nature and audit process being covered in the General Auditing Guidelines are not considered here in view of emphasis on coverage of the industry specific technical aspects rather than general aspects.

6.4 In present competitive environment, the AM considerably rely on their vendors to provide technologically advanced, defect free products in a timely and cost effective manner. Vendor development and selection is a critical

process in the automobile industry. The AM has following choices for procurement of its component requirements:

(a) Import from parent company or from technical partner;

(b) Manufactured In house;

(c) Outsourced from ancillary vendors;

Import from parent company and In house manufacturing are not considered cost effective in view high overheads and administrative cost. Secondly, AM prefers to operate on zero inventory level on Just in Time (JIT) approach.

With mushrooming and creation of substantial increase in capacity for production of auto components and ancillary units, it is expected that considerable efforts will be required for developing the capabilities of local suppliers through outsourcing or procurement practices.

Automobile Components

6.5 The AM, generally, acts as integrator. It divides it procurement requirements in three parts:

(i) Tier 1 Components – Critical components like, Fuel System, brake systems etc which are highly sensitive to the entire production line as well as the ultimate brand image of the product.

(ii) Tier 2 and 3 components – these are non core components.

In respect of Tier 1 component – the AM generally prefers known and established vendors. Generally, they are not changed in short term, whereas, in case of Tier 2 and 3 components, vendor selection is flexible and they can be changed depending upon their capacity and capabilities.

The AM is required to declare the vendor procurement of components to Automotive Research Association of India (ARAI) and obtain authorisation. If there is any change of design, etc., in case of such components, it requires approval of ARAI. Thus, the entire process is highly regulated. The procurement process requires Homologation.

Homologation (to approve or confirm officially) is the process of certifying or approving a product to indicate that it meets regulatory standards and specifications, such as safety and technical requirements.

6.6 The procurement of Auto Components by AM will involve several aspects like:

(a) Designing of components

(b) Quality control and precision

(c) Providing toolings by AM and control over the same

(d) The entire supply chain management of the Auto Component manufacturer and involving inventory management at supplier level as well as at AM premises.

6.7 The purpose of this chapter is to:

(a) Examine the role of procurement and purchasing department and the importance of vendor development.

(b) Review relevant aspects to identify potential critical elements of vendor development.

(c) Get an understanding of the procurement practices and vendor development efforts of a AM and how these affects their vendors.

(d) Establish procedures in respect of internal control processes required to monitor such procurement practices which is unique for this industry.

(e) Identifying risks associated with outsourcing processes and mitigating the same by appropriate audit plan.

(f) Existence of IT Controls relevant to the peculiar outsourcing processes relevant to this Industry.

6.8 The following are key concepts and control objectives related to vendor development in procurement:

(a) Role of Procurement and Purchasing Department

(b) Vendor development and selection process

(c) Vendor Evaluation

(d) Vendor Monitoring.

Role of Procurement and Purchasing Department of AM

6.9 Procurement role refers to acquiring of inputs, components by AM through domestic outsourcing channels. The vendor development is defined as an effort by AM towards the vendors for increasing the technical performance and capabilities of the vendor to meet the AM's short and long term supply requirements. Strategic procurement might imply standardisation of components, delivery times and schedules and levels of inventory. These efforts will lead to an approach as joint problem solvers and attitude towards

vendors will be that of trust and partnership. Good procurement practices includes sharing and discussion of cost structure between AM and vendors.

6.10 Long term strategy also includes retaining control over designs and patents. Decision is required to be taken in respect of what can be outsourced to vendors. The outsourcing strategy has several benefits such as, allowing AM to focus on its core competencies, reducing operating cost and research and development of new products and technologies. Outsourcing, however, also has considerable risks such as, high level of dependence of vendors for components and the impact on production line, potential non performance including meeting high quality standards, vendors financial difficulties, etc, which may adversely impact the AM's image, profitability and performance.

6.11 High level vendor development team will be required to strive for setting stringent quality norms, continuous monitoring of the processes and facilities of the vendors. This also requires establishing strict vendor selection norms and standards.

AM bears the transaction costs of finding a vendor, who specialises in the specific process required and then negotiates details of quality, cost and delivery of said parts and components. This process is also called efficiency of Quality Cost and Delivery (QCD).

6.12 AM has to render some assistance to the vendor through information exchange and loaning of machines, tooling, moulds, financial expertise, deputing engineers, etc. Such relationship would build a so called "quasi organisation" with its own cultural behaviour and operating style. There are two kinds of possible relationship between AM and vendors, arms length contractual relationship (ALR) and obligatory legal contractual relationship (OLR). In ALR, it is a short term relationship. The AM procures its supplies through an open tender bidding system. The relationship ends when the tender is executed. In OLR, the vendor and AM have a long term relationship. There are joint/common products and part development between the parties. The orders are placed by commissioning rather than tender. The AM and vendor solve problems together. The decision is not only based on commercial considerations but technological competency.

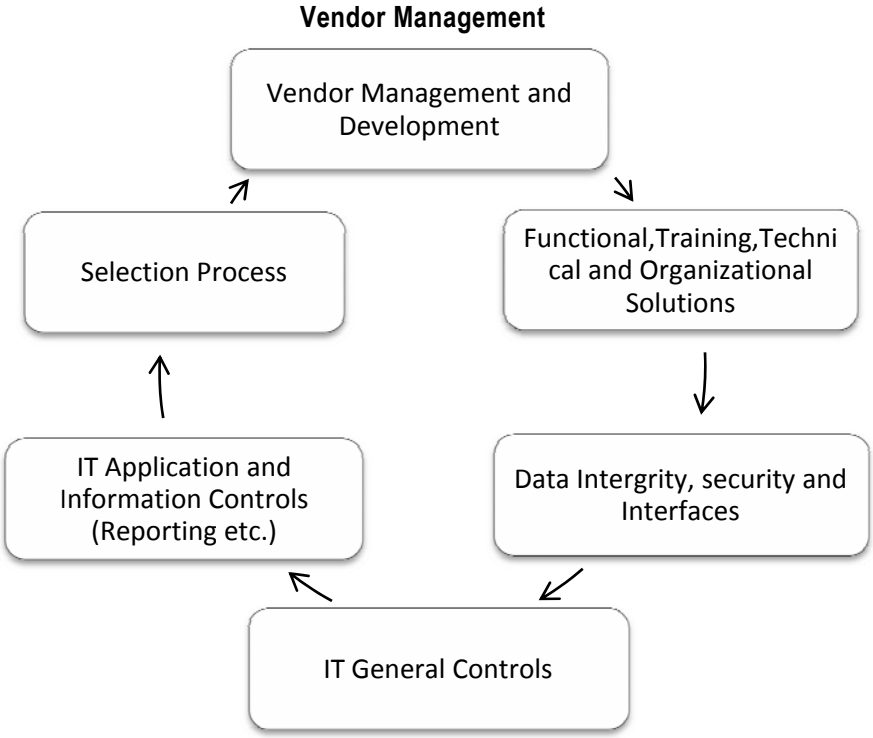
Design and Quality Control

6.13 The AM is required to provide design for the components to be manufactured. The ownership of IP in respect of such design rests with AM. The component manufacturer will have to provide suitable undertakings and sign Non Disclosure Agreements for the same. Any alteration in design has

to be appropriately communicated to the component manufacturer so that enough time is provided for change over of the machine settings, etc.

Stringent Quality Control norms are specified by the AM in respect of component produced by such ancillary units. The rejections at the production line level is returned back to the component suppliers and the same impacts its rating in respect of future supplies. At times defects are detected at customer level when such parts are required to be replaced.

The AM requires the component manufacturers to adhere to ISO standards and documentation in respect of procedures and methodologies to achieve highest level of precision.



Vendor Development

6.14 Vendor development includes elevating supplier performance and capabilities. It also includes vendor evaluation, feedback of vendor performance, raising performance expectations, education and training for vendor personnel, vendor recognition, placement of engineering and other AM personnel at the vendor's premises and direct capital investments by the

AM in the Vendor's entity.

In some cases AM can prompt increases in vendor performance by threatening to cancel the contract. However, which this tactic may yield short term benefit, it may not contribute to a long term improvement to AM's vendor base. If the AM expects considerable improvement in vendor capabilities, it must strive to effectively communicate its need and be willing to participate in the improvement process.

6.15 In this model, not only goods and services are exchanged for consideration, but information is also exchanged. However, in several cases, there may be people exchanged, such as visiting engineers who will assist the vendors. A proactive AM will not only evaluate vendors, but will also actively facilitate the improvement process. It is easy to criticise and downgrade or black list an errant vendor. However, it is very difficult to develop a vendor partnership to a mutually win-win situation where vendor develops and AM gets a quality source of regular supplies. This technique, generally, pays back in long run.

Vendor Development Process and Practice

6.16 The team of AM will identify vendors who meet with the prescribed criteria for procurement of components.

The criteria for vendor selection includes:

1	Manufacturing facilities of the vendor
2	Existing processes and systems followed by the vendor
3	Geographical locations and proximity to the AM plant
4	List of existing customers
5	Accreditation to Quality Standards like ISO, etc
6	Financial capacities and soundness
7	Inspection and test facilities
8	Credit facilities enjoyed
9	IT facilities and awareness
10	Process control
11	Process capabilities and availability of trained manpower
12	Utilities and house keeping
13	Awards

6.17 Based on evaluation of the above criteria, vendor selection is made and a contract for supply of outsourced components is drawn up. The contract is, generally, for a long term commitment. The contract should provide for safeguards relating to IP rights of the AM and also access to IT systems of each other for facilitating information interchange, particularly, in respect of scheduling, material movements, invoices and payment advices.

It is a general practice in automobile industry that AM operates at zero inventory levels and hence requires the vendors to strictly meet its delivery schedules. The default on meeting delivery schedules will lead to immense loss to AM. In that situation, AM generally develops two to three vendors for each components in order to avoid such an eventuality.

6.18 Vendors are given certain tolerance levels in form rejection allowance in ppm (parts per million). If vendor ppm increases above a specified level, vendors are penalised and warned. In case it further shoots up, AM will deregister the vendor. It is to be ensured that the inspected and certified quality materials reach assembly line. Consistent quality vendors are upgraded and redefined as D.O.L (Direct on Line) Suppliers. Some AM require their vendors to undergo third party audits of vendors QMS (Quality Management Systems).

Apart from components, AM also procures Product Validation testing software for its Research and Development Department. The modalities of the same are provided in future chapter of this Technical Guide.

6.19 The IT integration between vendor and AM facilitates exchange of instant updates and information relating to production plan, materials despatch from vendors facilities and enables the AM IT systems to provide on line information to the management. The IT integration will require higher levels of protocols for protecting data security of each entity.

6.20 The above process can be classified in following broad categories:

(a) Due Diligence Process

(b) Quality Assessment of all vendors

(c) Production assessment

(d) Supply Chain security

(e) Ongoing monitoring and evaluation.

Further, following different dimensions should be analysed:

(a) Assurance of Supply

(b) Quality and Regulatory compliance

(c) Cost/ Procurement aspects

(d) Technical/ Innovations

(e) Communication capabilities and responsiveness.

6.21 The following are important aspects in this regard:

(i) Assurance of Supply

Assurance of supply is an essential element in order to guarantee appropriate supply chain management in the organisation. While evaluating the same, the following aspect needs to be considered:

(a) Capacity of the unit

(b) Safety/ Health/ Environment Risk

(c) Inventory management

(d) Financial solvency/ business stability

(e) Delivery performance

(f) Technological capabilities

(g) Supply chain management.

It is considered prudent to develop two or more vendors for each component in order to ensure continuous and timely supply of quality components. Accordingly, the procurement plan will also involve two or more vendors for each component. Delay on the part of a vendor will, therefore, not hamper the production cycle of the AM.

(ii) Quality and Regulatory Compliance

The track record of quality of the vendor is to be considered:

(a) Recall and complaints

(b) Change/Deviation management

(c) Materials management controls

(d) Quality Management Systems

(e) Quality culture

(f) Production facilities and equipment

(g) Process validation approach

(h) Documentation standards.

(iii) Procurement/ Cost

The procurement cost has to be kept competitive to meet the final competitive cost of the product:

(a) Cost management

(b) Ability to achieve the target price.

(iv) Innovation/ Technical

In order to generate a better understanding of the technical competence and innovative profile of the vendor, the following aspects should be taken into consideration:

(a) Technology specialism

(b) Plant capabilities

(c) Business problem solving capabilities

(d) Technical skills/Staff Qualifications

(e) Control systems

(f) Development capability

(g) Process development expertise

(h) Project management

(i) Willingness to innovate

(j) Intellectual property.

(v) Responsiveness and Communication

In order to generate a view of communication capabilities of the vendor, the following aspect needs to be considered:

(a) Rapidity of project assessment

(b) Resource availability

(c) Flexibility

(d) Ease of communication

(e) Pro-activeness.

Evaluation of Vendor

6.22 The following aspects are significant with regard to evaluation of Vendor:

(i) General

(a) The vendor should have sufficient capacity to assure supply chain.

(b) The ethics and culture of the management of vendor should assure anti counterfeiting measures.

(c) The system should be sustainable for audit trail.

(ii) Quality Systems

(a) Use of Quality by design.

(b) Implementation of systems to assure continuous quality improvements.

(c) Implementation and use of risk management.

(iii) Plant Tour

(a) Health and safety standards

(b) Child Labour

(c) Waste Management

(d) Industrial hygiene

(e) Utilities

(f) Equipment calibration and maintenance

(g) Warehouse controls.

(iv) Documentation

(a) Master records, batch production records

(b) Training and personnel qualifications

(c) Product release, change control, deviation handling, failure investigations, stability program.

(d) Process

- Process trending–yield
- Rework/ reprocess
- Validation protocols and reports.

Vendor Monitoring and Rating

6.23 The following are important aspects of vendor monitoring and rating:

(i) Ongoing monitoring

Each batch should be assessed according to defined criteria. The criteria will be based on risk assessment. The following aspect needs to be considered:

(a) Specifications

(b) Statistical evaluation of Quality Control data for critical parameters

(c) Delivery dates and quantities

(d) Certificates and other documents.

(ii) Periodic evaluation

On annual basis, each vendor should be evaluated for the following parameters:

(a) Periodic full testing of material

(b) Quality for example – number of not right first time deliveries

(c) Complaint situation

(d) Reaction on audit and remediation plan

(e) Response time for complaint and questions

(f) Reaction time for changes in regularity requirements.

(iii) Rating

After periodic evaluation, the vendor should be classified according to an objective rating system. The following categories of rating are suggested:

(a) Completely satisfactory

(b) Mainly satisfactory – limited approval

(c) Partially satisfactory – conditional approval

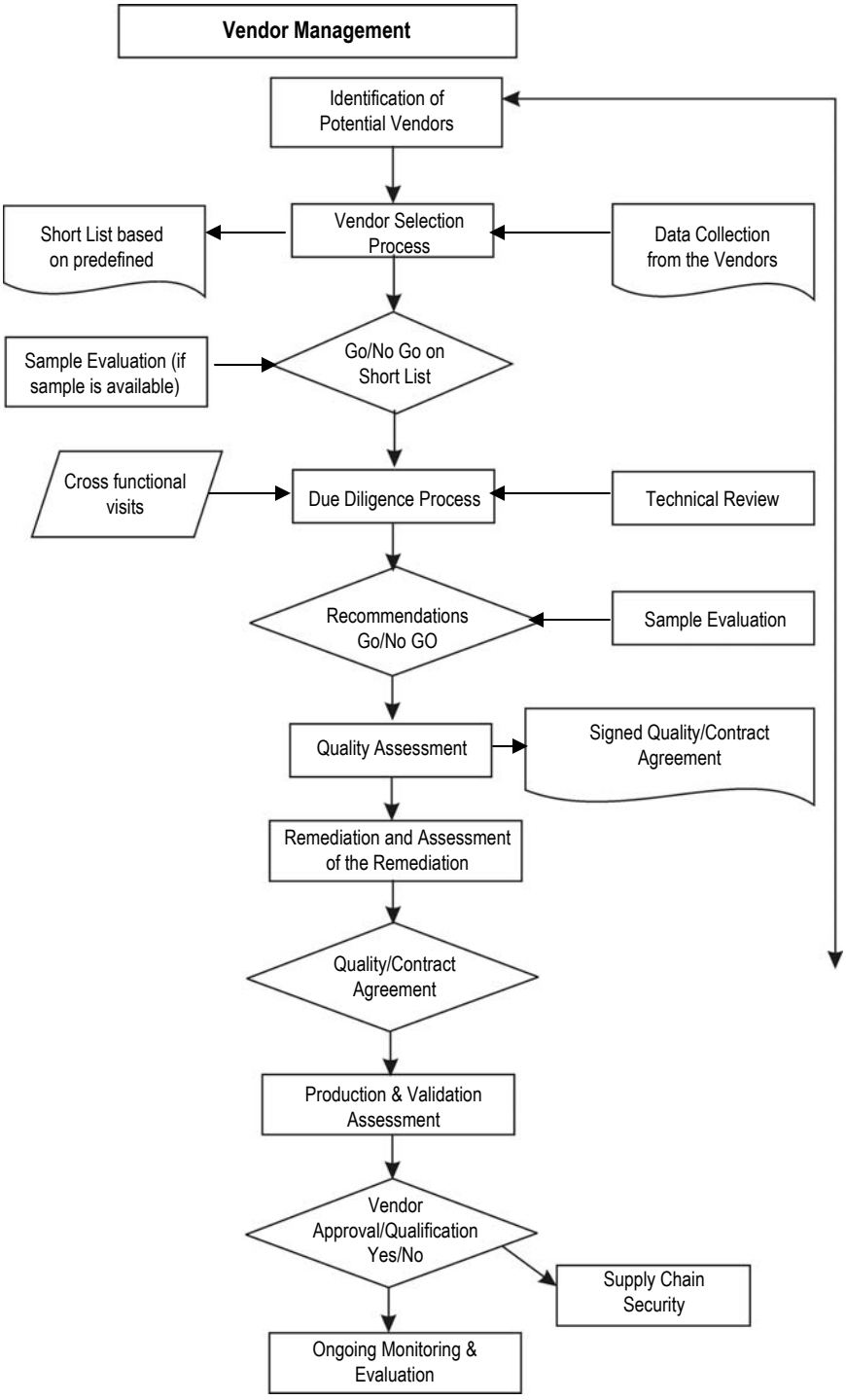
(d) Not satisfactory – disqualification.

(iv) Review with vendor and re-audit

Based on the above evaluation, discussion with vendor can result into review of contract with vendor or re-audit.

Sample Vendor Registration Form is given as **Appendix 1** to this chapter.

Vendor Development and Procurement



Procurement Process for Vendors Assigned Procurement Plans for Components

6.24 The second level development of vendors for component suppliers for AM, is a challenging task. The same involves small units where certain processes of production of component is outsourced. The selection criteria of said outsourced units will involve the AM's approval and technical clearance in respect of their capabilities and facilities as is required for the main vendor.

The process in respect of material movement and its control over the same is duly recorded and documented to ensure that no component finds its way to the spurious market.

Control over technical knowhow and Intellectual Property rights of the AM is to be protected and hence proper control systems in that respect is to be established.

Warranty

6.25 AM is required to give warranty to its customers. In the event of any defects in respect of components, the same warranty assurance is required to be taken from vendors and accordingly, any claims in respect for replacement of component will be required to be made good by the vendors supplying the component. In that regard, identification of each component in respect of source of its supply is to be done by appropriate markings.

The entire procedure for identification of vendor, development of such facilities and procurement process forms part of the Supply Chain Management which is very critical for the AM to provide quality output to its customers.

Audit Procedure

Identifying Risk and Planning Internal Audit

6.26 Based on the technical guidance provided in the foregoing paragraphs in respect of vendor development and procurement processes unique to the automobile industry, the risk matrix and factors will have to be framed by the audit team. Close interaction with the vendor in the process of setting up facilities for the AM involves risk associated with proximity, familiarity and control process override. The procurement department, technical department and production management works closely with the vendors for setting up the processes required for obtaining the requisite quality output on timely basis.

