

Chapter One

INTRODUCTION

1.1 Background of the Study

Nepal has very short history of auto business, less than three decades. Few businessmen were striving for market share in our sluggish economy. Only government officials, Diplomats used vehicle as transport facility. Mostly truck, bus, minibus and taxi, seemed to be rolling in the poor roads of Nepal. Even one decade earlier only elite class of Nepalese society used to drive for luxury and prestige. With passage of time, the luxury has changed to necessity. Even middle classes have accessed to vehicle today. Vehicle has become must for businessmen and other busy persons. Diesel and petrol consumption in the fiscal year 2009/10 were 5,48,543 and 2,18,512 k. liters respectively (Nepal in Figures 2010: Central Bureau of Statistics). This changing environment has promoted this business and import of vehicle and related goods are increasing with growing market. In Nepalese market, light Indian vehicle like Tata (Indicia), Maruti, Mahindra and Korean light vehicle like Kia, Hyundai occupied almost 70% market share. Other light vehicles like Italian Fiat, Malaysian Proton, general motors, Korean Syang young, American Ford, GM and French Peugeot are also available in Nepalese market Japanese Toyota, Honda, Nissan, Mazda, Mitsubishi, Isuzu, are also established vehicles for Nepal. Now a day due to high price they are losing market share, although attractive model and quality have sustained them. Further highly expensive and high class, Germany vehicle Mercedes and BMW of 3000-5000 cc are also available in Nepalese market.

Nepal has matured automobile business with wide range of varieties. Any vehicle brand available in India is also available in Nepal, and most of the world's auto-makers have manufacturing facilities in India. Nepal's automobile

market is full of models of different shapes, size and price tags. Each of these models comes with a variety of options like AC/non-AC. Power starting, power window, . Engine-type interior facilities like music systems and son on. The addition/deletion of these facilities raise/reduce the price as well. From Daewoo to Hyundai and from Tata to Daihatsu, all names are available in the country.

Nepal is importing vehicle and spare parts from India, Japan China, Germany, Korea, America, French, Malaysia, Italy etc.

Although Nepal has per capita income of US \$ 568 (World Bank Report 2009, 2010), dealers are finding and defining Nepal as immense and growing market. This statement is also supported with increasing trend of vehicle registration. People with money increasingly prefer to invest on vehicles. They have been withdrawing money from banks and, with nowhere else to turn it, are spending it on vehicles. This is also one reason to give positive trend to the vehicle market. Institutional supports like easy financing and insurance services can also be treated as promoters. Nepalese dealers are now not satisfied with the direct marketing strategy, they have set their own independent market strategy like mass consumption items. i.e. lucky draw, bumper upphar, free services etc.

Automobile Dealers import Vehicles and parts from manufacturer, and sell to customers. Thus dealers create a link between manufacturer and the ultimate users/ customers. Basically dealers provide vehicle itself, with parts and services facilities. Parts and services are for after sales supports. All most all vehicle dealers deal these three categories of products/services. Selling a vehicle does not ends the business rather creates market for parts and services. Actually, they are interrelated to each other.

Now the auto market is marked by rising demand, cutthroat competition and lucrative but affordable deals in the passenger vehicle sector of the country. New models of cars are continuing to roll on the streets throughout the year, the interest rates of hire purchase financing hit all time low and more banks aggressively entered into the retails banking, inducing more competition in financial services. Almost all banks have started financing vehicles

With the civilization of human being, there came every possible facility in their lives by themselves for more and more convenient life.

Today we can find every corner of this world as a very cozy place due to the development & advancement of more and more improved and latest technologies. Most of such inventions have undoubtedly made our lives faster and easier.

Amongst these inventions for people's lives, automobile was also invented in 1886 A.D. which was really very significant event. Since the every possible effort is being employed for the better features and specifications of automobile. Now with this constantly being modified and better featured manmade object, man is really attaining better lives.

Every line of automobiles is regularly rendering services to the people according to their respective features and objective of their production and development; whether it is truck, tractor, bus, pickup, jeep, or car.

Automobile has two active dimensions which are contributing to the development of the economy. One dimension is the business of automobile itself and another is the transportation and carriage of people and goods from one place to another in a very safe, reliable and convenient way. Thus, it has become an important part of the society and the world.

In the very context of automobile, car has become a necessary part of today's busy lives. With the rapid growth of life style, Nepalese people are also being very eager to have private family car. Exploring and watching all these demand of the Nepalese people, its neighboring countries and third countries are more eager to produce and export cars which are suitable to our country's road and family status. So, we can see, the very fact is happening here in Nepal. Nepalese roads are getting busy with public and private cars. So, we can see that the cars for today's business as well as social lives are getting a necessity. It has made the day to day lives easier, faster and reliable.

1.2 Nepal Automobile Dealers' Association (NADA)

To look into the matter related to vehicle business, an association called Nepal Automobile Dealers Association (NADA) was established in 2032. This association is formed to integrate businessmen dealing in vehicles, spare parts and the production of automotive items. This association also aims to exert pressure or say in decision making of government towards purchase of vehicles and related goods. More importantly this association has provided leadership to association in local level. This association is publishing 'Trade Directory' annually and other news letters periodically. To provides information about auto business it has also set up Auto Information Centre (AIC). Other district automobile association's under its umbrella are:

1. Hetauda Automobile Association
2. Gandaki Automobile Dealers Association
3. Morang automobiles Dealers Association

Introduction of NADA in its own words, “Nepal Automobile Dealers Association, known as NADA in short, is an organization established for the primary objective of contributing towards the automobile sector thought and organized channel. NADA is a not-for-profit organization that seeks to bring all legitimate automobile professionals under one roof to further strengthen the sector for its own member’s benefit within the territory of the Kingdom of Nepal.”

Objectives of it in its own words are as follows:

- To easily make available of roads transport vehicles (motorcar, truck, bus, jeep, motorcycle, tractor, tempo, etc) and all their parts, batteries, tires/tubes, bearing, transmission. Electrical equipment, related accessories, tools, automotive engines, or any other components used in automobiles.
- To preserve its members’ professional interests and to represent all its members for their benefit
- NADA is a not-for-profit organization
- NADA can acquire assets, use it, and sell it whenever as an individual
- NADA can charge membership fee. Receive grants and donations, take loans or conduct any other activity to mobilize its resources. Prior to receiving any foreign grants and donations, NADA shall seek approval from Finance Ministry
- To contribute towards the economy of the country and therefore taking social responsibility for the development of the country

- To plan, provide service, give certification consultancy or carry out any other task to further develop the association.
- To find a tandem with national policies related to automobiles and contribute towards the implementation of such policies.
- To establish district-level Automobile Association, help them and to unite them all.
- NADA can open its branch and sub-branch offices within the territory of the country with prior approval from the local authorities.
- To establish relationship with other like-minded national and/ or international organizations.
- To collect data related to automobiles, conduct research, and publish them in books, newspapers. etc.
- The Organization shall work guided by national policies and programs in tandem with the authorities and shall seek approval from the concerned authorities while conducting any of its works

(Source: www.nada.org.np)

Under the active participation of NADA, NADA Auto expo has been initiated since 2055. It is definitely a new venture to Nepalese auto market, till now three successful auto shows have been organized. It is beneficial to both dealers and customers.

1.2.1 Vehicle Importers Registered in NADA

Nepal is importing vehicles from mostly from India. Apart from India, Nepal is also importing from other countries, Japan, China, Korea, Italy, Malaysia, America etc. A total of 41 dealers dealing in vehicle were registered in NADA till the fiscal years 2064/65. Out of them, 23 were dealing passenger car (PC) vehicles. The name list of vehicle importer along with their vehicle brand names are as follows.

Name of firm Vehicle brand

1. Agni Incorporated Pvt. Ltd. Mahindra
2. Ajima Trade Syndicated Pvt. Ltd. Vehicles
3. AM International Pvt. Ltd. Chinese Vehicles
4. Amaty Enterprises Pvt. Ltd. Mitsubishi
5. Arun Intercontinental Traders Maruti, Suzikui
6. Laxmi Intercontinental Pvt. Ltd. Hyundai
7. Bhajuranta Engineering & Sales Ltd Ashokleland
8. Bhajuratna Agency Pvt. Ltd Fiat
9. bhudeo Trading Proton
10. China Motors Pvt. Ltd Chinese vehicles
11. Continental Associates Pvt. Ltd Kia
12. Continental Trad. Ent. Pvt. ltd. Kia
13. Cube Intercontinental Pvt. Ltd. Eicher

14. Deepak Gautam & Co. Mercedes-Benz
15. Dong Feng Sales Nepal Pvt. Ltd Chinese Vehicles
16. Dugar Autoclinci Pvt. Ltd Nissan
17. Dugar Automobiles Pvt. Ltd . Nissan, Manindra
18. Dugar Brothers & Sons Nissan, Volkswagen
19. Eure Gears Pvt. Ltd. Peugeot, Land Rover
20. Global Associates Pvt. Ltd Samsung
21. Greenland Marketing Pvt. Ltd Chinese Vehicles
22. Gurans Engineers Pvt. Ltd. Nissan
23. Hansraj Hulaschand & Co. Daihatsu, Ssangyong
24. Joshi Autoland Pvt. Ltd Suzuki
25. Joshi Automobiles Pvt. Ltd. Suzuki
26. Karan Motors Co. Suzuki
27. Kedia Internatinal Pvt. Ltd Swaraj Mazda/ Chinese
28. Mally Automobiles Pvt. Ltd. Vehicles
29. Mally Brothers Pvt. Ltd Vehicles
30. Nakasu Motors Pvt. Ltd Mitsubishi
31. Nemlink INt. Tradrs Pvt. Ltd Perodua
32. Nepal Internatinjal Business Pvt. Ltd. Vehicles

33. Pdma Shree Pvt. Ltd Mazda
34. Prime Global Pvt.Ltd Chinese
35. Saakha & Co. Pvt. Ltd Chinese Vehicles
36. Shankar Automobile Agency Isuzu
37. Shree Himalayan Enterprises Pvt. Ltd Suzuki
38. Sipradi Trading Pvt. Ltd. Tata
39. Syakar Co. Ltd . Honda
40. United Traders Syndicate Pvt. Ltd. Toyota
41. Vijay Motors Pvt. Ltd. Opel., Subaru ,cheverlot
42. Go gord pvt.Ltd, ford motors

Among them some were sub dealers, Joshi Autoland Pvt. Ltd, Joshi Automobiles Pvt. Ltd, Karan Motors Co., Mally Automobiles Pvt. Ltd, Mally Brothers Pvt. Ltd were sub dealers. Same dealers had registered with different name like for Kia motors. There were two dealers registered: Continental Associate Pvt. Ltd. and Continental Trad. Ent. Pvt. Agni Incorporated Pvt. Ltd.,

Arun Intercontinental Traders, Bhjuranta Engineering & Sales Ltd, Cue Intercontinental Pvt. Ltd, Dugar Automobiles Pvt. Ltd, Kedia International Pvt. Ltd, Shree Himalayan Enterprises Pvt. Ltd, Sipradi Trading Pvt. Ltd, Syakar Co. Ltld etc were dealing Indian vehicles. Similaryly, Am International Pvt. Ltd, China Motors Pvt. Ltd, Dong Feng Sales Nepa IPvt. Ltd, Greenland Marketing Pvt. Ltd, Kedia International Pvt. Ltd, Prime Global Pvt. Ltd, Saakha & Co. Pvt. Ltd etc were dealing Chinese vehicles. Laxmi Intercontinental Pvt. Ltd, Continental Trade. Ent. Pvt. Ltd, Hansraj Hulaschand

& Co. were dealing Korean vehicles. Amatya Enterprise Ltd, Dugar Auto clinic Ltd. Dugar Automobiles Ltd, Dugar Automobiles Ltd, Gurans Engineers Ltd, Hansraj Hulachand, Naksu Motors Ltd, Padam Shreee Ltd, Shankar Automoi\bile Agency, Syakar Co. Ltd, United Traders Syndicate Ltd. Etc were dealing Japanese Vehiocles. Some Dealers were dealing different models of didderebnt origin, like Hansraj Hulaschand & co. dealt both Japanese Daihatsu and Korean Sangyong. Dugar Automobiles Pvt. Ltd dealt Japanese Nissan and Indian Mahindra; Dugar Brothers & Sons dealt Japanese Nissan along with American Ford. Likewise, Kedia International Pvt. Ltd dealt Chinese vehicle along with Indian Swraj Mazda, Deepak Gautam & Co .and Vijay Motors Pvt. Ltd were dealing Germany vehicles like Mercedes Benz, Opel. Subaru, French vehicle Peugeot was dealt by Euro Gears Pvt. Ltd. Bhajuratna Agency Pvt. Ltd. Was dealing Italian Fiat, Likewise, Bhudeo Trading and Nemlink Int. Trader Pvt. Ltd were dealing Malaysian Proton and Perodua , cheverlot respectively.

1.3 Road Statistics

Compared to the rate in which the number of vehicles registration and import growing, the roads have emailed all the time stagnate. With every passing year, congestion in the streets of the cities is increasing. The road statistics showed that, there is not such significant development in road construction Road is one of the infrastructures of the development. But it has not developed and low initiation has been taken for the development of it although government has levied heavy tax in vehicle registration, import, licensing etc.

1.4 Import of Vehicle and Related Commodities

Mainly vehicles and spare parts are imported from India, Despite India; Nepal is importing vehicle and related commodities from other countries also. Most of the world's auto-makers have manufacturing facilities in India in joint

investment, so imports from India is increasing and import from Japan is decreasing. Nevertheless, imports from countries like, Korea and Malaysia are increasing. Therefore imports of vehicles and related goods can be divided into two categories, one from India and another from other countries. Indian automobiles have captured, almost 86.02% share and the rest by others in light vehicles..

1.5 Statement of the Problem

Automobile business is giving direct and indirect employment more than two lakh people and contribution in range of 25%-27% contribution to government tax revenue (NADA Auto News: Aswin 2067). So it is really important sector of Nepalese economy. Spare parts and after sales services are more important in automobile business. Only selling the vehicles is not enough so they also have to manage after sale services properly. Managing this entire thing has posed problem to the vehicle dealers. The management should use management accounting tools to analyze the problem and make amicable decision.

The research question arises whether the Nepalese vehicle dealers are practicing management accounting or not? Are the dealers using the management accounting as a tool of management? This research will be focused on following research questions.

1. Whether Nepalese Vehicle dealers are practicing management Accounting or not?
2. Which of the Management Accounting tools are mostly employed by them?
3. What are the major problems in adopting the management accounting tools?

1.6 Objectives of the Study

The core objective of the study is to examine the pattern of management Accounting Practiced by the selected vehicle dealers of Nepal. The objectives can be listed in following ways:

1. To Study the current management practice regarding management accounting in selected dealers.
2. To identify the areas for effective use of Management Accounting Tools in the vehicle dealer's business.
3. To give recommendations improve the performance of vehicle dealers' business.
4. To provide suggestion to solve the problem arise in application of management accounting tools.

1.7 Significance of the Study

Highly Competitive and changing environment of automobile business has posed serious problems to management. So management Accounting should be practiced in Planning and controlling of the automobile business. This study may be important in following grounds:

1. It will help to know the position of Management Accounting currently practiced by Nepalese Vehicles Dealers.
2. It will help to find out problems and solve the problems pertaining to use of management Accounting tools.
3. It will provide information about application of Management Accounting tools and promote the use of the management accounting tools.

1.8 Limitation of the Study

This study is concerned with light vehicle (passenger car) dealers therefore it does not include two wheelers dealers and heavy vehicle dealers. In many case same vehicle dealers are dealing both light and heavy vehicle. Such dealers come under this study as it is impossible to differentiate the management

Accounting used by such dealer for two products separately. The study is made on the five dealers. The study is not free from the following limitations.

1. It studies on Management Accounting tools only.

2. It does not consider the economic factors, human factors and other factors.
3. This study focuses on small car only therefore it does not include two wheeler dealers and other heavy vehicle dealers.
4. It does not study all the vehicle dealers of Nepal: rather it will study only five dealers.
5. As the study focuses on four wheeler dealers, finding drawn may or may not be appropriate for two wheeler dealers and other heavy vehicle dealers.

Compilation of Foreign Motor Vehicle Import NEPAL

- An import license is required.
- The import duty is levied at around 94 percent on public carriers and around 117
- Percent on mini-buses (customs duty of 25 percent on public carriers and 40 percent on mini-buses, 32 percent excise duty on the gross of Invoice Value plus Customs Duty, 1.5 percent local development tax on invoice value, 5 percent special tax on invoice value, and 13 percent value added tax (VAT) on the gross of invoice value plus additional duties and taxes).
- The import duty on other vehicles is around 176 percent (80 percent customs duty, and additional duty and taxes as applicable on mini-buses and public carriers).

1.9 Scheme of the Study

The study has been divided into five chapters, Chapter I is the introduction parts

Chapter I: Introduction

Which includes general background and status of auto business in Nepal? It further specifies objectives, significance and limitations of the study.

. Chapter II: Literature Review

which include theoretical aspect of management accounting and review of management accounting tools. This chapter also includes review of previous research conducted on management accounting practices. Finally it specifies the major findings of previous research and difference between the previous and this research.

Chapter III: Research methodology

This specifies and gives glimpse of sampling, data collection procedure and statistical tool used in this research.

Chapter IV: Theoretical and practical Analysis

The collected data have been presented in tabular form and analyzed in this part. This chapter includes major findings of this research.

Chapter VI: Summary, conclusion and Recommendation

CHAPTER-II

LITERATURE REVIEW

Dynamic and uncertain environment has posed fatal threaten to the managers and entrepreneurs in conducting their business activities. Information is powerful weapon to tackle, handle and track the dynamic environment in flavor. A lot of updated information of both external and internal is needed. Since 1950s internal users (manager of all level, including board of directors, chief executive officer, general manager etc and other line authorities) are getting more focus along with the external users (stockholders, creditors, tax authorities, suppliers, customer etc) for accounting data, This has led to emergence of management accounting. The goal of management accounting is not to be an accountant; rather it aims to produce confident and capable manager. Management account provides information to management for planning, controlling and decision making. Past data is needed to evaluate present achievement and forecast future. Management accounting is a systematic way to access the needed information to internal users such as

managers of different levels.

In ordinary language, any system of account which assists in carrying out its functions more efficiently may be termed as management accounting. (Munankarmi, 2003:1.05)

“In ordinary language, the term ‘managerial accounting’ is used to describe the modern concept of account as tool of management in contrast to the conventional annual or half-yearly account prepared mainly for information of proprietors, the object being to so expand the financial and statistical information as to shed light on all phases of the activities of organization.”(Goyal)

“Management accounting is the term used to describe the accounting methods, systems and techniques, which coupled with special knowledge and ability,

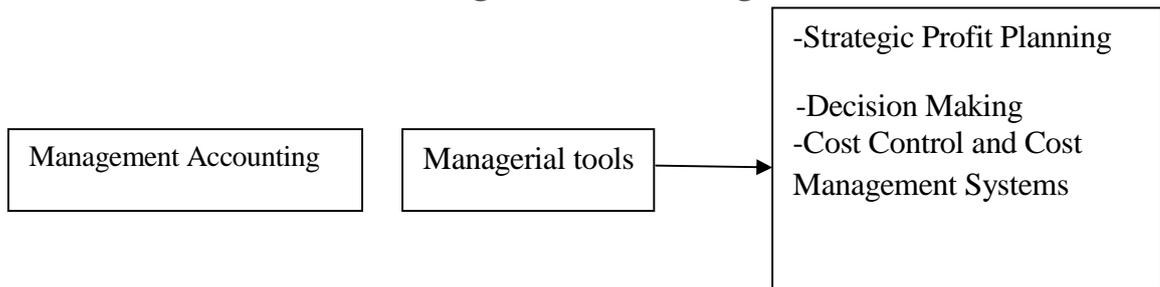
Assist management in minimizing losses. It is essentially the application of managerial principles and know-how to the planning development, execution and control of corporate plans.” (Batty)

“Managerial Accounting is the process of identifying, measuring, analyzing, and interpreting and communication information for searching the goals of the company. Managerial accounting is an integral part of the management process and managerial accountants are important strategic partners in the company’s management team.”(Hilton)

Managerial accounting is emerging and developing as a separate discipline. It is not confined to routine clerical work; rather it is a dynamic and challenging task. It is a management tools in the hand of manager. Management is getting things done through others. Planning, controlling and decision making are the important functions of management, which cannot be carried out in vacuum. Every activity should be based on decision making and controlling. It aims to simplify complicated decision making.

Figure No. 2.1

Management Accounting



Managerial accounting activities include collecting, classifying, processing, analyzing and reporting information to manager for effective management and long term planning. Managerial accounting emphasized two aspects;

- ✓ Presenting the accounting information in proper way before the management.
 - ✓ Such accounting information being placed in such way as to assist management in its operation and functions.
- (Bajaracharya, & et.al, (2004:31).

Finally management accounting is a tool in the hand of management to lead their organization in this multi-faceted and dynamic world.

2.1 Review of Management Account Tools for Vehicle Dealers

Management accounting performs broad functions from collecting data to interpret the data for management. Various internal information (Capacity) available, current capacity utilization, cost structure, past results etc) and external information (competitors' position, social-political movements, market characteristics, globalization etc) are needed to procure and store. Management accounting is a system which collects, stores, retrieves, modifies, analyzes, interprets and provides concise information/data covering entire filed of business for the management. Thus management accounting helps management in planning, controlling and decision making. Management accounting tools

have wide application for all kind of manufacturing and trading, small and large business.

2.1.1 Capital Budgeting

Capital budgeting is an important managerial tool. One duty of financial manager is to choose investments with satisfactory cash flows and rates of return. Therefore, a financial manager must be able to decide whether an investment is worth undertaking and be able to choose intelligently between two or more alternatives. To do this, a sound procedure to evaluate, compare, and select projects is needed. This procedure is called capital budgeting. Capital budgeting is investment decision-making as to whether a project is worth undertaking or not. Capital budgeting is basically concerned with the justification of capital expenditures. It may be decision regarding replacement, expansion diversification etc. Characteristics of capital budgeting is as follows

- ✓ Long term investment
- ✓ Bulk amount of investment
- ✓ Effect of time value of money
- ✓ Risk and Uncertainty

“Capital budgeting is of paramount importance as a framework of future development, and as major determinant of efficiency and competitive of power of a firm. It relates to fixed or long term assets, which are defined as assets that are in operation and yield returns over a period of time. It, therefore, involves a current outlay in return for a series of anticipated future benefits. (Khan and Jain)

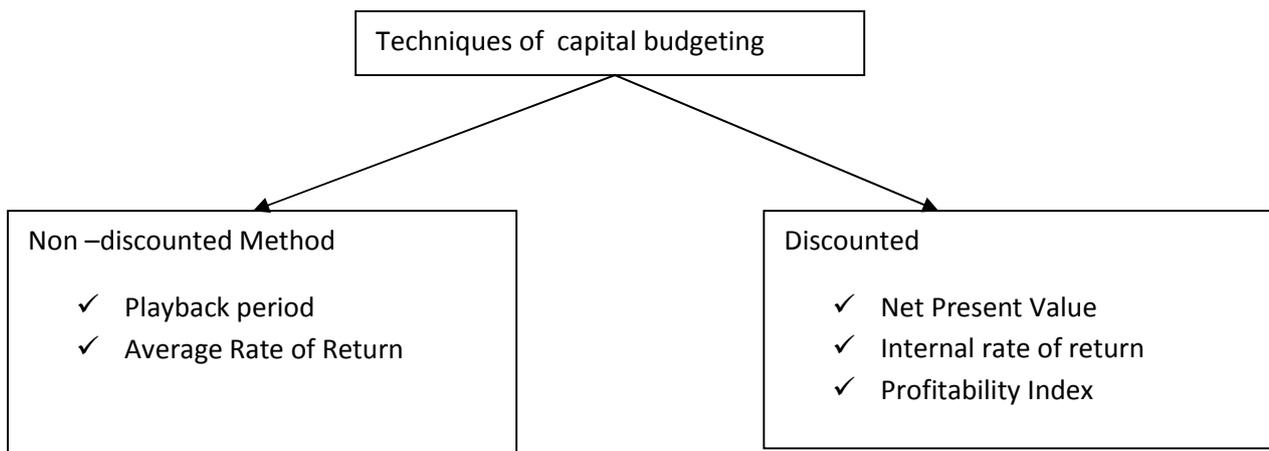
Procedure of Capital budgeting are

- ✓ Estimating the project's net cash flows
- ✓ Measurement of benefit of the investment
- ✓ Evaluation of risk associated with the

investment

There are various techniques of capital budgeting. These techniques can be categorized into two categories via, non-discounted and discounted method

Figure No. 2.2
Capital Budgeting Techniques



A) Non discounted Cash Flow Method

This is unsophisticated and traditional method. These techniques do not consider the time value of money while evaluating the projects. Payback period (PBP) and Average rate of return (ARR) fall under this category.

i) Payback Period (PBP)

The payback period is the number of year required to recover the initial investment. It does not consider the inflows after the payback period. The projects having short payback period are desirable.