6.27 The evaluation and selection process of vendors requires objective analysis of the various parameters and criteria defined as per the requirements of the AM. The audit plan should cover verification of such process of evaluation and documentation to ascertain reasonable assertion relating to meeting the norms relating to transparency, arms length evaluation and comparison with the performance achieved in relation to that anticipated at the time of evaluation.

The internal audit plan should also cover verification of process of verifying inspection reports, quality control specifications and whether the same have been met by the vendors in respect of supplies effected by it. The impact of the supplies on the ultimate production process needs to be analysed in order to ascertain the rejection in comparison to the tolerance levels. To ascertain subsequent steps and action taken by the AM to rectify the defective supplies including terminating contract with vendor, wherever required, the internal audit plan should also cover whether any penalty, etc, have been levied to the errant vendors and whether any repeat materials have been procured from such errant vendors.

6.28 Control activities in respect of internal audit of vendor development and procurement process of an automobile industry, typically, consist of the following:

Item	**Control Parameters**	**Control Activities**
Potential Vendor – Identification and Selection	Identification of potential vendors – unbiased criteria	(i) Whether there exist a proper unbiased system to identify and locate potential vendors for procuring identified components. (ii) The process enables existing or new entities having capabilities for meeting the AM requirements for components to compete effectively. (iii) The criteria set for selection and identification of vendors is not twisted in such a

Item	Control Parameters	Control Activities
		manner to prefer or eliminate a particular class of vendors. (iv) Proper weightage is accorded to experience and facilities available. (v) Proper documentation exists to ensure transparent and unbiased selection process.
Negotiation of Contract terms	Arms length - contract terms	(i) Ensure adequate safeguards for ensuring quality and timely deliveries. (ii) Sufficient mechanism for stick and carrot approach to motivate vendors to adhere to contract terms. (iii) Existence of adequate fall back and back up systems to ensure uninterrupted production cycle of the AM without any loss. (iv) Cost effective procurement terms. (v) Compliance with statutory requirements including health, safety and environment. (vi) Terms to meet industry standards and norms. (vii) Whether provision is made for cost of dies, moulds and tools supplied by AM to vendors.

Item	Control Parameters	Control Activities
		(viii) Whether contract provides for safeguard of Intellectual Rights of the AM including designs. (ix) Whether proper terms are stipulated for taking necessary precautions for pilferages and duplicates. (x) Whether terms provide for back to back warranty on defective parts supplied by the vendor. Penalty clauses and settlement of claims. (xi) Whether sufficient safeguards are provided for approval of AM for outsourcing of processes by vendor to third party processors. Quality assessment, IP protection, safeguard on clandestine sales of components to unauthorised agents.
Monitoring	Continuous monitoring and evaluation	(i) Reports relating to performance of vendors in relation to quality and timely deliveries. (ii) Evaluation of the vendors on regular basis. (iii) Whether there exist proper communication channels with vendors to ensure meeting standards of

Item	Control Parameters	Control Activities
		expectations. (iv) Corrective measures in respect of observations of the evaluation process. (v) Surprise checks on the manufacturing facilities of the vendor/ outsourced processors, to ensure adherence to standards of AM. (vi) Confirmations/ Physical verification in respect of assets/ materials with third parties for processing.
Data capture and IT interface	Recording of transactions of material movements. Reporting of delivery schedules, inspection reports and rejection memos.	(i) Whether the material despatches are properly captured in the IT systems duly interfaced with the vendors. (ii) Whether materials rejections are recorded with suitable memos. (iii) Whether contract terms are properly reflected in the invoices, debit notes, incentives, penalties etc. (iv) Whether suitable safeguards are provided for data theft, hacking/ unauthorised access. (v) Whether proper documentation are available to establish receipt and issue of components.

Item	Control Parameters	Control Activities
		(vi) Whether proper system exists to identify the components supplied by each vendor and correlate with any rejections, defectives. (vii) Whether appropriate claims are made on the vendors for such warranty breaches, defective products, etc. (viii) Computation of Liquidated damages to be claimed from vendors for delay in supplies. (ix) Reconciliation of input quantity with output quantity.

Information Technology (IT) Controls

6.29 The vendors are connected with the AM's IT server and systems. This enables efficient data transportation and online reliable data interchange. AM specifies delivery schedules which are captured by the vendors in their respective production units. The production units activate the production plan according to need based procurement schedule.

The intimations relating to despatches are available to AM online. This facilitates plant production scheduling and data capture.

6.30 Delivery note and invoices raised by vendors are directly validated by the system of AM and transactions recorded and updated in the AM's financial records. This avoids duplicate recording of same entries. However, sufficient control systems should be built in to validate data before recording and acceptance. Suitable checks and balances should be built in for preventing unauthorised access at both ends and should enable user to view and process data only what is authorised. Data secrecy and integrity is to be ensured at both ends through adequate safeguards.

Appendix 1: Sample Vendor Registration Form

COMPONENT VENDOR INFORMATION/ SELECTION FORM

	Date:	
1	*Name of Vendor:*	.....
2	*Address for Correspondence:*	.....
		.....
3	*Name of Contact Person*	.....
4	*Communication details:*	
	Factory:	.....
	Office:	.....
	Fax No:	.....
	Res:	.....
	Mobile No:	.....
	Email:	.....
	Website:	.....
5	*Organisational Head and Designation:*	.....
		.....
	Contact number	.....
6	*Alternate Corrospondance Address*	
	(if any) & contact details:	.....
		.....
		.....
7	*Products or Services offered:*	.....
		.....

8	*Systems:*	*Own/ ISO-9000/ QS-9000/*
	(Submit Copy of Certificate)	*TS16949 / any other/ NONE*
	tick applicable one	
9	*Major Customers:(Min. three)*	*.....*
		.....
		.....
10	***Tax Details:****(As applicable)*	
(a)	*Company Registration No-*	*.....*
(b)	*PAN No -*	*.....*
(c)	*Vat Tin No -*	*.....*
(d)	*CST Tin No -*	*.....*
(e)	*Service Tax -*	*.....*
(f)	*ECC NO -*	*.....*
(g)	*Excise Range*	*.....*
(h)	*Excise Division*	*.....*
(i)	*Excise Commisionarate*	*.....*
11	*RTGS/ Electronics Fund Transfer Mandate Form*	*Information form filled / not filled*
	(To be filled in given format)	*.....*
12	*Vendor Category:* ***(tick applicable one)***	*Trader / Manufacture / Service*
#	***Hard /Scanned documents to be provided for Supplier registration:***	***1****. Pan card.****2****. Tax registrations-VAT, CST, TIN, Service tax, Excise, etc.* ***3.*** *Company Registration,* ***4.*** *Cancelled cheque OR Bank approved letter for account information,* ***5.*** *Company profile.6. SSI then submit SSI registration*
13	*Escalation Matrix (Min 2 level)*	
	Name, designation & contact No: (level 1)	*.....*
	Name, designation and contact No (level 2)	*.....*

Note	***Following information (Sr. No. 14 to 24) is not applicable for traders registration (only for manufacturer)***	
14	*Form of the company:* ***(tick applicable one)***	*SSI/ PARTNERSHIP/ PROPRIETOR / PVT LTD/ PUBLIC LTD*
15	*If SSI, SSI registration no* *Submit copy of Small Scale Registration*	*.....*
16	*Technical Knowhow:* ***(tick applicable one)***	*Joint Venture / Collabration / 100 % Indian.*
17	*Organisation commencement year:*	*.....*
18	*Land / Building:* ***(tick applicable one)***	*Ownership / Rented*
19	*No. of Workers:*	*.....*
20	*No. of Management Staff:*	*.....*
21	*No. of shift worked and weekly off days*	*.....*
22	*List of Machineries:* *(Attach separate sheet for details of Plant & Machineries avaialble)* *Machine, Quantity, Make , Year of Purchase, Capacity*	

23 *Details of Quality Control Facility available:*

Attach separate sheet for details

Instrument/ Equipment, Quantity, Make, Year of Purchase, Frequency of Calibration)

24 *Turnover for Last 3 Years .* .....

25 *Present Manufacturing Capacity:* .....

25 *Selection Criteria:*
Please tick the appropriate one:

End-user feedback	☐
Past Experience	☐
Vendor information	☐
Certified Vendor	☐
Authorised dealer/ Distrubutor/ Manufacturer	☐

Note: Any one of the above criteria is OK for vendor selection and registration.

26 *Comments (if any):* .....

27 *Vendor Code No.:* .....

28 *Department: PURCHASE use only*

Sign of Assessor

Date:

Name of the Assessor:

Designation: *Prepared By (Purchase)*
Approved By (Purchase)

Place:

VENDOR INFORMATION / SELECTION FORM (RTGS DETAILS)

Date:

1	*Name of Vendor:*	.....
2	*Address for Correspondence:*	.....
		.....
		.....
3	*Name of Contact Person*	.....
4	*Communication Details:*	
	Factory:	.....
	Office:	.....
	Fax No:	.....
	Res:	.....
	Mobile No:	.....
	Email:	.....
	Website:	.....
5	***Particulars of Bank Accounts:***	
(a)	*Name of the Bank*	.....
(b)	*Name of the Bank Branch*	.....
(c)	*Bank Address*	.....

(d)	*Bank Contact Number*	.....
(e)	*Nine Digit Code no of the Bank and Branch*	.....
(f)	*IFSC (RTGS) Code of the Bank and Branch*	.....
(g)	*Bank Account No*	.....
(h)	*Type of Bank Account*	*Saving/ current/ CC* .....

(As appearing on the cheque book. Pl mention complete A/c no alloted by the bank)

Note: Please attach the bank cancelled cheque or photo copy of the cheque or bank approved letter of the above said account for the verification of the above particulars.

Chapter 7
Engineering Research and Development

7.1 When an automaker designs a new car, it not only tries to identify consumer tastes a few years down the road, but also needs to create a car that is feasible to produce on an assembly line and still make a profit. Once the design gets "locked down," meaning the physical parameters of the vehicle are set, the engineers start their work. A new car development team usually includes a few hundred of engineers, split into groups as chassis and body, suspension, drive train, control systems and other major sub-systems. Other teams may be dedicated to exorcising "NVH" (noise, vibration and harshness), meeting government regulations, or finding the most ergonomically correct setup for the widest variety of differently sized humans that could get behind the wheel. With the rise of in-car infotainment systems, engineers are working on the latest gadgets to improve the user experience. They devise solutions and then they test, test, and test some more until they get it right. They test to meet performance requirements, for durability, for fuel mileage, test for aerodynamics and for safety compliance. Testing costs money.

7.2 Today many tests can be done on the computer before prototypes are built, but those computers and the software cost more money and eventually, real-world tests must be done and unique prototypes must be built. Some of that real-world testing can take place at automakers' private proving grounds or closed test tracks, but the need to test in extreme weather conditions lures them to the roasting desert and the frigid winter. The logistics of getting humans, prototypes and test equipment to these regions does not come cheap, either. That means you will find designers (interior and exterior), model makers, marketing people, manufacturing specialists, assembly line workers, purchasing analysts, and any number of outside consultants, plenty of accountants working on new product development at any given time. Throw in the obligatory executive decision makers, highly compensated individuals under extreme pressure to get it right, and you begin to get an idea of the number of people involved in creating a new car. It also has to consider the support staff assisting with human resources, IT and other essential services of a modern corporation.

To understand how a company decides on incurring expenses, what factors influences company to incur such expenses and to understand the impact of the same in various business cycles, concept of Research and Development needs to be understood.

Research

7.3 Research is original and planned investigation, undertaken with the prospect of gaining new scientific or technical knowledge and understanding. The company is researching the unknown, and therefore, at this early stage, no future economic benefit can be expected to flow to the entity.

Development

7.4 Development is the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems, or services, before the start of commercial production or use. An example of development is a car manufacturer undertaking the design, construction, and testing of a pre-production model.

Factors Influencing the Decision for a Research and Development

7.5 Company's' perceptions about their competitive environment are important for innovation and are better measures of firm-specific competition. There are mainly two types of innovations viz; process and product innovation. Process innovation is often bundled with product innovation, and that in terms of innovation, input acquisition of technology is often bundled with R&D, suggesting that the economic value of process innovation is likely embodied in product innovation.

R&D can increase sales or profit of the company in the long run. R&D can decrease also the cost of production of the company, so that company can compete with his rivals. Both profit margin and sales depends on investment and gross fixed asset of the last period. To avoid multicollinearity, total investment is not considered, because R&D is a part of investment. R&D has another role for reducing future cost of production. If cost of production increases then the companies are forced to reduce it in future through current R&D expenditure. So, cost margin of the companies depends on the decision of R&D spending. Gross Fixed Asset – Sales ratio (GFAS) is used

as a variable because company's R&D expenditure depends on the company's last period's financial strength. Gross Fixed Asset is used as a proxy for the financial strength.

7.6 The impact of R&D on cost margin in case of large scale firms is higher than small scale firms. In both these cases last period's R&D positively affects cost margin as increase in R&D in the last period needs more R&D investment as it is a dynamic process. As large scale firms spend more on R&D in the last period, so their spending will be more in the current period as they are concerned for their long run gain compared to small scale firms. Though cost margin increases due to increase in R&D in both large and small scale firms but the impact on profit margin is positive in large scale firms whereas small scale firms suffer huge loss. So R&D is not beneficial for small scale firms as they have small gross fixed asset. They suffer huge loss due to high cost of production.

Break-Even Time

7.7 The break-even time (BET) metric for the product development process measures the length of time from the project's beginning until the product has been introduced and has generated enough profit to pay back the investment originally made in its development.

Patterns of Research and Development Expenses

7.8 A company can undertake a research and development project in various formats as listed below:

(a) In-house research and development.

(b) Purchase of an Intellectual Proprietary Right (IPR) from group concern or market.

(c) Acquisition of a company with research and development as core business.

In case of In house research and development, the company may incur major expenses of following nature:

(a) Finance Cost

(b) Technical Cost

- Infrastructure Cost
- Technical Equipment
- Consulting Fees
- Licenses & Permits

(c) Administrative Cost

- Salaries and Wages
- Travelling & Logistics

In case of purchase of IPR and acquisition of a company, the expense would be in nature of capital and the particular expense would be accounted as per the accepted accounting and auditing principles detailed out below.

Risk Assessment for Research and Development

7.9 Risks associated with the current management framework for R&D activities include:

(a) Clear priorities and direction may be lacking to direct research activities towards the objective, as well as making it difficult to redirect funding as priorities evolve.

(b) A research management framework may not be sufficiently established to ensure that there is a common vision that is supported by research goals relevant to departmental policy needs and responsive to evolving government priorities.

(c) Knowledge management processes may not be systematically followed throughout the Department to support knowledge capture, sharing of research information and informed policy decision-making.

(d) Funding lapses may occur, impeding the achievement of identified research goals within the allocated time and budget.

(e) The number of skilled and experienced research professionals may not be sufficient to meet current and anticipated needs which may affect the ability of departmental management and policy makers to make informed decisions.

(f) Performance measures may not be in place, resulting in a lack of monitoring of the progress towards providing relevant, timely and significant research finding.

(g) In light of the decentralized research model, there may be duplication of effort and resources.

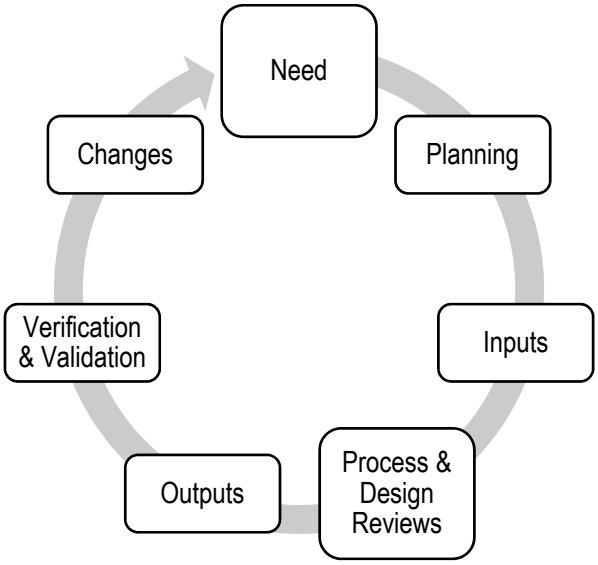
(h) Expenses may be incurred without sufficient approvals and authorization for purposes other than the objective of R&D.

(i) Expenses incurred may remain unaccounted or wrongly accounted resulting in lack of true and fair view.

Audit Procedure for Technical Areas

7.10 In order for the internal auditor to determine if the organization is in fact involved in research and development, auditors need to establish who is responsible for defining the characteristics of the product or service together with how and when this is carried out.

Internal auditors should establish which research and development projects have been, and are currently being, undertaken. They should select a sufficient number of projects to be able to audit all stages of the design process. Guidance for auditing the various stages of the research and development process is given below but it should be noted that it might not be possible to audit all stages for all the projects selected.



Audit Cycle for Research and Development Process

Auditing Need for Research and Development

Audit Objective

7.11 Internal auditors should evaluate whether organizations have in place, and perform, activities for the review of such needs. Whilst it is not a requirement of the standard it is useful to review how the decision to proceed with research and development is taken, i.e., have risks and cost implications been considered and have all relevant functions (internal or external) been consulted.

7.12 The need for research and development is generated from a number of sources including organization's strategic planning; market intelligence and research; service reports; customer feedback and demand; new or changed statutory and regulatory requirements; process changes; new technology; suppliers, etc.

Audit Risk

7.13 Internal auditors should evaluate the risks, the possible implications for customer satisfaction and issues that the organization may encounter if some relevant inputs are not considered. For product development and target costing purposes, customers' needs or requirements must be translated into product functions or components for engineering. A quality function deployment matrix relates information about customer requirements (that is, features that customers require) to a product's functions or components. Internal auditor can have access to such matrix, wherever available and verify the same for approvals and authorization.

Audit Process

7.14 Data Analytics— An auditor can check the matrices for value index, where for any component if the value index is less than one, it relates that the cost exceeds the benefit and the component is a likely candidate for cost reduction in efforts to achieve the target cost. This would help the auditor in assessing the inception of a particular research and development project taken up by the company.

Function Group	(2) Cost	(3) Relative Importance	(3) ÷ (2) Value Index	Action Implied
Chassis	20.0%	26.8%	1.34	Enhance
Transmission	4.0%	10.0%	2.50	Enhance
Air conditioner	1.4%	3.2%	2.29	Enhance
Electrical system	10.0%	8.8%	0.88	Reduce cost
Other function groups	64.6%	51.2%	0.79	Reduce cost

Auditing Research and Development Planning

Audit Objective

7.15 Governance Framework— Having assessed what initiates a R&D project, an internal auditor should then evaluate the governance framework laid down for such project, especially in case of a decentralized research and development project across various locations.

Audit Risk

7.16 An entity level control risk can be ascertained by knowing if:

(a) Company has developed and implemented a governance framework to coordinate research and development activities across various locations.

(b) Company has establish an oversight process to guide and monitor research activities.

(c) Check for formal processes to coordinate policy research across the locations to mitigate risk of gaps or unintended overlaps in research, as well as duplication of research effort.

Audit Process

7.17 The following issues should be considered when auditing the planning function:

(a) What is the overall flow of the R&D planning process?

(b) How is it described?

(c) What resources and competencies are required?

(d) What part of the research will be outsourced?

(e) Who is responsible and are the authorities defined?

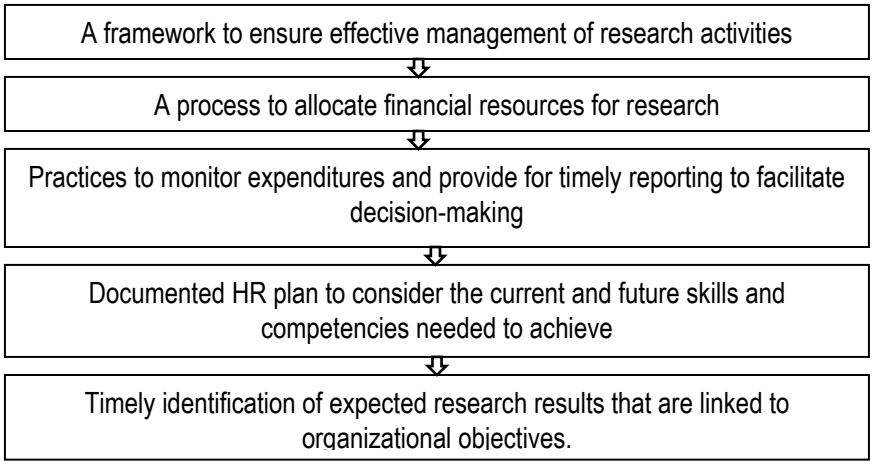
(f) How are (internal and external) interfaces between various groups identified and managed?

(g) Are the required verification, validation and review points defined?

(h) Are the main milestones and timelines identified?

(i) Is the implementation and effectiveness of the plan monitored?

(j) Is the plan updated and communicated to all relevant functions, as necessary?



Auditing Research and Development Inputs

Audit Objective and Risk

7.18 When auditing the design and development inputs, auditors should develop an understanding of how the organization identifies its own inputs based on:

(a) The organization's products and processes;

(b) Financial, environmental, health and safety issues;

(c) Organizational risks and impacts;

(d) Customer's requirements and expectations;

(e) Statutory and regulatory requirements applicable to the product.

Auditors should evaluate the risks, the possible implications for customer satisfaction and issues that the organization may encounter if some relevant inputs are not considered.

Audit Process

Break Even time

7.19 The Break-Even Time (BET) metric brings together in a single measure three critical elements in an effective and efficient product development process.

First, for the company to break-even on its R&D process, its investment in the product development process must be recovered. So BET requires

tracking the entire cost of the design and development process. It provides incentives to make the product development process faster and less costly.

Second, BET stresses profitability. It encourages marketing managers, manufacturing personnel, and design engineers to work together to develop a product that meets real customer needs, including offering the product through an effective sales channel at an attractive price, and at a manufacturing cost that enables the company to earn profits that can repay the product development investment cost.

And third, BET is denominated in time: it encourages the launch of new products faster than the competition so that higher sales can be earned sooner to repay the product development investment.

7.20 An internal auditor can scope in the above, to assess if the on-going R&D project are meeting the required BET set at the beginning. Each R&D project may have its own project charter which can be referred to for understanding the dynamics of the project and accordingly carry out necessary checks and balances. Following areas can be looked into for carrying out further work:

(a) Assessing probable nature of expenses and verify the same with actual to result in correct calculation of return on investment.

(b) Verifying if the necessary approvals as per the project charter are in place while deciding key drivers of project like sales channel, pricing, etc.

7.21 Data Analytics— An internal auditor can check if the expenses are being allocated to the correct R&D project. Also the allocation of common expenses is done on basis of scientific calculations.

The auditor shall in case of out sourced activity for any project shall check for the contractual obligation of the parties. Following clauses shall be sufficiently reviewed to mitigate external risk to the company such as:

(a) Confidentiality— The contract shall detail out the confidentiality obligations to either parties with an objective to safeguard confidential information on designs, prototypes, process, and innovation.

(b) Sharing of information— The clause shall preset the extent to which information sharing can be done directly or indirectly with or without approval of the company.

(c) Contractual Agreement— The auditor shall ensure that all contracted work of the company is sufficiently agreed in document with indemnification clauses. Internal auditor should also assess if the vendors are sufficiently insured.

Auditing Research and Development Process and Design Reviews

Audit Objective

7.22 Internal auditors should verify that the overall research and development process is controlled in accordance with the organization's original plan being reviewed and that the design and development reviews take place at appropriate planned stages.

Audit Process

7.23 The following issues should be considered by auditors when examining the review process:

(a) Do reviews occur at planned stages throughout the design process?

(b) Are the reviews carried out in a systematic way involving representatives of the functions concerned with the stage(s) being reviewed?

(c) Have all original and any new inputs been considered?

(d) Are the original outputs still relevant or have revised outputs been identified?

(e) Have revised inputs and outputs been reviewed and approved by those with the relevant responsibility and authority (including the customer where appropriate)?

(f) Does the output demonstrate the suitability, adequacy and effectiveness of the designed product?

(g) Are the relevant design objectives being achieved?

(h) Are there adequate records of reviews?

7.24 Internal auditor shall understand the risk universe and control objectives for the IT process designs and protocols that get developed in the process of a research and development, and verify if they are protected sufficiently with copyrights/patent as applicable.

Internal auditor should assess the project management related areas. He should consider following areas while examining the process:

(a) Whether a pilot product for the R&D is going to be developed?

(b) Whether the designing and production of a pilot product is going to be outsourced?

(c) Whether the turnaround time has been established?

Auditing Design and Development Output

Audit Objective

7.25 The research and development outputs should comply with the identified needs in order to ensure that the resulting product can fulfil its intended use. Outputs can include information relevant to the following:

(a) Marketing, sales and purchasing;

(b) Production;

(c) Quality assurance;

(d) Information for service provision and maintenance of the product after delivery and, should be provided in a form that enables verification and validation activities to be performed.

Audit Process

7.26 Internal auditor should obtain evidence from the projects selected to confirm that:

(a) Information regarding the completion of research and development stages is available;

(b) The research and development process has been completed for the stage under review;

(c) Research and development outputs have been confirmed.

The auditor should obtain evidence of R&D inspection reports carried out on the output of a development. Auditor shall evaluate whether the turnaround time has been met by the outsourced vendor and whether the inspection report mentions if the pilot product matches to the pilot sketch. The auditor shall verify if the BOM (Bill of Material) is created as a result of product developed and if the cost of the same is identified. Auditor shall also verify if the BOM has been approved and version control is maintained before passing on the same to engineering team.

Auditing Research and Development Verification and Validation

Audit Objective

7.27 Research and development verification is aimed at providing assurance that the outputs of a project have met the input requirements for this project.

Audit Process

7.28 Verification can comprise activities such as:

(a) performing alternative calculations;

(b) comparing a new design specification with a similar proven design specification;

(c) undertaking demonstrations including prototypes, simulations or tests; and,

(d) Reviewing documents prior to issue.

7.29 Internal auditors should determine that the research and development verification activities should provide confidence that:

(a) Required verifications are planned and that verification is performed as appropriate during the research and development process;

(b) The completed research or development is acceptable and the results are consistent with and traceable to the initial requirements;

(c) The completed research or development is the result of implementation of a proper sequence of events, inputs, outputs, interfaces, logic flow, allocation of timing, etc;

(d) The design or development provides safety, security, and compliance with other requirements and design inputs;

(e) Evidence is available to demonstrate that the verification results and any further actions have been recorded and confirmed when actions are completed.

7.30 Internal auditor should determine that only verified design and development outputs have been submitted to the next stage, as appropriate.

Quality assurance— In such complex situations, the organization will need to seek agreement with the relevant external parties as to how design validation will be performed and the results communicated to and shared with it. In

such a situation, provision should be incorporated into the organization's design and development planning for completing design validation in this manner.

Internal auditor should ensure that:

(a) There are records to confirm that the validations have been carried out;

(b) The validation was carried out in accordance with the planned arrangements for validation;

(c) The validation indicates that the resulting product is capable of meeting the requirements of the specification;

(d) Wherever practical, the validation has been carried out prior to delivery or implementation; and that,

(e) There are records of any actions necessary to correct non-compliance with the design and development inputs and the reasons for these deviations.

Auditing Design and Development Changes

Audit Objective

7.31 Design and development changes made during the design process need to be controlled.

Audit Process

7.32 Internal auditor should consider the following:

(a) Are the sources and requests for changes properly identified and communicated?

(b) Is the impact of any change evaluated?

(c) Is any additional design proving or testing undertaken where appropriate?

(d) Are the effects of the changes on constituent parts and product already delivered evaluated?

(e) Has appropriate approval been given before a change is implemented (this could include statutory or regulatory approval or approval by the client)?

(f) Are the changes fully documented and do records include information regarding any necessary additional actions?

7.33 Auditors need to verify and evaluate if any roll back of vehicle has been announced by the company for a particular design or batch of auto vehicle. If any incident, the auditor shall consider the following:

(a) If the management has documented the problem for roll back?

(b) Has sufficient inspection and investigation been carried out before announcement?

(c) Has the roll back been approved and authorized?

(d) Whether the cost of roll back and replacement has been arrived and provided accurately?

During the planning phase of the audit as per Standard on Internal Audit (SIA) 1, "Planning and Internal Audit", a detailed audit program must be developed that outlined the criteria and audit tests aimed at assessing the objective of the audit. Considering the above areas of scope, Internal auditor programme should incorporate the management accountability framework as per **Appendix 1.** Risk Matrix may be as per **Appendix 2.**

Audit Procedures for Financial Areas

Financial Reporting

7.34 Determining what is directly attributable requires a thorough understanding of the R&D function, supporting information, and use of judgment. Active and contemporaneous analysis of the R&D life cycle is necessary to determine the point of capitalization because amounts that are initially expensed cannot be subsequently capitalized. After completing the development activity, the new intangible asset is amortized on a systematic basis over the life of the technology.

The automotive industry is one such sector where Research and Development ('R&D') is an important element of growth. It is directed by changing customer preferences, competition and future regulatory norms leading to a shorter life span of models and upgrading of the existing ones. Accordingly, intensive research and development activity around vehicle components, systems, production processes and new technologies gives rise to a variety of intangible assets in the automotive sector. As the industry makes high amount of investments in R&D activities, the related costs impact an entity's earnings and cash flows. Thus, managing R&D costs is crucial for this industry.

Indian Accounting Standard

7.35 As per Accounting Standard (AS 26), "Intangible Assets", 'research' is defined as an original and planned investigation undertaken with the prospect of gaining new knowledge and understanding. The automotive sector continuously innovates to bring down costs, meet the regulatory, safety requirements as well as to improve customer comforts and convenience. A decision to proceed from research to the development phase would be taken only after considering the results of such research.

Some of the examples of research activities are:

- Use of sintered products/composite materials for reducing the weight of the engine/other body part resulting in reduced cost and improved fuel efficiency.
- Research on engines with low emission and use of alternate fuels for greener and cleaner environment.
- Improved customer comforts and safety features like, auto pilot technologies.

7.36 At the research stage, the entity may not be able to identify a project or a product and the relationship between the cost being incurred and the expected future benefits. An expenditure on research (or on the research phase of an internal project) should be recognized as an expense when it is incurred. In the research phase, an entity cannot demonstrate that an intangible asset exists from which future economic benefits are probable. Accordingly, the expenses incurred are charged to the statement of profit and loss.

7.37 In AS 26, 'development' is defined as the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes systems or services prior to the commencement of commercial production or use.

Some of the example of developmental activities can be:

- Use of engineering plastics for body structure parts to reduce manufacturing costs;
- Improvements in brakes, suspensions and steering for improving performance and user comfort;
- The design, construction and testing of pre-production or pre-use prototypes and models;
- The design of tools, jigs, moulds and dies involving new technology;

- The design, construction and operation of a pilot plant that is not of a scale and that is economically feasible for commercial production; and
- The design, construction and testing of a chosen alternative for new or improved materials, devices, products, processes, systems or services.

Assessment of an Eligible Intangible Asset

7.38 Internal auditor to ensure that an intangible asset arising/capitalized from a development (or from the development phase of an internal project) is recognized if, and only if, a project can demonstrate all of the following:

- The technical feasibility - must be explained and substantiated and should be capable of answering the question as to whether the project is technically feasible and how it can be implemented,
- The intention to complete the development activity and use or sell it can be substantiated by a management assessment of the project and a project plan detailing the phases of development and the use or sale of the outcome.
- The ability to use or sell the result of a development activity depends on the technical capability of the entity since in many cases development projects are for internal use.
- The expected future economic benefits can be demonstrated by the anticipated cash flow which may arise from the development projects.
- The availability of adequate technical, financial and other resources to complete the development depends on the entity's financial position, adequately qualified employees and sufficient resources.
- The ability to measure the expenditure attributable to the intangible assets during the development phase includes all the costs directly attributed or allocated on a reasonable basis.

Accounting of Expenses

7.39 Internal auditor need to take a pause and carefully assess, since the R&D expenditure could constitute a significant portion of an entity's cash outflows, the accounting of such expenditure may have a substantial impact on the financial statements of the entity.

Internal auditor's checklist shall mandate following questions:

- What are basis of judgements being exercised at various stages of R&D?

- Is the company having sufficient tools to be able to recognize whether the expenditure is being incurred at the research phase or the development phase?
- Does the company carefully examines and has thorough documentation to be able to assess when the research activity has ended and when the development activity has commenced?

7.40 Internal audit to ensure if an entity cannot distinguish the research phase from the development phase of an internal project to create an intangible asset, the entity treats the expenditure on that project as if it were incurred in the research phase itself. To put it otherwise, if recognizing of development expense as intangible is not sufficiently documented or rationale does not exist, the same shall be treated as research expense and debited to profit and loss account.

Once the development activity commences, auditor should determine:

- Whether an identifiable asset would result from this activity?
- Is the asset separable from the entity to be sold, transferred, licensed, rented, etc. to meet this criterion? Required documentation to be checked.
- Is the resource from which/ from the use of which, future economic benefits will be available to the entity identifiable?
- Is the asset with a physical substance (e.g., a prototype) or without (e.g., technical know-how)?

In the case of an asset with a physical substance, the physical element of the asset would be secondary to the intangible component, i.e., the know-how which is present in it. This involves considering the technical feasibility, an identifiable market, restrictive regulatory/ licensing barriers, dependencies on direct/ indirect input costs, etc.

Outsourced R&D Projects

7.41 Cost of outsourced projects to be capitalized. In case of an outsourced project there can be two scenario:

- The entire development project has been outsourced. The auditor should check the rights being acquired and state the type of control which it has. In such a case where the cost is easily identified (the purchase price), that the entity is willing to buy, indicates the future economic benefits. Accordingly, the cost may be capitalized.

- A part of the project has been outsourced. If the project meets the criteria of internally generated intangible, the outsourced cost should be included in the cost of development as directly attributable cost.

New Generation Product

7.42 The cost incurred in the development phase of a new generation product would typically be capitalized if it leads to a completely new product.

Facelift

7.43 These are, generally, minor revisions to the existing model of a vehicle, so as to adapt to current trends and customer expectations. It does not always result in a new product. For accounting, internal auditor should assess whether the cost of a new generation product or a facelift meets the criteria for capitalization.

Special Edition

7.44 Generally costs relating to special editions are not capitalized as there is no technical upgradation. Special edition of vehicle contain few special features which are not a part of the standard model.

Past Expenses

7.45 Internal auditor shall check to ensure that expenditure on a development project that was initially recognized as an expense by a reporting enterprise in previous annual financial statements or interim financial reports should not be recognized as part of the cost of an intangible asset at a later date.

Subsequent Expenditure

7.46 Internal auditor to ensure that the subsequent expenditure on a recognized development project shall be expensed unless:

- It is probable that the expenditure will enable the asset to generate future economic benefits in excess of its originally assessed standard of performance; and
- The expenditure can be measured and attributed to the asset reliably.

Therefore, only rarely will expenditure be incurred after the initial recognition of a purchased intangible asset or after completion of an internally generated intangible asset result in additions to the cost of the intangible asset.

Impairment of the Capitalized Development Expenses

7.47 The ability of an intangible asset to generate sufficient future economic benefits to recover its cost is usually subject to great uncertainty until the asset is available for use. Therefore, auditor shall ensure the enterprise to test for impairment, at least annually, the carrying amount of an intangible asset that is not yet available for use.

In case where the use of an intangible asset will be for a specific period that is longer than 10 years. In such scenario, the presumption that the useful life, generally, does not exceed 10 years is rebutted and the entity:

- Amortizes the intangible asset over the best estimate of its useful life
- Estimates the recoverable amount of the intangible asset at least annually in order to identify any impairment loss
- Discloses the reasons why the presumption is rebutted and the factor(s) that played a significant role in determining the useful life of the asset.

Applicability of Ind AS and its Implications

7.48 Internal auditor shall asses the applicability and accordingly assess if the entity has measured the financial impact due to adoption of IFRS/ Ind AS. IFRS/ Ind AS does not mention a rebuttable presumption with reference to the useful life of an intangible asset. An intangible asset with a finite useful life is amortized over its useful life. An intangible asset with an indefinite useful life is not amortized but will be tested for impairment annually and whenever there is an indication that the intangible asset may be impaired.

Tax Related Matters

7.49 Deductions are made available by the Government of India at various point of time. Internal auditor's checklist shall include the following questions:

- Does the expenditure (capital or revenue) incurred on scientific research include cost of land or building which does not qualify for weighted deduction?
- Is the expenditure incurred on the approvedin-house R&D facility?
- Is the R&D facility approved by prescribed authority?

Auditor needs to evaluate the effective date of eligibility of expenses, considering the recognition of facility date and application of approval, ensuring the same is as per the guidelines of Department of Scientific and Industrial Research.

Appendix 1: Control Matrix

MAF Element (Management Accountability Framework)	Control Objective	Control Example
1. Governance and Strategic Direction	1. An effective governance framework for research activities is in place.	1.1 A clearly communicated mandate, with roles and responsibilities, has been established for research activities. 1.2 Strategic direction and priorities are established for research through formal strategic planning activities to ensure efficient use of resources and to prevent duplication of effort. Priorities are re-assessed for continued relevancy. 1.3 An oversight body exists and has established a process to receive complete, timely and accurate information.
2. Research Management	2. A framework is in place to ensure effective management of research activities.	2.1 Operational plans and priority-setting practices are developed and communicated for selecting, monitoring, and closing research activities. 2.2 There is an acquisition process in place for research activities that is effective and efficient and meets regulatory

		requirements. 2.3 A process is in place to manage research projects, which includes risk analysis, peer review and stakeholder consultation to ensure achievement of project goals. 2.4 Tools and guidance, including financial management processes, are effective and appropriate to support research activities.
3. Knowledge Management; Stewardship	3. A process is in place to capture, preserve, and share research documents and data.	3.1 There is an adequate process in place to capture research documents and data. 3.2 A process exists to support the timely and targeted dissemination of research documents and data with key stakeholders in the Department.
4. Financial Performance	4. A process is in place to allocate financial resources for research, along with practices to monitor expenditures and provide for timely reporting to facilitate decision-making.	4.1 Activities, schedules and resources are integrated into project budgets with the appropriate level of detail to ensure that the allocation of funds supports strategic priorities. 4.2 Research expenditures are recorded and verified to ensure accuracy and completeness for

		effective stewardship of funds. 4.3 Expenditure forecasts are monitored against objectives and significant variances are identified and explained.
5. People	5. A human resources plan has been documented to consider the current and future skills and competencies needed to achieve the research goals of the Department.	5.1 A strategy is in place for recruiting, developing and retaining people to meet the current and future needs of the organization. 5.2 There are effective resource strategies amongst departmental staff, contract personnel, and partnerships to achieve strategic and operational objectives.
6. Results and Performance	6. Management has identified expected research results that are linked to organizational objectives.	6.1 A performance management process is in place that identifies expectations, tracks research results, and is linked to strategic goals. 6.2 Research results are used by policy makers in making informed decisions. 6.3 Key performance indicators (KPIs) are established, tracked and monitored for the continued relevancy of research activities.