In case of even cash flows

$$\text{Payback Period} = \frac{\text{Initial Outlay}}{\text{Constant Annual Cashflows}}$$

In case of uneven cash flows

$$\text{Payback Period} = \text{Minimum Year} + \frac{\text{Amount to be Recovered}}{\text{Cashflow During the Year}}$$

Where Amount to be recovered = Investment - Minimum year's cumulative cash flow advantages of payback period

- Use of Cash flow
- Easy to calculate and understand
- Emphasizes liquidity

Disadvantages of Payback period

- Ignore the time value of money
- Ignores cash flows occurring after the pay pack period
- Not a measure of profitability

ii) Average Rate of Return (ARR)

It is also called the accounting rate of return. It is based on the average rate of return after tax over-initial outlay. Higher rate of return is preferable. It is computed as follows:

$$\text{Accounting Rate of Return} = \frac{\text{Average Net Income after Tax}}{\text{Initial Outlay}}$$

If ARR is more than minimum acceptable rate of return the investment decision is done. Otherwise the project is rejected. ARR doesn't consider the timing of the cash flows and time value of money. So it may give unsatisfactory internal rate of return. That's why it is not used so frequently.

Advantage of Average Rate of Return

- It is simple to understand and use
- It can be easily calculated with the help of accounting data ☹ It uses the entire streams of cash flows

Disadvantage of Average Rate of Return

-) It uses only accounting profit
-) It ignores the time value of money
-) It ignores the length of projects lives
-) It ignores reinvestment of the profit

B) Discounted Cash Flow Method

Unlike traditional method, discounted cash flow method considers the time value of money, so it is regarded as superior.

i) Net Present Value (NPV)

It is widely used method. It is present value of future returns discounted at the firm's cost of capital, minus the cost of investment. This method requires the determination of three items of for a project.

-) Initial cash outflow
-) Future net cash inflow and
-) Minimum required rate of return

Mathematically,

$$\begin{aligned}
 NPV &= \frac{CF_1}{(1+k)^1} + \frac{CF_2}{(1+k)^2} + \dots + \frac{CF_n}{(1+k)^n} - I_0 = \sum_{t=1}^n \frac{CF_t}{(1+k)^t} - I_0 \\
 &= (\text{Present value of future cash flows}) - \text{Initial outlay} \\
 &= (PVIFA_{k,n}) - NCO
 \end{aligned}$$

Decision

If NPV is positive (NPV>0) the project should be accepted. In case of mutually exclusive projects higher NPV is preferable.

Advantages

-) Use of cash flow
-) Considers the time value of money
-) Consistent with goal of shareholder wealth maximization

Disadvantages

-) Sensitive to discount rates
-) Complicated

ii) Profitability Index (PI)

Profitability index is also called benefit-cost ratio. It is the ratio of the present value of the future cash flows to initial outlay.

$$\text{Profitability Index} = \frac{\text{Present Value of the Cash Inflow (TPV)}}{\text{Present Value of Cash Outflow (NCO)}}$$

Disadvantages of Profitability Index

- ⌚ Not easy to determine discount rate
- ⌚ Ranking may be different with different discount rate

iii) Internal Rate of Return (IRR)

The internal rate of return is usually the rate of return that a project earns. It is defined as the discount rate, which equates the aggregate Present Value (PV) of the net cash in flows (CFAT) with aggregate Present Value of the cash out flows of a project. In other words, it is that rate which gives the project net present value zero. The internal rate of return is determined on the basis of trial and error.

For Trial and Error method

PV inflows = PV investment costs

$$\frac{CF_1}{(1+IRR)^1} + \frac{CF_2}{(1+IRR)^2} + \frac{CF_3}{(1+IRR)^3} + \dots + \frac{CF_n}{(1+IRR)^n} - I_0 = 0$$

Or,

$$\sum_{t=1}^n \frac{CF_t}{(1+IRR)^t} - I_0 = 0$$

The project having IRR greater than required rate of return is preferable. In case of mutually exclusive projects the project with higher IRR should be accepted.

Advantage of Internal Rate of Return

-) Use of cash flow
-) Recognized the time value
-) Consistent with the firm's goal of shareholder wealth maximization

Disadvantages of Internal Rate of Return

-) Possibility of multiple IRRs
-) Can involve tedious calculations

2.1.2 Cost segregation into Fixed and Variable

Cost means monetary measure of the sources sacrificed/foregone for a particular purpose. IN other word payment of money/money worth to get something is the cost. "Different cost for different purposes", in organization there may be various types of cost. These costs should be accumulated and classified, analyzed and grouped and controlled. So that the cost and unit cost can easily be determined. Beside this, cost should be controlled. Which need behavior identification? It helps to conduct special analysis for planning controlling and decision making.

On the basis of behavior cost can be categorized into the three categories, namely:

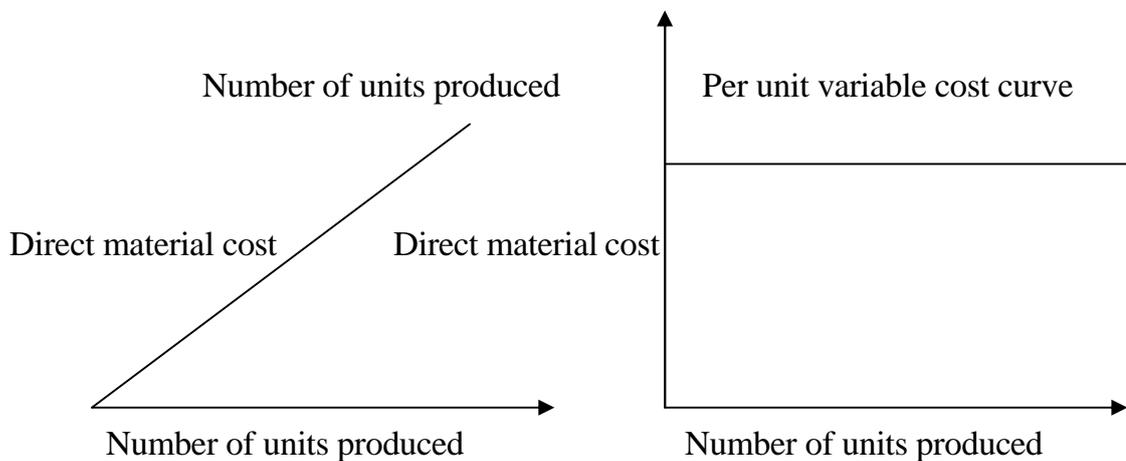
- 1) Variable cost
- 2) Fixed cost and
- 3) Step variable cost
- 4) Semi Variable Cost

1) Variable cost

"Variable cost are the costs that tend to vary in direct proportion and same direction to change in production activity, sales activities or same other measures of volume/cost driver. The costs of these inputs increase/decrease in proportion to increase/. Decrease in volume or cost driver." (Hongren , Foster and Datar)

Figure No. 2.3

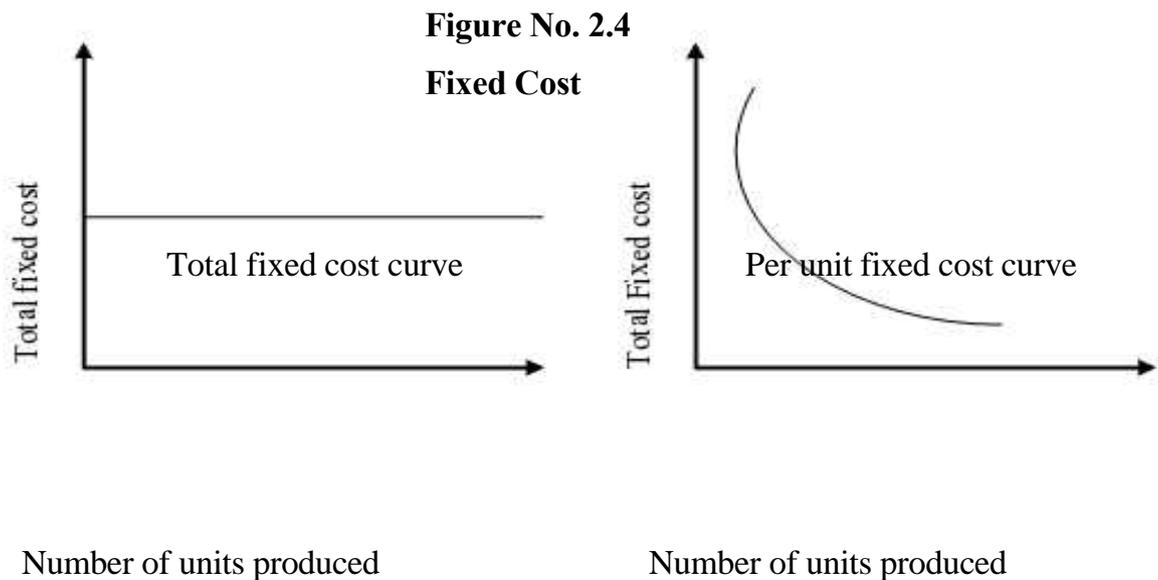
Variable Cost



Such type of cost increase as the production/activity increase and decreases when production/activity volume is decreased in same proportion and direction. But per unit cost will be fixed as shown in the figure. Direct material/spare parts in workshop, commission of sales are few examples of variable costs. The consumption of engine related spares increase with increase in engine overhauled (activity), so this is the variable cost.

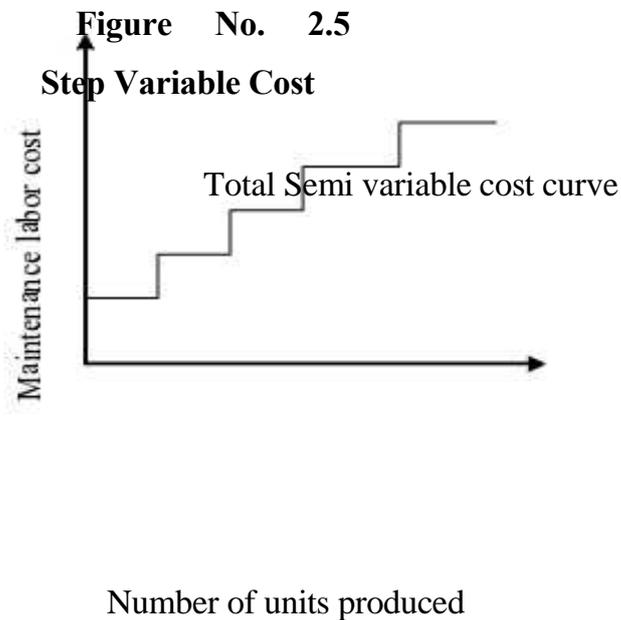
2) Fixed Cost

If any cost remains constant in total at any activity level of activity within the relevant range, it is called fixed cost. It does not show affinity with activity level, as time passes these cost are accrued. Like administrative expenses, salary, interest etc, whatever is the sales volume it would be constant.



The figure shows that the total fixed cost will be constant irrespective of activity level and fixed cost per unit will decrease with increase in level of activities.

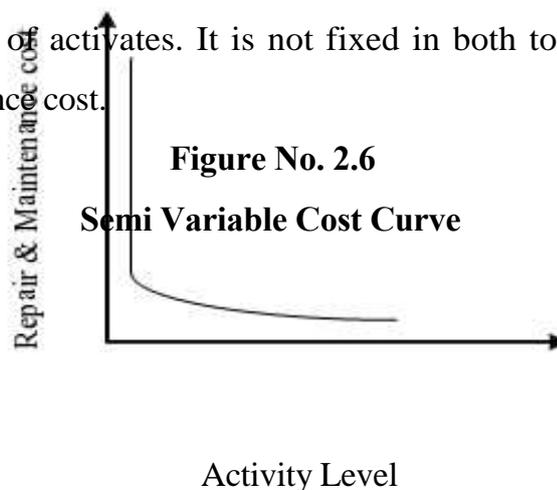
3) Step Variable Cost



It will be constant to certain level of activity then will changed and again will be constant and so on as shown in figure. Indirect labor cost can be taken as the example of step fixed cost. It is also called moving fixed cost.

4) Semi-variable Cost

It is also known as mixed cost as it is hybrid cost consisting of both variable and fixed cost. So, neither it is perfectly variable nor absolutely fixed with respects to volume of activities. It is not fixed in both total and per unit, like repair and maintenance cost.



Such type of cost should be separated into variable and fixed cost for various decision making purpose. It helps in pricing, flexible budget making, cost-volume profit (CVP) analysis, alternative decision making. Cost estimation and segregation plays important role in planning and decision making. The term 'cost' plays vital role not only in cost accounting rather it is equally important in planning and decision making. Estimating, control and cost management is base for making profit. It has wide application, of them some are:

- Product cost determination
- Cost volume profit analysis
- Budgeting
- Cost control
- Price determination
- Bidding for contracts and special offer
- Make of buy decision
- Further processing decision

Methods for Cost Segregation are as follows:

A) High and Low Method

In this non sophisticated method, difference in cost of two activity level (high and low) with in relevant range is taken into consideration. In the words of Jain and Narang, "As the name suggest, this method considers two levels of activity to split cost. It considers the out put at different levels i.e. high or low point is compared with the amount of expenses incurred at these different periods.' These data is taken from old rescores of organization.

$$\text{Variable cost per unit (VCPU)} = \frac{\text{Fixed cost per period}}{Y}$$

Where,
 $Y = \text{Mixed cost}$
 $FC = \text{Fixed cost, and}$

Cost at higher level - Cost at the lowest level
Output at highest level - Output at the lowest level
= Total Cost - (VCPU x
Output) = FC + VCPU X
Units

VCPU = Unit Variable Cost

This Method is Simple to use. However as it considers only two points, it may lead wrong conclusion. Only two points are not enough to define the complete cost behavior.

B) Regression Analysis/Least square methods

This method assumes linear relationship between dependent and independent variables. Cost depend on level of activates. As level of activities increases cost also increases. Regression analysis further assumes the magnitude of change is same. It provides best-fitting straight line eliminating judgmental estimate at all. It is a statistical method. It determines regression by minimizing the sum of the squares of the veridical distances between the actual Y values and the predicted values of Y.

$$Y = a + bX$$

$$b = \frac{n(\sum XY) - (\sum X)(\sum Y)}{n(\sum X^2) - (\sum X)^2}$$
$$a = \frac{\sum Y}{n} - b \frac{\sum X}{n}$$

Slope of the regression line:

Y-axis intercepts

Where,

X is a value of the independent variable

Y is a value the dependent variable

N is the number of items in the sample

x is the X variable summed

Y is the Y variable summed

x^2 is the X variable squared and the squares summed

$(\sum X)^2$ is the X variable summed and the sum squared

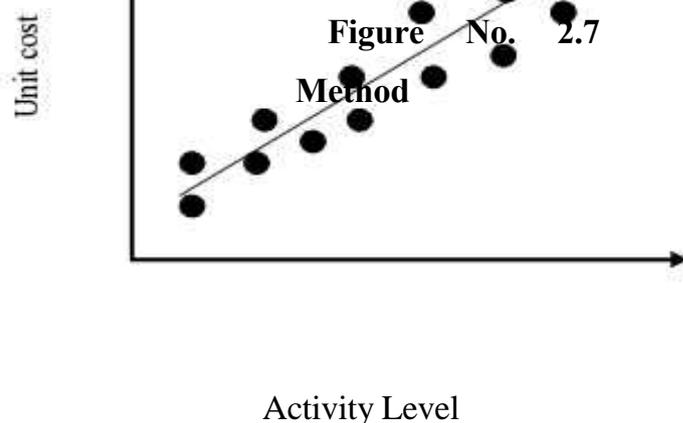
y^2 is the Y variable squared and the squares summed

$(\sum Y)^2$ is the Y variable summed and the sum squared

$\sum XY$ is the sum of the products of X and Y

It is more accurate than high low point method. It reduces the error. But it is complicated and time consuming. The reliability depends on the degree to which the independent variable (Activity measure) can explain the change in the dependent variable.

C) Graphical method/Visual fit method



The figure shows graphical method of cost segregation. This is a simple method which uses scatter diagram. Costs of different activities are plotted then line is drawn in judgmental basis. It's subjective and results may be different with different people and estimates.

D) Average Method

In this method simple average is done to segregate variable and fixed cost. Although it is quite simple method, it does not give accurate results. So it is rarely used.

E) Accounting estimate method

It is also a kind of judgmental method. Department manager and accounting personnel analyze each item of cost ledger and segregate them into variable and fixed cost. To segregate the miss cost, they will arrive at certain agree percentage, which will best describe the cost behavior judgmentally.

F) Engineering Method

It is the new and sophisticated method, detailed analysis of work methods are done. Standard input and standard costs are determined, time and motion study is carried out then cost behavior is found out. With detailed study cost pattern for various activity level are determined. It is highly accurate method but time consuming and expensive.

2.1.3. Tax Effect Analysis

In the words of Seligman tax is “compulsory contribution from a person to the government to defray expense incurred in the common interest of all without reference to special benefit conferred. “In simple language tax is a liability to pay an amount to the state. This tax is unavoidable contribution to government. Tax plays crucial role in planning and decision making. So it should be planned and managed properly. Tax planning is done to minimize tax burden and maximize the profit. Managers have to consider tax factor while planning business activity.

For the purpose of enhancing the investment environment in a country, the government provides different types of facilities to the business organizations. Such facilities include reduction in tax rate, providing tax holiday, investment allowance, depreciation facility etc, tax planning means the use of all these facilities given by the government to reduce the tax liability. (Kandel, 2003:151)

Tax planning is scientific, economic, legal and ethical planning activity to use various incentives concessions allowance, rebate etc. It has wide scope, the relevant aspects are:

Long term

) Selection Of business

) Selection of product

-) Selection of location
-) Selection of sources of capital
-) Size of business

Short tem

-) Acquisition of Fix assets
-) Repair and maintenance
-) Pollution Control Cost (PCC)
-) Research and development (R &D)
-) Stock valuation
-) Lease or buy

Analysis of tax effect provides various benefits for organization they can be summarized as follows

-) Saves tax and increases profitability
-) Avoids unnecessary worries, tensions and administrative hassles
-) Helps in analysis of risk
-) Enhance competitive abilities etc

2.1.4 Standard Costing

It is management accounting tool for management control. Control is an important function of management. With control, objective of organization can not be achieved. For control actual performance should be compared with predetermined costs/level of performance. Then deviation should be found out and corrective action should be taken on time.

Standard cost for a given job is the predetermined cost to complete the job as

per specifications. Standard costing is a system before starting the production and then comparing this with the actual costs of the job after completing the production. The difference between the predetermined or standard costs and the actual costs is termed 'the variance.'" (Bajaracharya & et al, 2004:495)

Application of standard costing

) Budgeting

Budgeting is numerical expression of action. The budget is prepared with detailed analysis of every activity. Direct labour, direct material and manufacturing expenses are the main components of budget. To set budget standard costing provides bases.

) Economic Decision

Standard costing provides appropriate standard for each activity, which helps in making decision regarding special offer, further processing etc.

) Pricing Decision

Vehicle dealers have to set price for their vehicle, spare and services. Standard costing gives data about these products. Actual outcomes are compared with estimated so it helps in fixing prices for their product

) Cost control

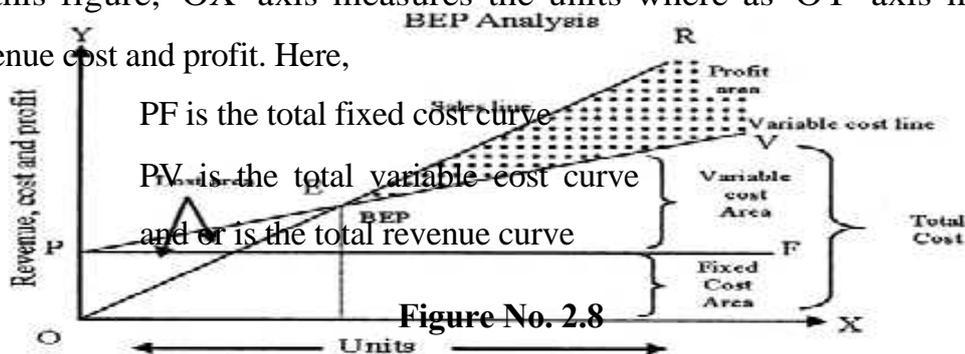
To control is compare the actual output with standard one, find deviation and take corrective action promptly. Standard costing measures the deviation, search the reasons and take corrective action to keep the outcome within acceptable limit.

2.1.5 Break even Analysis/Cost Volume Profit Analysis

Cost volume profit is a supplementary tool of profit planning, which studies revenue/ cost with respect to the sales. In the words of Drury, "cost volume profit analysis is a systematic method of examining the relationship between changes in activity (i.e. output) and changes in total sales revenue expenses and net profit. As a model of these relationship cost volume analyzes, simplifies the real world conditions that a firm will face. First of all 'no loss no

profit' situation is found then, on the basis of the corner stone further profit planning is done. CVP analysis studies important variable such as selling price, sales volume, expense and tax. These variables have unique relation .for different organization. Cost volume profit analysis is in immensely helpful for developing alternative strategies in sales planning and the cost estimation Since, fixed cost remain constant within relevant range, the fixed cost curve is parallel of 'OX' axis. Variable costs slope upward form the origin to right but the slope depends on variable cost ratio.

In this figure, 'OX' axis measures the units where as 'OY' axis measures revenue cost and profit. Here,



Here, the revenue curve intersects the total cost curve point E. this point is called break even point. At this point, the total revenue equals the total cost. The graph states that if the company can reach the point of the BEP it can

generate sufficient revenues to cover all of its operating expenses.

Approaches to CVP and BEP

The cost-volume profit relationships and the break-even point can be analyzed through different approaches. Mainly, the break-even-point and other required cost-volume profit relationships could be explained through different methods.

- 1) Variable income statement method
- 2) Contribution Margin Method
- 3) Mathematical Formula Method
- 4) Graphical Method

1) Variable Income Statement Method

	Sales in unit	XXX
	Sales Revenue	XXX
Less: -	Variable Cost of Goods Sold	XXX
	Contribution Margin	XXX
Less: -	Fixed Cost	XXX
	Net Income before Tax	XXX

2) Contribution Margin Method

Contribution Margin reflects the revenue remaining after covering all variable costs. Contribution Margin is the excess of sales revenue over variable costs.

So, contribution margin means how much is left from sales revenue, after covering variable expenses that are contributed toward the covering of fixed expenses and then toward profit for the period.