Appendix 2: Risk Matrix

Risk Associated with Research and Development Planning	
Lack of a committee or group representative of the company, responsible for guiding, directing, and approving EA plans and products, including significant changes in the enterprise architecture	Formally assign the responsibility for directing, overseeing, and approving the enterprise architecture to a committee or group with representation from across the business units and IT
Failure to evaluate new products	Set up a performance plan for the new product
	Evaluate sales volume for new product
	Evaluate profitability of new product
Failure to optimize customer and product mix	Produce a report for the optimization of a customer product mix
	Review the report regularly for any changes in the optimization matrix
Failure to track performance of new customer and product strategies	Review the report regularly for any changes in the optimization matrix
	Produce a report for the optimization of a customer product mix
	Align customer performance with product availability
	Evaluate the performance of a new customer per product
Failure to survey market, industry and products and determine customer needs and expectations	Conduct continuous qualitative and quantitative assessment of the market in which the business is operating and align business functions to suit current market conditions
	Constantly analyze customer needs and wants and align the business function in order to supply the customer with the specific needs and wants

	Drive marketing efforts to communicate the competitive advantages of the business products
Risk Associated with Research and Development Inputs	
Unproductive, high-risk or otherwise not closely managed alliance partnerships can lead to lost time and investment, product and/or service failures	Clearly map critical success factors and performance metrics to a balanced scorecard and evaluate performance internally and externally against criteria
Inappropriate versions are prepared for release into production due to a lack of version control	
Product/process costs may be misstated causing critical decisions to be based on incorrect information	Waste streams, recovery and disposal practices should be reviewed to determine if costs are minimized and that waste costs are properly attributed to the product or process responsible for the generation of that waste
	Process reviews must be conducted to determine whether product costs accurately reflect the actual manufacturing process and, if so, whether that process reflects the most effective method of producing the required product
Inappropriate, unauthorized, or unverified Configuration Items (CIs) are implemented into the production environment resulting in a negative service impacting event	Unauthorized changes to the Configuration Management Database (CMDB) are assessed for their impact and remediation plans are developed, approved and executed
	Configuration Item (CI) monitoring is performed and unauthorized changes and discrepancies to Configuration Management Database (CMDB) are identified, verified, correlated and reported, in a timely manner
Inappropriate versions are	Source code is frozen in accordance to

prepared for release into production due to a lack of version control	documented Lead Time Freeze standards
	Automated jobs are used to promote software source files
	Source code versions are maintained and managed throughout the development and maintenance lifecycle to ensure code integrity and accuracy
Failure to perform product costing	Product costing reports should be produced and tracked against sales and profitability
Inappropriate, unauthorized, or unverified Configuration Items (CIs) are implemented into the production environment resulting in a negative service impacting event	Unauthorized changes to the Configuration Management Database (CMDB) are assessed for their impact and remediation plans are developed, approved and executed.
	Configuration Item (CI) monitoring is performed and unauthorized changes and discrepancies to Configuration Management Database (CMDB) are identified, verified, correlated and reported, in a timely manner
An unauthorized or unapproved change is promoted to the production environment	Development, test, and operational facilities should be separated to reduce the risks of unauthorized access or changes to the operational system
	Changes to information processing facilities and systems should be controlled
Unauthorized changes are migrated into production	A post-implementation review is performed and documented
	Changes driven by the change management process are approved prior to migration into production
	Access to promote changes into production is segregated from development personnel and restricted to authorized users
Changes enter the production environment without the appropriate review and approval causing adverse effects to	Changes are approved by appropriate levels of management based on risk and impact levels

the business or technology asset	
Risk Associated with Research and Development Verification and Validations	
The test environment does not support testing standards and requirements, causing confidentiality, integrity, and availability of production systems to be compromised	Test and development environments are created and exist in isolation from production systems
	Development and test environments are maintained to mirror the production environment
Failure to appropriately test the product to determine if product guidelines have been met	Testing is performed at milestones and compared to project objectives. Variations are documented and changes approved
The testing environment does not accurately reflect the production environment, causing defects in the release to go undetected prior to implementation	Test environment and conditions reflect production as appropriate
	Stress tests and load balancing is performed as appropriate
	User Acceptance Testing (UAT) is performed and exceptions appropriately addressed
A "good" product is scrapped erroneously.	Product specifications are built into the manufacturing process so that the product does not make it through the entire process without meeting specifications (legal regulations, durability, customer expectations, etc.)
	Inspection procedures are put into place to independently detect defects in the finished good prior to leaving the plant

Chapter 8

Production and Production Planning

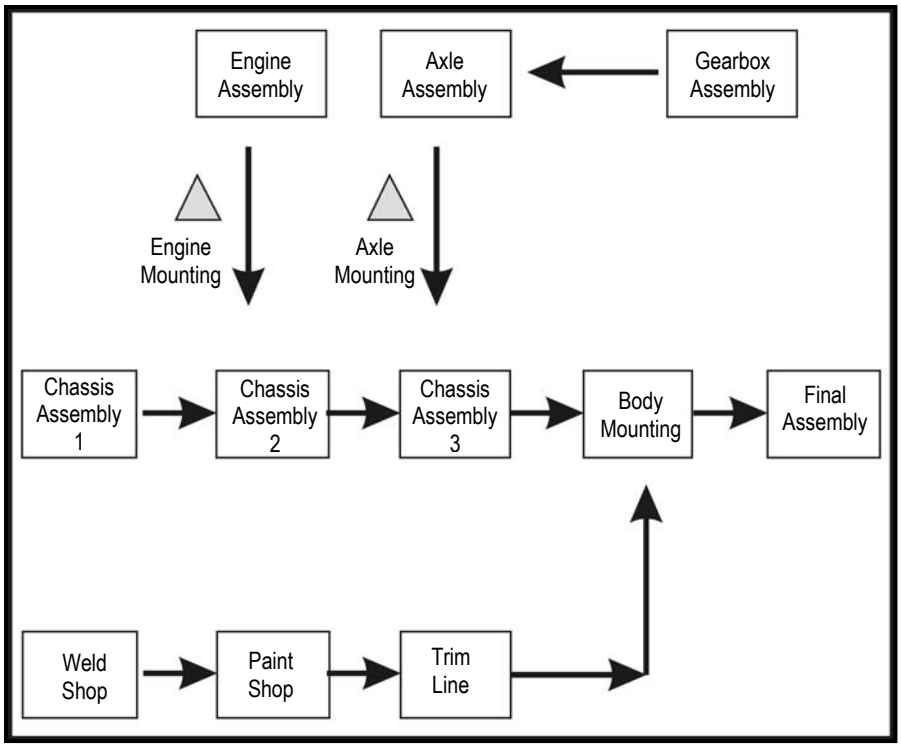
8.1 Production is a scientific process which involves transformation of raw material (input) into desired product with the help of energy, capital, manpower and machinery and is a very complex process. Automobile production is categorised under production by assembly.

Aim of production function is to add value to product or service which will create a strong and long lasting customer relationship or association, which can be achieved by healthy and productive association between Marketing and Production people. Marketing function people are frontline representative of the company and provide insights to real product needs of customers. An effective planning and control on production parameters to achieve or create value for customers is called production management.

8.2 Product quality determines the success of the production process in automobile industry. One of the key drivers of quality is the performance of the product over a period of time. Any automotive organization sets a goal of achieving production efficiency and ability to operate at an optimum level at all the time. Furthermore, the production should be achieved with a least level of wastage. Accomplishment of quality control for automobile is crucial as the components that go into the automobile are produced at other sites and shipped to assembly plants, hence rigorous testing and inspection audits are carried out at supplier sites similar to those used by the assembly plants.

Automobile Production Function

8.3 Automobile production process with diagram and key processes which are involved in automobile production process are briefly explained below:



(i) Engine shop- where the engine block casting is made according to dimensions and other engine parts are assembled.

(ii) Transaxle shop- complete machining of gear blanks, shafts and assemble of gear box is done here. The gear box is sent to engine shop where it is fitted with engine and the unit is called power train.

(iii) Weld shop- welding of these panels is done and the body made is called body in white (BIW).

(iv) Paint shop- as the name suggests, the painting of complete body is done, and painted body is sent for final assembly.

(v) TCF shop- Trim Chasis Final shop where the engine is assembled with the body along with other parts such as wheels, wind shield, seats dashboard, etc.

(vi) Testing- Finally tests are carried out such as shower test, DLT test, drive test, etc. However testing is an integral process in all other above shops. And finally a car rolls out of the unit.

Need for Production Planning

8.4 Production planning is fixing of goals of production and estimating resources to achieve this goal. It forecasts individual step in the production process. In parallel to the design of the vehicle, the planning of the production process takes place. Production Planning and Control (PP&C) is a process that comprises the performance of some critical; functions on either side, viz., planning as well as control. It ensures that optimum utilization of production capacity is achieved, by proper scheduling of the machine items which reduces the idle time as well as over use. It ensures that inventory level are maintained at optimum levels at all time, i.e., there is no over-stocking or under-stocking. It also ensures that production time is kept at optimum level and thereby increasing the turnover time. Since it overlooks all aspects of production, quality of final product is always maintained.

8.5 Production planning is required for scheduling, dispatch, inspection, quality management, inventory management, supply management and equipment management. Production control ensures that production team can achieve required production target, optimum utilization of resources, quality management and cost savings. It is the process of aligning demand with manufacturing capacity to create production and procurement schedules for finished products and component materials. The process is vital as it tracks and makes a record of the manufacturing process flows, for example, the planned and actual costs. Also, goods movements from the conversion of raw material to semi-finished goods. It helps manufacturer to work out the quantity of material manpower, machine and money requires for producing predetermined level of output in given period of time.

8.6 Manufacturing planning and control address decisions on the acquisition, utilization and allocation of production resources to satisfy customer requirements in the most efficient and effective way. The circuit of manufacture controlling starts with the aperture and release of the order and ends with the manufacture of the product itself. The performances are defined for a particular order. In this way, the outputs of products are being registered from the economic and technical point of view and the resulted materials are being inventoried on their value and quantity.

Objectives

8.7 Production control implements the production plan, which directs, coordinates and controls the production. It helps to achieve the production goals. The purpose of the internal audit for production control is to assess independently and assure on the following points:

- adequacy of designing of existing control framework for production process and appropriate implementation of such controls;
- appropriate roles and responsibilities, including the segregation of duties, have been established for key processes involved under production controlling activity;
- optimum utilisation of all the resources with minimum wastage and maximum achievement of quality of the product;
- the procedures for ensuring accuracy of the production information in the financial system are adequate.

Audit Procedures

Review of Production Control Framework

8.8 Production is carried on by following various production policies initiated by production department of an organisation. The aim of a good production policy is to achieve maximum output with minimum input. It is of vital importance that production department of the organisation should be managed in such a manner as to ensure economy in material resources and production time. Production management is primarily concerned with formulation and design of various production policies. Production management means planning, scheduling and controlling the flow of materials through a plant. It is concerned with decision making relating to processes for producing goods in accordance with the pre-determined specifications and standards by incurring minimum costs. Thus, it is concerned with production planning and control and initiating various production policies.

8.9 Internal auditor has to ensure existing written control procedures and practices of manufacturing and methods to control and monitor the smooth flow of all production processes, production cost savings, thereby improving bottom line, controlling wastage of resources and maintaining standard of quality throughout the production cycle. Internal audit need to ensure that adequate controls are maintained for updation of necessary changes on regular review of production process.

Once the production has been set in motion, it is necessary to check that it is proceeding according to the plan. Every production programme involves determination of the progress of work, removing bottlenecks in the flow of work and ensuring that the productive operations are taking place in accordance with the plans. It should record delays or deviations from the production plans, which helps to reveal defects in routing and scheduling,

misunderstanding of orders and instruction, under loading or overloading of work, etc. There should be regular review of all such deviations and remedial measures are undertaken to ensure plant efficiency and performance.

8.10 The deviations may arise on account of following:

(i) Materials may be delivered late or may not be delivered at all.

(ii) Associated departments may have fallen behind in their own production.

(iii) There may be excessive absenteeism on the part of the workers.

(iv) The customer may insist on changing the specification or delivery date.

(v) Machines/ power break down.

(vi) There may be errors in drawings.

(vii) There may be too many rejections due to poor material quality.

(viii) Errors in processing and inspection.

Auditing Various Techniques of Production Control

8.11 The major controls techniques used by organisation for production management need to be reviewed for internal audit:

(i) Programming – Under the production programming, it is necessary to ensure that the right amount of quantity is determined to be produced and time schedule for the same is considered by:

- even loading of plant by ensuring production at an even rate throughout the year.
- even loading of labour in total man hours per week.
- efficient use of capital, where production program are arranged is such a way that minimum capital is tied up in a stock.

(ii) Ordering — It is process of placing orders to the supplier and the processing department for the material and other parts needed to manufacture the product and to arrange the ordering quantity and delivery schedule in such a way that all items are delivered in time to meet the production programme.

(iii) Dispatching — The decision of assigning various jobs to different

machines is known as Dispatching, it is one of the limited areas where the foreman still exercises his discretion within the context of a well-developed production control system.

(iv) Documentation and authorisation controls need to be reviewed for internal audit are:

- Production should commence only on issue of authorised job order, where time taken to perform an operation is recorded.
- Material to be issued on store requisition slip authorising the storekeeper to issue the materials to departments for performing operations.
- Issue of tool orders to the tool department to keep ready the tools, jigs, fixtures, etc.
- Recording idle times of machines and operators and reporting them to appropriate authorities for necessary action or delays.
- Internal delivery note to be issued for delivering finished products, finished components or even excess materials into stores.

(v) Progressing – Progressing or follow-up is a most important step of production control. This step is to ascertain from time-to- time that the production operations are progressing according to the plan. It is the measurement of output against plan, analysis of performance for shortfalls and following up the line management to apply corrective action for excessive short-fall. Under progressing information may be available for comparing the actual performance against the planned one:

- Flowcharts indicating the planned sequence of operations.
- Production schedules to compare targets with performance.
- Machine loading charts indicating different operations performed by each machine – the variance in the machine performance could be on account of breakdown of machine due to lack of monitoring over repair and maintenance program.
- Inspection schedules to establish a programme for inspection.

Sample Audit Checklist for Production Process in given as **Appendix 1.**

OEM – Supplier Synergy on Production Scheduling

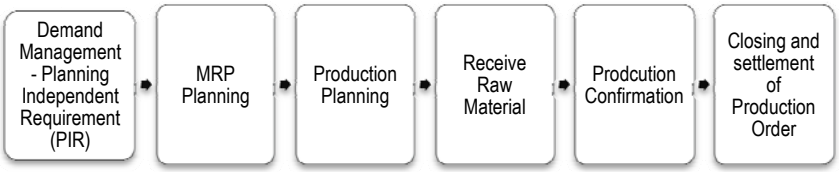
8.12 The major aspect of the 'OEM-auto component manufacturers' linkage

relates to concerns regarding responsibility for design and quality besides location, cost and module design capabilities. It is evident that 'on-site' suppliers contribute substantially in achieving overall supply chain efficiency through standardization of parts and cost effectiveness.

In the framework of the automobile industry, one will not be interested in the long term planning for the most detailed pieces. Due to the fact of the automotive sector which holds strong relationship regarding the order and delivery, there is SAP interface used by OEM and Suppliers, where production planning is taken care through system support and online updation are carried out as and when required.

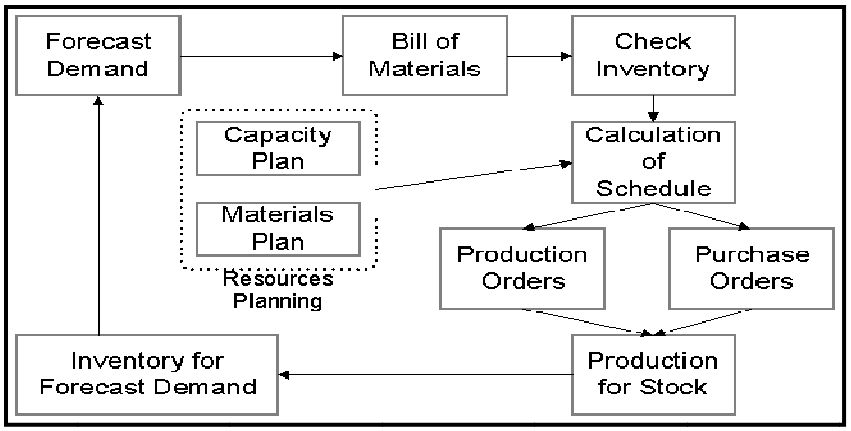
Review of Flow of Processes under Production Planning

8.13 Processes involved under production planning mechanism are as mentioned below:



System for production planning in automotive industry are mainly MRP based, where a forecast for sales of standard items is generated by Marketing/ Sales and a manufacturing plan is created from this. The forecast demand is used to push the production line in advance of the actual demand. This may be mixed with Just In Time system (JIT), which requires reduced inventories and improved system responsiveness at all stages because of the short time scales involved. JIT assumes other parallel improvements and change to both the working practices and the culture of the company.

MRP based production planning cycle is as under:



Demand Management

8.14 The function of demand management is to estimate requirement quantities and delivery dates for finished products and important assemblies. Demand planning is based on the Sales plan to meet the sales requirements as per the production cycle times. MRP checks for the availability of various raw materials used for production at different stages using the master data such as Bill of material (BOM) and available current plant stocks. Demand Management uses PIR (planned independent requirements) and customer requirements. Material requirement planning need to achieve following objectives:

(i) Primary objective is to ensure that material and components are available for production, and final products are ready for dispatch.

(ii) Another primary objective is not only to maintain minimum inventory but also to ensure right quantity of material is available at the right time to produce right quantity of final products.

(iii) To ensure planning of all manufacturing processes, this scheduling of different job works so as to minimize or remove any kind of idle time for machine and workers.

Material Requirement Planning (MRP)

8.15 MRP determines any shortages and creates the appropriate procurement elements. It does net requirement calculation and generates planned orders for in-house produced materials and purchase requisition for raw materials. It does lead time scheduling and calculates production dates in planned orders. It explodes the BOM and generates procurement

proposals at each BOM levels. Bill of Material (BOM) is a base functionality of setting up production process in an ERP system. A manufactured item consists of components, which are used to build the product through production operation(s). The main use of BOM is to define product structure of a manufactured end item.

In case of material shortage, purchase requisitions are created for materials which are externally procured, and planned orders are created for in-house produced materials. These purchase requisitions and planned orders initiate the Procurement Cycle and the Execution Cycle of Production respectively. As MRP works with infinite capacities, capacity levelling is be done in order to avoid any capacity bottlenecks.

Capacity Planning and Levelling

8.16 Capacity Planning is used to analyse the capacity overloads at work centre and shift the orders to avoid any capacity bottlenecks. Capacity requirements are generated via MRP on Work Centre and since MRP works with infinite capacity and plans everything on work centre without considering any capacity constraints, it is required to level the capacity at the work centre. Capacity can be levelled at each work centre in order to create constraint production plan. The ultimate goal of capacity planning is to meet the current and future level of the requirement at a minimal wastage. Effective capacity is the optimum production level under pre-defined job and work-schedules, normal machine breakdown, maintenance, etc. Capacity Planning based on the timeline is classified into three main categories long range, medium range and short range.

(I) *Long Term Capacity:* Long range capacity of an organization is dependent on various other capacities like, design capacity, production capacity, sustainable capacity and effective capacity. Design capacity is the maximum output possible as indicated by equipment manufacturer under ideal working condition.

(ii) *Medium Term Capacity:* The strategic capacity planning undertaken by organization for 2 to 3 years of a time frame is referred to as medium term capacity planning.

(iii) *Short Term Capacity:* The strategic planning undertaken by organization for a daily weekly or quarterly time frame is referred to as short term capacity planning.

8.17 It need to be checked during internal audit that whether demand is more than production capacity; in such situation company is in a position to

use its production capacity to the fullest and need to fulfil requirement by buying from outside. Where the demand is less than the production capacity, company can choose to reduce the production or share it output with other manufacturers. Factors affecting on capacity planning need to be reviewed are:

- Production facility layout, design and location
- Production technology
- Human capital
- Operation structure – scheduling and quality assurance
- External structure – policy and other regulations.

Production Orders

8.18 The output of MRP will be "Planned Orders", which needs to be converted to production orders for further execution of the process.

Production Order is a document which specifies what material needs to be produced and in what quantity. It also contains the BOM components and routing operation data. Production Order is released for execution, and material availability checks are carried out which determines if there are any missing components.

Production Order Confirmation

8.19 When goods are produced physically at the shop floor, then production order must be confirmed. During confirmation, components materials are consumed automatically in ERP and Goods receipt of material is performed automatically in ERP. However, instead of auto goods movement, manual Goods Issue and receipt to be performed separately from confirmation. Any failed goods movement due to a deficit of component stock need to be reprocessed manually. Activity costs such as machine, labour etc. will also be updated in the production order during confirmation on an actual basis. The order gets Confirmed and Delivered status after final confirmation and final Goods receipt. If confirmation is posted wrongly, then auditor need to check whether the confirmation is cancelled and posted again with correct data.

Closing of Production Order

8.20 Once the production is completed, the Confirmations of orders are executed, and goods movement for material consumptions and goods receipt

are posted against the Order. Hence, the Order gets the Delivered (DLV) status, and the material is received into desired storage location. Usually at the month end before doing order settlement, production order needs to be set to technically completed status in order to calculate production variances by the controlling personnel.

After the production order is delivered completely or if there is no further execution then production order should be technically completed. After technical completion only the order gets deleted from stock/requirement list and is no longer considered in material requirement planning run. All dependent reservations also get deleted from the system on technical completion of order.

Review of IT Controls and Appropriate Roles and Responsibility Checks

8.21 Masters involved under production process are:

(i) Material Master— The material master contains information on all the materials that a company procures, produces, stores, and sells. This is used under processes like, purchase of materials, Goods Movement postings such as, goods issued or receipt in inventory management and also for physical inventory postings, sales and distribution for sales order fulfilment process, etc. Auditor should ensure that the item master code creation is based on duly authorised Material Code request forms and the access for creation/ updation/ modification are restricted to authorised person only. Regular review process of masters is in place to remove or block material codes which are not in use.

(ii) BOM Master— Auditor need to check that BOM & Cost sheets for any product are updated and duly approved before it is being updated/created in system. Whether the rights are available to alter the material in BOM to restricted authorised person. A consistent margin % should be kept between sale price & cost of any particular sheets. Any negative margins should be adequately highlighted to controlling Team on time.

(iii) Work Center Master— A Work Center is a machine or group of machines where production operations are performed. Work centers are used in Routings and contains data for scheduling, capacity, costing, etc. The rights to create are always need to be highly restricted and timely reviewed to incorporate any change in production process.

(iv) Routing Master— Routing is nothing but a sequence of operation performed at the Work Center. It also specifies the machine time, labour

time, etc. for the execution of operations. It is also used for scheduling of operations and used in standard cost calculation of the product. Closed monitoring of this master is required as it contains sensitive data for production costing.

(v) Production Planning— In case of component manufacturer where production plans are based on the production plan of OEM and are shared through ERP by OEM, auditor need to ensure production planning and the procedure at the organisation for the preparation of weekly/ monthly/ annual production budgets, and system controls system controls like, restricted authority to change/ update and no possibility of manual intervention are in place. The manual controls for the materials which are not covered in planning through ERP need to be reviewed.

(vi) Production Order— Production order creation, updation, release rights need to be restricted to authorised production personnel. Production orders are generated through MRP run only or manual intervention is allowed by ERP need to be checked. Conflict in segregation of duties need to checked for confirmation of production orders on physical production of goods. All production activities should be initiated on the basis of properly authorized and approved production orders in order to maintain effective financial and operational control of production activities. Completion status should be duly updated on timely basis as based on the same material requirement accuracy is dependent. Delay in completion of production orders need to be reported and analysed.

Person responsible for production operations and production planning should not be in a position to control the accounting of production costs.

(vii) MRP Run— Auditor to review that MRP is used for which items of inventory, i.e., whether all raw material, packing material, spares, consumables and which materials are controlled manually. Check review process of MRP runs is in place by the independent person to ensure material requisitions are generated accurately and inventory controls are also in place.

(viii) Production Rejection— Post production, quality controls determines any defect in products. Production rejection are booked in ERP in order to record such defective item. Plant head determines if such rejection is normal or abnormal and set corrective action with roles and responsibilities. Any reworking if required will be separately recorded in ERP.

Review of Operational Controls for Optimum Utilisation of Resources

8.22 Check the policies for production process are documented and consisting of all above elements of production planning designed towards achievement of goals of the organisation, the roles and responsibilities and authority control matrix are defined in the policies. Audit needs to ensure that there is no mismatch between the production planning and control methods and the planning environment and existing practices are as per policy. System is in place for recording the deviations and they are reported to authorised personnel for analysis and corrective actions.

Check that there is a proper lay out for free flow of materials. Check the machine utilization status report and check if the machines are used as per the laid down standards of efficiency and utilisation. Also check the idle time, whether detailed analysis is carried out thereof and the steps taken to reduce idle time.

In case of job work activity, auditor need to check whether the requirements are properly planned with job work related reports and material movements are happening on timely basis without delay. Ensure using data analytics the status of production orders on basis of system reports that the production orders are closed and necessary status is updated in ERP for the production orders, so that material requirement planning run will not be incorrect. Check whether the production orders are completed as per stipulated time and whether quality controls are in place and targeted quality is achieved for actual production.

Maintenance of Plant & Machinery

8.23 Maintenance policy is particularly important in capital-intensive industries. Schedule of preventive maintenance need to be in place to ensure breakdown free production process. Maintenance is done through repair, partial replacement and total replacement. Such schedule need to be reviewed by Plant Head to ensure if the schedule is sufficient to avoid any breakdown. If the preventive maintenance is not as per the schedule it may result in:

- Full capacity utilization may not be achieved.
- Increase in production cost as fixed labour cost cannot be reduced.
- Increase in maintenance cost as more spare parts are required.

- Reduction in product quality and increase in wastage.
- Safety of workers and operators in jeopardy.

Productivity Analysis

8.24 Actual production plant efficiency and performance meet management's expectation in an adequate and appropriate manner. Monitoring on productivity to maintain alignment with the organization objectives, where two essential part of productivity are labour and capital. Productivity measurement enables company to identify areas which require improvement or special focus. Also productivity provides ready report card to measure status against company's production objectives. Total productivity measure takes into consideration sum of all input factors which are used for the output. In case of labour productivity, output is compared to the labour wages.

Wastage Analysis

8.25 Process for recording of defective products during production process need to be in place. The same need to be monitored by authorised production person whether it is as per target or on higher side. Process of authorising on recycle or disposal of such products need to be well defined and followed regularly.

Case Study on Production Efficiency and Idle Time Analysis

8.26 Following is Case Study on Production Efficiency and Idle Time Analysis:

(i) *Scope of Analysis*— Production Line's efficiency, accuracy of payment of overtime and incentives, Idle Time variances.

(ii) *Procedures Performed*—

- Recalculation of line wise efficiency using the payroll and HR Time keeping software.
- Performed analytical reviews.
- Variance analysis.
- Obtained understanding of the performance measurement system.

(iii) *Observation on Discrepancies in the Calculations of—*

- The idle time which is not reported to management at all in the efficiency reports whereas idle time if reaches to a certain level (more than the standard idle time) must be informed to higher management.
- The Overtime reported while calculating the production efficiency and the actual overtime paid as per payroll/HR Time payroll.
- Production efficiency calculated by engineering/ planning department and efficiency calculated by Internal Audit Department**.**
- Monetary Incentive payments to production managers based on their efficiency which is measured by accumulating the production floors efficiency for which the individual production manager is responsible.

(iv) *Effect of Idle Time on Production in Units—*

Month	Net Idle Time (Net of Std Idle time 20%)	Actual Production Output	Estimated Production based on available time	Estimated Production Output Loss	Estimated Production Output Loss (%)	Overtime Reported (Hours in % to std hours)
Oct -15	14%	138,176	160,670	(22,494)	–14%	6%
Nov - 15	4%	126,032	131,283	(5,251)	– 4%	1%
Dec - 15	17%	162,951	196,327	(33,376)	–17%	6%

Company should use standard costing system to evaluate the performance of the factory. The variance analysis should be done and variances should be investigated (if material) to find out the causes.

Examples of Variance Analysis are as follows:

Desired Objective/ Target	Variance Analysis	Process of Variance Analysis
Completion of products within the allocated time and shipped to the customer.	**Efficiency Variance:** Standard Time Allowed **Less:** Actual Time incurred to complete the	Variance should be investigated (if Material) and actions should be taken to prevent it to be incurred in future.

	Style/Order **Idle Time Variance:** Standard Idle Time **Less:** Actual Idle Time.	**For Example** If production lines are stopped due to un-availability of raw material, machine breakdown, etc. responsible department should be accountable for the inconvenience.

Analysis on Preventive Maintenance and Production Wastage using Data Analytics

8.27 On review of machine wise production and preventive maintenance available data for the unit, it is observed that during certain period specific machine has missed the schedule most of the time. Wastage reports for the same period are compared and relationship tried to be established, that wastage percentage is on higher side when preventive maintenance is not carried out as per the schedule.

Period	Maintenance (Instance)			Non availability of		Production Wastage %	
	Scheduled	Done	Not Done	Machine	Manpower	Scheduled	Actual
Apr-14	119	64	55	0	0	5%	5.5%
May-14	123	87	36	10	20	5%	6.1%
Jun-14	96	65	31	1	10	5%	5.2%
Jul-14	110	77	33	8	20	5%	5.62%
Aug-14	109	71	38	3	35	5%	5.38%
Sep-14	99	43	56	24	31	5%	5.58%

Review of Financial Controls

8.28 With regard to production costs, internal accounting controls should provide for the recording, classification, and reporting of production costs such that inventories, cost of sales, and operating costs are properly reported in the financial statements, and should provide for the safeguarding of company assets. Finance department should conduct periodic review to verify adequate controls for reporting, recording and tracking of all production transactions under financial records.

Recording of Production and Consumption

8.29 Auditor need to check at the end of each month whether the production orders are closed and the actual production as well as inputs consumption is recorded against the production order. The risk involved here is production may not be recorded on time resulting into difference in physical verification of inventory and delay in consumption of material. Back posting of production and consumption should be restricted in ERP and to be allowed only with necessary approvals.

8.30 Auditor need to check the process of creation of production orders and long pending open order status during internal audit. The process of recording consumption against the production order need to be cross checked against BOM for each product as set up in ERP. The MIS system and other data maintained for monitoring raw material consumption need to be reviewed. Accounting procedures should ensure the timely recognition of manufacturing variances and their proper classification for reporting purposes.

The cost system and recording controls should ensure that material and labour costs are reliably and consistently accumulated, classified, and distributed to the appropriate products or jobs. This basic objective must be achieved if inventory costs and costs of sales are to be determined on something more than an arbitrary basis. For this objective to be achieved following controls need to be ensured:

- All materials transferred to work in process and then to finished goods must be accurately reported.
- Material pricing procedures must be accurate and consistent.
- Direct and indirect labour (in both producing and service departments) must be accurately classified and reported.
- All overhead costs should be properly accumulated and classified. Costs included in the standard rate should be similarly reported in actual results. Significant over/under absorbed overhead should be investigated.
- If low cost materials and supplies are charged directly to expense, inventory control should be established through adequate storekeeping procedures, budgetary expense review, and other alternative controls.
- The standard cost system should be integrated with the general accounting records so that variances are properly classified and reported on a timely basis. Standard costs must be established

annually in accordance with corporate policy in order to provide meaningful variance reporting.

Cost run for finished goods and semi-finished goods need to be carried out at regular frequency as absence of the same could result into erroneous standard cost information in ERP resulting in wrong profit/ loss reporting for the product. Customer wise, material wise reason analysis for such higher cost cases need to be carried out, which may be either due to actual loss or non-occurrence of cost run on timely basis.

Utility Cost Analysis

8.31 Target costs and actual costs considering material and other variable components like, labour cost and overhead costs such as, power cost, machine cost and other indirect overheads as per MIS reports are added together and variance analysis of totality basis as well as and cost component basis need to be carried out on regular basis. In case of excess cost reporting the probable reasons may be:

- BOM is not updated in timely manner in ERP resulting in variance with Material cost;
- Rise in Raw Material costs resulting in higher material costs;
- Lack of control on routing function by which other costs than material cost getting effected;
- Actual rise in labour and other overhead costs.

Alternate Material

8.32 Actual consumption report need to be cross checked with the planned consumption (basis BOM) report on regular basis, and variance need to be analysed to check whether alternate material is used instead of planned material, due to unavailability of the planned material; which may result in excess cost of production for the period. Such practice is result of lack of control on production planning process. Rights to use the alternate material need to be restricted with authorised person.

Data analysis carried out on usage of alternate material than planned material resulting in excess production cost:

Order No.	Planned Qty KGs	Code	Cost Per Unit	Code	Cost Per Unit	Excess Production Cost
53030	1163.65	1002293	48	5009968	48.33	384.00
53029	1163.65	1002293	48	5009969	48.33	384.00
53028	1478.06	1001008	48	5009968	48.33	487.76
53027	1100	1001061	42	1001765	44.5	2,750.00
53026	1144	1001061	42	1001765	44.5	2,860.00
53023	235.62	1001147	44.46	1001764	46.5	480.66
52630	638.93	1000902	46.5	1002605	47.15	415.30
52019	1672.65	1000679	46.5	1001691	48.75	3,763.46
51024	826.48	1002448	46.86	1002508	47.89	851.27

Rework Cost of Products

8.33 The process for rework of material has to be implemented in ERP and should not be controlled manually. In absence of such process, reworks cost can't be analyzed separately.

Accounting of Scrap

8.34 Scrap generated from production process should be reconciled with scrap stock in books of accounts at the end of each month. Process wastage need to be defined in the BOM of respective product. Internal auditor should corroborate the reasons with the variations in the consumption pattern of the related source materials, the relevant input output ratios, the work in progress as at the end of the month and the finished goods manufactured during the month.

Any deviation between physical quantities of scrap and stock as per ERP need to be analysed with adequate reasons. The quantum of scrap during any month should be normal and under accepted production guidelines. Abnormal scrap if any need to be monitored after getting understanding on the type and nature of the scrap generated by automobile companies. Corrective action / follow up action with role and responsibility need to be determined for the abnormal scrap. Scrap should not be recorded under production costs but should be reported separately.

Appendix I: Sample Audit Checklist for Production Process

S. No	Audit Procedures – to check	Yes	No	NA
1.1	Is production policy documented along with roles and responsibilities and authority matrix and kept on record?			
1.2	Are process stages carried out as per predefined flowchart and control plan?			
1.3	Are related product parameters monitored and recorded?			
1.4	Does the record for no. of labour required to work at each machine for standard production has been maintained as per given format?			
1.5	Calculation of idle time is done on percentage basis and in case the idle time exceeds specified percentage the reporting of the same to the higher management on daily/weekly basis with proper reasons.			
1.6	Calculation of overtime and recording of the same is done by the Production Manager and he further reports it monthly to the Unit head and the HR coordinator of the unit.			
1.7	The total area covered by the production floor with its utility including storage for raw and finished goods is recorded in prescribed format.			
1.8	Capacity Analysis of machines is done in the prescribed format.			
1.9	The upkeep and maintenance of machine is done on regular basis so as to increase their life and proper track of the machine maintenance is maintained in the prescribed format.			
1.10	Separate machine log book is maintained and updated.			
1.11	Proper reporting of machine breakdown/ shut			

S. No	Audit Procedures – to check	Yes	No	NA
	down is done by production in charge to unit head with valid reasons.			
1.12	Shut down for more than 3 hours is reported to Unit Head which further reports to higher management.			
1.13	The production Manager verifies the final product according to the standard production plan and records the same with deviations, if any in respect of quality and quantity both.			
1.14	Quantity Analysis is done by the Production Manager as set out in master chart of the particular product.			
1.15	Is material consumption monitored with respect to production? Are trends consistent/ satisfactory? Are actions initiated to control material consumption?			
1.16	Proper classification of wastage is done into normal and abnormal.			
1.17	Classification as abnormal is done if wastage is occurred due to the following: — Error in machine — Raw material quality issues — Power cut with prior information — Labour mistake All other wastage which is not normal.			
1.18	The wastage is properly recorded in the wastage register/sheet on daily basis along with proper reasons and it is shown in the production MIS in the prescribed format.			
1.19	The monthly average wastage is properly calculated, and if the wastage exceeds the standard wastage, then necessary steps to reduce the wastage are taken.			

Chapter 9
Inventory Management

9.1 Inventory management is a very important function that determines the health of the supply chain as well as the impacts the financial health of the balance sheet. Every organization constantly strives to maintain optimum inventory to be able to meet its requirements and avoid over or under inventory that can impact the financial figures. Inventory is always dynamic. Inventory management requires constant and careful evaluation of external and internal factors and control through planning and review. Inventory management involve continuous monitoring, control and review of inventory and interfacing with production, procurement and finance departments.

Inventory involves various cost such as, holding cost, ordering costs, investments, space management, etc. Also there are chances that stored inventory may get damaged or get pilfered adding to extra cost to the company. Therefore, it is important to have a robust inventory management for an organization.

9.2 It is essential to have optimum inventory at all times. Over inventory stocking results in erosion of profits and increase in inventory carrying costs that effects the operational costs of the company, while shortage of inventory can lead to loss of business and sales opportunity which will not only result in revenue loss but damage company's reputation and reliability in the market and with customer. Inventory by nature is operation intensive. With the number of items running into thousands, coupled with the number of transactions that are involved in managing inventory operations on daily basis, it is quite possible that without water tight controls over processes, systems and operations, inventory will go out of control resulting in impacting bottom line directly.

Inventory in Automobile Industry

9.3 Besides raw material and finished goods it holds inventory of spare parts to service the products. Defective products, defective parts and scrap also forms a part of inventory as long as these items are inventoried in the books of the company and have economic value. Further, both raw materials and finished goods those that are in transit at various locations also form a part of inventory depending upon who owns the inventory at the particular juncture. Finished goods inventory is held by the organization at various

stocking points or with dealers and stockiest until it reaches the market and end customers. Internal auditor should keep in mind the general rule for deciding whether an item should be treated as inventory or not, which is basically to determine the purpose for which the entity is using the item. If the purpose is any of the three alternatives mentioned below, the item should be treated as inventory:

- held for sale in the ordinary course of business;
- in the process of production for such sale; or
- in the form of materials or supplies to be consumed in the production process or in the rendering of services.

9.4 In the automotive industry, inventories are classified under following category:

- Production inventory,
- Finished goods, and
- Inventory (components) held for service and maintenance contracts.
- Goods in Transit.

Production Inventory

9.5 Inventories that are not classified as finished goods or components for service and maintenance contracts are classified as production inventories. Examples:

- Raw materials
- Production materials,
- Consumable supplies,
- Work in progress.

Finished Goods

9.6 Finished goods are inventories ready to be sold to the customers. A certain item (e.g., an engine) can be treated as finished goods in the financials of one company and work in progress in the financials of another Company. Finished goods are accounted for as inventories till the time they are sold to the customers and revenue is recognized.

Inventory (Components) Held for Service and Maintenance Contracts

9.7 Automobile manufacturers are required to keep inventory of components for service and maintenance purposes for specified period of time as mandated by regulatory authorities from time to time for each model. For instance, a particular model may be withdrawn from production and distribution. However, to ensure that the users who have purchased these models in past years can get these models repaired/ serviced in the future, automobile companies need to carry these inventories. Internal auditor should ensure that there is a proper system of technical evaluation to ensure proper valuation of such inventories at each reporting date.

Goods in Transit/ Goods on Consignment

9.8 In the automotive industry, goods-in-transit and goods on consignment form a very significant part of inventory. Internal auditor should ensure that goods-in-transit are shown as inventory of the receiver entity and goods on consignment shown as inventory of the delivering entity.

Goods-in-transit are the goods that have not yet arrived at the premises of the receiver but for which the supplier has fulfilled all the delivery obligations. Goods on consignment are goods delivered to an external party who holds them on behalf of the delivering company.

Objectives

9.9 The Inventory Management System and the Inventory Control Process provides information to efficiently manage the flow of materials, effectively utilize people and equipment, coordinate internal activities, and communicate with customers. The purpose of the audit of inventory management is to assess independently and assure on the following points:

- adequacy of inventory control process policies and procedures and appropriate implementation of such controls.
- appropriate roles and responsibilities, including the segregation of duties, have been established for all key processes.
- physical and operational controls are well in place for effective inventory management.
- completeness and accuracy of reporting and recording all inventory transactions in financial system and adequacy of monthly, year end reporting procedures.

Audit Methodology

Review of Inventory Policy Framework

9.10 Adequate internal controls should exist to ensure accuracy in reporting, recording and tracking of production costs and inventories. The organization should conduct periodic reviews to verify that these controls are adequate and properly functioning. An effective risk-based control framework of inventory management should be updated with timely corrective measures taken when problems are detected.