Total Contribution Margin= Total Sales Revenue - Total Variable Cost

$$\text{CMPU} = \text{SPPU} - \text{VCPU}$$

Contribution Margin Ratio is equal to contribution margin divided by revenue.

$$\text{Required sales in Rs. for desired profit} = \frac{\text{Fixed cost} + \text{Desired profit}}{\text{CM Ratio}}$$

Again, if requirement is to find out the sales volume for certain level of profit after deducting tax amount, the formula can be expressed as

$$\text{Required sales in Rs. for desired profit} = \frac{\text{Fixed cost} + \frac{\text{Desired profit}}{1 - \text{tax}}}{\text{Contribution Margin Per Unit}}$$

Again, formula for the required sales in rupees for the desired profit after tax can expressed as

$$\text{Required sales in Rs. for desired profit} = \frac{\text{Fixed cost} + \frac{\text{Desired profit}}{1 - \text{tax}}}{\text{CM Ratio}}$$

3) Mathematical Formula Method

This is the most widely practiced approach to the breakeven point and cost volume profit analysis. The formula uses an algebraic equation to calculate the break even point.

$$\text{Sales Volume} = \text{FC} + \text{VC} + \text{Profit}$$

Where,

$$\text{FC} = \text{Total Fixed Cost,}$$

$$\text{VC} = \text{Total Variable Cost}$$

This equation can also be presented in the form of

$$\text{SPPU} \times \text{Q} = \text{FC} + \text{VCPU} \times \text{Q} + \text{Profit}$$

Where,

$$\text{SPPU} = \text{Selling price per Unit}$$

$$\text{VCPU} = \text{Variable cost per unit}$$

$$\text{Q} = \text{Quantity (Sales Unit)}$$

For the Break Even sales volume

$$\text{BE sales volume} = \text{FC} + \text{VC} + \text{Q}$$

4) Graphical Method

A break even chart is used to graphically depict the relationships among revenues, variable costs, fixed costs, and profit (or losses). Then no profit/no loss point (the break even point) is located at the point where the total cost and total revenue lines cross. Below this point, the firm incurs losses and above this point, the firm earns profit.

2.1.6 Ratio Analysis/Financial Statement Analysis

Simply Ratio means an expression of quantitative relationship between two numbers. This ratio gives more than quantitative information if they are properly interpreted. Ratio analysis is a widely used technique to evaluate the financial position and performance of a business. The term ratio refers to the numerical or quantitative relationship between two variables. It gives a meaningful technique of measuring and evaluating financial performance of a business with relevant industry firm average or specific standards such as past ratios of the same firm. It is a powerful tool of financial analysis. For the purpose of ratio analysis following two types of tools are used

a) Trend Analysis

It is comparison of present ratio with past and future ratio of the company

b) Comparison with Others

It is comparison of ratio of firm with those of similar firms or with industry average at the same point in time.

The objectives of ratios analysis are as follows:

1. The main objective of ratio analysis is to analyze the firm's relative strength and weakness.
2. It evaluates the financial condition and performance of the firm.
3. It paves way for useful interpretation of financial statements.

4. It helps in suggesting corrective measures for the betterment of the firm.

Advantages of the Ratio Analysis

The importance of ratio analysis is the fact that it presents facts on a comparative basis the following are some of the advantages of ration analysis:

1. Ratio analysis provides an integrated view of the overall profitability of the firm, which the management constantly concerned.
2. It enables to analyze the ability of the firm to meet its short term as well as long term obligations.
3. Helps in planning, forecasting the performance of the firm over a period of time. When the ratios are compared, it indicates success or failure in future.
4. Facilitates for inter-firm comparison,. A inter firm comparison would demonstrate the firms position vis-à-vis its competitors. If the results are at variance either with the industry standard or with those of the competitors, the firm can seek to identify the probable reasons or in that light, take remedial measures.
5. Facilitates trend analysis. The advantages of trend analysis of ratios, lies in the fact the analyst can know the direction of movement that is whether the movement is favorable, or unfavorable, when compared over the years.
6. Another dimension of the usefulness of ratio analysis is from the view point of the management. It imparts light on the degree of efficiency in the management and utilization of its assets. The various activity ratios measure this kind of operational efficiency.

Types of Financial Ratios

There are various types of ratios that are used by/for different parties for different purposes. It can be calculated from the information given in the financial statements.

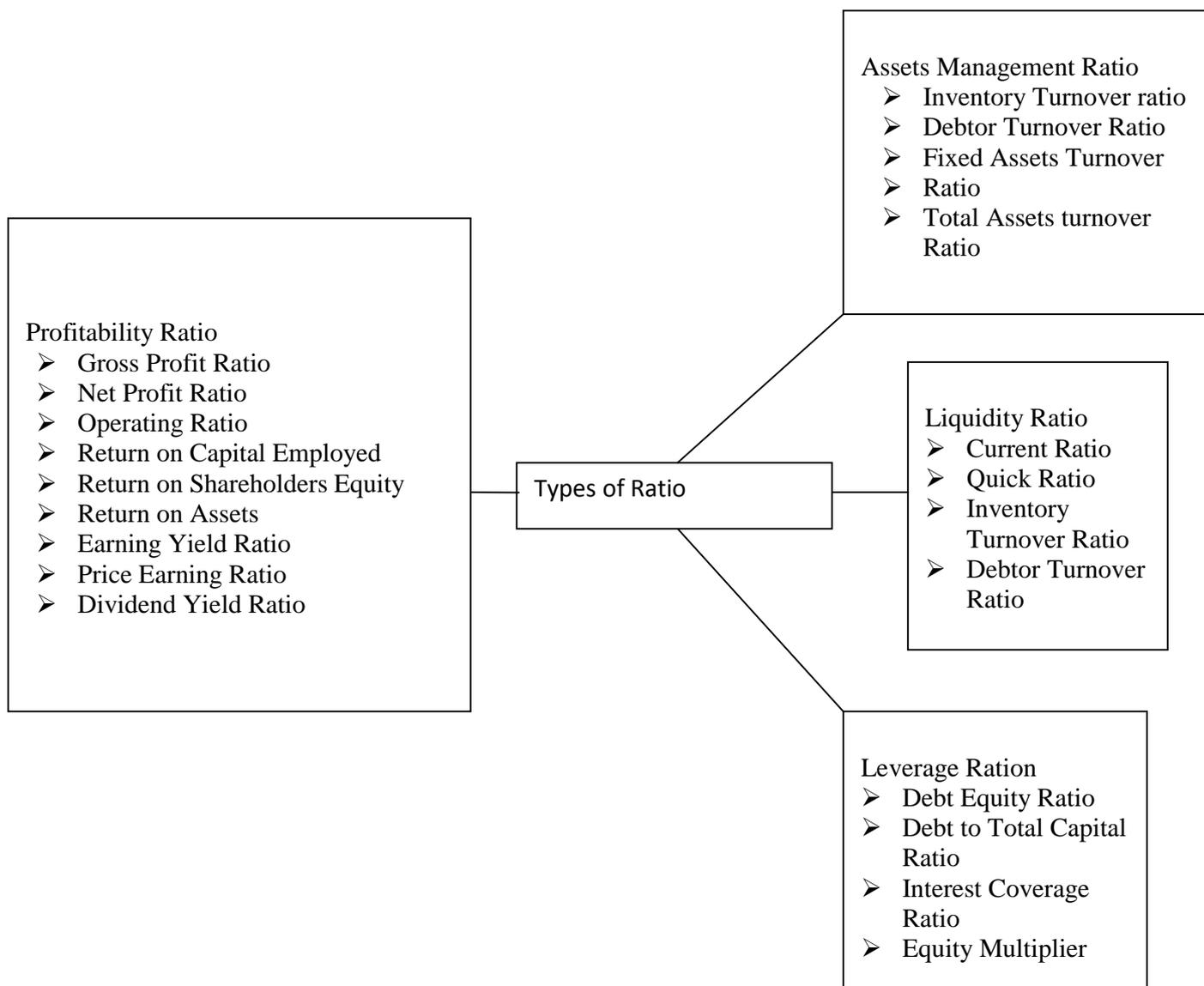
Generally, ratios are calculated from the financial statements by the parties'

such as creditors, investors, financial institutions and management of the firm to know their field of interest.

Several ratios calculated from the accounting data can be grouped into various classes according to financial activates or functions to be evaluated.

Figure No. 2.9

Types of Financial Ratios



Limitation of the Ratio Analysis

It is already mention that the ratio analysis is a widely used tool of financial analysis, however it suffers from various limitation. Some of them are as follow:

a) Difficulty in Comparison

One serious limitation of ratio analysis arises out of difficulty associated with their comparisons to draw inferences. This may be due to following.

- i. Difference in the basis of inventory valuation.
- ii. Different depreciation method
- iii. Estimated working life of Assets, particularly of plan and equipments.
- iv. Treatment of extraordinary of income and expenditure and so on.

b) Impact of Inflation

The second major limitation of the ratio analysis as a tool of financial analysis is associated with the price level change. This, in fact, is weakness of the traditional financial statements, which are based on historical cost.

c) Conceptual Diversity

The differences in the definitions of items in the balance and profit and loss statements make the interpretation of the ratios difficult.

d) Short-term Changes

The ratios calculated at a point of time are less informative and defective as it suffers from short-term-changes.

2.1.7 Master Budgeting

A budget is a numerically expressed course of action/target for definite period, which shows both revenues and expenditure. It may be prepared for an organization as a whole or for sub units. Budgeting shows management's desire to allocate scarce resources and priority for activity of future. The master budget is compilation of all functional budgets. It includes from sales budgeted to operational budget and financial statement.

The main aim of budgeting is to present the future forecasting, numerically

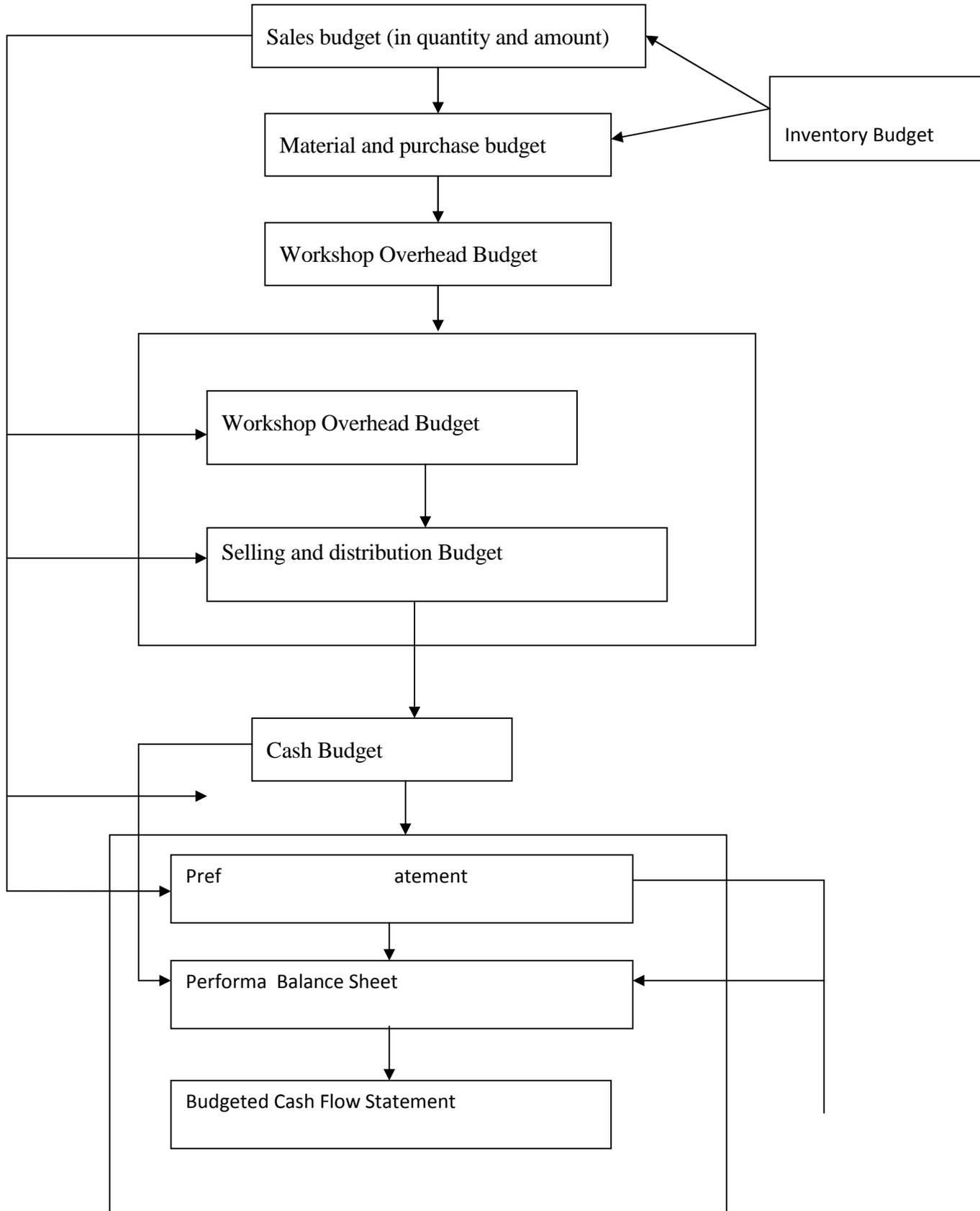
expressed in advance of commencing operation, stating what and how things

are done. It covers a definite period of time, usually one year. Budgeting is an artistic work as well, in which numerical plans are presented in well structured.

Budgets, basically forecasted financial statements-formal expressions of

managerial plans that encompass all phases of operations including sales, purchasing manpower and financing. (Bajaracharya & et al, 2004:346)

FigureNo.2.10
Master Budgeting





A) Sales Budget

Sales budget is starting point. On the basis of this budget other budgets are developed. Sales budget is prepared both in units and amount. It is based on sales forecast, past sales trend, market situation and seasonal influences. These determinants should be analyzed properly to make realistic sales budget. Vehicle brand wise, segment wise, region wise budget is prepared on the basis of sales forecast. Sales forecasting can be done through past trend analysis.

Zero based budgeting (ZBB), market survey, judgmental analysis etc.

B) Material and Purchase Budget

In case of trading business, merchandise budget is prepared instead of production budget. After preparation of sales budget, material and purchase budget is prepared on the basis of the sales forecast; Material purchase solely depends on sales budget. Increase in sale of a particular brand of car; indefinitely increase the sales of spares parts of and services for this particular brand. This budget shows detailed budget by product, department and time.

$$\text{Purchase} = \text{Sales} + \text{Desired ending inventory level} - \text{Opening inventory level}$$

Purchase policy should be set for effective management and

control of material various things should be considered while purchasing are as follows:

Carrying cost

It includes cost of storage, rent lightening, store staffing, handling, auditing, recording etc.

Ordering Cost

It includes all clerical and administrative cost of purchasing, accenting, transporting and receiving.

Lead time

It is time period arrive to ordered material

Reorder level

It is the reordering level, calculated considering minimum stock level, consumption rate etc.

Reorder level = Minimum level + Consumption

during lead time

$$= \text{Safety stock} + (\text{lead time} \times \text{daily}$$

consumption)

i) Economic Order Quantity (EOQ)

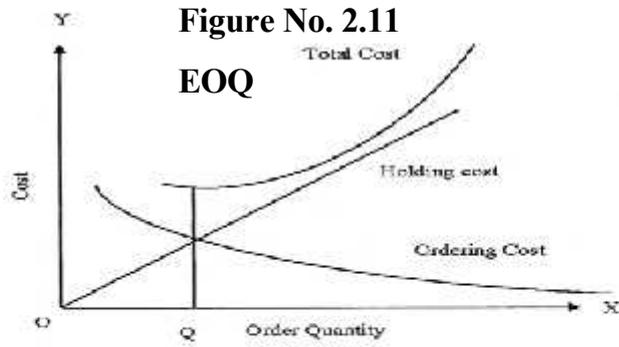
How much to purchase, when to purchase is main problem in procurement.

Economic order quantity can help on this regard. It equates cost of acquisition

and cost of possession. In order words it minimizes the total inventory cost.

Figure No. 2.11

EOQ



✓

$$EOQ = \sqrt{2AO/c}$$

Where,

A= Annual Requirement

O= Average cost of placing an order

C= Annual carrying cost of carrying one unit in inventory

$$\begin{aligned} \text{Total Inventory Cost} &= \text{Ordering Cost} + \text{Total carrying cost} - \text{Discount} \\ &= (O \times A/\text{Order size}) + (C \times \text{Order size}/2) - \text{Discount} \end{aligned}$$

ii) Just In Time (JIT) System

It is new emerging concept, to avoid loss and perfect control. In this philosophy purchase is made just when need. It is demand pull, Japanese philosophy of purchasing in small lots with frequent deliveries. In this method purchase is entirely customer's demand driven. Thus it minimizes minimizing the wastage (like waste of waiting, transportation, stocks, motion, processing itself, making defective etc) and inventory holding cost. But perfect anticipation of need and reliable sources of supply is must. Reliable and geographically near supplier should able to supply on time with uniform quality. JIT, system works with perfect employee participation, industrial engineering, continuing, improvement, total quality control and small lot size.

Advantages of JIT system

- Reduces the amount of money tied up in inventories
- Reduces inventory holding cost
- Saves space as not required to maintain large inventories

- Makes possible to dictate quality problems timely
- Increases lab ours efficiency

- Minimizes the wastage

Limitation of JIT system

- Wrong estimation may lead the to misdirection
- Risk of not supplying on time
- Risk of not supplying quality materials
- Efficient inspection of supplies is needed

C) Workshop Overhead Budget

Vehicle dealer by nature of business have their own workshop of after sales support. This workshop does, servicing, maintenance of sold vehicles. In this operation, such workshop generates revenue incurring costs. The costs are lab our, electricity, rent, machine etc. Such overhead budget served as factory

overhead of production. Workflow for the workshop should be forecasted and lab our/material should be planned properly for the coming period. Effective workshop management, affect, overall performance of the organization as a whole.

D) Operating Expenses Budget

This includes two budget, selling & Distribution expenses budget and administrative budget.

i) Selling and Distribution Expenses Budget

It includes cost related to selling, distribution and delivery of product to customer. Sales commission, carriage outward, advertising, insurance, executive salaries are the examples of such expenses. In vehicle dealer two kinds of such expenses can occur one for vehicle and another for spare parts.

But mainly focus goes on vehicle. The vehicle dealer having wholesale business of spare parts to other dealer/retailer may give consideration to spare parts marketing as well.

ii) Administrative Expenses Budget

Administrative expenditure are fixed to very large extent. Administrative department provides services sales, workshop and other. The expenses not included in workshop and sales are included under this category. Although such expenditures are not productive directly, it has crucial impact on organization's performance.

E) Cost of Good Sold Budget

It determines the cost of product sold. It helps in preparation of profit loss account and balance sheet. Evaluation of ending inventory and fixation cost of goods sold are main purpose of this budget.

F) Cash Budget

This budget shows, opening cash, cash inflow/outflow and ending balance. It helps in determining the anticipated cash receipt and payment and thus cash surplus and deficit. In case of deficit prompt arrangement can be done. In case of surplus, alternative use is preferred. Cash is critical aspect for each and every organization; it also measures the liquidity of organization. All the organization operates on money, not in profit so cash should be managed properly. Cash budget helps in effective cash management. It is summary of expected cash inflows/outflows over a projected period.

G) Performa Financial Statement

It is the final step of master budgeting. It portraits and summarize results to be achieved in future, Financial Statements generally include budgeted income,

statement, balance sheet and cash flow statements.

i) Performa Income Statement

It shows magnitude of profit. It will serve as target of benchmark for the year. IN other words it shows how profitable is the business.

ii) Performa Balance Sheet

It gives clear picture of financial position of organization, with ending balance of all accounting titles. It shows glimpse of liability (from current liability to long terms debt) assets (from current assets to fix assets).

iii) Budgeted Cash Flow Statement

Cash flow shows inflow/out flow of cash under the head of operating activities, financial activities and investing activities. As accenting entries are done on the basis of accrual basis, to show true cash transaction cash flow statement is prepared. Cash flow comprises both short and long term perspective of cash. It further comprises both capital income/expenditure and revenue income/expenditure.

2.1.8 Flexible Budgeting

Budget can be categorized in static and flexible in nature. Master budget is static in nature and prepared for curtained activity level. It is estimated that the activity will no change significantly. But it's only coincident that there will not be significant deviation. In the uncertain future anything can happen, so different alternatives should be kept ready for these purposes. If there is significant change whole budget has to be modified and readjusted with great

deal of effort, such draw backs are eliminated in flexible budget. Flexible budget is not based on only one level of activity rather it shows wide range of estimates. Within relevant range of activity. It helps in control of overheads setting bases for control.

Overheads (Y) = Fixed cost + variable costs (per activity) x activity

$$= FC + UVC \times \text{activity}$$

In above formula after ascertaining the fix cost and unit variable cost (UVC), it can be calculated overheads for different activities. So it is automatically geared to changes in volume.

Desirability of Flexible budgeting

-) It is desirable for such type of business which have unpredictable sales
-) For new ventures/Launches prediction of volume of activities is very hard. So different alternatives can be prepared with flexible budget.
-) Flexible budgeting is also desirable for organization having fluctuating activity levels
-) For those organization which activates are entirely customers' demand driven.

Flexible budgeting helps in marginal analysis by presenting details regarding output costs, sales and profit for different levels of activity. For overhead control, actual performance can be compared with budgeted one for actual activity level. It can not be done is static budget. Thus it is indispensable management accounting tools for cost reduction and control. It also gives information about usage of capacity (In terms of percentage) of both plant and human resources.

2.1.9 Responsibility Accounting

In today's complex and dynamic world, all organization can not be managed and controlled centrally. Decentralization is the must. Responsibility accounting is a form and process of decentralization. Whole organization is divided into smaller units: - division, segments, department, branches, product line etc. Every unit is managed and controlled by responsible person, manger. Authority and responsibility are delegated to the respective manager making him/her accountable. The manger should report the performance of the unit to the

top management.

Responsibility accounting refers to the various concepts and tools used by managerial accountants to measure the performance of people and departments order to ensure the achievement of the goals set the top management. (Bajrachayra & et al, 2004:459)

Traditionally responsibility accounting refers only to financial performance (cost, revenue and profit) of sub units. But nowadays it measures overall performance of the unit. Process of responsibility accounting.

) Identifying the responsibility centre

First of all, separable and identifiable units for operating purpose are identified as a responsibility centre:

) Delegation of authority and responsibility

After identification of responsibility centre specific authority and responsibility are assigned to respective manager. It is the process of decentralization. Along with authority and responsibility, accountability is also transferred.

) Controllability of the object

It defines that the manager is accountable for the cost which is controllable by him/her. He/she cannot make decision beyond his/her limit.

) Establishing performance evaluation criteria

In this step, criteria to evaluate the performance are established to find whether performance is acceptable or not, the criteria are standard costing, budgetary control, profitability ratios, valuation measures etc.

) Selecting cost allocation bases.

In this step, bases for allocation of joint cost corporate cost are identified. The allocation of the joint cost heavily influences the

performance of the unit. So an appropriate and agreed based should be selected. The widely used methods are traditional costing method and activity based costing (ABC) method. Activity based costing (ABC) is an accurate method.

Finally responsibility accounting is method to measure the performance of a sub unit, with perfect use of decentralization. It has following contribution.

-) Decentralization
-) Segment evaluation
-) Motivation
-) Transfer pricing
-) Drop of continue decision

2.1.10 Activity Based Costing (ABC)

Widely practiced method of allocating overhead cost is traditional costing method and activity based costing (ABC), Traditional costing relies on arbitrary cost allocation, and allocate indirect cost object using single overload rate. It tends to over cost high volume and under cost low volume products. Although its simple many drawbacks of tradition costing method, activity based costing has been evolved. It uses cause and effect cost allocation and multi bases. In the words of T. Lucy, "ABC seeks not only to allocate to product cost on a more realistic basis than simple production volume but also

attempts to show relationship between overhead costs and activities that cause them."