Inventory management policies should establish stock levels for various types of inventory, provide procedures for monitoring inventory levels and usage rates, and establish a framework for purchasing and/or manufacturing decision.

It should cover controls for all aspects of it, i.e., receiving, warehousing, issuing for production, assembly, finished goods storing, shipping, cyclical and periodic counts, financial reporting and monthly and year-end procedures.

Controls must be designed to ensure that material misstatements are prevented, or detected and effectively corrected.

9.11 In case of inventory management, the function is essentially dealing with two major functions. First function deals with inventory planning and the second being inventory tracking. As inventory planners, the main job consists in analysing demand and deciding when to order and how much to order new inventories. The procedures will, normally, provide the step by step guidance on how to manage each aspect of warehousing and may cover:

- receiving and issuing of supplies;
- quality control or verification;
- storage of goods;
- how to control stock movement (stock control);
- documentation flow;
- how to detect and deal with stock losses;
- how rejected material will be managed; and
- how to deal with unwanted material, obsolete and scrap, disposal.

Planning, entry and keeping records of all goods movement should form part of inventory policy. Goods movements include both "external" movements

(goods receipts from external procurement, goods issues for sales orders) and "internal" movements (goods receipts from production, withdrawals of material for internal purposes, stock transfers, and transfer postings).

For each goods movement a document is created which is used by the ERP to update quantities and values and serves as proof of goods movements. During review the necessary actions to be taken to ensure all the controls as per policy are well implemented and operating effectively after evaluating inventory reports, documents and ERP.

Sample Audit Checklist for inventory process in given is **Appendix 1.**

Review of Specific Items of Inventory

9.12 Other than regular inventory, there are specific items of inventory which are important in relation to the automotive industry:

Moulds and Toolings

9.13 OEMs often engage with component manufacturers to produce automobile parts. These component manufacturers and OEMs produce ‘tools and moulds’ or ‘toolings’ which are used in the manufacturing process for the purpose of producing automobile parts as per the specifications of a vehicle.

These toolings are usually designed for the production of specific products or models, and their utility generally ceases with the discontinuance or modification of the models developed. Toolings may be fabricated by component manufacturers themselves or procured from an OEM. When the product is phased out, the tooling specific to that product is also scrapped. The tools and moulds are subject to wear and tear due to repeated usage in the manufacturing process and on an average have a utility ranging from three to four years.

9.14 Specific care should be taken for moulds and toolings inventory as the treatment vary according to the arrangement with supplier. There are two key accounting challenges associated with toolings. One challenge relates to whether toolings are an item in the nature of inventory or the cost may be amortised over the useful period of life of mould. Internal auditor should ensure that all underlying contractual arrangements in this respect are checked to decide on the treatment of mould inventory.

9.15 The second challenge relating to toolings in the automotive sector is who should capitalize toolings— whether the OEM or the component manufacturer, Internal auditor need to understand the underlying master supply agreement. A master supply agreement is often a multiple-component

agreement that comprises a bundle of services that may include developmental activities, construction or acquisition of tools from a third party and delivery of the final manufactured components. These agreements may also include a variety of remuneration mechanisms, including upfront payments, progress payments at key milestones and/or payments through the component price as part of the series of production. Therefore, each separate component should be assessed according to its economic substance rather than its legal form. One should assess whether the contribution received from the OEM for development of the toolings is a pure financing arrangement or for the purchase of the tool or towards the commitment made by the supplier for a continuous supply of the products. Accordingly, toolings would be capitalised in the books by the party that has control of these assets.

Consumable Supplies

9.16 Consumable supplies are divided into two major parts:

(i) Production Supplies: Production supplies areused in the production process- they are also known as indirect materials. Production supplies may consist of, fuel, gas, propellants, oil, grease and grinding materials, supplies used in the commercial area such as in the workshop of a dealer, etc. Internal auditor should ensure that production supplies should be treated as inventories unless they are of insignificant value, in which case they should be expensed off immediately. The auditor should ensure that there are adequate internal controls and procedures in respect of the procurement of these items and proper records are kept for these inventories.

(ii) Other Supplies: Other supplies are used for product development, product instructions, printed matter and other office supplies. They are immediately expensed off at the time of acquisition. However, supplies purchased and held in larger quantities for commercial and service activities, should be treated as inventories.

Produced Vehicles

9.17 Vehicles produced by the entity are divided into following categories:

(i) Vehicles to be used for Product Development: These vehicles are manufactured to support or improve the production activity and they are not manufactured for permanent use and, therefore, internal auditor should ensure that they should not be considered as fixed assets and should be considered as a part of inventory. These should be charged off to expenses when the product is disposed or scrapped.

(ii) Vehicles for Demonstration and Public Relations Activities: Internal auditor should ensure that these vehicles are treated as inventory instead of fixed assets.

Review of System Controls with Review of Segregation of Duties

9.18 Internal controls must be designed so as to establish the roles and responsibilities of the different people involved in the inventory processes. The rationale for the segregation of duties is to ensure that errors are detected and to limit the risks of irregularities or errors being concealed. There should be segregation of duties between the following functions:

- purchase order creation/ amendment
- custody and receiving of stock
- updating of stock records

Internal auditor need to review that necessary system controls are maintained with segregation of duties. *viz.,* person having access to or control over inventories (i.e., purchasing, production, warehousing, incoming goods or shipping) should not have custody and rights to maintain inventory records. Responsibilities for maintaining detail inventory records and general ledger records should be segregated. The segregation of these two accounting functions is necessary to ensure that entries to the general ledger accounts are not influenced by employees who maintain subsidiary records. Persons responsible for inventory custody, shipping, purchasing, and receiving should not be responsible for determining physical inventory taking procedures or cycle counting programs since they may have a biased interest in the results of the physical counts.

Access to Material Master

9.19 The ERP controls on the key processes of inventory are essential to strengthen the control framework. The material master database (referred as the "material master", comprising all the individual material master records stored in the system) contains descriptions of all materials that an enterprise procures, produces, and keeps in stock. It is the central repository of information on materials (such as, inventory levels) for the enterprise. It has information for material requirements planning (MRP) such as, safety stock level, planned delivery time, and reorder level for a material. Information on purchasing such as, over- and under delivery tolerance levels, storage

information like unit of issue, storage conditions, and packaging dimensions, forecasting information like forecasting period, and past consumption/usage, and accounting information such as, standard price, past and future price, and current valuation. Selling prices for products should be in accordance with written pricing guidelines laid down by suppliers and approved as per authority matrix.

Company policy may restrict access to material master data. Access restrictions are intended to prevent unauthorized users from changing a material master record. Certain users may have authorization to change data centrally. Also regular review of such master information should be in place to update the changes in the process if any.

Bill of Materials Master

9.20 The bill of materials is a record of the parts used for production a product. The bill of materials is used to pick items from stock, so if the bill is incorrect, incorrect amount of stock may be picked up from the warehouse. Excess stock requisitions or returns from production may be due to errors in BOM records. A periodic review of every BOM, as well as password-only access to BOM records in ERP need to be ensured.

Inter Unit Transfers

9.21 All Invoices for Inter Unit transfers can be raised only against valid and approved Stock Transfer Orders (STO) where total quantity and rates are defined in the STO in ERP.

Review of Physical and Operational Inventory Controls

9.22 In any company inventory management is one area that the managements always focus on when it comes to improving business efficiencies and cutting costs. Inventory control and effective management is essentially based mainly on two prime factors, which are Company's Inventory Management Strategy and as well as Management's focus on Inventory Operation Management. Key operational internal controls for the inventory are:

(i) *Effective Custodial Procedures and Physical Safeguards*: A fundamental basis for control over inventory tracking is to number all locations, identify each inventory item, and track these items by location. Verify that all incoming inventory is fulfilling quality norms as per the set

standards. Rejected material should be physically separated and informed to accounts department. All receipts, transfers, and withdrawals of stock for use either in the production area or for sale to customers should be properly recorded and the records should reflect actual quantities on hand. Customer owned stock, need to be properly segregated with separate tagging and should not be mixed with the inventory of the organisation. All inventory items should be identified with a tag, which states the item code, description, unit of measure and quantity.

Key service performance indicators for freight forwarders should be identified and measured. Delivery reliability should be measured monthly by comparing targeted to actual dates and reviewed by the senior management. Stocks should be stored in secure access and appropriate physical safeguards over inventories should be established. Inventory storage area should be free from risk of any pilferage and damage. Adequate safeguards should exist to protect the inventory against theft, fire and other risks. Stock in trade need to be adequately insured.

(ii) *Physical Verification of Inventory*: Periodic physical inventory taking or systematic cycle counting programs serve as a basis for assessing the controls on inventory movements. A physical stock taking should be carried out at the end of each month/ quarter by people independent of stock handling and recording in order to substantiate the accuracy of perpetual inventory records. Guidelines for physical verifications should be provided in policy on "Physical Verification of Inventory". The physical inventory procedures should be reviewed and approved by the plant controller prior to the conduct of the inventory. If the inventory is categorized according to ABC classification method, internal auditor can identify high value items and ensure tight control in terms of process control, physical security as well as audit frequency analysis. Under cycle counting procedures, considerable attention must be focused on stock movement as manufacturing and shipping operations are likely to be in progress. Closing stock of finished goods at plant need to be cross checked with excise records. Perpetual verification for stores and spares items may be carried out by the stores in charge. Periodic physical verification need to be conducted for stock lying at third party locations and need to be cross checked with stock as per books of accounts.

All significant differences between the physical inventory and perpetual stock records as per general ledger should be investigated, presented to management. Adjustments should be approved in accordance with policy and should be processed in the books of accounts.

(iii) *Reporting Non Moving/ Slow Moving Inventory*: Report of non-moving/ slow moving/ obsolete inventory should be reviewed periodically by inventory team and action should be taken for sale/ scrap/ discard/ stock transfer of such items on physical verification and on discussion with management. Damaged goods should be separated from undamaged goods at the warehouse premises. Specific and general provisions should be reviewed quarterly in light of the stock conditions, ageing and turnover.

Inventories with Third Parties

9.23 This is a very important area in the automotive industry as a number of components are fabricated at third party premises and there is considerable movement of materials. Internal auditor should ensure that the entity maintains proper records in respect of all its inventories lying with the job worker or third parties for processing. It should be ensured that for each reporting period, confirmations are received from each of such parties and they are valued properly. Internal auditor should verify that there is proper physical verification of these inventories conducted by the company at regular intervals. He should ensure that there is a proper system of monitoring wastages, obsolescence and slow moving items and cross checking it with the contractors agreement and considering the clauses on aspects like, quantum of wastage allowed, quantitative reconciliation, input-output ratio, etc. He should also ensure whether BOM is configured for input & output ratio for material sent for Job Workers. In case, these job workers happened to be related parties, the auditor's extent of checking may increase, considering the control environment of the entity. Further, internal auditor should also reconcile the movement in materials with the excise records and ensure compliance with all the excise rules.

Review of Financial Inventory Controls

9.24 All authorizing documents should be accounted for numerical control procedures. To ensure completeness of inventory transactions recording system should be in place that, copy of the authorizing document (e.g., requisitions, production orders, bills of material) should be routed directly to the accounting department at the earliest practical point in the production process sequence. Procedures for recording individual documents in detail, inventory records must be synchronized with the recording and transfer of costs in the general ledger.

Valuation of Inventory

9.25 Valuation part of inventory is very important as it affects both revenue and assets of the business.

As per Accounting Standard (AS) 2, "Valuation of Inventory", valuation of inventory is made at cost or market/ net realisable value whichever is lower. There are three types of cost which are included in the inventory:

(i) *Purchase Cost*— Price of goods along with freight cost (freight cost either included in inventory or charged to expenses in the period incurred, but need to be consistent) and other direct costs.

(ii) *Cost of Conversion*— After purchasing the raw material or goods during the production time whatever cost is paid or payable will be considered as conversion cost. It includes direct labour, material and other direct expense plus allocation of fixed and variable production overhead incurred for conversion or raw material into finished goods.

(iii) *Other Costs*— It includes any other expenditure incurred to bring inventory or stock in the present location and condition. All three are the major part of the cost which required to be considered for valuation of the inventory. But it should not include abnormal wastage relating to material and labour, storage cost, administrative expenses and selling and distribution expenses.

9.26 During review process, internal auditor does testing of items costs to know from where purchased costs in accounting records come from. If a significant proportion of the inventory valuation is comprised of finished goods, then the internal auditor will review the bill of materials for a selection of finished goods items, and test them to see if they show an accurate compilation of the components in the finished goods items, as well as correct costs. For direct labour cost, analysis may be carried out whether the labor costs listed in the valuation are supported by payroll records. Overhead cost analysis may be carried out to check for abnormal costs that are included in inventory which should be charged off to expenses and testing will be done for validity and consistency of the method used to apply overhead costs to inventory.

Inventory Allowances

9.27 Internal auditor should determine whether the amounts recorded as allowances for obsolete inventory or scrap are adequate, based on policy and historical patterns, and reports of inventory usage (as well as by physical

observation during the physical count). Inventory write offs should be necessarily approved as per authority matrix.

Cut-off Analysis

9.28 Internal auditor will examine procedures for halting any further receiving into the warehouse or shipments from it at the time of the physical inventory count, so that extraneous inventory items are excluded. Testing of the last few receiving and shipping transactions prior to the physical count, as well as transactions immediately following it, need to be carried out to ensure proper cut off period. Objectives to be ensured on cut off analysis are:

Existence— Inventory as recorded on tags exist.

Completeness— Existing inventory is counted and tagged.

Accuracy— Inventory is counted accurately.

Classification— Inventory is classified correctly on the tags.

Cut-off— Transactions are recorded in the proper period.

Realizable value— Obsolete and unusable inventory items are excluded or noted.

Rights— The organisation has rights to inventory recorded on tags.

Presentation and Disclosure— Inventory is properly classified on the cut-off date and disclosed in the notes to the financial statements.

Investigate Negative-Balance Inventory Records

9.29 If the accounting records show that there is negative inventory on hand, detailed investigation need to be carried out.

Scrap Accounting

9.30 Scrap is an important component in the manufacture of vehicles/automobile components. If the scrap is part of inventory, internal auditor need to check the nature, extent and value of scrap generated and the sales pattern and ensure such valuation is normally after taking into account the realizable value of such scrap.

Accounting for Price Revisions

9.31 The main raw materials involved in the automobile industry are subject to periodical price revisions from the suppliers. Internal auditor should check the rate contracts and should understand the process of price revisions.

Internal auditor need to make sure that such revisions are appropriately dealt with in the books of account of the company. He also needs to make sure that the impact on account of such price revision on the inventory balances are duly given taking into account the period for which the price revisions are given effect to.

Disposal of Stocks

9.32 All stock phase-out should be approved as per authority matrix and proper record must be kept for inventory updates as well as books of accounts.

Review of Fraud Risks

9.33 Inventory is a complex accounting and auditing area which is material, and subject to manipulation. Accordingly, it requires exercise of high levels of professional skepticism by the internal auditor. Frauds in this cycle involve overstatement of inventory or assets and understatement of expenses. Theft of inventory by the employee is reflected as inventory shrinkage.

Instances for Manipulating Inventory is given as **Appendix 2.**

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Appendix 1: Sample Audit Checklist for Inventory Process

S. No.	Audit Procedures – to check	Yes	No	N/A
(i)	Do you compare materials received, including verification of quantities received to properly approved purchase orders? Do you accept only items that were properly ordered?			
(ii)	Do you safeguard goods received? Do you segregate custodial and record-keeping functions?			
(iii)	Do you maintain accurate perpetual inventory records?			
(iv)	Do you ensure that all material transferred from the receiving activity to other activities is recorded?			
(v)	Do you completely and accurately document all transfers to and from storage?			
(vi)	Do you transfer material to operations only on the basis of properly approved requisitions? Do you verify that material received complies with requisitions?			
(vii)	Do you minimize product inventory while enabling timely order fulfillment?			
(viii)	Does your system track all materials or product moved into or out of storage? Do you identify discrepancies with actual counts?			
(ix)	Do you employ physical security measures to prevent unauthorized additions to or removal of product from storage?			
(x)	Do you appropriately requisition all goods to be transferred to operations?			

S. No.	Audit Procedures – to check	Yes	No	N/A
(xi)	Do you communicate handling and storage policies and procedures clearly to employees?			
(xii)	Does your warehouse layout facilitate efficient order fulfilment?			
(xiii)	Do you notify operations or other appropriate personnel when inventory drops below a predetermined level?			
(xiv)	Do you reconcile goods shipped with goods billed?			
(xv)	Do you compare products and quantities retrieved from storage with the customer order and/or product requisition?			
(xvi)	Do you periodically count product in storage and reconcile to perpetual records? Do you investigate differences between physical count and accounting records?			
(xvii)	Do you reconcile books and records to ensure their internal consistency?			
(xviii)	Do you review shipping documents for completeness and compare customer orders for accuracy before shipment?			
(xix)	Do you check negative balance cases of inventory and identify the reasons thereof?			
(xx)	Do you match periodic production schedules to inventory information and order lead-time requirements?			

Appendix 2: Instances for Manipulating Inventory

Event	Affected Accounts	Possible Manipulations
(i) Purchase of Inventory	• Inventory • Accounts Payable	• Under recording of purchases • Recording in later period • No record of purchase
(ii) Return inventory to supplier	• Accounts payable • Inventory	• Overstate returns • Record returns in an earlier period
(iii) Inventory is sold	• Cost of goods sold • Inventory	• Record at too low an amount • Not recording of cost of goods sold • Not recording of inventory
(iv) Inventory becomes obsolete	• Loss on write off of inventory • Inventory	• Not writing off of inventory • Not write off at proper value
(v) Periodic count of inventory quantities	• Shortage on inventory • Inventory	• Over count inventory • Double counting inventory, etc

Chapter 10
Sales and Receivables

10.1 In the extremely competitive automobile industry, automobile manufacturer (AM) primarily focuses on its core competencies like, technology development, research, product development and customer engagement.

The AM has following channel/s for sales:

(i) Through dealers/ distributors in company owned showrooms

(ii) Through dealers/ distributors where car dealership outlet is owned by the dealer

(iii) Through company owned showrooms (without dealers).

10.2 Sales Function of an automobile industry is distinctive from other industries, and is a specialised task which determines the long term sustainability of the AM. It is not just a process of selling finished products. The process involves development of dealers more as a partner rather than just as a representative and setting up of dealership outlets/ showrooms. Substantial efforts are required in providing technical expertise and knowledge sharing for obtaining higher sales and customer base. Logistics plays an important role in the smooth functioning of the sales process.

In the present customer driven environment, AMs constantly be dependent on of the dealers for customer and market feedback, however customer complaints are usually handled by the AMs. In the past AMs in India focused only on domestic sales, however in the recent times India has also become a prominent auto exporter and has strong export growth expectations for the near future.

10.3 The purpose of this chapter is to:

(i) Examine the role of Sales department and the importance of dealer development;

(ii) Review relevant aspects to identify potential critical elements of dealer development;

(iii) Get an understanding of the sales practices and dealer development efforts of an AM and how these affects their dealers;

(iv) Establish procedures in respect of internal control processes required to monitor such sales practices which is unique for this industry;

(v) Identifying risks associated with dealer development and mitigating the same by appropriate internal audit plan;

(vi) Existence of IT Controls relevant to this Industry.