Under the ABC system, the activity-cost pools are allocated to products on the basis of activity cost drivers. Activity cost drivers form the cost allocation base, which is chosen so that there is a cause and effect relationship between it and the costs, in the activity-cost pool. Therefore, identification of a cost allocation base or the cost driver for each activity is the most crucial and determining stage in the ABC system. A rate per unit is calculated for each cost driver for each activity used by the product. (Bajracharya & et al, 2004:107)

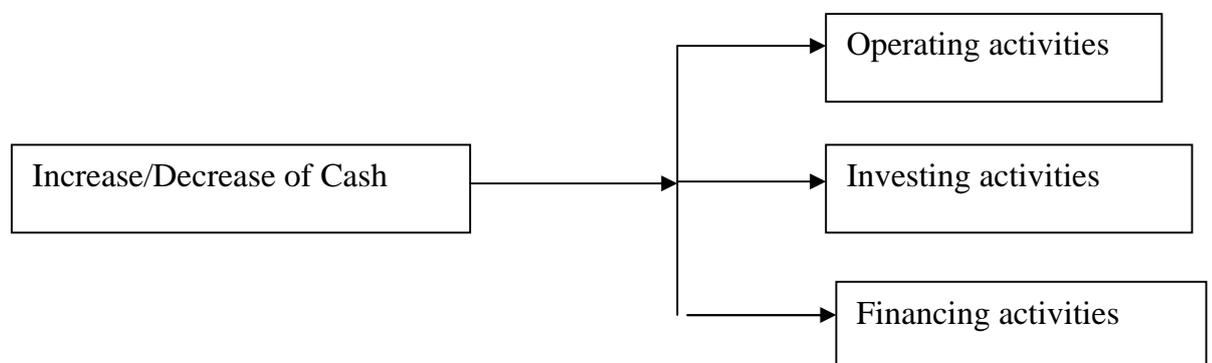
The process of Activity based costing (ABC) as follows:

-) Identification of major activities
-) Determination of cost drivers
-) Creation of cost centre/cost pool
-) Trace the cost of activities to products

2.1.11 Cash Flow Statement Analysis

The cash flow statement is an important financial statement which show inflow and out flow of cash and cash equivalent. Cash equivalent generally includes highly liquid short term investments such as treasury bills, money market funds, commercial papers etc. Information about cash receipt and payment is also can be obtained from cash book, but cash flow statement provides more information to decision maker about increase and decrease of in operating, investing and financing activities. **Figure No. 2.12**

Cash Flow Statement



Cash flow statement analysis reflects financial health of the organization like ability to give positive cash flow in future and ability to meet short term and long term obligation. In this statement accrual based accounting information is converted into cash based information and rearranged under the group of operating, investing activities and financing activities. Hence cash flow statement provides vivid description about the solvency and financial position of business.

Importance of cash flow statement

It provides following information:

- Ability to generate positive future cash flows
- Ability to meet financial obligation
- Assess the reasons for differences between income and cash receipt and payment
- Information about both cash and non cash aspects of investment and financial activities
- Correlation of income with cash flows
- Liquidity, solvency and financial flexibility

2.1.12 Zero Based Budgeting

Zero-Base Budgeting is a technique and tools of planning and decision-making. It reverses the working process of traditional budgeting. In traditional incremental budgeting, departmental managers need to justify only increases over the previous year budget. This means what has been already spent is automatically sanctioned. In case of ZBB, no reference is made to the previous level of expenditure. Every department function is reviewed comprehensively and all expenditures rather than only increases are approved. ZBB is a technique, by which the budget, request has to be justified in complete detail by each manager starting from the Zero-base. The Zero-base is indifferent to whether the total budget is increasing or decreasing. The manager have to starts from zero level justifying all costs in terms of cost and benefits.

Benefits of ZBB

1. Results in efficient allocation of resources as it is based on needs and benefits
2. Drives managers to find out cost effective ways to improve operations

3. Detects inflated budgets
4. Useful for service departments where the output is difficult to identify
5. Increases staff motivation by providing greater initiative and responsibility in decision-making
6. Increases communication and coordination within the organization
7. Identifies and eliminates wastage and obsolete operations.
8. Identifies opportunities for outsourcing.
9. Forces cost centers to identify their mission and their relationship to overall goals.

Drawbacks of ZBB

1. Difficult to define decision units and decision packages, as it is very time-consuming and exhaustive.
2. Forced to justify every detail related to expenditure. The R&D department is threatened whereas the production department benefits.
3. Necessary to train managers. ZBB should be clearly understood by managers at various levels otherwise they cannot be successfully implemented. Difficult to administer and communicate the budgeting because more managers are involved in the process.
4. In a large organization, the volume of forms may be so large that no one person could read it all. Compressing the information down to a usable size might remove critically important details.
5. Honesty of the managers must be reliable and uniform. Any manager that is prone to exaggeration might skew the results.

2.1.13 Lease or Buy

During business operation, such type of decision (Lease or buy) to be taken for example a dealer is in need of a plot of 10 annas, the dealer can either buy or lease the plot. Leasing is contract between owner (lessor) and a hirer (lessee) for the hiring of a specific asset. In such contract lessee gets only possession, ownership remains own owner himself. Maintenance of the assets should born by the either party as stated on the contract. In lease lessee has to pay rent. IN case of buying he has to pay bank interest (in case debt financing), have depreciation facilities and scrap value. These two financing alternatives are evaluated on basis of after tax cash flows with the help of time value of money. The alternative having least cost is selected. Other aspects such as availability of lease, financing, administrative burden also should be considered.

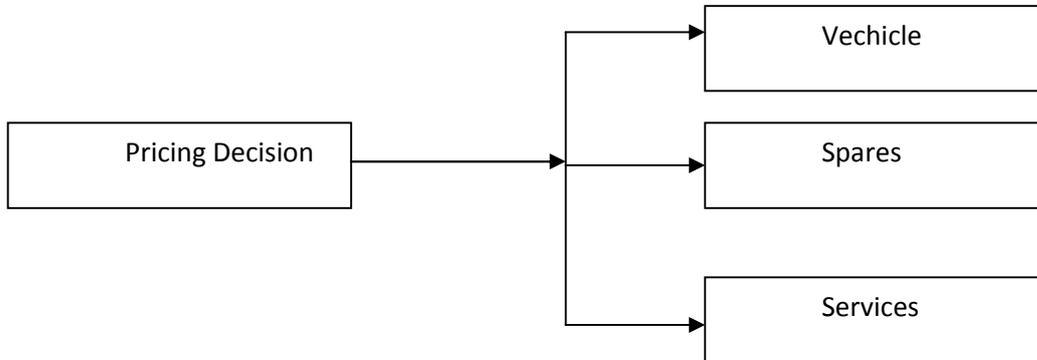
2.2 Pricing

Price is a crucial factor, which determines market success and in turn business success. Dealers have to set price of their vehicle, spare and services. Cost is expected to recover from sales revenue. As these organizations are profit-oriented so price should be above cost. Pricing should be one with perfect.

Information, as it has long term effect and costly to change if it is put into effect. Customer for vehicle may be of elite class, middle or lower class, government/diplomats business organization, businessmen etc. quality of product target customer affects pricing decision. Elite class wants high quality regardless of price where as middle class wants acceptable quality at affordable /reasonable price. Market survey should be done to have information about market characteristics.

Figure No. 13

Pricing Decision



Competitor analysis is also important in pricing decision. There may be many dealers targeting same customer to sell their product so vigilant watch on movement is necessary. IN Nepal there are almost 23 dealers in passenger car division (registered in NADA). The competition is very tough and pricing should be done with reference to price of competitors.

2.2.1 Methods of Pricing

a) Variable Cost Pricing

It considers only variable cost for pricing like cost of products (for dealers), direct material, direct labor etc. It is based on marginal costing. For merchandising organization, variable cost includes mainly cost of the product. And other administration cost. First of all total valuable cost is computed and some mark up percentage is added to arrive to price. Mark up percentage is set to cover the cost of all kind.

$$\text{Selling price per unit} = \text{Variable cost price per unit} + \text{mark up}$$

b) Absorption Cost Pricing

This method considers both variable and fixed cost for pricing of the product, IN other words it incorporates both product and period cost. Total cost for the product is compiled then mark up is added to set price.

$$\text{Sales price per unit} = \text{Cost price per unit} + \text{mark up}$$

It is based on the concept that product cost includes all direct cost and allocation of fixed cost

c) Target Return/Return on Investment (ROI) pricing

Return on Investment (ROI) is ration of income to invested capital. IN order words it is required rate of return on investment to cover all opportunity cost. As there may be more than one alternative investment sector as an opportunity cost. The return that could be earned by investing same resources in the next alternatives is the minimum required rate of return on investment

$$\text{ROI} = \text{Income} / \text{capital investment}$$

d) Activity Based Costing (ABC)

It is method of allocating overhead to products with application of relationship between overhead costs and activities that cause them. It assumes that overhead is inflated by diversity and complexity of products rather than volume of output. Mostly organizations having multiple products use this method. Costs are accumulated by activity centers in this method. First, all major activities are identified then cost driver for each major activity is assign. Cost centre/cost pool for each major activity is created then cost of activities is traced to products.

2.3 Transfer Pricing

In the words of Horngren, Foster and Datar, a transfer price is price that a subunit of an organization charges for products or services supplied to another subunit of the same organization. The transfer price creates revenue for the selling subunit and a purchase cost for buying subunit, affecting operating income numbers for both subunits. The operating income can be used to evaluate the performance of each subunit and to motivate managers. Likewise, in the words of Kaplan and Atkinson transfer pricing is the principal tool of financial control in decentralized organization. So it is basis of segment reporting.

In organization there may be more than one department if one department transfers goods/services to other and charge for the products/services it is called transfer pricing.

Transfer price affects performance and ultimately profitability of both transferring and receiving department. Transfer price is revenue for transferor and cost for transferee.

2.3.1 Methods of Transfer Pricing

Transfer pricing is set to meet objectives of organization as a whole considering goal congruence. Like wise motivation of department manager is also important.

a) General Transfer Pricing

	Additional Outlay		Opportunity cost per
Transfer Price =	Cost Per Unit	+	unit to the
	Incurred because		organization because
	goods are transferred		of the transfer

This transfer price is based on opportunity cost. Opportunity cost (if the goods/services sold elsewhere) is added to variable cost to determine transfer price.

b) Cost based Transfer pricing

On cost based transfer pricing goods/services charged on the basis cost of the product/services. Price can be charged either considering variable cost only or considering full cost. In variable cost pricing only variable cost considered and in absorption both variable and fixed costs are considered

c) Market Price Based

In this method price is set equal to market price for the same goods/services. One department treats other department as external customer under this pricing method.

d) Negotiation

In this method department managers of department bargain/discuss to reach a reasonable price within best interest of organization as whole. Transferring department tries to set price high as market price but receiving department wants to lower the price. Finally a reasonable price is set.

e) Target Return

In this method pricing is set as per required rate return on investment (ROI). To set price the department determine its required rate of return and set transfer price.

2.4 Review of Previous Research on Management Accounting Practice

Many researches have been conducted on management accounting practice in Nepalese context, especially in profit planning and controlling, financial statement analysis, cost volume profit analysis etc. Few researches have been

made in application of management accounting tools in Nepalese context. These researches have shown that management accounting is still a new thing and in developing stage in Nepal. Decision is taken in intuition of strategic manger rather than applying management accounting tools. Here, review of

previous of previous research conducted on management accounting practice has been presented.

Mr. Sagar Sharma (2002): Mr. Sharma conducted a research work entitled. "Management Accounting Practices in Listed Company of Nepal." ON the basis of primary data, he has focused on management accounting practices by these listed companies. Major finding of his research are:

- Budgeting, cash flow, ratio analysis are widely used management accounting tools.
- Cost segregation, break even analysis, standard costing, ling term budget are slightly in use. Activity based costing, responsibility accounting are not in use
- For capital budgeting payback period and Net preset value are widely used
- 70% and more practice master budgeting among them 87% used actual expenses to prepare the budget
- Mostly Profit and loss is used to measure overall performance of company
- Cost base pricing is used to price the products/services
- 100% company practice past trend to forecast cost and revenue
- Management account tools are not practiced mainly lack of information and cost factor.

Mr. Krishna Bahadur Karki (2007): Mr. Karki has conducted research entitled, "Management Accounting Practice in Joint Venture Banks of Nepal." Basing on primary data he has focused on management accounting tools used in

these banks. The major findings of his research are:

- Capital budgeting, cash flow and annual budget are widely used in Joint venture (JV) banks.
 - Activity based costing (ABC), standard costing, long term budgeting and zero based budgeting are no in use.
 - For capital budgeting profitability index (PI) and net present value
-
- are widely used. NO banks are using modified internal rate of return (MIRR).
 - Past actual budgets are used as base for preparation of budgeting
 - All most all JV banks practice short term budgeting. They use profit and loss account, ratio analysis and cash flow statement to evaluate overall performance of bank.

Mr. Narayan Prased Acharya (2006): Mr. Acharya has conducted research entitled, "Management Accounting Practice in Nepalese Public Enterprises.": He has focused on management accounting practice basing on primary data. Major finding of his research are:

- Annual budgeting, cash flow statement, responsibility accounting are widely practiced in PEs.
- Break even analysis, capital budgeting, financial statement analysis, flexible budgeting are only slightly used in these enterprises
 - For preparation of budget they based on actual past expenses
 - Role of government is prominent in pricing of product/services
 - Use of transfer pricing is not in use in these PEs.
- They use first in first out (FIFO) for pricing of inventory issues
- Profit and loss account is use for evaluation of overall performance of the enterprises.
- The decision of these organizations is done under the political influence rather than on the basis of management accounting.

Mr. Ailendra Kumar K.C. (2006): Mr. K.C. has conducted research entitled. "Management Accounting Practice in Nepalese Public Enterprises." He has focused on management accounting practice basing on primary data. Major finding of his research are:

- Annual budgeting, cash flow statement, capital budgeting, ratio analysis are widely used in these PEs.
- Only 5% use Activity based costing (ABC) and 17% use responsibility accounting.
- For capital budgeting, 72% sue net present value (NPV) and 55% use payback period (PBP).
- Zero based budgeting (ZBB), activity based budgeting (ABB) are not in practice, rather they use past expenses as base for preparation of budget.And mostly short term budgeting are used. NO PEs are practicing progression analysis.
- Profit and loss are used to evaluate the overall performance of organization as a whole.
- Transfer pricing are rarely practiced.

2.5 Research Gap

This research differs with the previous not only in the time frame, but the in the nature of organization as well, Mr. Sharma, Mr. Karki, Mr. Acharya have selected the organization, Listed companies, joint venture banks and public enterprises. Management accounting practices required in vehicle dealer business is quite unique. So conclusion drawn under the previous research may or may not be applicable to vehicle dealers due to different

nature of business. Vehicle dealing business is different in size of business, differ in product and service they deal
interims of competition and after sale service.

CHAPTER III

Research Methodology

3.1 Research Design

The research attempt to analyze the management accounting practiced in Nepalese Automobile Dealers. This study focused on major accounting tools practiced by automobile dealers. Nature, comparison and relationship between Indian automobile dealers and other automobile dealers regarding practice of management accounting practice are analyzed. Hence descriptive and comparative analysis was used. Trend analysis, T-test and Chi-square test were used for testing the hypothesis.

3.2 Source of Data

Data was collected through questionnaire, short interview, opinion and

discussion. However secondary data was used wherever necessary. Secondary data was collected on automobile registration, import statistics, road statistics etc

3.3 Population and Sample

The population includes the entire automobile dealer existing in Nepal. There are almost 41 automobile dealers registered in Nepal Automobile Dealers' Association (NADA). Out of them 23 dealers are dealing passenger car (PCcar/jeep/van) automobiles. The small car dealers was the targeted sample as this study entirely focused on this category. However some automobile dealers are dealing both commercial and passenger automobile such dealers are also taken into consideration. Name list of these automobile dealers along with model are as follows.

Passenger Automobile Dealers Registered in NADA

1. Agni Incorporated Pvt. Ltd. Mahindra

2. AM International Pvt. Ltd

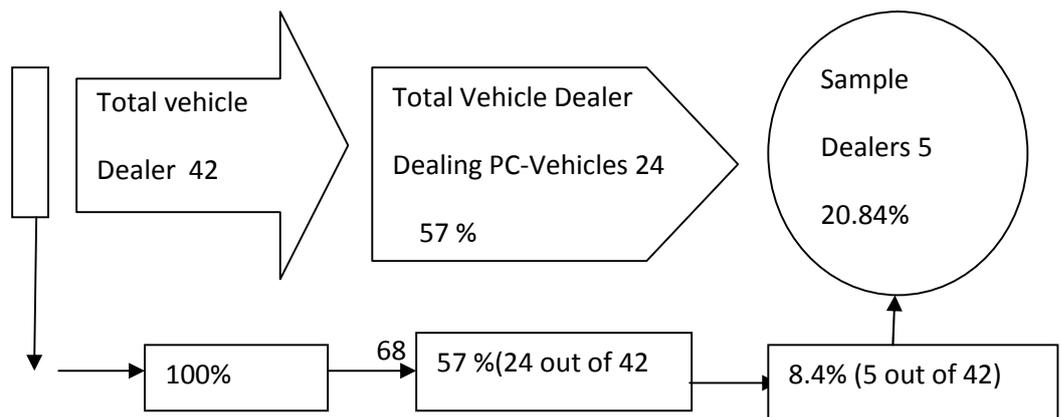
Mahindra

Chinese automobiles

3. Amaty Enterprises	Mitsubishi
4. Arun Inter Continental Traders	Maruti Suzuki
5. Laxmi Intercontinental Pvt. Ltd	Hyundai
6. Bhajurajna Agency Pvt. Ltd	Fiat
7. Bhudeo Trading	proton
8. Continental Associates Pvt. Ltd	Kia
9. Continental Trad. Ent. Pvt. Ltd.	Kia
10. Deepak Gautam & Co.	Mercedes-Benz
11. Dugar Autoclinic Pvt. Ltd	Nissan
12. Dugar Brothers & Sons	Nissan, Volkswagen
13. Euro Gears Pvt. Ltd	Peugeot, Land Rover
14. Gurans Engineers Pvt. Ltd	Nissan
15. Nakasu Motors Pvt. Ltd	Mitsubishi
16. Nem link Int. Traders Pvt. Ltd	Perodua
17. Padma Shree Pvt. Ltd	Mazda
18. Saakha & Co. Pvt. Ltd	Chinese Automobiles
19. Shree Himlayan Enterprises Pvt. Ltd	Suzuki
20. Sipradi Trading Pvt. Ltd	Tata
21. Syakar Co. Ltd	Honda
22. United Traders Syndicate Pvt. Ltd	Toyota
23. Vijay Motors Pvt. Ltd	Chevrolet, Subaru, Opel
24. Go ford	Ford motors

Out of these dealers five were selected as sample. The sample was selected on non probability sampling basis. For the sampling purposive/judgmental sampling was used.

Figure No. 3.1



The figure shows that out of 42 automobile dealers, 24 (57%) are dealing with PC automobiles. Out of 24 automobile dealers, 5 (20.84%) were selected as sample automobile dealers, which was 8.4% in total automobile dealers.

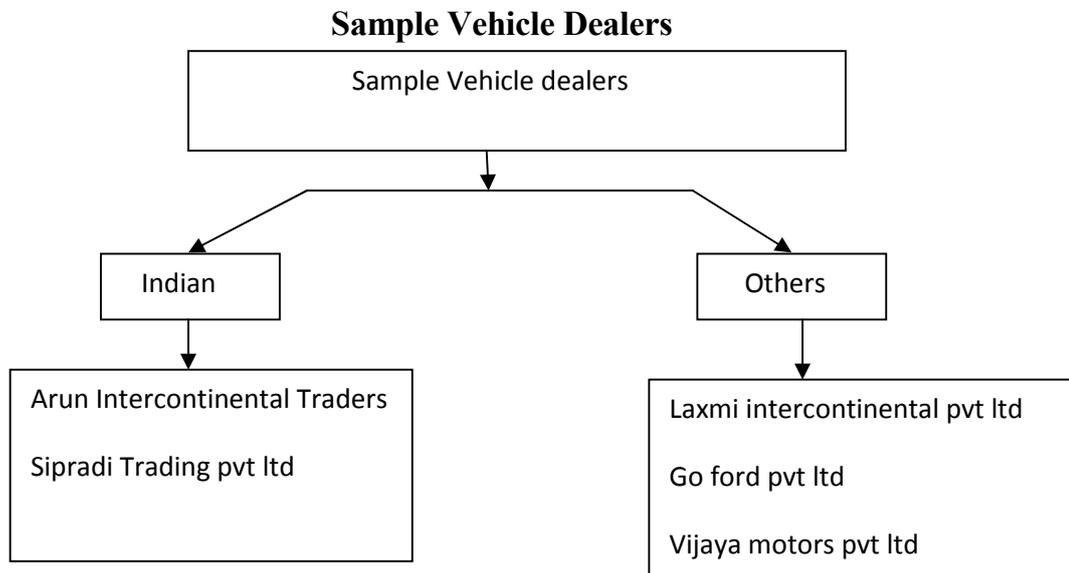
The table shows the line of business (LOB) of the selected dealers.

Selected Dealers

<p>Arun Intercontinental Traders Jhamsikhel, Lalitpur, Line of Business Distributorship of Suzuki & Maruti Automobiles Jeep/Van, Equipments, Spare Parts, Accessories, Tools</p>	<p>Laxmi Intercontinental Pvt. Ltd Naxal, Kathmandu Line of Business: Automobiles, Passenger Car / Jeep/Van, Equipments, Spare Parts, Accessories, Tools & Special Equipment.</p>
<p>Go ford Pvt Ltd, Kathmandu Authorized distributor of: Ford motor, Line of Business: Automobiles, Passenger Car / Jeep/Van, Equipments, Spare Parts, Accessories, Tools & Special Equipment. Authorized importer</p>	<p>Sipradi Trading Pvt. Ltd., Naya Naikap, Kathmandu Line of Business: Sole Authorized Dealer of TATA Automobiles & Spare Parts for Nepal. Branch & Service Centre: 1. Thapathali 2. Bahuwari, Gandak, Birgunj 3. In Front of Stadium, Ward No.-10, Pokhara 4. Milan Chowk, Butwal 5. Karkado, Surkhet Road, Nepalgunj 6. Birtamode, Jhapa 7. Attariya, Kailali 8. Narayanghat, Chitwan 9. Hetauda, Makawanpur</p>
<p>Vijaya motors Pvt. Ltd Line Of Business: Sole Distributors of Chevrolet Automobiles for the Kingdom of Nepal. Chevrolet Spare Parts & others Accessories, Lubricants</p>	

The automobile dealers were divided into two category viz. Indian and Others

Figure No. 3.2



3.4 Questionnaire and Data Collecting Procedure

The data was collected through questionnaire, interview and discussion directly from concern organization. Objective questions relating to automobile dealer business containing general accounting management accounting practice were designed. The questionnaires were of “tick-mark” and multiple choices. They were given an option of other where they can express their practice if those were different from listed in the questionnaire with their views and with free expression. First two spare questions were about type of ownership and category of product. Then other, eighteen questions are about management accounting practice which were entirely multiple choices. Last two questions were about difficulties and potential benefits of management accounting practice in automobile dealers. These questions were open type. The questionnaire provided to concerned organization, from the management the questionnaire was filled up, wherever necessary short interview and discussion were taken as well. They were assured that the information would be kept

confidential, and used for academic purpose only, would not be printed in any form.

3.5 Data Processing Procedure

The data collected were categorized in suitable comparative tabular form. The data were processed with simple arithmetic mean and percentage basis. Bar charts, set charts and flow charts were used to make the presentation lucid. For testing hypothesis students' t-test and chi-square tests are used.

3.6 Major Management Accounting Tools

The management tools discussed in this research is as follows

1. Capital Budgeting
2. Cost Segregation into Fixed and Variable
3. Tax Effect Analysis
4. Standard Costing
5. Break Even Analysis (B EP)/Cost-Volume-Profit (CVP) Analysis
6. Ratio Analysis/Financial Statement Analysis
7. Master Budgeting
8. Flexible Budgeting
9. Responsibility Accounting
10. Activity Based Costing (ABC)
11. Cash Flow Statement
12. Zero Based Budgeting (ZBB)
13. Lease or Buy

3.7 Statistical Procedure

For the analysis of the data simple mean, percentage and trend analysis were used. Trend analysis was used to find out growth rate and forecast automobile registration. For testing the hypothesis, Managerial accounting tools used by each dealer were totaled individually. But the relative importance of the tools was not considered. Then student's t- test was used for testing the hypothesis. Similarly similarities/differences in practiced of management accounting in between Indian automobile dealers and other automobile dealers were tested with chi-square test.

3.8 Hypothesis

Thirteen Management Accounting tools are used as parameters. These are 1) Capital budgeting 2) Cost segregation 3) Tax effect 4) Standard costing 5) Break Even Analysis (BEP) 6) Financial Statement analysis 7) Master budgeting and 8) Flexible budgeting 9) Responsibility Accounting 10) Activity Based Costing (ABC) 11) Cash Flow Statement 12) Zero Based Budgeting (ZBB) 13) Lease or Buy. The sample dealers were asked whether they were practicing these tools or not, then they were valued irrespective of their importance.

Null hypothesis (H_0):- the dealers are practicing more than average number management Accounting Tools as their management practice.

Alternative Hypothesis (H_1):-The dealers are practicing less than average number of accounting tools.

For the testing of other hypothesis, the sample dealers were grouped into Indian and others categories.

Hypothesis for testing of Break Even Point (BEP) Analysis

Null hypothesis (Ho):- there is no significant difference between Indian and

others vehicle dealers in practice of Break Even Point (BEP) Analysis

Alternative hypothesis (H1):- There is significant difference between

Indian and other vehicle dealers in practice of Break Even Point (BEP) Analysis

Hypothesis for testing of Activity Based Costing (ABC)

Null hypothesis (Ho):- There is no significant difference between Indian

and others vehicle dealers in practice of Activity Based Costing (ABC)

Alternative hypothesis (H1):- There is significant difference between Indian

and other vehicle dealers in practice of Activity Based Costing (ABC).

CHAPTER-IV

DATA PRESENTATION AND ANALYSIS

Every business needs strategic move to survive in competitive market. Proper

planning, controlling and effective decision making play vital role to lead the organization towards achievement of objectives. Management accounting is the means to effective planning, controlling and decision making. Management accounting mainly focuses on internal users. Therefore, the focus of the study is to explore the management accounting tools used by automobile dealers. To cope with the complicated, dynamic and competitive environment, management accounting tools are only means to survive to automobile dealers. Globalization has added both threats and opportunities. Capable organization will reap the opportunities and it will pose threats to weak organization.

There are 42 automobile dealers registered in NADA. Out of which 24 (57 %) dealers are dealing passenger car (PC) automobiles. As the study is focused on PC automobiles dealers, out of these 24 automobile dealers, only 5 (20.83%) dealers were selected using stratified judgmental sampling.

The research was survey type. Questionnaire was scheduled consisting of eighteen tick mark and two open end questions. Questionnaires were distributed directly to the head office of the dealers. Authentic persons like finance manager, accounts manager, auditor, account officers etc were asked to fill up the questionnaire. All these five dealers responded to the questionnaires. Short table interviews/ opinions were also taken wherever necessary. Thus primary data were used.

The raw data have been processed, tabulated and analyzed. Percentage analysis, trend analysis, student's t- test and chi-square have been used for analyzing the data.

4.1. Automobile Registration

The annual automobile registration reflects the trend of economic development of the country. So it serves as the economic indicator. Increasing trend is

favorable for the economy. Development of financial institution, government policy, development of road etc affects the automobile registration. As per micro economic indicator of Nepal 2007 there are almost 18 commercial banks (including agricultural development bank), 72 finance companies and 21 insurance companies.

4.1.1 Annual Automobile Registration

Table No. 4.1

Annual Automobile Registration upto the Fiscal Year 2067/68

Fiscal Year	Bus	Mini bus	Dojar/ truck	Car/jee p /van	Micro Bus	picku p	Motar cycle	Tractor traile r	Other s	fy totals	Fy gross total
059/060	432	298	1212	2906	232	581	29404	2485	60	37610	402054
060/061	732	237	1477	7089	884	478	26547	2191	74	39699	441753
061/062	753	285	1592	4781	584	-	31093	1374	69	40711	482464
062/063	1588	663	2263	5114	66	36	45410	635	60	54975	537439
063/064	1564	806	3278	5156	138	736	72568	2992	1547	88735	626174
064/065	1419	1179	3594	4741	31	1588	69666	3297	224	84740	710,914
065/066	1843	593	3643	6857	128	1287	83334	4663	222	102570	813484
066/067	1888	780	4524	12268	145	1975	168707	11460	40	201787	1015271
067/068	1610	1370	1969	8510	115	3087	138907	7937	135	163640	1178911
Grand Total	11829	6211	23552	57422	2323	9768	665636	37034	2431	814467	

Source: Department of Transport Management, Government of Nepal

The changing need for automobile has led tremendous inflow of automobile to the country from different countries. Till the fiscal year 059/060, the total numbers of automobile registered was 4,02,054, by the fiscal year 065/065 it was 813484. The increase was nearly TWO times. That means in last seven years the total automobile increased by two times. Facilities of financing, has broaden the market by providing accessed to middle class as well. By the end of the fiscal year 2067/68 there were 163640 vehicle was registered in a fiscal year ,in the year 061/62 there is no any pickup vechicle was registered ,but at the end of the year 2067/68 it will be 9,768. Motor cycle is used for mostly because of its reliability, so in the fiscal year 059/60 it was imported 29,404 its growing up and while in the year 064/65 the motar cycle was 69666 imported.finally the last year data total motorcycle was imported 1,38,907 in the year 067/68.Tractor, 7,937 Micro bus 115 Others automobile. From the fiscal year micro-bus also has been started to registered and reached to total no. of 2323 by the end of the fiscal year 2067/68. People having money are investing on automobiles, as a good investment sector. A number of transport (Yatayat) Company/Organization /business association are the result of this. The operation of transport companies have led to increase in registration of automobiles in country.

Table No. 4.2

Percentage Change of Annual Registration of Total Vehicles Vs. Car Jeep and Van

Fiscal Year	Total	Percentage Change	Car, Jeep and Van	Percentage Change
059/60	37,610	-	2,906	-

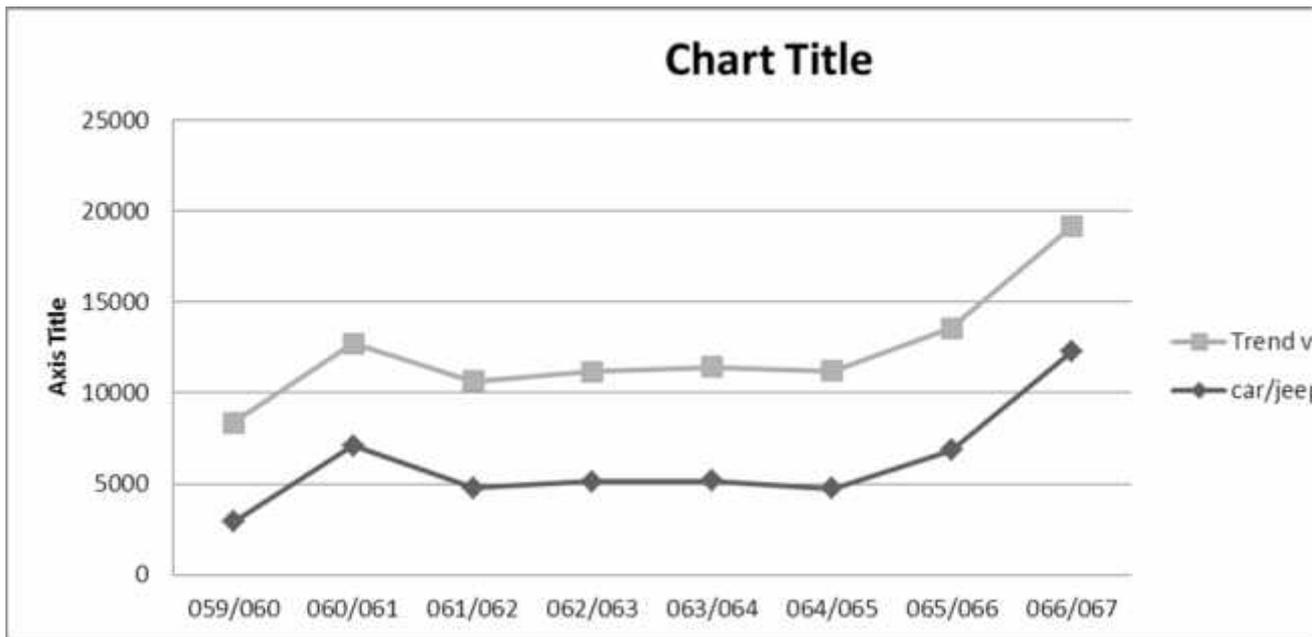
060/61	39,699	5.55	7,079	143.60
061/62	40,711	2.55	4781	-32.40
062/63	54975	35.04	5114	6.97
063/64	88735	61.41	5156	0.82
064/65	84740	-4.50	4741	-8.05
065/66	102570	21.04	6857	44.63
066/67	201787	96.73	12268	78.91
067/68	163640	-18.90	8510	-30.63
	814467	-	57422	

In the fiscal year 060/61 registration of total automobile increased by 5.55% in the next fiscal year it again increased by 2.55 %. Again in the fiscal year 062/63 it showed larger increment of 35.04%. 61.41% was the huge increment for the year 063/64. But in the fiscal year 064/65 it decreased by 4.50%,

which was followed by larger increase of 21.04%, in subsequent year. Again in the fiscal year 066/67 it increased by 96.73% which was one of the huge increment in automobiles up to till now. Then it decreased by 18.90% in the following fiscal year 067/68.

Figure No. 4.1

Percentage Change in Annual Automobile Registration



Source : Table No. 4.2

The figure shows that the percentage change in registration of car, jeep and van has also the same direction, with slightly changed magnitude. In the last nine years the total registration of car, jeep and van increased. In the fiscal year 060/61, it increased by 143.60%. But in the fiscal year 061/62 it decreased by 32.40%. It increased by 6.97% in the fiscal year 062/63. In the fiscal year 063/64 it slightly increased by .82% but it decreased by 8.05% in fiscal year 064/65. The number of car, jeep & van registration was highly increased by 44.63% in fiscal year 065/66 and again in fiscal year 066/67, it increased by 78.91%. but it decreased by 30.63% in fiscal year 067/68 due the instability of the government and due to the increment of custom rate of vehicles i.e 238%.

Table No. 4.3

Trend Analysis of Annual Registration of Total Automobile

Fiscal	Total	$x = 2(X - \bar{X})$	x^2	xy	$y = 90496.33 + 5916.73x$
--------	-------	----------------------	-------	----	---------------------------

Year(X)	Vehicle Registration (Y)	2063.5)			
059/060	37610	-9	81	-338490	37245.76
060/061	39699	-7	49	-277893	49079.22
061/062	40711	-5	25	-203555	60912.68
062/063	54975	-3	9	-164925	72746.14
063/064	88735	-1	1	-88735	84579.6
064/065	84740	1	1	84740	96413.06
065/066	102570	3	9	307710	108246.52
066/067	201787	5	25	1008935	120079.98
067/068	163640	7	49	1145480	131913.44
Total	814467		x=249	xy=1473267	

Let the linear equation describing the trend be: $y = a + bx$

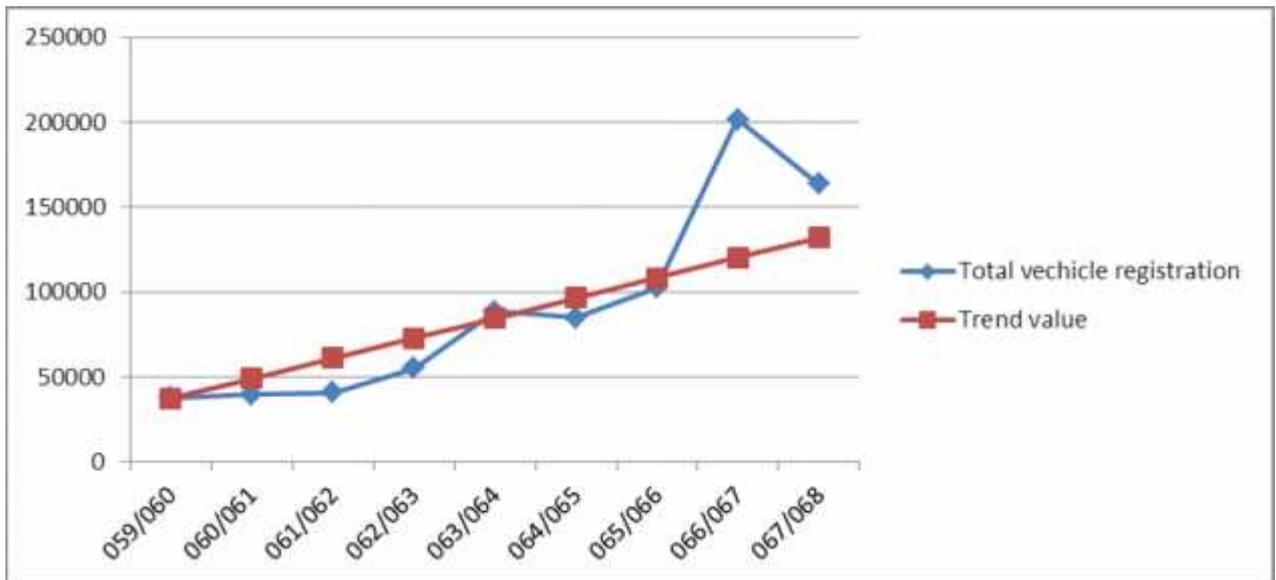
Since $x = 0$

$$a = \frac{y}{n} = \frac{814467}{9} = 90496.33$$

$$b = \frac{xy}{n} = \frac{1473267}{126} = 11692.59$$

Figure No. 4.2

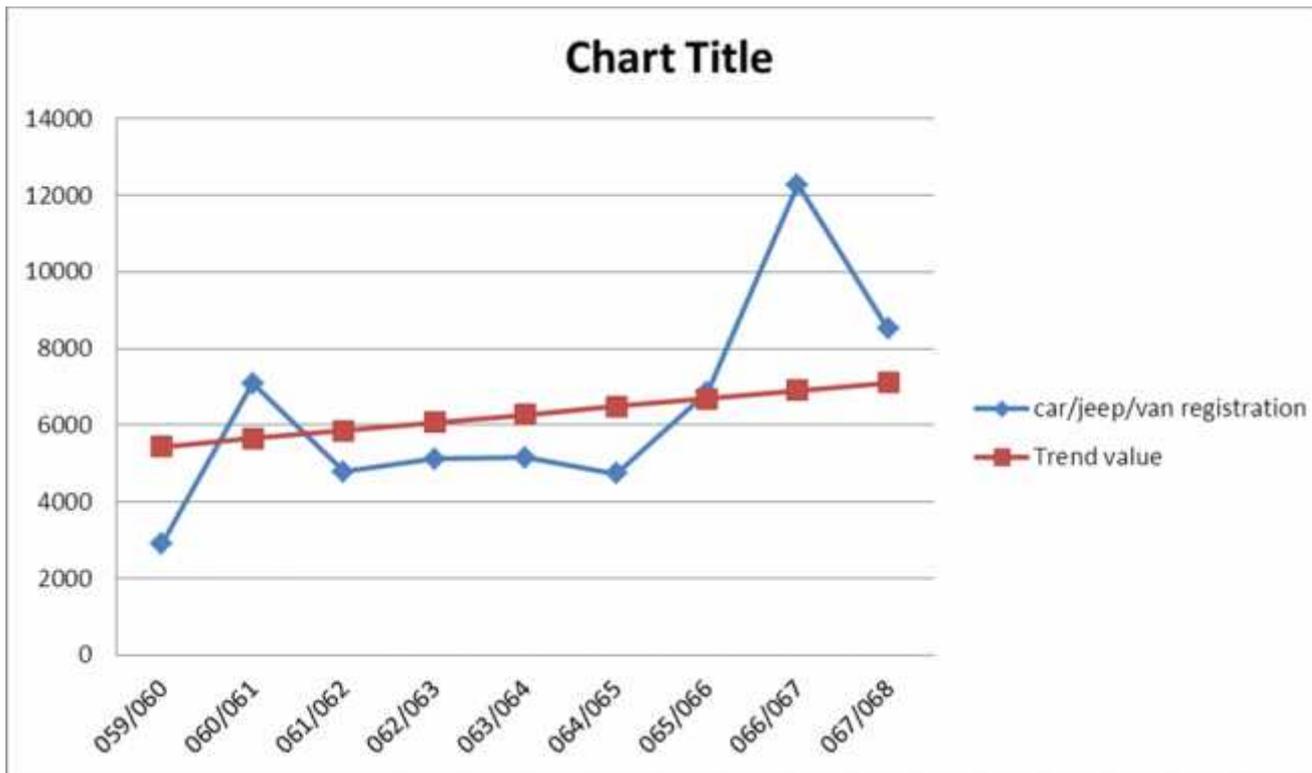
Trend Line for Total Vehicle Registration



The figure shows trend line for total automobile registration. The total automobile registration has been in fluctuating trend. Although, from trend analysis, it can be concluded that the growth rate was positive and increasing with growth rate of 1,347 numbers per year. For the fiscal year 2063/64,

$$x = 2(X - 2063.5) = 2(2068 - 2063.5) = 9$$

Fiscal Year(X)	Car, Jeep, Van/registration(Y)	$x = 2(X - 2063.5)$	x^2	xy	$y = 6380.22 + 104.59x$
059/060	2906	-9	81	-26154	5438.91
060/061	7089	-7	49	-49623	5648.09
061/062	4781	-5	25	-23905	5857.27
062/063	5114	-3	9	-15342	6066.45
063/064	5156	-1	1	-5156	6275.63
064/065	4741	1	1	4741	6484.81
065/066	6857	3	9	20571	6693.99
066/067	12268	5	25	61340	6903.17
067/068	8510	7	49	59570	7112.35
Total	57422		$x^2 = 249$	xy = 26042	



This figure shows Trend Line for Car/jeep/van. The registration of these automobiles has been in fluctuating trend. Although, from trend analysis, it can be concluded that the growth rate was positive and increasing with growth rate of 106 numbers per year.

Capital accumulation, mode of control, decision making, and size of business depend upon type of ownership to very large extent. One (20%) out of five automobile dealer was registered as sole trading and the remaining four (80%) were registered as private limited. Except Arun Intercontinental Traders (AIT) other automobile dealers were registered as private limited. AIT was registered as sole trading.

S.N	Dealer	Type of Organization
-----	--------	----------------------

		Vehicle-PC	Vehicle-CV	Spares	Services
1	AIT	✓	-	✓	✓
2	LIPL	✓	-	✓	✓
3	GFPL	✓	✓	✓	✓
4	STPL	✓	✓	✓	✓
5	VMPL	✓	✓	✓	✓
Total		5	3	5	5

4.2 Category of the Products Dealt by Sample Dealers

Table No. 4.7

Category of the Products Dealt by Sample Dealers

The focus of the study was PC (Light Automobiles) only. But some automobile dealers deal both light and heavy commercial automobiles. Some auto maker manufactures both type of automobile and in turn their dealers also deal the entire products. Chevrolet, ford , Tata motor manufacturer produce their

automobile in wide variety including both commercial heavy automobiles and passenger cars. So their dealer deals both type of automobiles out of 5 sample dealers, 3 dealers deal commercial heavy automobiles. For after sales support, all the dealers have own workshop and spare parts centre/outlets. Arun Intercontinental Traders has Shree Himalayan Ent. Pvt. Ltd to manage Spare and Services

4.3 Management Accounting Practices in the Sample Dealers

Table No. 4.8

Management Accounting Practices in the Sample Dealers

S.N	Management Accounting Tools	Organization					Total	%
		AIT	LIPL	GFPL	STPL	VMPL		
1	Capital Budgeting	✓	✓	-	✓	✓	4	80
2	Cost Segregation into and Variable	✓	✓	✓	✓	✓	5	100
3	Tax Effect Analysis	✓	✓	✓	✓	✓	5	100
4	Standard Costing	✓	✓	✓	✓	✓	5	100
5	Break Even Analysis (BEP) Cost-Volume Profit (CVP) Analysis	✓	✓		✓	✓	4	80
6	Ratio Analysis/ Financial Statement Analysis	✓	✓	✓	✓	✓	5	100
7	Master Budgeting	✓	✓	✓	✓	✓	5	100
8	Flexible Budgeting	✓	-	-	✓	✓	3	60
9	Responsibility Accounting	✓	-	-	✓	✓	3	60
10	Activity Based Costing(ABC)	✓	-	✓	-	-	2	40

11	Cash Flow Statement	✓	✓	✓	✓	✓	5	100
12	Zero Based Budgeting	-	-	-	-	-	0	0
13	Lease or Buy	✓	-	-	✓	-	1	20
Total		11	8	7	11	10		
Percentage		84.6 2	61.54	53.85	84.62	76.92		

Where,

Arun Intercontinental Traders	AIT
Laxmi intercontinental Pvt. Ltd.	LIPL
Go ford Pvt. Ltd.	GFPL
Sipradi Trading Pvt. Ltd.	STPL
Vijaya motors Pvt. Ltd.	VMPL

[There abbreviations have been used here for ease which may or may not have used by the dealers themselves.]

Capital Budgeting was practiced by 80% (4 out of 5) automobile dealers. GFPL (Kia Motors) did not practice capital budgeting. They didn't felt necessary it yet and took it as not relevant to their business. Capital budgeting is necessary and relevant to each and every business whether it is manufacturing or trading. Other dealers practiced capital budgeting and they used different techniques of capital budgeting.

All automobile dealers under sample selection used cost segregation into fixed cost and variable cost. Similarly all automobile dealers did tax effect analysis and applied standard costing. Break even (BEP) analysis was practiced by 4 out of 5 (80%) dealers. GFPL did not practice BEP; they didn't feel it necessary and relevant yet. BEP is an important tool of profit planning. Dealers can express their Break Even (No profit no loss) in terms of sales volume, number of automobile sold, no of automobile serviced etc. All these five dealers did financial statement analysis and master budgeting. But flexible budgeting was

practiced by 3 out of 5 (60%) dealers. There as on was the same as they did not feel necessary and relevant. Flexible budget can be prepared in terms of sales volume of different range (number of automobile sold for sales and number of automobile serviced for workshop likewise inventory turnover for spare parts). It is also a technique of profit planning in the hand of manager.

As an effective method of evaluating performance of people and department, responsibility accounting was practiced only by 3 out of 5 (60%) automobile dealers. Both Indian automobile dealers AIT and STPL did practice responsibility accounting. VMPL also used responsibility accounting. Remaining LIPL and GFPL did not practice it.

Activity Based Costing (ABC) was practiced only by 2 out of 5 (40%) automobile dealers; AIT and GFPL, one Indian automobile dealer and one from others automobile dealer. LIPL, VMPL and Indian automobile dealer STPL did not practice ABC. They applied the concept but did not practice the tool. All the sample automobile dealer s practiced cash flow statement as a part of master budgeting. Zero based budgeting (ZBB), modern technique of

budgeting / forecasting was not used by any of the seleGFPLd automobile dealers.

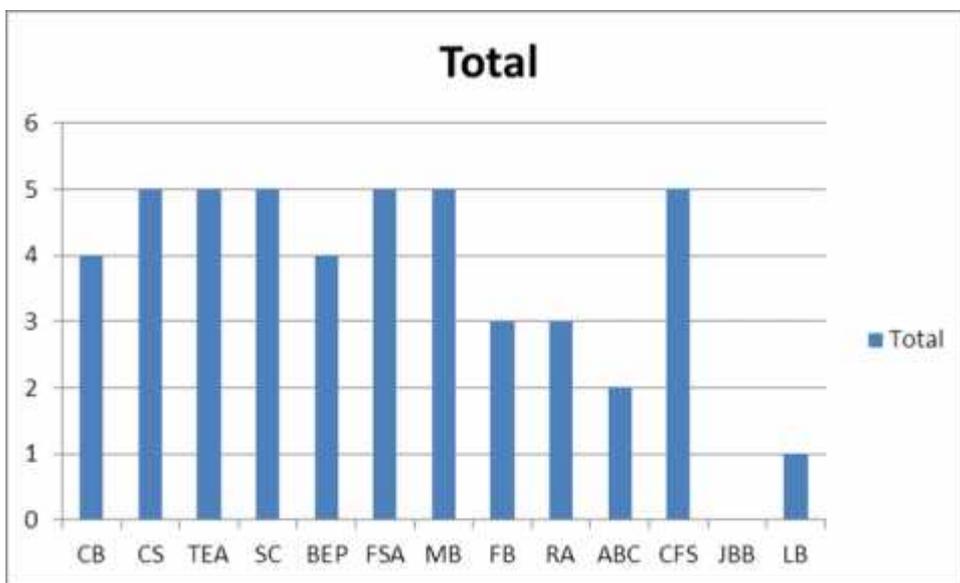
Lease or buy, decision m a king regarding alternative choices were practiced by

Only one Indian automobile dealer. Other automobile dealers did not use those tools since they felt it's not relevant and not necessary yet.