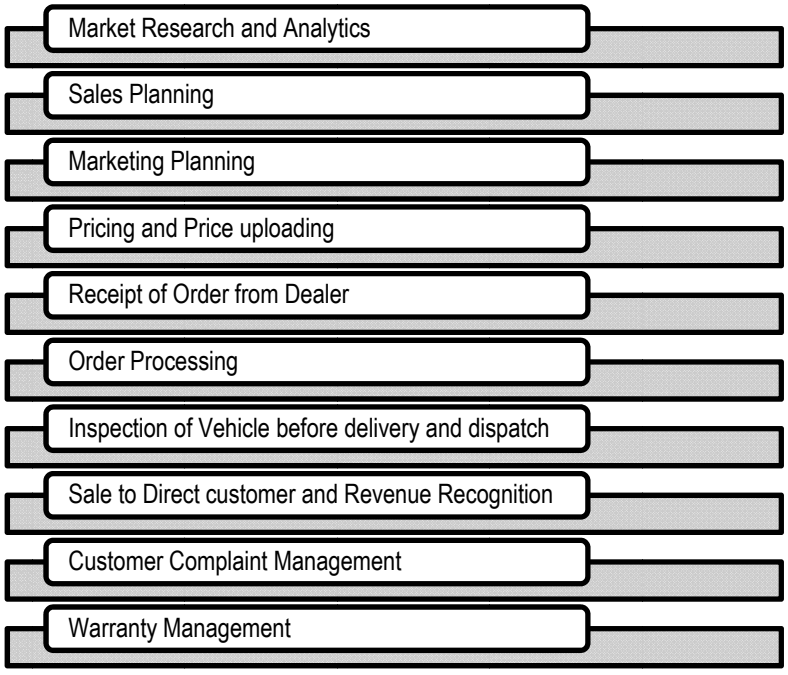
Role of Sales Department of AM

10.4 Sales role in an AM refers to selling of the vehicle/ automotive components by AM through dealers and directly to the customer.

The way consumers make purchasing decisions is constantly changing, so it's important for AMs to continually re-evaluate their sales strategy. Strategic sales might imply customer engaging schemes, attractive discounts and offers basis festivals/ seasons, efforts ensuring easy availability and early delivery of vehicles, etc. These efforts will lead to an approach towards attitude of customers which will be that of trust and partnership. Good sales practices includes understanding customer needs, and planning sales and marketing strategy on the basis of the understanding.

Long term strategy also includes upgrading designs and models, introducing exchange schemes to retain customers and Dealer management. Dealer Management is crucial as it is the link between the AM and direct customers.

Sales Function



10.5 Market research and analytics is a crucial step to sales plan preparation. Inaccuracy or absence of market research may result in incorrect sales plan which may result in incorrect procurement as well as production.

AMs perform market research through feedback from dealers and direct customers, past trends, competitor's launch plans and marketing strategy. Marketing research could be qualitative as well as quantitative. Quantitative research is done by gathering surveys and feedbacks. For Qualitative research AMs get behind the facts and figures to find out how people feel about their products and what prompts them to spend.

10.6 On the basis of the market research and capacity to produce, the sales plan for the year and rolling sales plan for the subsequent years are prepared. AMs should take into consideration seasonal and festival effect and the sales plan is prepared both in volume and amount.

Sales Planning is an essential element in order to guarantee appropriate supply chain management in the organisation. While developing the same, the following aspect needs to be considered:

- Capacity to produce
- Safety/ Health/ Environment Risk
- Inventory management
- Financial solvency/ business stability
- Delivery performance
- Technological capabilities
- Economic environment
- Competitor's Market share and future strategy

The sales plan is then broke down to a month-wise and region/dealer-wise planned sales and the same is shared with the dealers for their respective regions. The sales plan is usually monitored on a monthly basis and subsequent alterations are made in the Sales plan. Dealers are also given incentives for meeting the targeted sales (volume and amount).

10.7 Marketing budget for the year is finalised on the basis of the sales plan and business strategy (e.g., Focus on a particular region, introducing a new model/car, etc.). Marketing budget is further broken down to different marketing activities like, billboards, television advertising, celebrity endorsements and print media as well as month-wise. On a monthly basis budgeted vs. actual expenditure on marketing activities is reviewed. An

analysis of marketing expenditure vis-à-vis sales trend is also done to ensure that marketing activities are targeted in the right direction. KPIs/ targets like, brand health, unique visitors, social media engagement, no. of visitors in experience centers, PR value financial returns, branded goods sales are defined for all agencies and are reviewed against actual provided by the agencies.

10.8 Pricing activity is initiated approximately 12 months prior to the launch of a model year change, refresh or new vehicles. Pricing in the automotive industry is governed by positioning of the product, competitor details, target customers, dealer margin, need of the vehicle in company's portfolio, power trains and trims as well as standard and optional specifications on each trim. Pricing sheet/working is approved by a cross functional committee including Sales, Marketing, Finance, and Controlling to ensure aspects of taxes, viability, affordability, etc. are taken into consideration while finalizing the price. Once the price is finalised the same is uploaded in the system along with dealer margin details for billing/ invoicing. A maker checker control is very crucial for price uploading in the system. While billing the dealers can only enter the product code, specifications and quantity, however price is a non-editable field. Prices are reviewed on an annual basis and revised as required. In case of any changes in duties, taxes, exchange rates, etc., prices during the year are changed as required.

10.9 Dealers place an order with the AM on the basis of the sales plan and current market conditions and demand on a monthly/ weekly basis. The same is reviewed by the sales team to ensure adequacy as well as availability across all dealerships and changes are made to the order accordingly.

Dispatch planning and pre dispatch inspection is controlled by the Dispatch and Quality team. On basis of requirement and availability, dispatch is planned in advance to ensure availability of the transport vehicle. AMs have registered transporters for each region to ensure smooth transport of the vehicles to dealership locations. Prior to dispatch of vehicle the dispatch team has to ensure pre-dispatch inspection by the quality team. It should be ensured that it has been done and receipt of payment from the dealer has been received as per the agreed terms. Pre dispatch inspection is carried out by the Quality Control department on the basis a pre-defined checklist to ensure that no damage/ defective vehicle/components are being dispatched.

10.10 AMs recognize revenue only when the vehicle is sold to the direct customer and dispatched from the dealerships (once risk and rewards are

transferred). In the system of AM, revenue is recognized when dealer raises an invoice on the customer on behalf of the AM.

Customer complaint management and warranty management form a significant part of the sales process. Each dealership has their dedicated customer relationship managers to ensure an ongoing relationship with the customers. Customer care number and email address are shared with the customers. On the basis of the nature of complaint and the type of customer, the complaint is directed to the required manager (sales, after sales, warranty etc.). AMs rely on the Customer Complaint register data while performing the market share analysis.

10.11 At the beginning of each year, on the basis of the calculation method adopted by the AM a warranty provision is created. All warranty clauses along with terms and conditions are legally vetted to ensure no ambiguity exists. Dealers provide services/ and parts as per the warranty terms and file warranty claims with the AMs, who either accepts/ rejects the claim on case to case basis. At the end of a certain period (usually monthly) all approved claims are segregated dealer-wise and approved by the Finance Department, who then makes the pay-outs to the dealer. Parts/ components replaced by the dealer are sent back to the AMs warehouse/ factory to ensure the same is not misused for any purpose.

Auto Ancillaries

10.12 AMs purchase certain components/ parts from auto ancillaries. An auto ancillary approval form is filled up that would contain details of capacity, facility, existing customers, manpower availability and financial strength, etc. Auto Ancillary is selected based on scoring in quality audit checklist and approval form. The same is approved by Procurement, Manufacturing as well as the Finance team. Specifications and technical requirement are communicated while selecting the auto ancillary. Declaration of independence, Non disclosure agreement and conformity with AM's Code of Conduct and Ethics is taken from all Auto Ancillaries.

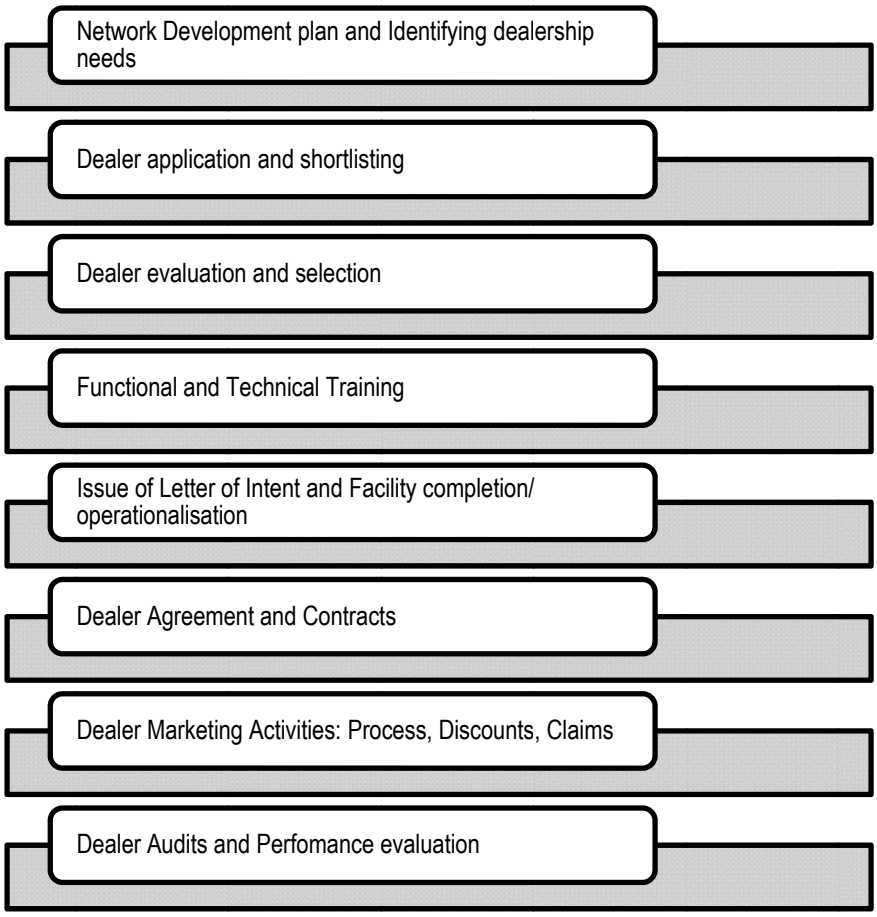
10.13 Quality parameters are agreed upon and mentioned in the agreement, and clause of rejection in case of low quality parts is also mentioned in the agreement. All components and parts undergo a quality check prior to being used in production, however AM may take a quality certificate from the manufacturer and perform quality checks only on a random basis.

Monthly dispatch schedule on the basis of the manufacturing plan of the AM

is shared with auto ancillary 15-30 days in advance to ensure adherence to Just in Time. Failure to deliver as per the schedule would result in stoppage of manufacturing and penalty may be charged on the Auto ancillary.

Payment is made upon receipt of components and parts and is subject to quality approval. Payments are made online through RTGS and hence a reconciliation on a monthly basis is crucial.

Dealer Management



10.14 Network development plan is based on the identified open points/ locations for expansion based on FPV (Future Planning Volumes), demographics, industry volumes, AM volumes, and market potential. Competition presence are additionally evaluated. On-site visit to proposed location is made to understand the market and assess the market potential.

AMs sources new dealer applicants through various mediums like:

(a) Release of newspaper ads or/and

(b) References.

Initial shortlisting of potential dealers is done on the basis of the application given by them.

10.15 The criteria for dealer selection includes following:

(i)	Auto experience
(ii)	Business performance
(iii)	Financial capacities and soundness
(iv)	IT facilities and awareness
(v)	Investment plan
(vi)	Reputation in the market
(vii)	Performance in the auto sector
(viii)	Awards
(ix)	Brand conformity
(x)	Marketing expertise
(xi)	Network planning capability

AMs may provide ratings on the basis of the mentioned criteria and shortlist a minimum score. For the final short listed dealers, a due diligence check is carried out to ensure information provided by the potential dealer is correct.

10.16 The above process can be classified in following broad categories:

(a) Initial screening

(b) Short listing basis mentioned parameters

(c) Quality assessment of all dealers

(d) Due Diligence

Once Dealer selection is made then Letter of Intent is issued to the selected applicant that outlines timelines for infrastructure set up/ facility planning as per Corporate Identity standards, IT set up, appointment and training of manpower, arrangement for working capital, validity, revoking of LOI and other T&Cs. This LOI needs to be duly signed by the AMs Management and selected applicant and retained for record purposes.

10.17 The dealer is required to obtain pre-approvals of design and layout of the facilities from the AMs architect and AM. The Dealer Network Development Team supports and monitors the overall progress of the new dealership facility completion through regular visits. Dealers are to submit progress updates on a regular basis. Post completion, a facility completion checklist including Corporate Identity and Dealer Identity requirements, demo cars, tools and equipment and manpower is filled out and approved. After completion of the facility and signoff of the facility completion checklist, AM enables dealer to start operations. Subsequently, commencement of business letter is issued to the dealer.

AMs use a legally vetted standard format for a dealership agreement which is signed on completion of facility and commencement of business that includes confidentiality, trademark and license agreement, etc. The agreement is signed by the AM and the dealer.

To enable business transactions (related to Sale of Vehicles & Spares) between AM & Dealership) the Dealer code is provided to the IT, Sales and Customer Service Team for configuration of Dealer Management System and other IT tools. Dealers and his team are given technical as well as IT system trainings to ensure dealer is competent to deliver quality service to customers and achieve sales targets as well as to ensure smooth flow of information between the AM and Dealer.

10.18 Dealer Marketing Activities are done by equal contribution of the AM and Dealer. Discounts/schemes are given by dealers who then claim the same back to the company. These discounts and schemes could be buy back schemes, exchange schemes, schemes for group company employees, corporate discounts, free services, etc. A dedicated team manages all claims made by dealers. Each claim is supported by necessary invoices and proof of discount/ services. Once the claim is approved then a debit note is issued on the dealer and the same is adjusted with the next payment to be made by the dealer.

10.19 On a periodic basis the Dealer Network Development Team of AM captures and consolidates dealer KPIs like:

(i) Sales targets

(ii) Customer Service

(iii) Marketing initiatives

(iv) Network

(v) Reaction on audit and remediation plan

(vi) Response time for complaint and questions

(vii) Reaction time for changes in regulatory requirements.

10.20 These KPI's are evaluated to enable monitoring performance of dealer network. After periodic evaluation, the dealer should be classified according to an objective rating system. The following categories of rating are suggested:

(a) Completely satisfactory

(b) Mainly satisfactory – limited approval

(c) Partially satisfactory – conditional approval

(d) Not satisfactory – disqualification

On the basis of the performance evaluation, dealer-wise identification of areas of improvement is done and the same are communicated to the dealer and status of the areas of improvement is monitored continuously.

Along with periodic performance evaluation, Dealer Standards Assessment audit should be done by an external agency for all dealers (operational for more than 6 months) on an annual basis covering company standards (sales, customer service, corporate identity, business processes).

10.21 AM should appoint an external auditor who conduct the audits at the dealership site as per the Dealer Standards Assessment AM guidelines. Internal audit results should be shared with the dealer and the Dealer network team should follow-up on a periodic basis (monthly) with Dealers to ensure closure of all non-compliances.

Identifying Risk and Planning Internal Audit in respect of Sales and Dealer Development Process

10.22 Based on the technical guidance provided in the foregoing paragraphs in respect of sales and dealer development unique to the automobile industry, the risk matrix and factors will have to be framed by the audit team. Close interaction with the dealers in the process of setting up of the dealership for

the AM involves risk associated with proximity, familiarity and control process override. The sales department, dealer network development team and finance team works closely with the dealers for setting up the dealership required for obtaining the requisite sales and quality of service to customers.

The evaluation and selection process of dealers requires objective analysis of the several parameters and criteria defined as per the requirements of the AM. Internal audit plan should cover verification of such process of evaluation and documentation to ascertain reasonable assertion relating to meeting the norms relating to transparency, arm's length evaluation and comparison with the performance achieved in relation to that anticipated at the time of evaluation.

10.23 Internal audit plan should also cover verification of process of verifying facility completion checklists and performance evaluation forms. The impact of each dealer on the ultimate sales needs to be analysed in order to ascertain the dependency on each dealer. It should also cover whether any penalty, etc., has been levied to the uncompliant and low scoring dealers.

Information Technology (IT) Controls

10.24 The dealers are connected with the AM's IT server and systems. This enables efficient data transportation and online reliable data interchange. Orders are placed by the dealers on the AMs systems and the intimations relating to dispatches are available to dealer online. This facilitates smoothing communication and flow of information.

Invoices are raised by dealers directly in the system of AM and transactions recorded and updated in the AM's financial records. This avoids duplicate recording of same entries. However, sufficient control systems should be built in to validate data before recording and acceptance. Suitable checks and balances should be built in for preventing unauthorised access at both ends and should enable user to view and process data only what is authorised. Data secrecy and integrity is to be ensured at both ends through adequate safeguards.

Refer **Appendix 1** for Sample of Dealer Registration Form.

Refer **Appendix 2** for Sample of Dealer Scoring Sheet.

Audit Methodology

10.25 Following are the *Standard Activities in an Order to Cash Process:*

Sales Planning, Master Maintenance, Order Creation, Dispatch and Invoicing, Receivables Management including provisioning and write-offs, revenue

recognition, customer complaints and warranty. *Assertions regarding revenue* are occurrence, completeness, measurement, presentation and disclosure.

Process	Sub Process	Description
Sales and Receivables Overview	Overview of Sales Process	▪ Discuss with the Process owners and obtain an overview understanding of the sales and receivables organization and processes covering the following: ▪ Types of products; ▪ Organisational structure – roles and responsibilities; ▪ Area-wise, product-wise sales distribution; ▪ Markets In which product exists ▪ Any new products that are upcoming ▪ Obtain and review the existing formally documented policies and procedures related to sales planning, ordering, master maintenance invoicing and receivables monitoring process including process maps charts, if any.
	SOD Analysis	▪ Through enquiry and observation gain an understanding of how operational duties are segregated within all functions of sales. ▪ Obtain documented standard operating procedure/policy. ▪ Obtain the system access control matrix to identify system segregation of duties. ▪ For conflicting operational roles (SOD violations), identify and test any compensating controls, such as the review of an exception report.
Sales Plan Review	Understanding the process for sales plan preparation,	▪ Through inquiry and observation, obtain an understanding of the process for preparation of sales plan.

	review and approval	▪ Obtain and review any existing formally documented policies and procedures for preparation (responsibility and approval) of sales plan. ▪ Review whether the sales plan is approved as per the documented authority matrix in the policies (if any). ▪ Obtain the budgeted vis-à-vis actual sales for the current year and last 2 years. ▪ Identify Sales linked incentives and variable salary for Sales Employees.
Dealer and Price Masters	Dealer & Price Master creation/modification/deletion process Overview	▪ Through inquiry and walk through, obtain an understanding of any dealer and price master creation, modification and deletion processes and controls covering following: ▪ Formal document of the process for addition/ modification/ deletion ▪ Authorisation matrix ▪ Actual rights to modify in system (System DOA) ▪ Forms used for addition/ modification/ deletion ▪ Maker Checker Controls ▪ Dealer-Employee linkages ▪ Fields in the master, which are mandatory. ▪ Select a sample of new dealers masters created during the period ▪ Select a sample of dealers master creation/alteration during the period. ▪ Compare the information entered in the dealer master with the supporting documentation for approval and timely updation.

		▪ Review if the information is updated completely, accurately and promptly. ▪ Review the process for assigning tax rates, credit limits to the dealer master. ▪ Obtain a report for dealer master to check for duplicate masters and old masters which are not in use. ▪ Obtain a dealer master change log to identify changes/modification in the master.
	Credit Control	▪ Obtain documented policy for credit control defining ▪ Levels of authority to vary as per standard dealer terms and conditions. ▪ Authority to set and amend credit limits. ▪ levels of authority to override credit limits and interest and penalty charges. ▪ Check whether credit limits are based on a systemic risk evaluation and credit rating. ▪ Credit rules are embedded in system, with appropriate access controls over approval functionality. ▪ Obtain a sample to verify: o Credit limits are reviewed periodically based on a pre-defined schedule based on the ratings. o Provide evidence that the controls over credit administration are operating effectively.
Sales Ordering Process	Overview	▪ Through inquiry and observation, obtain an understanding of sales

		ordering process covering following: ▪ Manual/ automated process ▪ Responsible Process owners ▪ System DOA ▪ Obtain documented SOP/ policies for the above process.
	Sales order creation	▪ Through inquiry and observation, obtain an understanding of sales order creation/ modification and deletion processes and controls for: o System DOA for access for creation/ modification of Sales Order o Sales order release strategy o Authorisation matrix for price/ discounts and final approval o In case of manual process – various forms and their approval. ▪ Select a sample of sales orders created during the review period. Review if the sales order is approved in accordance with the organisational authority matrix. ▪ Compare the information entered in the dealers master with the supporting documentation like, approved price list, sales orders and confirmations sent to dealer. ▪ Review the process for assigning various taxes. ▪ Review system checks for availability of the product, scheduling order and assigning existing stock to sales order. ▪ Review process of monitoring status of sales order. ▪ Obtain report for Open sales orders

		(SO) and identify reasons for the same (Aging analysis of Open SO). ▪ Identify if SO can be released without release strategy. ▪ Identify Duplicate SO entered in System ▪ Identify if SO created for a Dealer outside the master. ▪ SO Cancellation should be as per SOA Approval. ▪ Identify back dated orders.
Invoicing and Shipment Procedures	Overview	▪ Through inquiry and observation, obtain an understanding of invoicing and shipment procedures ▪ Responsible Process Owners and ▪ System/ Manual DOA
	Invoicing	▪ Sales invoices are sequentially controlled and include dealer order number and sales terms. ▪ Select a sample of invoices during the period for accuracy on following parameters: o Accuracy with regards to approved sales order. Invoice Processed without SO o Accuracy of applicable tax rates o Authorisation/ signature of invoice by appropriate authority o Payment terms and due dates are clearly displayed on invoices. o Goods delivered, however, invoice not raised or vice versa. o Compare quantity ordered v/s quantity delivered o Duplicate invoice numbers o Invoices with same amount and date.