Cost segregation into fixed cost and variable cost, tax effect analysis, stand a rd costing, ratio analysis, master budgeting, cash flow statement were practiced by all sample automobile dealers. Zero based budgeting was not in practice at all. Other capital budgeting, break even analysis, flexible budgeting, responsibility accounting, activity costing and lease or buy were partially practiced in these seleGFPLd sample automobile dealers.

Figure No. 4.5

Management Accounting Tools Practiced by Vehicle Dealers



Source: Table No. 4.8

Where

CB= Capital Budgeting

CS= Cost Segregation into Fixed and Variable

TEA = Tax Effect Analysis

SC= Standard Costing

BEP = Break Even Analysis (B EP)/Cost-Volume-Profit (CVP) Analysis

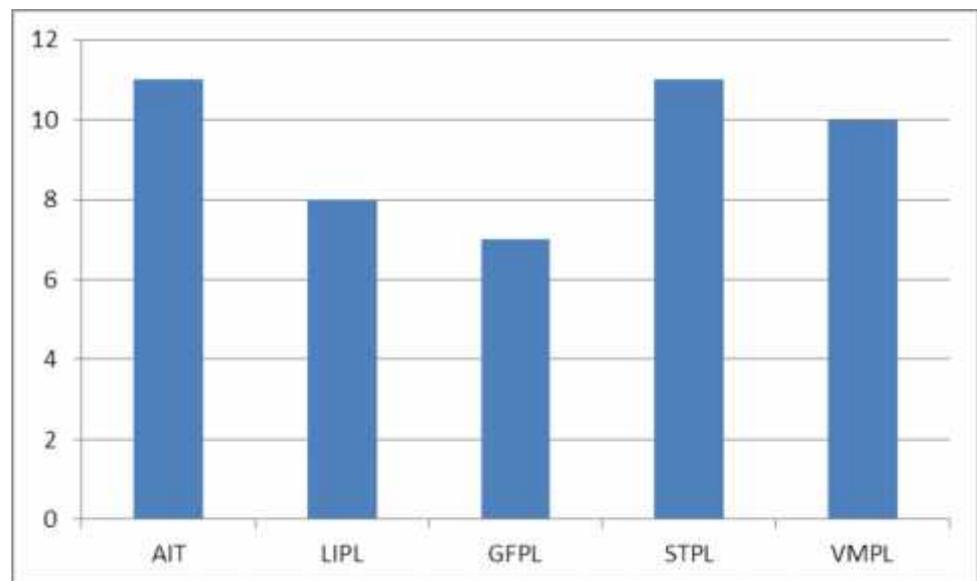
FSA = Ratio Analysis/Financial Statement Analysis

MB = Master Budgeting

- FB = Flexible Budgeting
- RA= Responsibility Accounting
- ABC = Activity Based Costing (ABC)
- CFS = Cash Flow Statement
- ZBB = Zero Based Budgeting
- LB= Lease or Buy

Both Indian automobile dealers, AIT and STPL have been practicing almost 11 out of 13 (84.62%) management accounting tools. Dealer of Japanese Automobile Toyota, VMPL has practiced 10 out of 13 (76.92%) tools. Similarly numbers of management accounting tools practiced by Korean automobile dealers LIPL and GFPL were 8 and 7 respectively.

Figure No. 4.6
Number of Tools Practiced by Dealers



Source: Table No. 4.8

Thus LIPL and GFPL were practicing less management accounting tools. The figure shows numbers of management accounting tools practiced by sample automobile dealers. Although management accounting has wide application in each kind of organization, dealers have not practiced all of them.

$$\begin{aligned} \text{A.M. } \bar{X} &= A + \frac{d}{n} \\ &= 10 + \frac{-3}{15} \\ &= 9.4 \end{aligned}$$

Hence the Average accounting tools used was 9.4, rounding the figure in average 9 tools were used by the sample automobile dealers.

Name of organization	No. of tools practiced (X)	d=X-A(10)	d ²
Arun Intercontinental Traders LIPL	11	1	1
Laxmi Intercontinental pvt. Ltd.	8	-2	4
go ford pvt Ltd.	7	-3	9
Sipradi Trading Pvt. Ltd.	11	-1	1
Vijaya Motors Pvt. Ltd.	10	0	0
		d=-3	d ² =15

Null hypothesis (H): $\mu = 9$ i.e. the automobile dealers have practiced at least 9 out of 13, Management accounting tools. In an other words, the management accounting tools practiced by these dealers

are above 9.

Alternative Hypothesis(H): $\mu < 9$ (left-tailed test) i.e. these dealers have practiced less than 9 management accounting tools.

$$\begin{aligned} \text{Also, } \sigma^2 &= S^2 = \frac{1}{n-1} \left[\sum d^2 - \frac{(\sum d)^2}{n} \right] \\ &= \frac{1}{4} \left[15 - \frac{(-3)^2}{5} \right] \\ &= 3.3 \\ S &= \sqrt{3.3} \\ &= 1.816 \end{aligned}$$

Test Statistic,

$$\begin{aligned} t &= \frac{\bar{X} - \mu}{S / \sqrt{n}} \\ &= \frac{9.4 - 9}{1.8166 / \sqrt{5}} \\ &= .4924 \end{aligned}$$

Degree of freedom (d.f.) = n-1 = 5-1 =4

Level of significance, $\alpha = 0.05$

Critical Value: The tabulated value of t at $\alpha = 0.05$ and 4 d.f. for one tailed test is 2.132, $t^{0.05,4} = 2.132$

Decision

Since the calculated value of t is less than the tabulated value of t, the null hypothesis

(H) is accepted. Hence it can be concluded that the selected

dealers have practiced more than 9 out of 13 management accounting tools.

4.4 Reason for not Practicing the Management Accounting Tools

Table No. 4.10

Reason for Not Practicing the Management Accounting Tools

S.N	Reasons	Dealers					Total
		AIT	LIPL	GFPL	STPL	VMPL	
1	Not Relevant	✓	-	✓		✓	3
2	Not Felt Necessary		✓	✓	✓		3
3	Cost Factor						
4	Lack of Information						
5	Lack of Expertise						
Total		5	1	5	1	1	

All the automobile dealers accepted only two reasons for not practicing the management accounting tools; those were not relevant and not felt necessary yet. They did not think they lack information and expertise, nor they agreed the time

and cost as the cause of not practicing these management accounting tools.

4.5 Access to Information Technology (IT)

Table No. 4.11

Access to Information Technology (IT)

S.N	Dealer	Type of Organization			
		professional	Internal IT	Manuals	Total
1	AIT	✓	✓	-	2
2	LIPL	✓	-	-	1
3	GFPL	✓	-	-	1
4	STPL	✓	✓	-	2
5	VMPL	✓	✓	-	2
Total		5	3	-	

This is the age of Information Technology (IT). It is dominantly and drastically changing the way of doing work making the working system systematic. Tedious works are taking away by these IT system s. The automobile dealers need awareness to wards the importance of IT. The table shows that Manual

Accounting System has been totally removed from these sample automobile Dealers. All the automobiles dealers(5 out of 5) were using professional accounting software. Out of 5 automobile dealers, 3 have their own IT departments to develop own systematic and regulate professional systems. Both of Indian Automobile dealers AIT and STPL have their own IT department. But in others category, only VMPL (1 out of 3) has their own internal IT department.

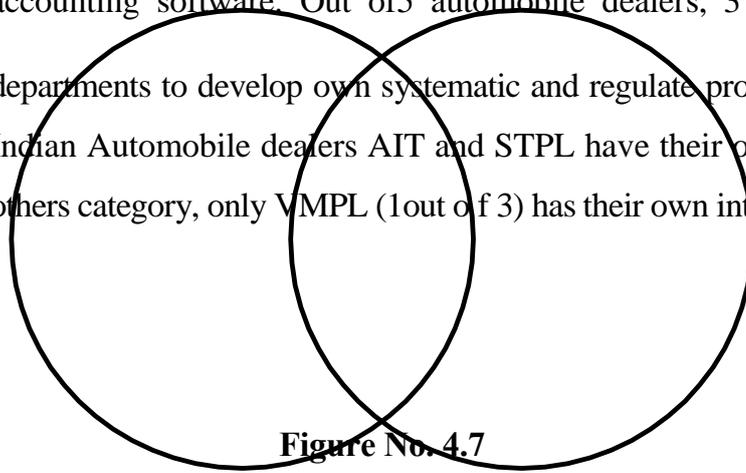


Figure No. 4.7

System in Vehicle Dealers

	1+2	
1. professional	AIT	2. Int, IT
LIPL	STPL	
GFPL	VMP	

4.6 Technique to Segregate Cost into Variable and Fixed Cost

Table No. 4.12

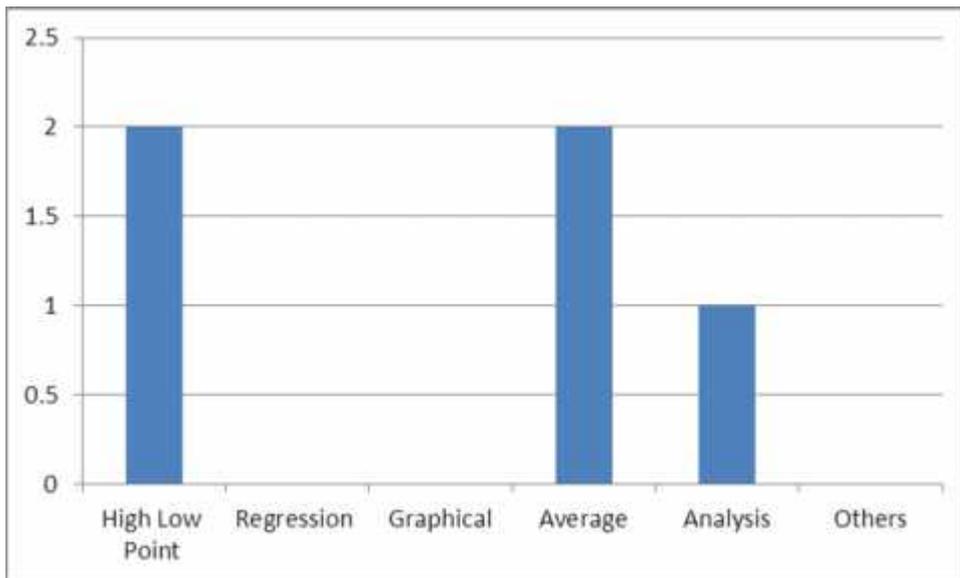
Technique to Segregate Cost into Variable and Fixed Cost

S.N	Technique	Dealers					Total
		AIT	LIPL	GFPL	STPL	VMPL	

1	High Low Point Method	✓				✓	2
2	Regression Method						
3	Graphical Method						
4	Average Method			✓	✓		2
5	Analysis Method		✓				1
6	Others						
Total		1	1	1	1	1	5

Only two automobile dealers (AIT and VMPL) used high low point method to segregate mix cost into variable and fixed cost. Group wise 1 out of 2 Indian automobile dealers and 1 out of 3 other automobile dealers used High low point method. GFPL and STPL used average method. LIPL used analysis method. The most accurate method namely Regression was not in practice at all. Likewise graphical method was also not practiced by both Indian and other automobile dealers.

Figure No. 4.8
Technique of Cost Segregation



High and low point method was practiced by 40% (2 out of 5) of sample automobile dealers. Similarly average method was also practiced by 40% (2 out of 5) of sample automobile dealers. .

4.8 Basis for Preparation of Budget

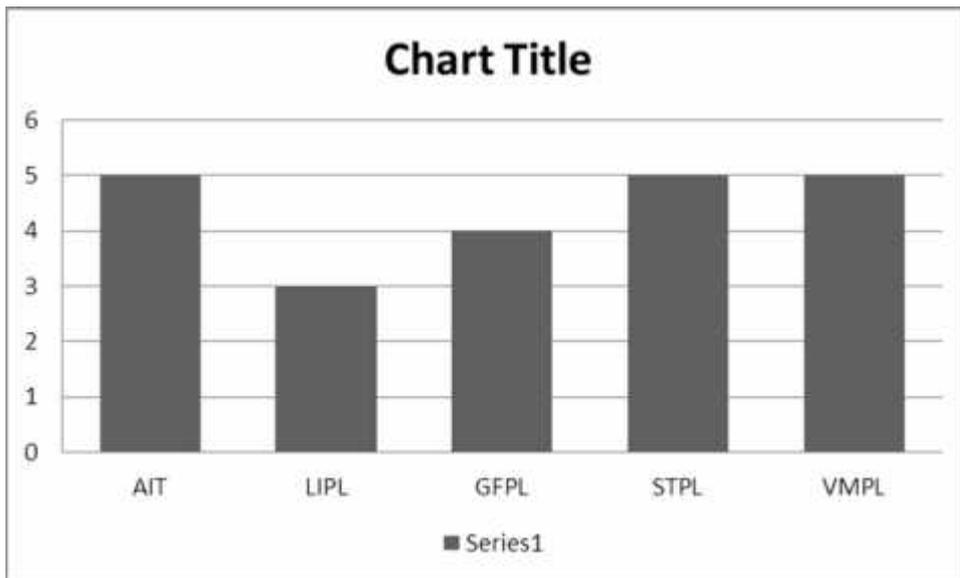
Table No. 4.13

Basis for Preparation of Budget

S. N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Past budget	✓		✓	✓	✓	5
2	Historical/ past Data	✓			✓	✓	3
3	Zero Based						

	Budgeting						
4	Activity Based Budgeting	✓		✓	✓	✓	4
5	Target set	✓	✓	✓	✓	✓	5
Total		4	2	3	4	4	17

All sample automobile dealers considered past budget and target to make their budget. Similarly past actual data was used by 60% (3 out of 5) of dealers. The dealers were AIT, STPL and VMPL. Zero Based Budgeting (Z BB) was not in practice. However, Activity Based Budgeting (ABB) was practiced by 80% (4 out of 5) automobile dealers. Except LIPL other automobile dealers used Activity Based Budgeting (ABB). The dealers used multiple methods rather than only one. AIT, STPL and VMPL used past budget, historical/past data, ABB and target set. LIPL used past budget and target set only. GFPL used past budget, ABB and target set. The figure shows different bases used by automobile dealer for preparation of budget.



4.9 Type of Budget

Table No. 4.14

Types of Budget

S. N	Technique	Dealers					Total
		AIT	LIPL	GFPL	STPL	VMPL	
1	Overall Master Budget	✓	✓	✓	✓	✓	5
2	Operational Budget Only						
3	Long Term Budget						
4	Annual Budget	✓	✓	✓	✓		4
5	Cash Budget Only			✓			1
Total		2	2	3	2	1	10

All sample

automobile dealers practiced overall master budget. They used to prepare annual budget. No dealer practiced operational budget and long term bud get. GFPL practiced cash budget only also and VMPL practiced overall master budget. Annual budget and overall master budget was practiced by AIT, LIPL, GFPL and STPL.

4.10 Responsibility for Preparation of Budget

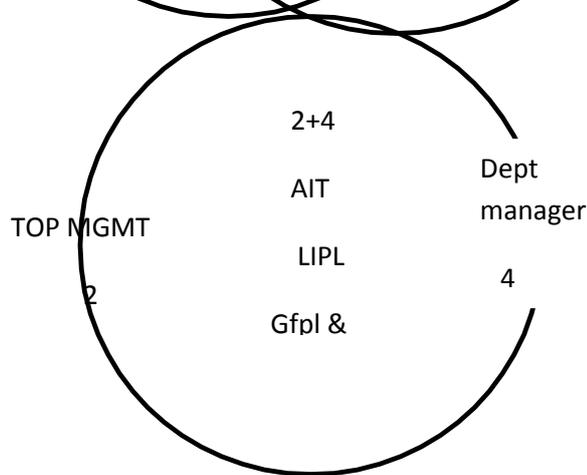
TABLE NO 4.15

Responsibility for Preparation of Budget

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Separate Budget Committee						
2	Top Management	✓			✓		2
3	Planning Department					✓	1
4	Departmental Manager/ Incharge	✓	✓	✓	✓		4
5	Departmental Manager/						

	Incharge						
	Total	2	1	1	2	1	7

The sample automobile dealers have no separate budget committee. Budget was prepared mostly by Departmental manager/incharge. In 80% (4 out of 5) of dealers budget was prepared by Departmental manager/incharge. Along with Departmental manager, top management prepared budget in AIT and STPL. In VMPL budget is prepared by planning department. In terms of percentage, in 40% (2 out 5 dealers) of dealer, the top management prepared budget. Both of these two automobile dealers were Indian automobile dealers, AIT and STPL.



Planning Dept

3

vmpl

4.11 Time Frame of Budget

Table No. 4.16
Time Frame of Budget

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Short Term (one year or less)	✓	✓	✓	✓		4
2	Mid-term (between one and five years)	✓				✓	2
3	Long term (five years and more)		✓				1
				✓			

Total	2	2		1	1	7
-------	---	---	--	---	---	---

Preferably automobile dealers used to prepare annual master budget. 80% of dealers (4 out of 5, AIT, LIPL, GFPL and STPL) used to prepare short term (≤ 1 Year) budget. 40% (2 out of 5, VMPL and AIT) used to prepare mid term (1-5 years) budget. Along with the short term budget LIPL used to prepare along term (> 5 years) budget as well. Only LIPL prepared long term budget. AIT used to prepare both short term and midterm budget.

4.12 Techniques of Capital Budgeting

Table No. 4.17

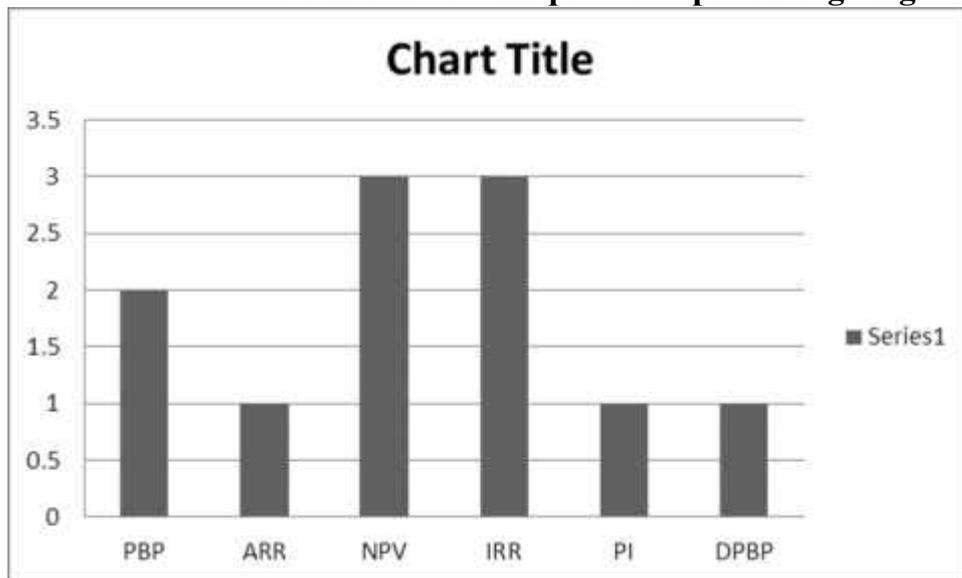
Techniques of Capital Budgeting

S. N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Payback Period (PBP)	✓				✓	2
2	Average Rate of Return (ARR)					✓	1
3	Net Present Value (NPV)	✓			✓	✓	3
4	Internal Rate of Return (IRR)		✓		✓	✓	3

5	Profitability Index (PI)					✓	1
6	Discounted Payback Period (DPBP)					✓	1
		2	1		2	6	11

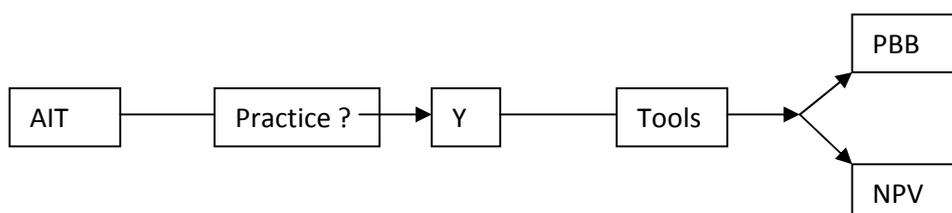
Figure No. 4.11

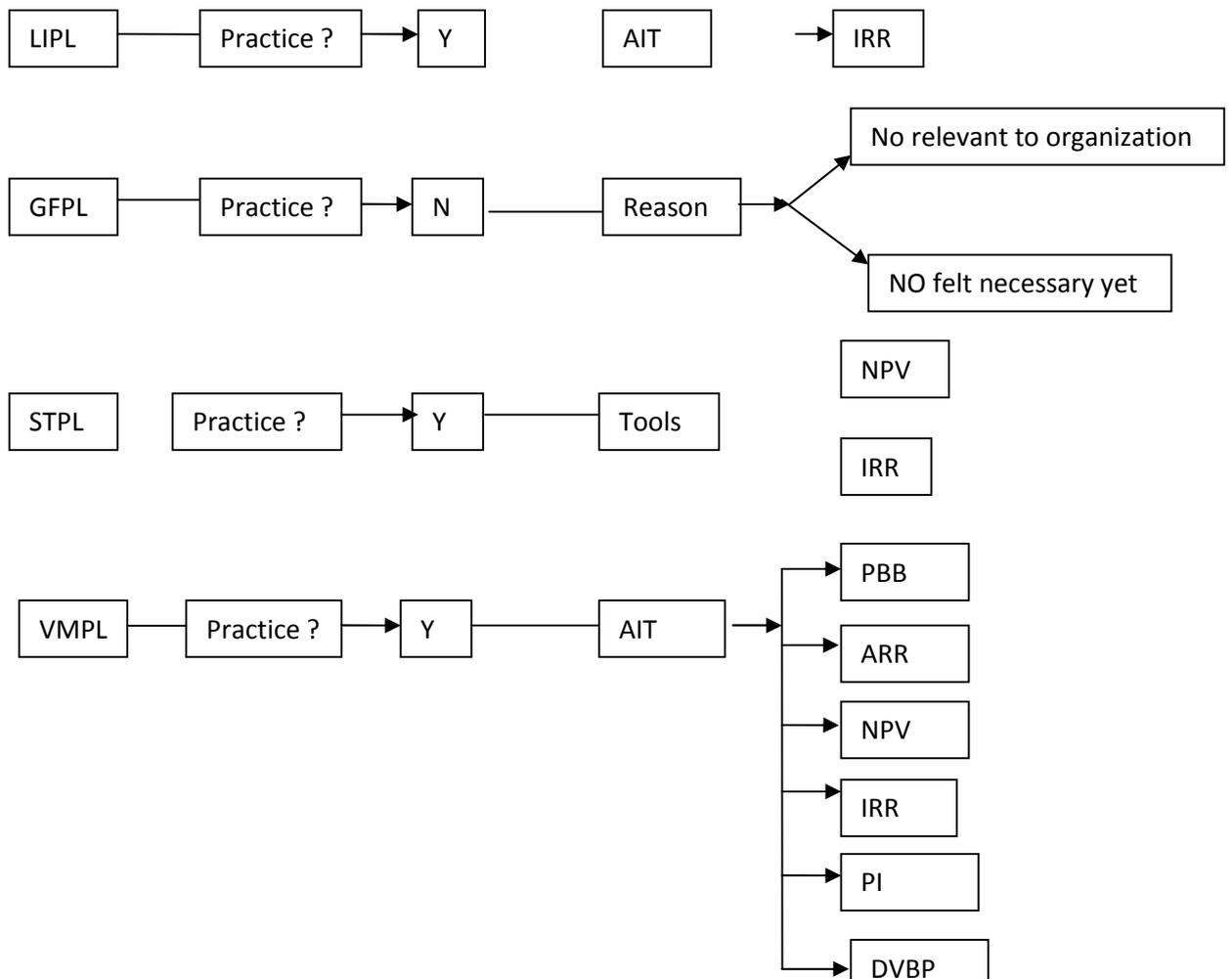
Use of Different Techniques of Capital Budgeting



For Evaluation of project/capital budgeting Net Present Value (NPV) and Internal Rate of Return (IRR) were mostly used. These two techniques were used by 60% (3 out of 5) automobile dealers. AIT, STPL and VMPL used NPV. Similarly LIPL, STPL and VMPL used IRR. Some dealers used multi technique rather than only one technique

Figure No. 4.12





VMPL used all most all techniques PBP, ARR, NPV, IRR PI and DVBP. AIT uses PBP and NPV. LIPL used only IRR. STPL used NPV and IRR both. But GFPL was not doing capital budgeting at all. Payback period was used by two automobile dealers. Average rate of return, profitability index and discounted payback period each were practiced by only one automobile dealer. The most appropriate method net present value was not practiced by all of the selected automobile dealers. LIPL was practiced only internal rate of return.

4.13 Pricing Products/Services

Table No. 4.18

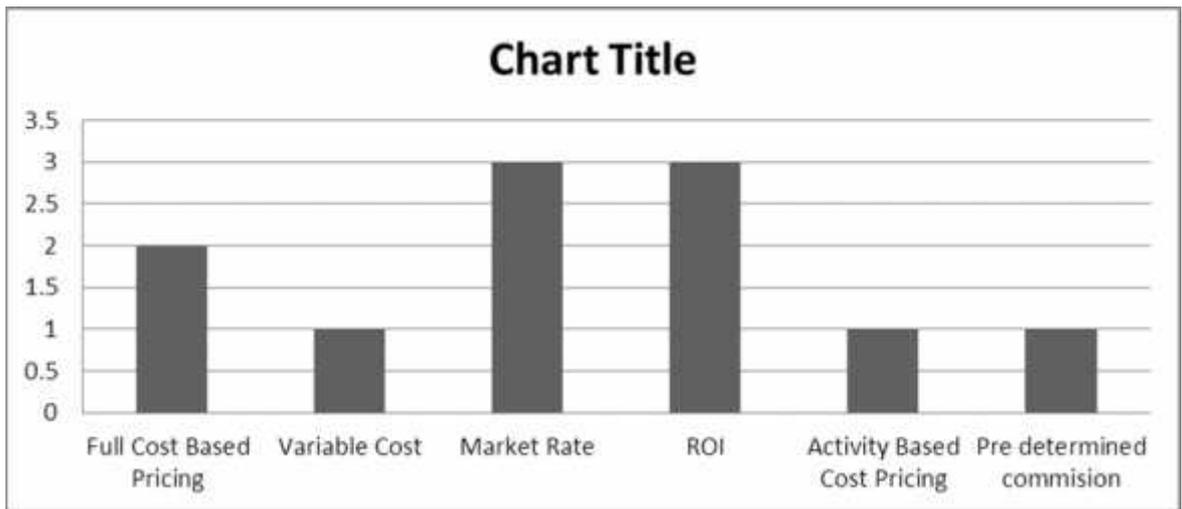
Pricing Product /services

S. N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Full Cost Based Pricing (Absorption)	✓	✓	✓	✓		4
2	Variable Cost						1
3	Market Rate				✓		1
4	Target Return on Investment (ROI)					✓	1
5	Activity Based Cost Pricing			✓			1
6	Pre-determined Commission(Percentage)						
Total		1	1	2	2	1	7

Automobile dealers need to set price for their entire product; automobile, spare parts and services. AIT, LIPL, GFPL and STPL (4 out of 5 or 80%) did pricing on the basis of full (absorption) costing based. Unlike these dealers VMPL did pricing on Return on Investment (ROI) basis. Along with absorption GFPL considered Activity Based Costing as well. Similarly STPL considered market rate along with absorption costing. There was no practice of variable cost pricing and pre-determined commission.

Figure no 4.13

Bases for pricing



As there was no practice of pricing on the basis of pre-determined commission, dealers are independent to set price of their product. AIT , LIPL and USTPL considered single factor/technique. But GFPL and STPL considered two bases for pricing their products.

S. N	Technique	Dealers					Total
		AIT	LIPL	GFPL	STPL	VMPL	
1	Profit/Loss	✓		✓	✓	✓	4
2	Budgetary Control	✓		✓	✓		3

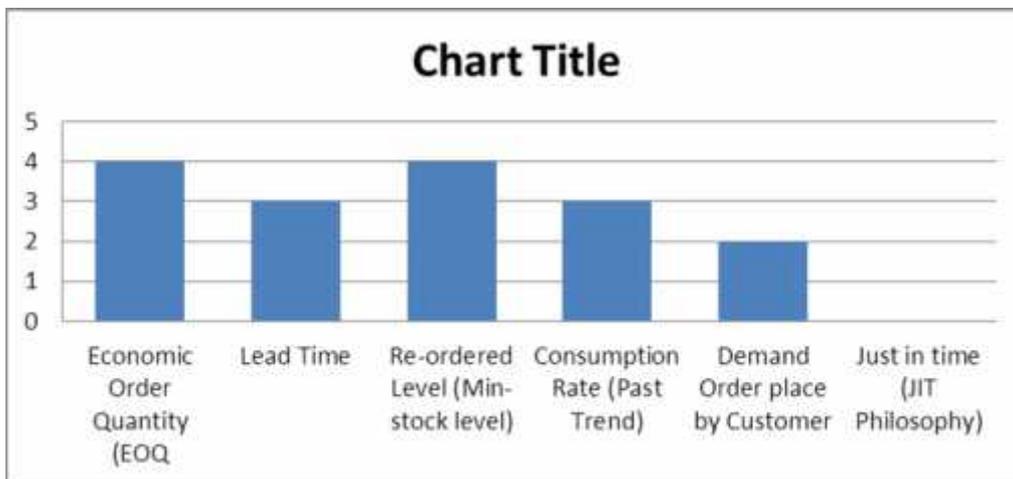
3	Standard Costing	✓			✓		2
4	Financial Statement Analysis	✓	✓	✓	✓		4
5	Cash-flow analysis	✓		✓	✓		3
6	Activity based costing						
Total		5	1	4	5	1	16

4.14 Measure and Control of Overall Performance

Table No. 4.19

Measure and Control of Overall Performance

Automobile dealers preferably used financial statement analysis and profit and loss to evaluate overall performance. 80% (4 out of 5) did evaluation on the basis of profit and loss and financial statement analysis. AIT, GFPL, STPL and VMPL used profit and loss.



Similarly AIT, LIPL, GFPL and STPL used financial statement analysis to measure, evaluate and control overall performance. VMPL definitely did financial statement Analysis/ratio analysis but for evaluation of performance it

preferred to use profit and loss only. 3 out of 5 automobile dealers (ATI, GFPL, and STPL) measured budgetary control for evaluation of performance.

Standard costing was used only by Indian automobile dealers, AIT and STPL. In other than Indian automobile dealers (LIPL, GFPL and VMPL) they practiced Standard costing but did not apply standard costing as base to measure and control overall performance. Cash flow statement analysis was used to measure performance in 60% automobile dealers (3 out of 5; AIT, GFPL and STPL). LIPL and VMPL were considering single factor/base. AIT, GFPL and STPL were using multifactor.

Activity Based Costing (ABC) was not practiced for performance evaluation. Only two dealers AIT and GFPL are using ABC as management accounting tool but they were not using this tool for performance evaluation.

Responsibility accounting was practiced in 3 out of 5 automobile dealers (AIT, STPL and VMPL). Responsibility accounting is also a technique to measure performance people and department.

4.15 For Forecast/estimate the Costs and Revenues

Table No. 4.20

For Forecast/estimate the Costs and Revenues

S.N	Technique	Dealers
-----	-----------	---------

		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Past Trend Analysis	✓	✓	✓	✓	✓	5
2	Zero Based Budgeting						
3	Market Survey	✓		✓	✓		3
4	Judgmental analysis				✓		1
Total		2	1	2	3	1	9

All automobile dealers did forecast/estimate the cost and revenue on the basis of past trend analysis. Along with the past trend analysis market survey was also used by AIT, GFPL and STPL. In term of percentage market survey was used by 60% (3 out of 5) automobile dealers. Judgmental analysis was done only by STPL. Modern techniques Zero Based Budgeting (ZBB) was not practice by any of these automobile dealers. LIPL and VMPL were relying on only past trend analysis. However AIT, GFPL and STPL were considering multifactor, to forecast/estimate the cost/revenues.

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	First in First Out (FIFO)	✓		✓			2
2	Last in Last Out (LIFO)		✓				1
3	Weighted Average				✓	✓	2
4	Simple Average						
Total		1	1	1	1	1	5

For costing of issue of inventory two dealers (AIT and GFPL) used FIFO, one dealer (LIPL) used LIFO and remaining two dealers (STPL and VMPL) used weighted average method. Simple average was not in practice.

4.17 Consideration for Inventory Procurement

Table No. 4.22

Consideration for Inventory Procurement

S. N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Economic Order Quantity (EOQ)	✓	✓		✓	✓	4
2	Lead Time	✓			✓	✓	3
3	Re-ordered Level (Min-stock level)	✓		✓	✓	✓	4
4	Consumption Rate (Past Trend)	✓			✓	✓	3
5	Demand Order place by Customer	✓			✓		2
6	Just in time (JIT Philosophy)						
7	Inventory Count (Period Model)	✓			✓		2
Total		6	1	1	6	4	18

4 out of 5 automobile dealers were practicing Economic order quantity (EOQ). Except GFPL other dealers were practicing EOQ while procuring inventory.

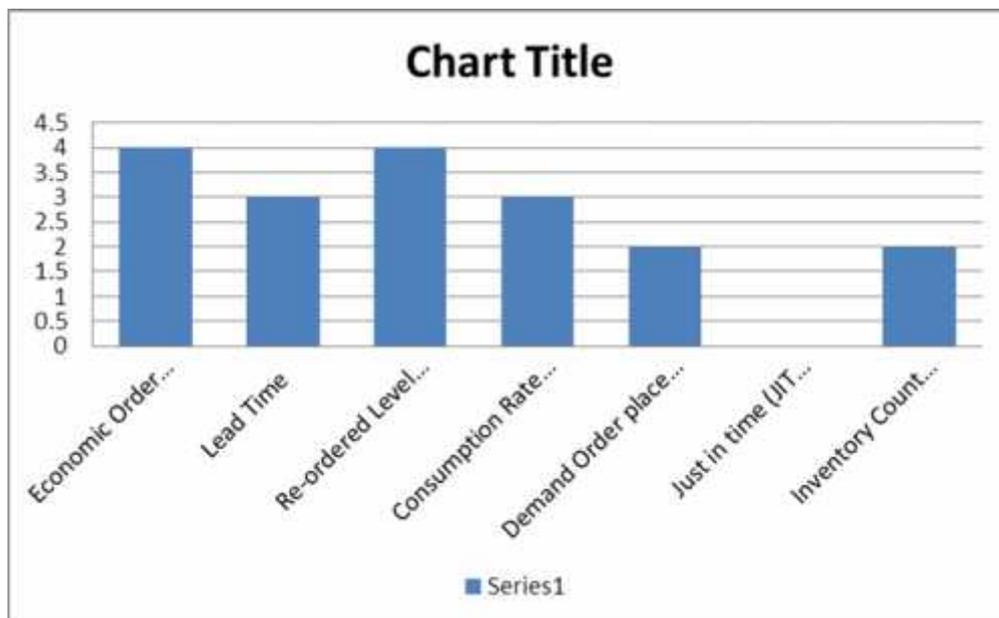
Lead time was considered by AIT, STPL and VMPL. Reorder level was

considered by AIT, GFPL, STPL and VMPL.

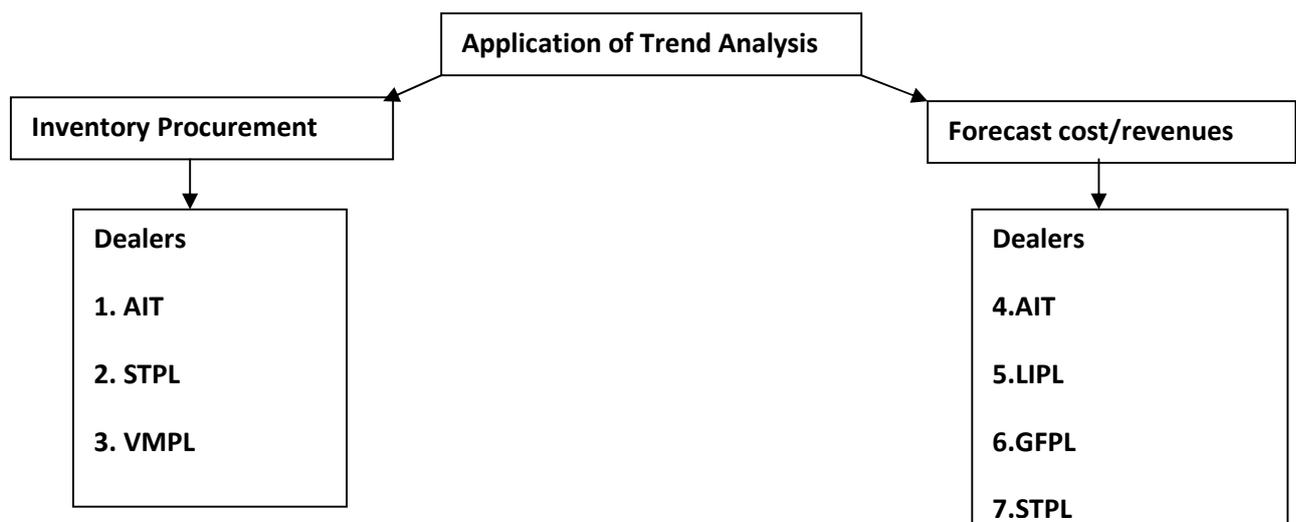
Hence 4 out of 5 (80%) dealers used reorder level. Similarly order placed by customer, inventory count (Period model) was considered only by Indian automobile dealers AIT and STPL. AIT, STPL and VMPL considered multi factors. But LIPL and GFPL were considering single factor. LIPL considered only EOQ and GFPL considered only reorder level.

Figure no.4.15

Considerations for inventory procurement



Only three automobile dealers; AIT, STPL and VMPL were using trend analysis. LIPL and GFPL were not applying trend analysis for planning inventory requirement.



New concept Just in Time (JIT) philosophy was not in practice. AIT and UTSPPL considered concept of JIT but not implemented it fully. Rather they practiced Automobile off the road (AOR).

AOR versus JIT

Automobile off the road (AOR) is a type of special order/indent placed by dealer on urgent cases. For normal case they do normal indent like weekly/monthly/yearly. If the automobile is off the road lack of any specific spares, such special order AOR is raised. It is raised to solve current problem as and when the spare is needed. Such type order is not placed for stocking the spares. Although AOR is also procuring the needed spare just in time, it is different from Just in time (JIT) philosophy. JIT system is philosophy of Procuring all the requirements just in time when they are needed, minimizing overstocking / hand ling and wastage. The AOR is only a kind of order which is not placed periodically, and placed in case of urgency only. But JIT is the philosophy of procuring all the items just in time whenever is needed. The entire automobile dealer practiced AOR but JIT was not in practice. They only applied concept of this philosophy.

4.18 Inventory Control

Table No. 4.23

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Total Value Basis	✓		✓	✓	✓	4
2	Total Quantity Basis	✓		✓	✓		3
3	Characteristics of Particularly item		✓				1
4	ABC Analysis				✓		1
Total		2	1	2	3	1	9

Inventory is a component of current assets. It should be optimum in both in terms of value and quantity. It is fund tied up for management which has alternative use if investment goes on excessive. If it's kept lower it will spoil the business due to non availability of the parts which affect sales of automobile and organization as a whole.

To control inventory total value basis (Cost approach) analysis is mostly used, 4 out of 5 (80%) used such practice. But LIPL was not practicing this technique. It was considering characteristic of particular items. Another mostly practiced technique was total quantity basis (Space approach).

Along with total value, total quantity was also considered by AIT, CTE and STPL (3 out of 5 dealers).

ABC analysis was practiced by STPL only, along with total value and total quantity. Both Indian Automobile dealers were considering multiple methods, LIPL and VMPL were considering single factor. Characteristics of particular items were identified only by LIPL for the controlling purpose.

4.19 Transfer Pricing

Table No. 4.24
Transfer Pricing

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Market Price Based			✓			1
2	Cost Price Based	✓	✓		✓		3
3	Target Return Based					✓	1
4	Negotiation						
5	General Pricing (opportunity cost basis)						1
Total		1	1	1	1	1	5

In automobile dealer ship mainly stock transfer from one department/branch to other department/branch constitutes transfer price. Likewise service charged by machine/lathe department to workshop is another form of transfer pricing. Similarly denting painting service charge by denting painting department to workshop is also a form of transfer. Such transfer pricing was done on market price based by CTE. It was done in target return basis by UTSP. The rest three dealers used cost price based. In terms of percentage 60% automobile dealers used cost price, 20% market price based and 20 % target return basis. No sample automobile dealer used negotiation pricing and general transfer pricing.

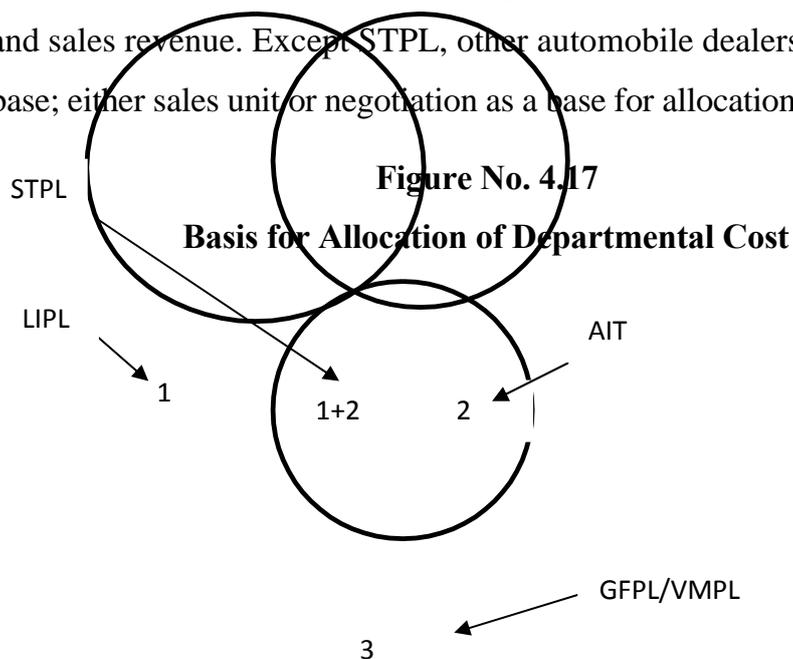
4.20 Allocation of Departmental Cost

Table No. 4.25

Allocation of departmental cost

S.N	Technique	Dealers					
		AIT	LIPL	GFPL	STPL	VMPL	Total
1	Sales unit		✓		✓		2
2	Sales Revenue	✓			✓		2
3	Negotiation			✓		✓	2
Total		1	1	1	2	1	6

For allocation of mixed (departmental) cost, sales unit and sales revenue and negotiation were equally used. AIT was using sales revenue. LIPL was using sales unit. GFPL and VMPL used negotiation. STPL was using both sales unit and sales revenue. Except STPL, other automobile dealers were using single base; either sales unit or negotiation as a base for allocation.



But LIPL took decision at top management level. Only two automobile dealers AIT and STPL considered Management accounting tools. AIT and STPL considered three criteria namely; management accounting tools, objective of organization and decision of top management. VMPL considered only objective of organization. No automobile dealer was following the advice of vendor. It showed that they were independent in making own decision. On group wise basis no dealer from other group followed management accounting tools. Both sample Indian automobile dealers AIT and STPL followed management accounting tools for decision making.

4.22 Difficulties in Application of Management Accounting Tools by Automobile Dealer

- ✓ Cost and time factor
- ✓ Lack of Industry
- ✓ No proper standard

Automobile dealers did not think difficulties in application of management accounting tools. They claimed that they were using all the relevant management accounting tools in planning, controlling and decision making. They thought that the management accounting tool they did not use, were not relevant and not necessary. However there was gap between theory and practice. Non use of capital budgeting, break even analysis, flexible budget by automobile dealers revealed that they have no awareness about the importance of these tools. Except cost and time factor other problems were lack of proper industry data and standard. In many cases, managers have to compare their status and achievement with same other dealers/competitors and industry

average to evaluate their achievement. Relative strength/weakness or position of the business will be known when it is compared to standard or others. Likewise regarding SWOT (strength, weakness, opportunities and threats) analysis of own and competitors, updated industry data and proper standards are necessary. Financial statement analysis/ratio analysis will give more meaningful result if it can be interpreted by comparing with standard and industry data. But in Nepalese context, the data was not available. Department of transport provides the data about the registration of automobile and other regulations. Likewise FNCCI and TPC provide import statistics. But there were no specialized institution/organization to research on micro level. NADA Auto Information Centre (AIC) was established one decade earlier, but on account of lack of resources it was unable to become result oriented.

4.23 Potential Benefits of Management Accounting for Automobile Dealer

- Effective/quick decision making and control
- Accurate Data finding
- Budget controlling
- Effective Control
- Proper planning

For proper planning, effective control and judicious decision making management accounting is very important. Management accounting tools are powerful weapons to survive in competitive market and lead the organization towards success. Automobile dealers opined that management accounting helps in accurate data finding, proper planning, budget controlling and effective decision making.

4.24 Test of Hypothesis

Hypothesis for testing of Break Even Point (BEP)

Null hypothesis (Ho):- There is no significant difference between Indian and others automobile dealers in use of Break Even Point (BEP) Analysis
Alternative hypothesis (H):-There is significant difference between Indian and other automobile dealers in practice of Break Even Point (BEP) Analysis .

Hypothesis for testing o f Activity Based Costing (ABC)

Null hypothesis (Ho):- There is no significant difference between Indian and others automobile Dealers in use of Activity Based Costing (ABC)

Alternative hypothesis (H):-There is significant difference between Indian and other automobile dealers in practice of Activity Based Costing (ABC).

4.25 Major Findings

The major findings of the research are as follows;

- The total automobile registration including car/jeep /van registration has been in fluctuating trend. However the trend was positive. Total automobile registration increased by 1,347 numbers per year and Car/jeep/van registration increased by 106 numbers per year. Total automobile registration almost 56.9% registered in Bagmati zone due to concentrated business opportunities and population density.
- Higher percentages of automobile dealers were registered as private limited. Indian automobile dealer, AIT was registered as sole trading and STPL was registered as Private Limited. All of the others (LIPL, GFPL and VMPL) were registered as Private Limited.
- Same automobile dealer used to deal both heavy (commercial) automobile and light (passenger car) automobile. 3 out of 5 (60%) dealers did both businesses. Only AIT Indian automobile dealer and LIPL other automobile dealer did passenger

automobile dealing the

rest (GFPL, STPL and VMPL) dealt both categories.

- Cost segregation into fixed and variable cost , tax effect analysis, standard costing, ratio analysis, master budgeting, and cash flow statement were practiced by all these selected automobile dealers.

Zero

based budgeting (ZBB) was not in practice at all. Capital budgeting and Break even analysis were not practiced by GFPL, but the rest dealers practiced the both management accounting tools. Flexible budgeting and responsibility were practiced only by 60% (3 out of 5, AIT, STPL and VMPL). Dealers falling under other category LIPL and GFPL were not practicing both of these tools. Activity based costing (ABC) was

Practiced by AIT and GFPL, others didn't feel it necessary and relevant.

Lease or buy was practiced only by STPL; other automobile dealers did not practice it yet. Both Indian automobile dealer AIT and STPL practiced 11 out of 13 (84.62%) management accounting tools. From other category VMPL practiced 10 out of 13 (76.92%) management accounting tools. LIPL practiced 8 out of 13 (61.54%) tools. GFPL

- Practiced only 7 (53.85%) management accounting tools. Hence Indian

automobile dealers practiced more than other automobile dealers.

- Reasons for not practicing some of the management accounting tools

were not relevant and not felt necessary by them. They didn't realize lack of information, expertise and cost factor, rather they think that these

tools were not relevant and not necessary in their business.

- The automobile dealers were aware of importance of IT. The manual

accounting system has been to tally eliminated. 3 out of 5 (AIT, STPL

And VMPL) dealers have their own internal IT department. The select GFPL automobile dealers used professional accounting system.