		▪ Identify system controls for invoicing above approved credit limits. ▪ Approval to override standard terms, discounts, credit terms, etc. ▪ Unmatched dealer orders, GDNs and sales invoices are reviewed weekly or monthly by a senior official and investigated as necessary. ▪ Invoices are cancelled/amended with proper authority. ▪ Obtain system access control matrix to review access controls over creation/ alteration/ deletion of invoices.
	Excise Duty	▪ Enquire whether all sales locations and products are covered in the Excise Registration certificate and Sales Tax/ VAT registration certificate. ▪ Inquire the steps taken to apply correct rate of excise and sales tax in all invoices (system control like, having the duty structure in master if any). ▪ Reconcile the actual duty with the total sales. ▪ Inquire the steps taken to apply correct rate of excise and sales tax in all credit notes. ▪ Select a sample of invoices and credit notes to check whether correct rate of taxes is applied.
	Shipment procedure	▪ Review the packing and shipment procedure. Select a sample of cases and verify the procedure. ▪ Review the system controls to ensure proper assignment of finished goods to invoices. ▪ Review turnaround time from Order

		Placing to Shipment. ▪ Obtain transport contracts and pricing agreements for outbound transport of goods. ▪ Determine how carriers are selected, what is the basis for requiring freight rate quotes and bids, how often are rates bid, performance evaluation of transporters, procedures for freight claims, etc. ▪ Review that appropriate freight costs have been charged to the dealers in accordance with the policy. ▪ Procedures and controls are operating to ensure accurate and timely processing of freight bills.
Warranty Claims and Customer Complaint Management	Warranty Provision and claims	▪ Through inquiry and observation, obtain an understanding of terms and conditions and time frame of warranty. ▪ Obtain and review the monthly warranty provision – working, supporting documents like, any documented policy/ process, approval of warranty provision, reversal of warranty provision and compliance with accounting standards. ▪ Obtain and review the actual warranty claims vis-à-vis the warranty provision. ▪ In case of differences, inquire with the management if any corrective steps are taken to compute the warranty provision in line with the actual warranty expenses.
	Customer Complaint Management	▪ Through inquiry and observation, obtain an understanding of process of receiving customer complains

		(email, customer care number, website, etc.) ▪ Obtain the customer complaint register and verify the same for completeness and adequacy. ▪ Identify the process of addressing customer complaints, turnaround time and root cause analysis of issues noted.
Revenue Recognition and Financial Reporting	Overview	Through discussion with the Finance team understand the procedure for accounting of sales and receivables. Obtain the relevant chart of accounts.
	Understanding controls over revenue recognition and financial reporting	▪ Review that sales revenue is recognised timely and in accordance with the applicable accounting standard. ▪ Identify cut-off dates and controls around the same. ▪ Identify, if back dating is possible while creating an invoice. ▪ All overdue balances are reviewed at least quarterly, by a senior official, and appropriate provisions are determined. ▪ Procedures have been defined for periodic reconciliation and balance confirmation of the dealers accounts. ▪ Review procedure for collection of pending Form C, if any.
	Provisions for bad debts and write off	▪ Through discussion with the Finance team understand the procedure for accounting of provisions for bad debts and write offs. ▪ Perform ageing of debtors and ensure the provision is calculated in accordance with approved procedures. ▪ Review that the approval for write off

		is in accordance with the authority matrix.
	Dealer Analysis	▪ Change in the dealer credit limit— high, low, average ▪ Credit limit utilization— high, low and average. ▪ Sales realization Per product vis-à-vis dealer. ▪ Sales Profit per product vis-à-vis dealer. ▪ Payment term as per master vis-à-vis dealer invoice (Different payment terms). ▪ Aging analysis. ▪ Aging analysis of Invoice and unmatched payments. ▪ Product sales vis-à-vis dealer concentration (Generic Item... not client specific item). ▪ Total dealer sales vis-à-vis Total Sales. ▪ Total Dealer sales returns vis-à-vis Total Sales return. ▪ Working Capital loss for late dealer payments. ▪ Identify dealers with credit balances. ▪ Identify dealer discounts taken after discount date.
	Performance Analysis	Performance analysis (Planned time and Actual time) (Time lag between) ▪ SO and Delivery ▪ Delivery and Invoice raised ▪ Invoice raised and Payment received ▪ Return of goods and credit note on the dealer.
	Other Analysis	▪ Sales vis-à-vis Sales return ▪ Sales vis-à-vis Credit note issued

		▪ Sales vis-à-vis Average outstanding due and bad debts (Overall and product) ▪ Price ranges of the products during the year from the same or different dealer. (For the period under review) ▪ Dealer share analysis for all products in Total Sales ▪ Budgeted margins vis-à-vis actual margins.

Appendix 1: Dealer Information/ Selection Form

Date:

Name of Dealer: ----------

Address for Correspondence: ----------

Contact Person: ----------

Communication Details:

Landline: ----------

Mobile: ----------

Fax: ----------

Email Address: ----------

Website: ----------

Alternate correspondence address (if any) & contact details ----------
---

Existing Dealerships (if any) ----------

Experience in the Automotive Sector ----------

Turnover of existing dealerships for the last three years (in INR) ----------
---

PAN No: ----------

Company Registration No- ----------

Escalation matrix (Min 2 level) ----------

Name, designation & contact No. (level 1) ----------

Name, designation & Contact No(level2)

Manpower Details: ----------

Finance: ----------

Please enclose copies of balance sheet for past 3 years ----------
---

Your Banker and Their Full Address: _____
_____

Bank Account No.: _____
_____

IFSC/Swift Code: _____

Bank Facilities / Limits available at present: _____

DID YOU OR YOUR ASSOCIATE/SUBSIDIARY FIRMS APPLY FOR REGISTRATION IN (NAME OF THE COMPANY) BEFORE AND IF SO WITH WHAT RESULTS? _____

ARE ANY OF THE DIRECTORS / PARTNERS / OWNERS WORKING OR HAVE ANY RELATIVES/ FRIENDS WORKING IN (NAME OF THE COMPANY)? YES/NO, IF YESPLEASE GIVE COMPLETE DETAILS:_____

ARE THERE ANY LEGAL CASES OF ANY NATURE PENDING AGAINST THE COMPANY OR ITS DIRECTORS/PARTNERS/OWNERS? YES/NO. IF YES , PLEASE ELABORATE IN DETAIL (ATTACH A SEPARATE SHEET IF NECESSARY)._____

*DECLARATION

Firm's Seal

WE HEREBY CONFIRM THAT THE INFORMATION GIVEN IN THIS DATA FORM IS COMPLETE AND AUTHENTIC.

SIGNATURE: _____ DATE:_____

NAME: _____ DESIGNATION: _____

Appendix 2: Vendor Selection/ Scoring Form

Please rate the dealer on a scale of 1-5 (1 being the lowest and 5 being the lowest) Top 3 vendors should be marked as L1, L2 and L3 for further Due Diligence.

Criteria	**Rating 1-5**
Experience in automotive dealership	
Performance of existing dealerships	
Ability to invest the required amount	
Technological capabilities and awareness	
Marketing expertise and knowledge	
Awards/Reward/Accolades in Automotive Sector	
Brand Conformity	
Reputation in the Market	
Total Score	/40

Note: Shortlisted dealers should not have a score below 60%.

Chapter 11
After Sales Service

11.1 In an automotive industry, the Original Equipment Manufacturer (OEM) earns the revenue under following broad heads:

(i) Revenue from Sale of vehicles and spares

(ii) Revenue from Sale of services

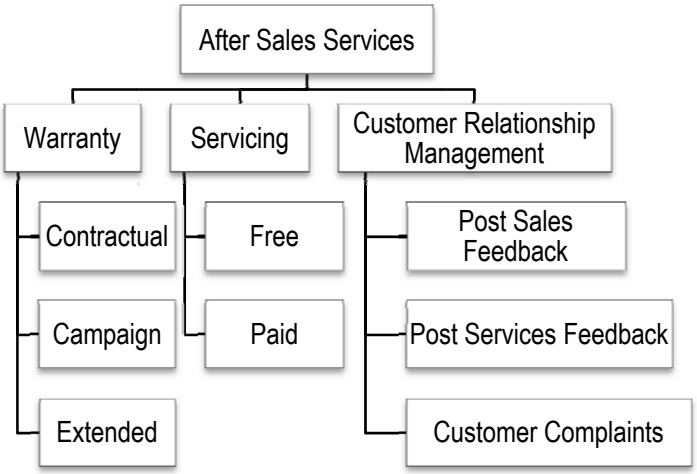
(iii) Revenue from maintenance contracts like extended warranties

(iv) Royalty Income.

11.2 Considering the stiff competition in automobile industry, each OEM is offering various services to ensure that customers are satisfied with the products and services of the organization. After sales service is a crucial aspect of sales management and plays an important role in customer satisfaction and customer retention. Rapidly declining profit margins in the new car sales business together with the continuous extension of car life are making the after sales business increasingly important.

Nowadays, After Sales Service is a key factor influencing buying decisions in automotive sales and a competitive differentiator for manufacturers. Rising customer expectations and technological advancements necessitate that automotive manufacturer's look at customer service innovatively.

Generally, after sales service providers are categorised in 3 groups, *viz*., OEMs, Authorised Service Stations/ Dealers and Independent garages.



Key Concepts and Control Objective

11.3 Following are key concepts and control objective related to after sales service:

(i) Warranty

Warranties are after sales services provided to customers to protect the buyer from different types of manufacturing defects (like, mechanical, electrical and assembly defects) in the product. Warranty can be a contractual warranty or a campaign warranty as explained below:

(a) Contractual Warranty

In the automotive industry, usually every vehicle delivered from an authorized dealer is covered by a Manufacturer's primary warranty in accordance with the specific conditions. This warranty is known as a contractual warranty and is provided on the sale of the product.

Under primary warranty, manufacturer guarantees to indemnify the car owner, for repairs and/ or replacements of part(s) in case of mechanical and electrical breakdowns and emission defects.

Normally, major parts like, engine, clutch, transmission, fuel system, brake system, suspension, Electronic Control Module (ECM), etc. are covered. Normal maintenance services like, wheel balancing, wheel alignment, etc. and replacement items like, rubber parts, bulbs, fuses, etc. are not covered.

The duration of contractual warranty begins on the date of sale of car.

(b) Campaign Warranty

Campaign warranty is a warranty cover decided after the sale of the product, which, generally, relates to specific safety and technical problems. In certain circumstances, the customers are officially required to bring back their vehicle for repair or testing e.g., call back of vehicles. In other cases, repairs are carried out free of charge when the customer brings back his vehicle.

(ii) Extended Warranty

An extended warranty is a prolonged warranty offered to consumers to cover products under specific conditions for an agreed period and/or content over and above the normal warranty. For e.g., an extended warranty scheme may cover a period (say one year or 2 years) beyond the free warranty service period. In the automobile industry, an extended warranty, generally, covers all

mechanical and electrical failures. An extended warranty may be sold as a part of the original sale of product or as a separately priced extended warranty contract. The extended warranty commences on the completion of manufacturer's primary warranty from the date of sale.

(iii) Free Services – Labour

In an automobile industry, manufacturer's, normally, gives free services (on an average up to 3 services) for regular maintenance of vehicle. At the time of free servicing, labour services are given free of cost, however, billing is done for oil refill, etc.

(iv) Customer Relationship Management

Customer relationship management includes various strategies and techniques to maintain healthy relationship with the organization's existing as well as potential customers. Customer relationship management is nothing but the study of needs and expectations of the customers and providing them the right solutions.

In an automobile industry, majority of the sales are made to ultimate customer through dealer network. Feedback is obtained from ultimate customer in respect of each service:

- Post Sales Follow up (i.e., After delivery of vehicle)
- Post Service Follow up (i.e., After rendering of each **Free** service)
- Post Service Follow up (i.e., After rendering of each **Paid** service)

Feedback form consists of various parameters based on which performance of dealer is ascertained. This facility helps the customer to register their grievances and/ or suggestions in respect of each service received. It also helps the OEM's in understating the level of customer satisfaction, response to each model, nature of complaints, areas of improvements, etc.

Control Objective

11.4 Following are control objective with regard to after sales service:

- Examine the role of Marketing and Customer Relationship department and the importance of effective after sales services.
- Review relevant aspects to identify potential critical elements of warranty and other services rendered.

- Get an understanding of the general business practices and how these affects the marketing and sales strategies and also profitability.
- Establish procedures in respect of internal control processes required to monitor such practices which is unique for this industry.
- Identifying risks associated with warranty, free servicing management and mitigating the same by appropriate audit plan.
- Existence of IT Controls relevant to this Industry.

Sample audit checklist for after sales is given as **Appendix 1** to this chapter. Case study is given as **Appendix 2** to this chapter.

Appendix 1: Sample Audit Checklist for After Sales

Assertions: Occurrence, completeness, measurement, presentation and disclosure.

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
Warranties	Is there a documented warranty policy of OEM?				
	Ensure whether all parts covered under warranty policy are identified separately.				
	Is there a system to identify the start and expiry of warranty period for each of the item covered under warranty?				
	Is there a documented SOP of a company/entity for receipt and processing of warranty claims?				
	How it is ensured whether claims raised for free replacements during the warranty period are appropriate?				
	Is there a Delegation of Authority Matrix specifying the financial and administrative limits for processing of warranty claims?				
	Whether Maker Checker system is in place for processing of claims?				
	Whether back to back warranty is entered with vendors for parts covered under warranty policy?				
	Is agreement entered with suppliers for free replacement of products and whether the same is in line with warranty policy of the company?				

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	Check whether mechanism is in place to restrict processing of time- barred warranty claims (i.e., processing of claims though warranty period is over).				
	Check whether mechanism is in place to identify non-processing of claims (like, free replacement of spares) though in warranty period?				
	Ensure whether all warranty claims received are processed.				
	Ensure timely processing of all warranty claims received.				
	Ensure processing of all warranty claims received at correct amounts and as per warranty policy.				
	Check whether provision for contractual warranty is made in accordance with the warranty agreement after considering: • the period and terms of warranty agreement and historical data with respect to the old models • the expense estimation made by management, supported by reasonable assumptions in case of new models. For this purpose, the business case model (budget) prepared for specific vehicle models and engineers' estimate for warranty cost to be incurred for the initial years can be used.				

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	Check whether there are any announcements of campaign warranty? If yes, whether provision for campaign warranty is made after considering: • Number of units of the product produced during the period in which the problems occurred • Estimated proportion of the units produced affected by the problem • Estimated proportion of the units concerned that will be repaired • Estimated cost of parts and labour for rectifying the problem.				
	Ensure whether Root Cause Analysis is made for all campaign Warranty (call back of vehicles) cases?				
	Ensure whether claims on vendors (vendor recoveries) have been raised in all cases.				
	Ensure whether claims on vendors (vendor recoveries) have been raised for correct amounts.				
Extended Warranties	Is there a documented policy of a company/entity for extended warranty?				
	Is there a documented SOP of a company/entity for receipt and processing of extended warranty claims?				
	Check whether extended				

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	warranty agreement is entered at the time of sale of vehicle or after expiry of contractual warranty.				
	Ensure whether revenue is recognised over a period of extended warranty.				
	Ensure that full consideration is received against extended warranty.				
	Ensure whether all extended warranty claims received are processed.				
	Ensure timely processing of all extended warranty claims received.				
	Ensure processing of all extended warranty claims received at correct amounts and as per extended warranty policy.				
	Is there a mechanism to identify whether: • warranty is extended without receipt of consideration • warranty is not extended though consideration is received.				
	Is there a mechanism to identify whether all warranties are extended on timely basis?				
	Check whether provision for extended warranty is made in accordance with the extended warranty agreement after considering: • the period and terms of				

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	extended warranty agreement and historical data with respect to the old models; • the expense estimation made by management, supported by reasonable assumptions in case of new models. For this purpose, the business case model (budget) prepared for specific vehicle models and engineers' estimate for warranty cost to be incurred for the initial years can be used.				
Free Servicing	Is there a documented Free Servicing policy of a company/entity?				
	Is there a documented SOP of a company/entity for receipt and processing of Free Servicing claims?				
	Ensure whether reimbursement is made only against eligible claims.				
	Is there a mechanism to identify whether all free servicing claims are raised on timely basis?				
	Is there a mechanism to identify whether all free servicing claims are raised for all eligible cases and for correct amounts?				
	Is there a mechanism to identify whether duplicate / fictitious claims are raised?				
	Review of pending claims for: (i) Warranty				

Process	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	(ii) Extended warranty (iii) Free Servicing.				
	Ensure whether provision is made for all eligible free servicing claims at cut-off date.				
Customer Relationship Management	Ensure whether feedback from customer is obtained after: • Delivery of vehicle • After each Free and Paid service • After periodic intervals				
	Ensure whether all customer complaints received are recorded.				
	Ensure whether Root Cause Analysis is made for all customer complaints received?				
	Review of pending customer complaint at periodic intervals.				

Appendix 2: Case Study

Background

ABC Motors Ltd. has sold 100,000 vehicles during FY 2015-16. The company has a policy of giving 3 free services in the first year of purchase or 40,000 km whichever is earlier. The dealer will submit a claim on ABC Motors Ltd. for Free Servicing done on quarterly basis.

Risks

- Reimbursing of amount to dealer:
  - Without rendering service to ultimate customer
  - Against duplicate claim for same vehicle for same service
  - For rendering of service after specified period is over (i.e., either 1 year has lapsed or vehicle running was more than 40,000 km).
- Processing of dealer's claim at incorrect amounts
- Processing of dealer's claim for incorrect period.

Audit Objective

- To ensure appropriate reimbursement to dealer
- To ensure processing of claims for correct amounts
- To ensure processing of claims for correct period
- To ensure appropriate provision is made at cut-off date.

Audit Procedures

Sr. No.	Audit Procedures / Control Activities	Yes	No	NA	Remarks
(i)	Obtain list of total number of vehicles sold and free servicing to be given, for the period under internal audit.				
(ii)	Ensure whether claims raised by dealer are supported by proper documents such as 'Free Service Coupons'.				
(iii)	Check whether system is in place to ensure that claim for same 'Free Service Coupons' cannot be raised.				
(iv)	Verify whether 'Free Service Coupons'				

Sr. No.	Audit Procedures / Control Activities	Yes	No	NA	Remarks
	against which claim was raised and paid are blocked for further processing.				
(v)	Check whether claims are approved by appropriate authority as per delegation of authority matrix.				
(vi)	Verify whether claims raised by dealer are processed and settled in time.				
(vii)	Verify whether claims raised by dealer are processed as per policy in respect of correctness of amounts, eligibility, etc.				
(viii)	Is maker checker system in place to ensure correct processing of claims?				
(ix)	Is there a conflict in segregation of duties in receipt, processing and settling of claims?				
(x)	Verify whether the provision for expenses is made based on the data, of free servicing given to ultimate customer.				

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