- Dealers used high-low point method, average and analysis method to segregate cost into fixed and variable. AIT and VMPL used High-low point method. GFPL and STPL used average method and only LIPL used analysis method. Most accurate method, namely regression was not in practice at all.
- The GFPL automobile dealers prepared budget on the basis of past budget on increment basis along with target set. Three dealers used historical data, similarly four dealers used activity based budgeting (ABB). No dealers used zero based budgeting (ZBB)
- All five automobile dealers practiced overall master budget. Usually Budget was prepared by department manager/in charge/head. In AIT and STPL, budgets were prepared by both department head and top management. VMPL has planning department to prepare budget. Separate budget committee and outside experts were not entertained by these select GFPL automobile dealers to prepare budget. Short period time frame was adopted in budget. AIT and VMPL adopted mid period planning. LIPL used long term planning along with short term budget.
- For capital budgeting NPV and IRR were used by 3 automobile dealers. PBP was practiced only by 2 automobile dealers. ARR, PPI and DPBP were practiced only by VMPL.
- Full costing was basically used method pricing, 4 automobile dealers used it. Only VMPL used target return (ROI) method. GFPL used Activity based costing (ABC) and STPL also consider market rate along with full costing.

- To measure overall performance financial statement analysis was widely used. VMPL mainly focus on profit and loss. 3 automobile dealers used budgetary control, cash flow and standard costing.
- Forecasting of cost and revenues were done on the basis of past trend analysis in all select GFPL automobile dealers. Similarly market survey was Also used by 3 out of 5 automobile dealers
- FIFO, LIFO and weighted average method were used to pricing inventory issue. EOQ was widely practiced for inventory management, except GFPL the rest are practiced EOQ. Minimum stock level was also practiced by 4 out of 5 automobile dealers. Similarly past trend was practiced by 3 automobile dealers. JIT was not in practice. Inventory control was done on the basis of total value (Cost constraint) by 4 dealers. And total quantity (Space constraint) was used by 3 automobile dealers
- Transfer pricing was mainly used on the basis of cost. 3 automobile dealers (AIT, LIPL and STPL) used this method. Market based and target return was practiced by GFPL and VMPL respectively.
- Department cost allocation was made on the basis of sales unit, revenue and negotiation in equal frequencies of two. The objective of the organization was considered most while taking decision. Only two Indian automobile dealers (AIT and STPL)
- Considered management accounting tools.

Decision of top management was followed by 3 automobile dealers (AIT, LIPL and STPL).

- Main problem in application of management accounting tools in their own words are cost factor, lack of industrial data, no proper standard. In context of Nepal there was no proper information bank and no specialized institution to do research on this automobile sector. So proper and quick data about this automobile sector was not available, making it as a main problem in application of the management accounting tools. Potential benefits of management accounting tools in their own
- words are quick/effective decision making, but get controlling and proper planning.
- Hypothesis test showed that there was no significant difference between Indian and others automobile dealers in practice of Activity Based Costing (ABC) and Break even analysis (BEP)

CHAPTER-V

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary

Import oriented Nepalese auto business has grown up to very large extent in last three decades. With passage of time, luxury driving desire has changed to necessity. Institution a support from financial sector like, automobile financing and insurance has added momentum to boost this sector. That's why wide variety of automobile are flowing to country and rolling into different parts of country. Not only Indian and Chinese automobile, Japanese, Korean, Malaysian, German, American, French, Italian etc automobiles are also competing in Nepalese auto market. Different and variety of brand in terms of space, power and appearance all are available in Nepalese auto market. Most of the world's auto makers have manufacturing facilities in India, which has been a tremendous influence to import of automobile to Nepalese auto market; the brand of automobile available in India is also available in Nepal.

As this sector is providing direct and indirect employment to more than two lakhs people and contributing up to 20% in total tax revenue, it has been an important sector of Nepalese economy. It is directly related to transportation and environmental pollution issues. Hence proper development of this sector has long term and irreversible impact on economy and environment. Being landlocked country the development of internal road interlinked to neighbor country is important. But due to the difficulties caused by geographical structure and political anarchy, development of road construction has come to stand still.

However Nepalese auto market has positive growth rate with increasing trend of both automobile import and automobile registration. In Nepalese market the competition is tough and turning into cut-throat in nature and market capture in strategies.

For proper management of auto business, management accounting is the must. As these businesses are operating in multi facet, uncertain, dynamic and competitive environment, to sustain and grow their business management accounting is a tool to improve/strengthen the business stamina. Similarly management accounting also helps organization towards achieving the goal through optimum use of scarce resources in the dynamic environment. Avoiding/reducing risk and uncertainty, management accounting helps to make paces of success. Management accounting is more important for decision making. As decision can not be taken in vacuum, it should be based on proper and updated information. Management accounting provides relevant information to simplify the complex and non-programmable decision making improving overall managerial activities. Proper and judicious utilization of management accounting tools lead every organization towards success. Management accounting has wide scope/application whether the business is manufacturing or trading.

The primary objectives of the research were to study the current management accounting practice in selected automobile dealers. The research focused on light automobile: passenger car (PC) automobile dealers. 5 dealers out of 23 PC automobile dealers were selected. Among them three were dealing both light and heavy automobiles. These five automobile dealers were categorized into Indian and Others automobile dealer for research purpose. The study tried to highlight on management accounting tools currently practiced and not practiced by those selected automobile dealers.

For conducting the research the survey type research was designed with descriptive, analytical and comparative approach. Mainly primary data were used. The data were collected via questionnaire; however table talks were also made wherever necessary. The data were tabulated in to comparative tabular form and analyzed with percentage analysis, t-test, chi-square test and trend analysis.

The research revealed that cost segregation into fixed and variable cost, tax effect analysis, standard costing, financial statement analysis, master budgeting and cash flow were widely practiced by automobile dealers. Likewise, capital budgeting, activity based costing (ABC) and cost volume profit (CVP) analysis were also practiced by most of automobile dealers. Flexible budgeting, responsibility accounting, target costing lease or buy were practiced by few automobile dealers. Practice of Zero based budgeting (ZBB), Regression analysis, value engineering were almost nil. Thinking not necessary and not relevant was the main reasons for not practicing these management accounting tools. All the automobile dealers have eliminated manual accounting. They were using professional accounting systems; many of them had their own internal Information Technology (IT) department.

The hypothesis analysis helps to conclude that automobile dealer were practicing more than nine management accounting tools. Similarly there was no significant difference between Indian automobile dealers and other automobile dealers in practice of Break even analysis (BEP) and Activity Based Costing (ABC).

Automobile dealers did not considered predetermined commission while pricing the product/services. Similarly they did not consider the advice of vendor while making account related decision. So it can be concluded that automobile dealers are free in setting prices and decisions making.

5.2 Conclusion

There are many management accounting tools developed to improve performance of business organization. But automobile dealers are not practicing all of them. Rather they are confining their practice to financial accounting and cost accounting. They didn't feel necessary to go beyond these financial accounting and cost accounting. So there exists gap between theory

and practice. Practice of regression analysis, zero based budgeting (ZBB), value engineering were almost nil. Even capital budgeting, break even

analysis, flexible budgeting, responsibility accounting, activity based costing (ABC), lease or buy were partially practiced. It revealed that automobile dealers have no awareness of importance of these tools rather they were following the rules of thumb. Taking decision in vacuum may have long term impact which would be costly to change after put into effect.

The critical problem in automobile dealership business, to apply management accounting tools is lack of industrial data and proper standard. In Nepalese context, there is no specialized organization /institution yet, to formulate standard and research on this sector. Auto Information Centre (AIC) of NADA is established nearly one decade earlier, but lack of Human resources and other resources, it is not working meaningfully. Likewise FNCCI and Department of Transport, Trade Promotion Centre (TPC) are the other organizations which Provides import and annual registration statistics only. Result oriented information on micro Level is not available easily, so automobile dealers have to gather required information on their own initiation and cost.

Hiring of outside expert is an effective method to solve the problem and apply new management accounting tools effectively. Likewise giving training to staff is also important.

But these practices were rarely found in automobile dealers. They were confined to financial accounting, cost accounting and traditional reporting. Hiring of outside expert, may identify the effective way of using management accounting tools, areas to apply new techniques etc.

Only applying the technique is not adequate, effective and result oriented application is admirable. Value engineering, Just in time (JIT), Zero based budgeting (ZBB), target costing, responsibility accounting, Activity based costing (ABC) are evolved in global perspective to improve performance of the business organization. But due to lack of awareness these tools are not in

practice.

5.3 Recommendations

Business needs to operate in an open system, where every external/internal factor affects on its operation, of which some may be out of control. Best fit managerial strategies should be applied in the global perspective. As managerial functions are not programmable and non clerical, timely updated external/internal data are essential. The information is most powerful weapon to sustain in competition and basis to make decision. Judicious use of limited resources, application of modern accounting tools helps to achieve the organization goal. On the basis of the research following recommendations are suggested:

- Timely updated information is needed for proper planning and decision making. But in Nepal there is no specialized institution to provide auto information. So it is recommended to set up own network of management accounting information system (MAIS), with integrate effort of internal/external IT experts. Proper scanning of needed information and dissemination should be done.
- Automobile dealers should not rely on rules of thumb. Because profit does not happen by chance/luck. Rather it should be planned/managed and tracked to own favor. Traditional methods are not sufficient to cope with dynamic and competitive environment. Innovative and new sophisticated method should be applied otherwise one have to lag behind far away. Management accounting should be practiced in every pace of planning, controlling and decision making. For planning capital budgeting, flexible budgeting, break even analysis, linear programming (LP), tax effect analysis, activity based budgeting (ABB), zero based budgeting (ZBB) should be used. For controlling Standard costing, responsibility costing, variance analysis, budgetary control, financial statement analysis, cost benefit analysis, activity based costing (ABC)

are recommended. Similarly, Japanese Kiezen system, total quality management, management audit and bench marking also should be practiced.

- To segregation cost into fixed and variable, regression method is the most accurate and scientific statistical method. But dealers were practicing only high low method, average and analysis method. So it is recommended to apply modern technique like regression.
- While preparation of budget environmental factors are also should be considered along with past budgets, target set and historical data. Events do not always follow the historical trend so Z BB is also recommended to practice with detailed analysis of environmental factors.
- For budgeting and planning it is recommended to take help of professional experts.
- Strategic thinking and long term vision is necessary to achieve goal. Along with tactical plan, strategic plan covering more than ten years also should be planned.
- Project evaluation/capital budgeting is irreversible decision. It should be done with full information and detailed analysis. For this purpose mostly NPV should be used.
- For pricing product/services multifactor should be considered. Only cost basis is not enough. Activity based costing, market rate, target return, marginal cost analysis etc also should be considered.
- Measure and control of overall performance should be done with multi basis. Some of the automobile dealers relying on only single factor like profit and loss and financial statement. All the relevant factors like profit and loss, budget control, variance analysis, financial statement, activity based costing, responsibility accounting should be considered.

- For forecast/estimate the cost/revenues past trend analysis is definitely an effective tool. But future is uncertain. So environmental analysis is necessary. ZBB market survey should be done to solve the possible changes in the future.
- Availability of spare parts plays dominant role in auto business, so proper planning of fast moving spare parts is mandatory. Just in time is the philosophy that has developed to minimize waste and handling. So its application is relevant. Automobile dealers should consider multifactor. Single approach is not sufficient. All the factors like, EOQ, trend analysis, minimum stock level, inventory count, environmental factors should be considered.
- Limited resources have multi use and have opportunity cost. Overstocking makes money tied up in stock depriving from many good opportunities. So stock level should be optimum. For controlling both total value (cost approach) and quantity (space approach) should be considered. If possible the characteristics of particulars item should be identified and categorized as per ABC analysis. Then on the basis of vital few and trivial many, inventory control should be done. The maximum and minimum level determination helps to control stock within relevant range.
- Transfer pricing should be done considering goal congruence. Negotiation and general transfer pricing rule is suitable but not in practice. So it is recommended to apply these techniques.
- Only few dealers representing 2 out of 5 automobile dealers are considering management accounting tools while taking account related decision. Decision should not be taken on vacuum. It should be based on detailed analysis, updated information. Decision has long term effect on destiny of organization and costly to change after put into effect.

➤ Management accounting should be used as basis for taking major decision

Automobile dealers should develop trend of taking help of management consultancy/extern all expert. If possible separate management accounting management department should be established. Otherwise managers should be trained and motivated to apply modern technique of management accounting tools. Interaction between management accounting experts and automobile dealers is appreciable to reduce gap between theory and practice. Short term training-seminars and long term training will be effective to shed light on application and importance of management accounting tools.

BIBLIOGRAPHY

- Agrawal, G. R. (2003), *Dynamics of Business Environment in Nepal*, Kathmandu: M.K. Publisher and Distributors
- Anderson, Henry R., Belverd Needles, Jr. and James, C. Caldwell (1989), *Managerial Accounting*, Boston: Houghton Mifflin Co.
- Anthony, R.N., Glewn, A. W. and James, S. R. (1985), *Fundamentals of*

- Arnold, J. and Tony, H. (1990), *Accounting for Management Decision*, New Jersey: Prentice Hall
- Atkinson, Barker, Kaplan & Young (2001), *Management Accounting*, Delhi : Addison Wesley Longman (Singapore) Pvt. L t d., Indian Branch
- Bajracharya, P., Ojha, K. P., Goet, J. and Shrama, S. (2004), *Managerial Accounting: Nepalses Perspective*, Kathmandu: Ashmita Books Publishers and Distributors
- Bateman, Thomas S. and Snell, Scott A. (2002), *Management: Competing in the New Era*, Singapore: Mc Graw-Hill Irwin
- Belkaoui, Ahmed R. (2000), *Advanced Management Accounting*, New York: Quorum Books
- Burch, J.J. (1994), *Cost and Management Accounting*, Saint Paul: West Publishing Co.
- Chadwick, L. (1996), *The Essence of Management Accounting*, New Delhi: Prentice-Hall of India
- Chakraborty, H. and Chakraborty, S. (1997), *Management Accounting*, New Delhi: Oxford University Press
- Chenhol, Robert H. (1981), *The Organizational Context of Management Accounting*, Boston: Pitman
- Dangol, R.M. and Dangol, J. (2061), *Management Accounting*, Kathmandu: Taleju Prakashan
- Dayal, I. and Dayal, A. K. (1978), *Organization for Management in Developing Countries*, New Delhi: Concept Publishing Company
- Deardon, J. (1988), *Management Accounting Text and Cases*, New Jersey: Prentice Hall
- Drury, C. (2001), *Management and Cost Accounting*, London: Business Press , Thomson Learning
- Ezzamel, M. and Hart, H. (1 987), *Advance Management Accounting: An Organizational Emphasis*, London: Cassel
- Fago, G., Subedi, D. P. And Gyawali, A. (2003), *Management Accounting*, Kathmandu: Buddha Academic Publishers & Distributors Pvt. Ltd
- Fox, R., Alison, K. and Keith, S. (1990), *Decision Making: A Management Accounting Perspective*, London: CIMA Garrison, R. H. (2000), *Managerial Accounting*, Texas: Business Publications Inc

- Grey, J. and Don, R. (1982), *Cost and Managerial Accounting*, New York: McGraw Hill International Book Co.
- Gupta, S. P. (1997), *Management Accounting*, New Delhi: Prentice Hall of India Pvt. Ltd.
- Hambalvo, J. (2001), *Managerial Accounting*, New York John Wiley Sons
- Hilton, Maher and Silto (2002), *Cost Management Strategies for Business Decision*, New Delhi: Tata McGraw Hill Co. Ltd.
- Hilton, R. W. (2000), *Managerial Accounting*, New York: McGraw Hill
- Horngren, Charles T. and Garry, L. Sundem(2001), *Introduction to Management Accounting*, New Delhi: Prentice Hall of India Ltd
- Horngren, Charles T., George, Faster & Srikant, M. Datar (2000), *Cost Accounting: A Managerial Emphasis*, New Delhi: Prentice Hall
- Joshi, P. R.(2002), *Research Methodology*, Kathmandu: Buddha Academic Publisher and Distributors Pvt. Ltd
- Kandel, P.R. (2003), *Tax Laws & Tax Planning in Nepal*, Buddha Academic Enterprises Pvt. Ltd
- Kothari, C. R. (1990), *Research Methodology, Methods and Techniques*, New Delhi: Wishwa Prakashan
- Lynch, Richard M. and William Son, Rober W. (1992), *Accounting for Management: Planning and Control*, New Delhi: Tata McGraw Hill Publishing Company Ltd.
- Singh Y. M., Ojha, K. P. and Acharya, C. (2004), *Cost and Management Accounting*, Kathmandu: Buddha Academic Publishers and Distributors Pvt. Ltd
- Sthapit, A.B., Gautam, H., Joshi, P. R. and Dangol, P. M. (2003), *Statistical Methods*, Kathmandu: Buddha Academic Enterprises Pvt. Ltd
- Thapa, S. K. (1994), *Accounting in Nepal*, Kathmandu: Ekta Publication
- Tricker, R. J. (1982), *Management Information and Control System*, New York: John Wiley and Sons
- Usry, M. E. and Lawrence, H. H. (1997), *Cost Accounting: Planning and Control*, Cincinnati: South Western Publishing Co.
- Welsch, Glenn A., Hilton, Ronal W. And Gordon, Paul N. (2000), *Budgeting: Profit Planning and Control*, New Delhi: Prentice Hall o f India
- Wolff, H. K. and Pant, P. R. (2005), *Social Science Research and Thesis Writing*, Kathmandu: Buddha Academic Publisher and Distributor Pvt. Ltd

Unpublished Master's Level Thesis

- Acharya, Narayan (2006), *Management Accounting Practice in Nepalese Public Enterprises*, Shanker Dev Campus, TU
- K.C., Ailendra Kumar (2006), *Management Practice in Nepalese Public Enterprises*, Shanker Dev Campus, TU
- Karki, Krishna Bahadur (2006), *Management Accounting Practice in Joint Ventures Banks of Nepal*, Shanker Dev Campus, TU
- Sharma, Sagar (2002), *Management Accounting Practices in Listed Companies of Nepal*, Shanker Dev Campus, TU

Other Articles

- *Business Age*, Monthly (Nov.2000), Auto Trends Growth with Hiccups, Vol.2:No.12
- Government of Nepal, Nepal Planning Commission, Central Bureau of Statistics(2006), *Nepal in Figures2006*, National Planning Commission Secretariat, Government of Nepal
- NADA Auto News (Aswin, 2063), *30 Annual Meeting*, Vol.3.
- NADA News Letter (Falgun 2061), *Status of Auto Business in Imports of Nepal*, Vol.2
- NADA News Letter (Kartik, 2062), *Status of Auto Mobile Business in Nepal*, Vol.3
- Nepal Rastra Bank (2007), *Macroeconomic Indicators of Nepal*, Research Department, Statistical Division
- Nepal Rastra Bank (2063), *Current Macroeconomic Situation*, Research Department, Statistical Division
- Spotlight, Weekly (Nov. 23-29, 2001) A Multitude Models as Market Grows, Vol.21:

Appendix

Questionnaire

Your small effort plays a vital role in my research work, entitled, “*Management Accounting Practices of automobile Dealers of Nepal*” So you are requested to (3) the alternative answers for each question concerning your reputed organization.

1. Please specify type of ownership of your organization.

- a) Sole Trading
- b) Partnership
- c) Joint stock
 - i) Public limited
 - ii) Private limited
- d) Others please specify

2. Please specify which category of product does your organization deal?

- a) Vehicle-Passenger Car (PC)
- b) Vehicle- Commercial Vehicle (CV)
- c) Spares
- d) Services
- e) *Others, please specify*

3. Would you kindly specify which of the following mentioned management accounting tools are practiced in your organization?

S.N.	Management Accounting Tools	Tick mark (3)
1	Capital Budgeting	
2	Cost Segregation into Fixed and Variable	
3	Tax Effect Analysis	
4	Standard costing	
5	Break Even Analysis(BEP)/Cost-volume-profit(CVP) Analysis	
6	Ratio Analysis/ Financial Statement Analysis	
7	Master Budgeting	
8	Responsibility Accounting	
9	Activity Based Costing (ABC)	
10	Cash Flow Statement	
11	Zero Based Budgeting	
12	Lease or Buy	

4. If your organization has not practiced any of the above mentioned tools, what might be the reason?

- a) Not relevant to our organization []
- b) Not felt necessary yet []
- c) Cost factor []
- d) Lack of Information []
- e) Lack of Expertise []
- f) Other, If Any

5. What kind of System do you have in your organization to support managerial operation for planning, controlling and decision-making?

- a) Professional Accounting Software []
- b) Internal IT Development System []
- c) Manual []
- d) Other, If any

6. What techniques does your organization use to segregate the mixed cost into variable and fixed?

- a) High-low Point Method []
- b) Regression Method []
- c) Graphical Method []
- d) Average Method []
- e) Analysis Method []
- f) Other, If any

7. On what basis does your organization prepare budget?

- a) Past Budget []
- b) Historical/Past Data []
- c) Zero Based Budgeting []
- d) Activity Based Budgeting []
- e) Target Set []
- f) Other, If any

8. What type of budget does your organization practice?

- b) Operational Budget Only []
- c) Long Term Budget []
- d) Annual Budget []
- e) Cash Budget Only []
- f) Other, If any

9. Who is responsible to prepare the budget in your organization?

- a) Separate Budget Committee []
- b) Top Management []
- c) Planning Department []
- d) Departmental Managers/Incharge []
- e) Outside Expert []
- f) Other, If any

10. What is the time frame of the budget prepared your organization?

- a) Sort-term (One year or less) []
- b) Mid-term (Between One and Five Year) []
- c) Long term (Five year and More) []
- f) Other, If any

11. Which capital budget tools are used in your organization, while making long-term investment or purchasing fixed assets.

- a) Payback Period (PBP) []
- b) Average Rate of Return (ARR) []
- c) Net Present Value (NPV) []
- d) Internal Rate of Return (IRR) []
- e) Profitability Index (PI) []
- f) Discounted Payback Period (DPBP) []
- g) Other, If any

12. How does your Organization measure and control the overall performance at the end of the accounting year?

- a) Profit and Loss []
- b) Budgetary Control []

- d) Financial Statement Analysis []
- e) Cash Flow Analysis []
- f) Activity Based Costing []
- g) Other, If any

13. Which technique does your organization practice for pricing product/services?

- a) Full Cost Based Pricing (Absorption) []
- b) Variable Cost []
- c) Market Rate []
- d) Target Return on Investment (ROI) []
- e) Activity Based Costing Pricing []
- f) Pre-determine Commission (Percentage) []
- g) Other, If any

14. Which techniques does your organization practice for forecast/estimate the cost and revenues for the future?

- a) Past Trend Analysis []
- b) Zero Based Budgeting []
- c) Market Survey []
- d) Judgmental Analysis []
- e) Other, If any

15. Which method is followed for pricing the issued of inventory in your organization?

- a) First In First Out (FIFO) []
- b) Last In Last Out (LIFO) []
- c) Weighted Average []
- d) Simple Average []
- e) Other, If any

16. What things does your organization consider while procuring inventory?

- a) Economic Order Quantity (EOQ) []

- c) Re-order Level []
- d) Consumption Rate []
- e) Demand-order Placed by Customer []
- f) Just In Time (JIT) Philosophy []
- g) Inventory Count []
- h) Other, If any

17. On what basis does your organization control inventory?

- a) Total Value Basis []
- b) Total Quantity Basis []
- c) Characteristic of Particularly Item []
- d) ABC Analysis []
- e) Other, If any

18. Which transfer pricing technique is practiced in your organization?

- a) Market Price Based []
- b) Cost Price Based []
- c) Target Return Based []
- d) Negotiation []
- e) General Pricing []
- f) Other, If any

19. Which technique does your organization practice to allocate joint (Mixed) departmental cost?

- a) Sales Unit []
- b) Sales Revenue []
- c) Negotiation []
- f) Other, If any

20) What are the main factors, which affects to the major accounting related to decision making process in your organization?

- a) Management Accounting Tools
- b) Objective of Organization
- c) Decision of top management
- d) Advice of Vendor
- e) Other, If any

[]

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21) Please specify the major difficulties for the application of Management Accounting tools and technique in your organization.

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____
- f) _____

22) Please specify the potential benefits of Management Accounting for your organization.

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____
- f) _____

Date :

Name of the organization :

Designation of the respondent :

Signature :